

Pipeline Hazard Analysis 263-273, 273A Coward Street & 76-82 Kent Road, Mascot

Perpetual Corporate Trust Limited as the trustee of the LMLP 1 and 2 Trust Document No. RCE-22261_LOGOS-CowardSt_Pipeline_Final_18Apr23_Rev(0) Date 18/04/2023

Pipeline Hazard Analysis

263-273, 273A Coward Street & 76-82 Kent Road, Mascot

Perpetual Corporate Trust Limited as the trustee of the LMLP 1 and 2 Trust

Prepared by

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Quality Management

Rev	Date	Remarks	Prepared By	Reviewed By
А	14 March 2023	Draft issue for comment	Donton Dorkor	Ctove Culuester
0	18 April 2023	Issued final	Renton Parker	Steve Sylvester



Executive Summary

Background

Perpetual Corporate Trust Limited as the trustee of the LMLP 1 and 2 Trust (The Proponent) is seeking to amend the Bayside Local Environmental Plan 2021 to increase the maximum Floor Space Ratio (FSR) of the site from 1.2:1 to 2:1 and introduce site specific additional permitted uses under Schedule 1. The amendment to the FSR would enable the redevelopment of the site for additional industrial floor space.

A preliminary concept proposal has been prepared that complies with the amended FSR and provides for the following:

- Staged demolition of existing buildings/structures and hardstand areas and site preparation works.
- Staged construction, fit out and operation of warehouse and distribution centre buildings with complimentary office, and retail.
- Other associated works including landscaping, at-grade parking and general site improvements.
- Provision for building identification signage and public art opportunities on the building elevations.

It has been identified that the site may be located within the vicinity of existing high pressure dangerous goods or gas pipelines. In the event the pipelines are located within the construction area for subsequent future proposed development, there is a potential that excavation associated with the future construction may impact the pipelines causing damage, leaks and potential ignitions of flammable materials.

Due to the location of the site in relation to the underground pipelines, it is necessary to consult with all operators of high-pressure dangerous goods or gas pipelines within or in the vicinity of the site with regards to requirements under Australian Standard AS 2885 Pipelines – Gas and liquid petroleum and to provide sufficient details on how these outcomes will be delivered or implemented.

Riskcon Engineering Pty Ltd (Riskcon) has been commissioned by The Proponent to prepare a report assessing the potential impacts on the underground pipelines in support of the planning proposal request at 263-273 and 273A Coward Street and 76-82 Kent Road, Mascot.

Conclusions

The high-pressure dangerous goods and gas pipeline (the pipelines) review and consultation study conducted for the proposed planning proposal at 263-273 and 273A Coward Street and 76-82 Kent Road has been assessed for the potential impact to the pipelines in the vicinity of the site.

It was identified that there are four high pressure dangerous goods or gas pipelines in the Mascot area which may be impacted by any subsequent future Development, these are:

- Mobil Oil Australia Pty Ltd (Mobil) liquid pipeline (terminal & pipeline no longer in use);
- Qenos Pty Ltd (Qenos) high-pressure gas pipeline (same as 559 ST 3500 kPa, see below);
- Vopak Terminals Australia Pty Ltd (Vopak) liquid pipeline from Vopak to Sydney Ports Bulk Liquids Berth; and

 Jemena – high pressure gas pipeline (No. 559 ST 3500 kPa), adjacent to Qantas Drive and the Sydenham to Botany Rail Corridor.

The Mobil and Vopak pipelines are all located around the specific Mobil and Vopak sites and are over 4 kms from the facility, hence, there will be no impact to these pipelines from the any subsequent future development. It is noted that the Mobil Terminal, located at Coal Pier Road, Banksmeadow, is no longer operational, hence, the pipeline from the Terminal to the Port Botany Bulk Liquids Berth is no longer used.

The Jemena high pressure gas pipeline (supplying gas to the Qenos site) is located adjacent to the Sydenham to Botany Rail Corridor and within 32 m of the closest point of the preliminary concept designs to the pipeline. Consultation was held with Freyssinet and Qenos to review the impacts to the pipeline(s) and it was identified that there would be no impact to the Jemena pipeline as a result of any subsequent future Development.

It is therefore concluded that there will be no impact to the high-pressure dangerous gods or gas pipelines in the Mascot area from future development of the site at 263-273 and 273A Coward Street and 76-82 Kent Road.

Recommendations

Should it be identified that, during the subsequent development stages, excavations or underground works are required outside the boundary of the site on the western or southern sides, it is recommended that consultation with Jemena be implemented to ensure excavations remain clear of the Jemena 559 ST 3500 kPa pipeline located adjacent to the Sydenham to Botany Rail Corridor.

i

6

Table of Contents

Executive Summary

1.0	Introduction	1
1.1 1.2 1.3	Background Objectives Scope of Services	1 1 2
2.0	Methodology	3
3.0	Site Description	4
3.1 3.2 3.3	Site Location General Description Adjacent Land Uses	4 4 4
4.0	High Pressure Dangerous Goods or Gas Pipeline Review	6
4.1	High Pressure Dangerous Goods or Gas Pipeline Identification	6
5.0	Hazard Identification	9
5.1 5.2	Introduction Gas Pipeline	9 9
6.0	Pipeline Assessments	10
$\begin{array}{c} 6.1 \\ 6.1.1 \\ 6.1.2 \\ 6.1.3 \\ 6.1.4 \\ 6.1.5 \\ 6.1.6 \\ 6.1.7 \\ 6.1.8 \\ 6.2 \end{array}$	High Pressure Natural Gas Assessment Introduction External Interference Hot-Tap by Error Corrosion Ground Movement Construction Defect Material Defect Lightning Ethylene Gas Pipeline in the Vicinity of the Development	10 10 11 11 11 12 12 12 12
7.0	Conclusion and Recommendations	13
7.1 7.2	Conclusions Recommendations	13 13
8.0	References	14
B1. B1. B2.	Hazard Identification Table Initial Correspondence Updated Correspondence	16 18 22
List	of Figures	
Figure	e 3-1: Site Location	4
Figure Kent I	e 4-1: Jemena 559 ST 3500 kPa Gas Pipeline Location in Relation 263-273 and 273A Coward Street and Road	d 62-86 8
Figure	e 6-1: Graphical Presentation of Exclusion Zones Around Pipeline	11

List of Tables

Table 4-1: Services in Proximity of Development



Abbreviations

Abbreviation	Description
ALARP	As Low As Is Reasonably Practicable
CBD	Central Business District
DGs	Dangerous Goods
DP	Deposited Plan
EGIG	European Gas Pipeline Incident Data Group
LGA	Local Government Area
NBN	National Broad
SSDA	State Significant Development



1.0 Introduction

1.1 Background

Perpetual Corporate Trust Limited as the trustee of the LMLP 1 and 2 Trust (The Proponent) is seeking to amend the Bayside Local Environmental Plan 2021 to increase the maximum Floor Space Ratio (FSR) of the site from 1.2:1 to 2:1 and introduce site specific additional permitted uses under Schedule 1. The amendment to the FSR would enable the redevelopment of the site for additional industrial floor space.

A preliminary concept proposal has been prepared that complies with the amended FSR and provides for the following:

- Staged demolition of existing buildings/structures and hardstand areas and site preparation works.
- Staged construction, fit out and operation of warehouse and distribution centre buildings with complimentary office, and retail.
- Other associated works including landscaping, at-grade parking and general site improvements.
- Provision for building identification signage and public art opportunities on the building elevations.

It has been identified that the site may be located within the vicinity of existing high pressure dangerous goods or gas pipelines. In the event the pipelines are located within the construction area for subsequent future proposed development, there is a potential that excavation associated with the future construction may impact the pipelines causing damage, leaks and potential ignitions of flammable materials.

Due to the location of the site in relation to the underground pipelines, it is necessary to consult with all operators of high-pressure dangerous goods or gas pipelines within or in the vicinity of the site with regards to requirements under Australian Standard AS 2885 Pipelines – Gas and liquid petroleum and to provide sufficient details on how these outcomes will be delivered or implemented.

Riskcon Engineering Pty Ltd (Riskcon) has been commissioned by The Proponent to prepare a report assessing the potential impacts on the underground pipelines in support of the planning proposal request at 263-273 and 273A Coward Street and 76-82 Kent Road, Mascot.

1.2 Objectives

The objectives of the study are to;

- Identify the location of high-pressure gas pipelines within or in the vicinity of the site.
- Where there is potential for impact of future developments on the pipelines, determine how the safeguards will meet the requirements of AS 2885 (Ref. [1]),
- Make recommendations for increased safeguards, where required, to ensure the risks are controlled to As Low As Is Reasonably Practicable (ALARP), and
- Report on the findings of the study in support of the proposed planning request.



1.3 Scope of Services

The scope of work is for the identification of the high-pressure gas pipeline on or within the vicinity of the planning proposal site and consult with the operators to ascertain whether the operators are concerned with the proposal and the potential risks to the pipeline.



2.0 Methodology

The methodology used in this assessment is as follows:

- Identify the high-pressure gas pipeline on or within the vicinity of the site using the "dial before you dig" organisation,
- Review the concept design to identify the potential impacts future development could have on the pipeline to determine the level of threat is posed to the pipeline.
- Contact the pipeline operators and confirm whether there are any risks posed to the pipeline.
- Report on the findings of the assessment including recommendations from operators regarding required safeguards during the planning process.



3.0 Site Description

3.1 Site Location

The site is located at 263-273 and 273A Coward Street and 62-86 Kent Road, Mascot, within the Bayside Local Government Area (LGA). The site is irregular in shape and comprises four parcels of land legally described as Lot 100 DP 1277278, Lot 101 DP 1277278, Lot 5 DP 1194564 and Lot 3 DP 230355.

The site is located approximately 7 km south-west of the Sydney Central Business District (CBD). It is immediately adjacent (north-east) to Sydney Airport and the Botany freight rail corridor, and is sited between major roads including Qantas Drive, O'Riordan Street, and Bourke Road. Alexandra Canal is approximately 650 m to the north-west. **Figure 3-1** shows the location of the site in relation to the Sydney CBD.



Figure 3-1: Site Location

3.2 General Description

The preliminary concept proposal includes the following:

• Staged demolition of existing buildings/structures and hardstand areas and site preparation works.

- Staged construction, fit out and operation of warehouse and distribution centre buildings with ancillary offices and retail tenancies.
- Other associated works including landscaping, at-grade parking and general site improvements.
- Provision for building identification signage and public art opportunities on the building elevations.

3.3 Adjacent Land Uses

Key features of the locality are:

- North: The site is bounded to the north by low scale industrial developments.
- East: The site is bounded to the east by low scale industrial development, beyond which is Coward Street. Further north of the site is the Mascot Town Centre which is characterised by transport-oriented development including high density mixed-use development focussed around the Mascot Train Station.
- South: The site is bounded to the south by the rail corridor and Qantas Drive with Sydney Airport further to the south.
- West: Airgate Business Park comprising multiple buildings. The immediately adjoining building currently accommodates the DHL Express Head Office and associated freight and logistics operations.



4.0 High Pressure Dangerous Goods or Gas Pipeline Review

4.1 High Pressure Dangerous Goods or Gas Pipeline Identification

In order to identify whether there are any high-pressure dangerous goods or gas pipelines in the vicinity of the site, the "Dial before you dig" organisation was contacted. An inquiry was lodged with this organisation who replied with the details listed below.

There were only two high pressure dangerous goods or gas pipelines identified in the immediate vicinity of the site:

- High pressure (3,500 kPa) Natural Gas Pipeline operated by Jemena; and
- High Pressure ethylene gas pipeline owned by Qenos.

Whilst other pipelines were identified, these are some considerable distance from the site and future construction at the site would have no impact on these pipelines.**_Table 4-1** identifies services that are located in the vicinity of the property.

Service	Discussion
Electricity	The operator is Ausgrid, who supply electrical services to the site. Electricity is not- classified as a high pressure dangerous good or gas pipeline; hence, there is no further assessment for this service.
Gas Pipeline	The Jemena high pressure gas pipeline No. 559 ST 3500 kPa was identified to be located along the eastern side of Qantas drive, between the edge of the roadway and the Sydenham to Botany Rail Corridor. The operator of the pipeline, Jemena, was contacted regarding the pipeline location in relation to the planning proposal site and information regarding the risks associated with the subsequent future development. A detailed review of this pipeline has been performed in Section 6.1 .
	In addition to the high pressure gas pipeline installed within the rail corridor, there are other lower pressure gas systems installed for supply to residential and commercial premises in the Alexandria area. These pipelines are installed under roadways and footpaths, including Bourke Road, O'Riordan Street and King Street. An underground services plan of the Bourke Road, O'Riordan Street and King Street area has been included at Figure 4-1 .
	It can be seen from this figure that the gas supply pipelines are well clear of the planning proposal site. The low-pressure gas pipeline terminates about 20 m from the boundary of the site (across Kings Street). There is no plan to excavate in the King Street area, beyond the development site boundary, as part of the concept proposal. Hence, there will be no impact to other pipelines in the Bourke Road, O'Riordan Street and Kings Road areas.
Ethylene Pipeline	Freyssinet is a company that is contracted to operate an ethylene pipeline on behalf of Qenos, who are located in the Banksmeadow area. Freyssinet is a pipeline patrol and maintenance organisation but does not own the ethylene pipeline in the Mascot area for which they are tasked to patrol/maintain. The pipeline ownership rests with Qenos. Qenos were contacted regarding pipeline ownership and it was identified that Freyssinet were the contracted organisation for pipeline patrol and maintenance.
	Qenos also indicated that Freyssinet were the appropriate organisation for providing information with regards to the ethylene pipeline.
	Freyssinet were contacted and supplied commentary that the works occur on the opposite side of the railway line and that there are no plans for works on the pipeline to occur within the vicinity as indicated for the submission for former Qantas Flight Training Centre. Subsequently, there are no concerns with the planning proposal.



Service	Discussion		
	The communication for the former Flight Training Centre and the recent correspondence for the 263-273 and 273A Coward Street and 76-82 Kent Road planning proposal is provided in Appendix B . In addition to this correspondence, a detailed assessment of the risks posed to the pipeline has been conducted in Section 6.2 .		
Communications	The National Broadband Network (NBN) is installed in the area of the site. The NBN is not-classified as a high pressure dangerous good or gas pipeline, hence, there is no further assessment for this service.		
Water	water services are supplied to the site and are located within the area of the proposed concept design. Water is not-classified as a high pressure dangerous good or gas pipeline, hence, there is no further assessment for this service.		
Communications	Telstra telephone network is installed within the area of site. The telephone is not- classified as a high pressure dangerous good or gas pipeline, hence, there is no further assessment for this service.		



WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

Figure 4-1: Jemena 559 ST 3500 kPa Gas Pipeline Location in Relation 263-273 and 273A Coward Street and 76-82 Kent Road

5.0 Hazard Identification

5.1 Introduction

It is necessary to understand the threats and risks posed by any future development at the site on the pipeline and the subsequent effects should the gas pipeline become damaged. A detailed hazard identification table has been prepared in **Appendix A** which has been discussed in further detail in the following section.

5.2 Gas Pipeline

A review of the surrounding area indicates there is a buried gas pipeline running along Qantas Drive which runs adjacent to the planning proposal site. Future excavation work around the pipeline is not expected as the proposed concept designs do not encroach onto the road. Therefore, the risk of gas pipeline being disturbed and damaged is incredibly low and spontaneous failure of the pipeline is an incredibly unlikely event.

In addition, the pipeline has several typical protection systems to protect it in the event that excavation work is required. Typical protection systems around pipelines include "dial before you did" to identify the location of pipelines, marker signs and marker tape, buried pipeline such that mechanical excavation can't impact the pipeline without multiple actions, restrictions on mechanical works within 3 m of the pipeline.

The location of the pipeline is already known; hence, there is a low potential for excavation work to occur around the pipeline. In the event of a site error resulting in excavation along the pipeline, the marker tape should be identified prior to impact; however, this may only be the case if the operator is aware of what the marker tape means. It is noted that such an activity would only occur with the presence of a representative of the gas pipeline. Assuming, the protection systems work as intended, the potential damage to the gas pipeline should be minimised preventing damage and potential incident escalation.

It is noted, the protection of the gas pipeline relies on personnel working in the area to be aware of the gas pipeline and the protections associated with it. Therefore, to improve site personnel knowledge, the following recommendations have been made:

- The site induction shall include information regarding the gas pipeline including location and protections to identify the gas pipeline (i.e., marker tape, etc.).
- All personnel working at the site shall be inducted prior to commencing any work.
- Appropriate markings shall be provided along the length of the gas pipeline as required to minimise the potential for unauthorised works occurring within the vicinity of the gas pipeline, in conjunction with the Site Induction and relevant site-specific construction management plans.
- Any work within the vicinity of the pipeline shall be submitted to operators and confirmed prior to commencement.

Notwithstanding the low risk of damage to the pipeline based upon the protection systems in place, this incident has been carried forward for further analysis to conceptually understand the risk posed by the pipeline on future development and vice versa.

6.0 Pipeline Assessments

6.1 High Pressure Natural Gas Assessment

6.1.1 Introduction

An additional analysis has been conducted regarding the types of incidents and events that may impact a buried gas pipeline in order to confirm such incidents and events, as a result of the future Development, cannot cause impact to the pipeline.

The European Gas Pipeline Incident Data Group (EGIG) collects and publishes a range of data in relation to high pressure gas pipelines. The EGIG comprises a group of major gas pipeline operators and related organisations in Europe and has collected data in relation to gas pipelines (operations, failures, etc.) over a 50-year period with over 4 million km.yr exposure to operation of gas pipelines. Hence, based on the vast experience available within this organisation, incidents that may affect the Jemena pipeline from future Development have been selected for review.

The EGIG (Ref. [2]) reports on the types of events that result in pipeline failure leading to loss of gas containment from the pipeline. The list of events have been extracted from the EGIG report (Ref. [2]) as follows:

- External interference
- Hot-tap by error
- Corrosion
- Ground movement
- Construction defect
- Material defect
- Other incidents

Each of these have been assessed in further detail in the following sections.

6.1.2 External Interference

External interference is the primary source of damage to pipelines which result in fire or explosion. Therefore, if damage can be prevented the risk of a pipeline loss of containment is drastically reduced. While excavation along or near the pipeline is not expected, in the event that it is, the following restrictions shall be imposed.

- Pipeline is to be marked on site by a representative of the pipeline operator.
- No work is to be performed within 3 m of pipeline without a representative of the pipeline opator present.
- No mechanical equipment is to be used for excavation within one (1) metre of the pipeline in any radial direction even after the pipeline location has been visually prove; unless under explicit direction from a representative of the pipeline operator.
- No mechanical works are allowed within 600 mm in any radial direction of the pipeline visually proving the pipeline location; excavation is to be conducted with hand tools only until the pipeline location has been visually proven.

- No mechanical equipment is to be used for excavation within 300 mm in any radial direction; excavation is to be conducted with hand tools only.
- For backfill, suitable padding material (screened spoil or clean sand with particles less than 2.8 mm in size) is required for at least 150 mm around the pipe.

The above restrictions are shown graphically in **Figure 6-1**.



Figure 6-1: Graphical Presentation of Exclusion Zones Around Pipeline

6.1.3 Hot-Tap by Error

Work on adjacent pipelines in the same pipeline corridor resulting in identification of the wrong pipeline and hot tap to the gas pipeline. Future development will not access the pipeline, nor are there adjacent pipelines that would require work; hence, hot-tap errors are not expected to occur.

6.1.4 Corrosion

External or internal corrosion resulting in loss of pipeline thickness can ultimately lead to pipeline failure. The construction operations at the site will have no impact on pipeline internal/external corrosion. Notwithstanding this, it is known that standard procedure for pipelines involves 'pigging' the pipeline internally with an intelligent "pig" that performs corrosion detection along with a number of other condition monitoring functions.

6.1.5 Ground Movement

Subsidence as a result of earthquake or excavations close by causing ground collapse around the pipeline can result in pipeline failure and loss of containment. Earthquakes may have an impact on the pipeline; however, any future Development has no influence on earthquake in the area.

Excavation in close proximity to the pipeline may lead to land subsidence adjacent to the pipeline resulting in exposure of the pipeline and loss of pipeline support. A review of the preliminary

concept designs at the Site indicates that excavation work is not intended to occur; hence, subsidence from adjacent excavations is not expected.

As noted, should excavations be required, the restrictions discussed in **Section 6.1.2** would be imposed which would dramatically reduce the potential impact to the pipeline. Therefore, ground movement is not expected to be an issue for any future development.

6.1.6 Construction Defect

Incorrect weld installation (weld failure), poor ground preparation (i.e. pipeline bed contains rocks which damage the external corrosion protection) or poor overfill preparation (rocks in the overfill impacting the external corrosion protection). Any future Development has no influence over construction defects that may have occurred when the pipeline was constructed.

6.1.7 Material Defect

Incorrect pipeline material selected for the specific application or poor material qualities not detected at time of pipeline section manufacture (i.e. poor-quality metallurgical assurance). Any future Development has no influence over pipeline material selection or manufacture that may have occurred when the pipeline was constructed.

6.1.8 Lightning

Lightning impacts to the pipeline causing materials failure or maintenance induced failures (e.g. work on the pipeline leads to loss of containment during future development or after work is complete due to failure to complete the work correctly). Any future Development has no influence over lightning impact or maintenance activities associated with the pipeline.

6.2 Ethylene Gas Pipeline in the Vicinity of the Development

A request for details regarding the ethylene pipeline was submitted to Freyssinet and Qenos, who provided details of the pipeline and a map showing the pipeline location with regards to the site. **Figure 4-1** is provided to show the location of the pipeline.

It can be seen from **Figure 4-1** that the closest point of the pipeline to the site is >34 m, at the south west corner of the site. Consultation with Qenos and Freyssinet, regarding the proximity of the ethylene pipeline, was held to determine whether Qenos/Freyssinet had any issues with the concept designs and whether construction operations associated with future development would impact on the gas pipeline. Both Qenos and Freyssinet replied in writing (see **Appendix B**) stating that they had no concerns regarding the concept designs and considered the concept designs to be sufficient distance from the pipeline not to have any impact during future development and operations period. Clearance for any future development construction has been provided by both Qenos and Freyssinet.

The detailed analysis conducted for the Jemena gas pipeline in **Section 6.1** also applies to the ethylene pipeline, noting these two pipelines are close to each other in the pipeline easement.

Based on the replies from Qenos and Fressinet, the potential impact analysis conducted in **Section 6.1** (which also applies to the ethylene pipeline), and the location of the pipeline >34 m from the development site, the ethylene pipeline will not be impacted by the any future Development.

7.0 Conclusion and Recommendations

7.1 Conclusions

The high-pressure dangerous goods and gas pipeline (the pipelines) review and consultation study conducted for the proposed planning proposal at 263-273 and 273A Coward Street and 76-82 Kent Road has been assessed for the potential impact to the pipelines in the vicinity of the site.

It was identified that there are four high pressure dangerous goods or gas pipelines in the Mascot area which may be impacted by any subsequent future Development, these are:

- Mobil Oil Australia Pty Ltd (Mobil) liquid pipeline (terminal & pipeline no longer in use);
- Qenos Pty Ltd (Qenos) high-pressure gas pipeline (same as 559 ST 3500 kPa, see below);
- Vopak Terminals Australia Pty Ltd (Vopak) liquid pipeline from Vopak to Sydney Ports Bulk Liquids Berth; and
- Jemena high pressure gas pipeline (No. 559 ST 3500 kPa), adjacent to Qantas Drive and the Sydenham to Botany Rail Corridor.

The Mobil and Vopak pipelines are all located around the specific Mobil and Vopak sites and are over 4 kms from the facility, hence, there will be no impact to these pipelines from the any subsequent future development. It is noted that the Mobil Terminal, located at Coal Pier Road, Banksmeadow, is no longer operational, hence, the pipeline from the Terminal to the Port Botany Bulk Liquids Berth is no longer used.

The Jemena high pressure gas pipeline (supplying gas to the Qenos site) is located adjacent to the Sydenham to Botany Rail Corridor and within 32 m of the closest point of the preliminary concept designs to the pipeline. Consultation was held with Freyssinet and Qenos to review the impacts to the pipeline(s) and it was identified that there would be no impact to the Jemena pipeline as a result of any subsequent future Development.

It is therefore concluded that there will be no impact to the high-pressure dangerous gods or gas pipelines in the Mascot area from future development of the site at 263-273 and 273A Coward Street and 76-82 Kent Road.

7.2 Recommendations

Should it be identified that, during the subsequent development stages, excavations or underground works are required outside the boundary of the site on the western or southern sides, it is recommended that consultation with Jemena be implemented to ensure excavations remain clear of the Jemena 559 ST 3500 kPa pipeline located adjacent to the Sydenham to Botany Rail Corridor.



8.0 References

- [1] Standards Australia, "AS 2885 Series Pipelines Gas and Liquid Petroleum," Standards Australia, Sydney.
- [2] European Gas Pipeline Incident Data Group, "10th Report of the European Gas Pipeline Incident Data Group (period 1970 – 2016), Document No. VA 17.R.0395," European Gas Pipeline Incident Data Group, March 2018.

Appendix A Hazard Identification Table

Appendix A



B1. Hazard Identification Table

Area/Operation	Hazard Cause	Hazard Consequence	Safeguards
Gas pipeline	Damage to pipeline during construction / excavation	 Failure of pipeline and loss of containment and fire, vapour cloud explosion, jet fire, flash fire 	 Underground pipeline protects against damage / radiant heat
	Fire from building		Marker tape, marker signs
	impacting pipeline		Dial before you dig
			Known location of pipeline
			Deep trenching to avoid impact AS 2885
			 Yellow jacketed pipeline (anti-corrosion and impact protection)
			Bed of sand in the trench to prevent rocks

Appendix B Details of Correspondence

Appendix B



B1. Initial Correspondence

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File Message Help Q Tell me what you want to do	
Fri 24/05/2019 14:53 Mark.Walker@qenos.com Re: Development Qantas Flight Training Centre 297 King Street Mascot NSW 2020 To • Steve Sylvester 1 You replied to this message on 25/05/2019 13:47.	~
Hi Steve, I have reviewed the pipeline location with regards to the proposed Qantas Flight Training Centre as advised by our contractor Freyssinet.	
I note that the construction at the Qantas development site will not occur within the Ethylene Pipeline corridor or pipeline easement. It is physically on the other side of the rail corridor.	
Therefore there will be no impact on the Ethylene Pipeline as a result of the proposed Qantas development	
Based on this, Qenos as Owner of the Ethylene Pipeline gives its clearance for the Qantas facility construction.	
Regards,	
Mark Walker	
mob: 0418 522 326	
Off Site Storages and Pipelines Manager, Olefines Plant Botany	
16-20 Beauchamp Road Matraville, NSW 2036	
Qenos	

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i You replied to this message on 14/02/2019 11:54.

Hi Steven,

I already gave you clearance in this area and over there is only Qenos pipe. No Vopak or Mobile pipelines in this location.

Sent from my iPad Regards

Ryszard JUSZCZAK - Pipeline Services Technician Freyssinet Australia Pty Ltd

Level 3,13-15 Lyonpark Road, Macquarie Park NSW 2113 Mob: 0438 168 750 www.freyssinet.com.au

On 12 Feb 2019, at 17:40, Steve Sylvester <<u>steve.sylvester@riskcon-eng.com</u>> wrote:

Ryszard,

I note in the "standard" e-mail from Terence, there is an indication that there could be liquid pipelines from Mobil and Vopak in the Mascot/Botany Area, could you let me know if pipelines from these facilities are installed along the rail corridor or are they located in the port area near the Vopak/Mobil sites. Many Thanks Steve

From: JUSZCZAK Ryszard <rjuszczak@freyssinet.com.au>
Sent: Tuesday, 12 February 2019 14:22
To: Steve Sylvester <<u>steve.sylvester@riskcon-eng.com</u>>
Subject: Re: DBYD JOB:15698586 SEQ:79884857 - Qantas Flight Training Centre 297 King Street Mascot NSW
2020

Hi Steve,

Your proposed Qantas Flight Training Centre is clear with Freyssinet. Qenos HP Gas Pipeline is on other side of a railway or partially inside. Any changes to proposed location please do not hesitate to contact me again.

Sent from my iPad Regards

Ryszard JUSZCZAK - Pipeline Services Technician Freyssinet Australia Pty Ltd

Level 3,13-15 Lyonpark Road, Macquarie Park NSW 2113 Mob: 0438 168 750 www.freyssinet.com.au

On 11 Feb 2019, at 16:08, Steve Sylvester <<u>steve.sylvester@riskcon-eng.com</u>> wrote:

Ryszard,

Thanks for your reply to my call. Based on the e-mail below I understand there are potentially three pipelines operated by Qenos, Mobil and Vopak in the Botany/Mascot area. The site where the works are proposed is shown on the attached drawing (297 King Street, Mascot). I have also included a Google Area Map showing the site location with regards to the rail corridor and King Street.

I note in the e-mail below that any work within 5m of the proposed Vopak/Qenos/Mobil pipelines will require monitoring by the pipeline owners or Freyssenet. However, I believe that based on the Qantas Flight Training Centre Project, all construction will be well clear of the pipelines and certainly within the site fence indicated, there will be <u>no work in the rail</u> <u>corridor</u>.

If you could let me know if there are any concerns regarding the pipelines, based on the proposed project, so I can include this in my response to the Department of Planning and Environment, who have raised queries regarding these pipelines.

If you need any more information please call me direct on 0411 659 309 or send me an e-mail request and I will respond with further information.

Regards Steve



Hi Steve

In reference to your email dated the 16th of February 2019, and the proposed training centre near the Jemena Gas Networks main.

In reference to your plan, Jemena advises that while at this time Jemena Networks has 559mm primary gas main in the subject area we do give permission for works to proceed.

In view of the close proximity and size of the works, as a minimum requirement we require a separation from edge of excavation to the gas main of 1m. Further, shoring may be required to stabilise the zone of influence and to minimise risk to the pipeline.

Duty of care exists to ensure there is no compromise to the integrity of the Jemena asset during this procedure due to the existing ground conditions that currently exist. Of special note please make sure that no loadings are applied to the gas main which includes all truck and excavator logistics.

It is imperative that a pipeline patrol officer be present to supervise all works in the locality of interest to Jemena. Contact should be made with our pipeline coordinator of <u>Infrastructureprotection@jemena.com.au</u> to arrange accordingly.

Regards Danny Guerrera Property Coordinator Property Team Jemena Level 12, 99 Walker Street, North Sydney 2060 PO Box 1220, North Sydney 2060 (02) 9867 7149 danny.guerrera@jemena.com.au] www.jemena.com.au



B2. Updated Correspondence

