

Leyton Properties Pty Ltd

Petrol filling station (24 hour operation) with associated shop, fuel canopy, car parking signage, retaining walls, fencing and landscaping.

Calton Road Gawler East, Lot 9010 CT 6205/146 (Proposed lot 2044 and 2050 in DA 490/D026/19)

490/E008/19

UPDATE REPORT

Following the SCAP meeting on the 12th March 2020, the applicant has now sought to address all deferral points arising from the meeting. These are detailed below;

a. Procedural and categorisation matters;

The applicant has withdrawn development application (490/E010/19) *Proposed car wash, vacuum bays and signage* and wishes to proceed only with 490/E008/19 *Petrol filling station (24 hour operation) with associated shop, fuel canopy, car parking signage, retaining walls, fencing and landscaping.*

The withdrawal of this application resolves the SCAP's concerns in relation to procedural and categorisation matters ('splitting out of the two applications') and registration of rights of way over the subject land.

The applicant's future intentions in relation to the car wash are unknown at present. The determination of the car wash application must not speculate on scenarios or outcomes that may arise in relation to a (speculative) future application for a car wash.

b. Vehicle access and egress arrangements;

As per the recent SCAP decisions (26/03/2020) concerning the Springwood Sales Centre and Shopping Centre there is now clarity that modifications to the median strip on the Gawler East Link Road are matters to be governed and controlled under the *Local Government Act 1999*.

The following advisory note has been attached to the recommendation:

k. Prior to occupation of the development, the applicant is reminded of their obligations under S221 of the Local Government Act 1999 to enter into an agreement with the Town of Gawler, detailing works required to be undertaken to the Gawler East Link Road (GELR) and any adjoining local roads.

Further to this, the proposed development provides appropriate vehicle access to Calton Road.

c. Landscaping and Lighting;

Landscaping: The applicant has provided a proposed landscaping plan (attached).

It is noted that the landscape plan (and in particular the selection of the 'Manchurian Pear' tree) has been prepared with reference to the Gawler Council 'Tree Species Guide' which identifies that this species grows to a mature height of 8 metres and is suitable in



Gawler Council in verges 1.0 to 1.5 metres wide. The plan also incorporates an assortment of low shrubs to the front, side and rear of the site including; '*Red Kangaroo Paw, Catlin's Giant, Tanika and Cushion Bush'*.

The proposed Landscaping Plan is considered to be suitably designed and effectively manage interface issues in the locality and maintain lines-of-sight for motorists on Calton Road and Gawler East Link Road.

Lighting: The applicant has provided a lighting plan (attached).

The attached lighting plan and report prepared by TMK confirms lighting has been designed to satisfy:

- Australian Standard 1158.3.1:2020 Lighting for Roads and Public Spaces - Pedestrian Area Lighting;

- Australian Standard 4282:2019: Control of the obtrusive effects of outdoor lighting.

d. <u>Stormwater management arrangements</u>

As per the above comments. This is a matter for the *Local Government Act 1999*. The following advisory notes have been attached:

- All stormwater and wastewater disposal from the site shall be connected to Council infrastructure and be engineered to the satisfaction of the Town of Gawler.
- A final detailed Stormwater Management Plan prepared in consultation with the Town of Gawler shall be implemented for the site. The details of the plan shall be incorporated within the Building Rules Consent documentation

CONCLUSION

It is considered that the above matters that relate to vehicle/egress (a) and stormwater arrangements (d) are matters for the *Local Government Act 1999*. It is therefore appropriate for these matters to be included as advisory notes to ensure the applicant is aware of their obligations under separate legislation.

The proposed Landscaping Plan is considered to be suitably designed and effectively manages interface issues in the locality. The low level shrubbery maintains line-if-sight visibility for motorists on Calton Road and Gawler East Link Road. Landscaping will be controlled and managed via conditions of planning consent.

The attached lighting plan demonstrates that the development conforms to relevant Australian Standards in regards to *Lighting for Roads and Public Spaces - Pedestrian Area Lighting* and the *Control of the Obtrusive Effects of Outdoor Lighting*. This is considered to resolve concerns relating to light pollution caused form the proposed development on adjacent land.

1. RECOMMENDATION

Option 1:

The State Commission Assessment Panel delegates to the Manager Development Assessment, the ability to determine whether the applicant has addressed the points of deferral, and subsequently grant or refuse Development Plan Consent

Option 2:



That the State Commission Assessment Panel is satisfied that the proposed development is not seriously at variance with the Development Plan; and

That the proposed development displays sufficient planning merit to warrant the granting of Development Plan Consent subject to the following conditions:

TMK Consulting Engineers Level 6 100 Pirie Street Adelaide SA 5000 Civil • Environmental • Structural Geotechnical • Mechanical • Electrical Fire • Green ESD • Lifts • Hydraulics Tel: 08 8238 4100 • Fax: 08 8410 1405 Email: tmksa@tmkeng.com.au



			Date:	01/04/2020	Job Number:	2003208
To: Bel	a Build and Design	Attention:	Anthony Pirone	Email:	estimator@bbd.con	<u>n.au</u>
From:	Adrian Ko					
Project:	Proposed Petrol Station Corner of Calton Road and Gawler East link Road, Springwood					
Subject:	External Lighting Modeling Report					

Dear Anthony,

1.0 INTRODUCTION

TMK Consulting Engineers were engaged to provide a lighting modelling report to address the SCAP (State Commission Assessment Panel) concerns in relation to light spill across to adjacent boundaries properties from the proposed external lighting design of described development site; and addressing the certification of lighting design to below Australian Standards;

- AS 1158.3.1:2020 Lighting for Roads and Public Spaces Pedestrian Area Lighting;
- AS 4282:2019: Control of the obtrusive effects of outdoor lighting



Figure 1: location of proposed development drawn on the google aerial view





Figure 2: Architectural 3D perspective of the proposed development building & canopy

The objective of this report is to:

 a) Provide certification/commentary on the light spill across the boundary lines to adjoining properties boundaries during both curfew & non-curfew hours when the site is in operation, for compliance to AS4282-2019 Table 3.1 and table 3.2 criteria (extract copied below) for Environmental Zone A2 – Low District Brightness for Rural Living Zone being the worst case scenario.



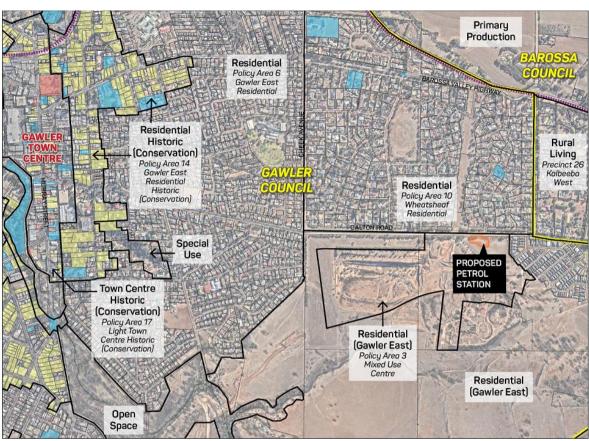


Figure 3 – Boundary Lines and Zoning Map

TABLE	3.1
ENVIRONMENT	TAL ZONES

Zones	Description	Examples
A0	Intrinsically dark	UNESCO Starlight Reserve. IDA Dark Sky Parks. Major optical observatories No road lighting -unless specifically required by the road controlling authority
A1	Dark	Relatively uninhabited rural areas No road lighting - unless specifically required by the road controlling authority
A 2	Low district brightness	Sparsely inhabited rural and semi-rural areas
A3	Medium district brightness	Suburban areas in towns and cities
A4	High district brightness	Town and city centres and other commercial areas Residential areas abutting commercial areas
TV	High district brightness	Vicinity of major sports stadium during TV broadcasts
v	Residences near traffic routes	Refer AS/NZS1158.1.1
R1	Residences near local roads with significant setback	Refer AS/NZS 1158.3.1
R2	Residences near local roads	Refer AS/NZS 1158.3.1
R3	Residences near a roundabout or local area traffic management device	Refer AS/NZS 1158.3.1
RX	Residences near a pedestrian	Refer AS/NZS 1158.4

Figure 4 – AS 4282 Environmental Zones



AS/NZS 4282:2019

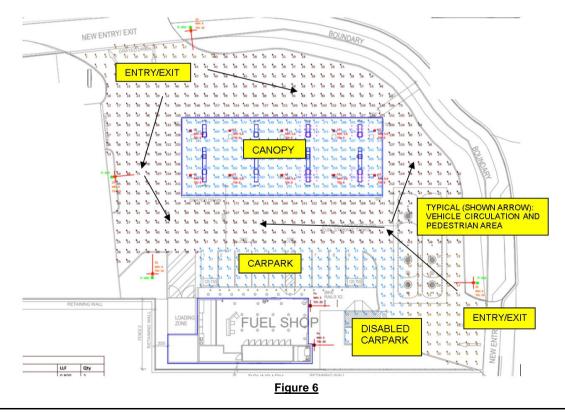
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TABLE 3.2 MAXIMUM VALUES OF LIGHT TECHNICAL PARAMETERS

	Vertical illuminance levels (E _v) lx		Threshol	d increment (<i>TI</i>)	Sky glow	
Zones	Non-curfew	Curfew	%	Default adaptation level (Lad)	Upward light ratio	
A0	See Note 1	0	N/A	N/A	0	
A1	2	0.1	N/A	N/A	0	
A2	5	1	20%	0.2	0.01	
A3	10	2	20%	1	0.02	
A4	25	5	20%	5	0.03	
TV	See Table 3.4	N/A	20%	10	0.08	
v	N/A	4	Note 2	Note 2	Note 2	
R1	N/A	1	20%	0.1	Note 3	
R 2	N/A	2	20%	0.1	Note 3	
R3	N/A	4	20%	0.1	Note 3	
RX	N/A	4	20%	5	Note 4	

Figure 5

- b) Provide recommendation on the illumination level on the car park areas and driveways for compliance to AS1158.3.1 2020 for below usage areas indicated below and shown in Figure 6;
 - Lighting calculations are according to AS1158.3.1:2020, sub-category:
 - PC1 for general carpark areas
 - PCD for accessible carpark spot
 - PA3 for general vehicle/pedestrian circulation area





Revision Code: Approved by: 01 AK 4 of 14



The various steps undertaken in the investigation were:

- a) Computer modeling using readily available software & luminaire photometric (.IES) files received from lighting supplier.
- b) Cross referencing & examination of all relevant standards to ensure the requirement is achieved.

The following was excluded from the assessment:

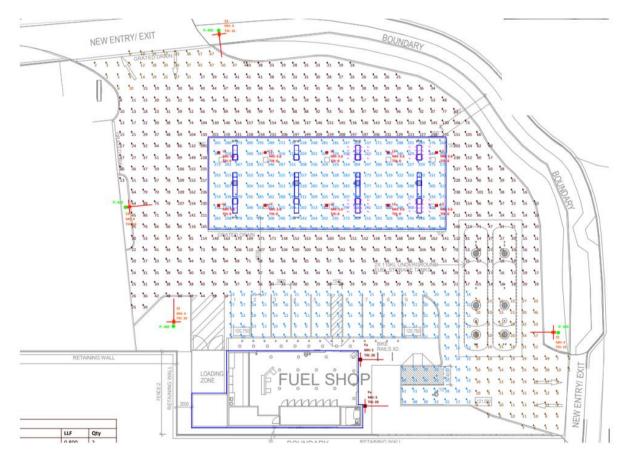
a) Site survey visual walk through to examine the condition around the site.

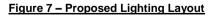
2.0 PROPOSED LIGHTING LAYOUT

The lighting layout proposed is based on the use of:

- 2 x 60W, LED luminaires, wall mounted floodlight at 5m (Nikkon Zeal T3)
- 4 x 50W, LED luminaires, 4m pole mounted floodlight (Nikkon Faro)
- 10 x 200W, LED luminaires, mounted underneath of canopy (Nikkon DOVE high bay)

Figure 7 provides an indication of the proposed lighting layout, along with Figure 8 shows the lighting schedule & symbols and Figure 9 shows an example 3D perspective of proposed lighting model;







Luminaire Schedule						
Label	Symbol	Description	LLF	Qty		
Fa	•	Nikkon Faro 60W ASY	0.800	2		
Z3	-	Zeal T3 - 50W	0.800	4		
L3	•	Dove 200W Lowbay	0.800	10		

Figure 8 – Proposed Lighting Schedule

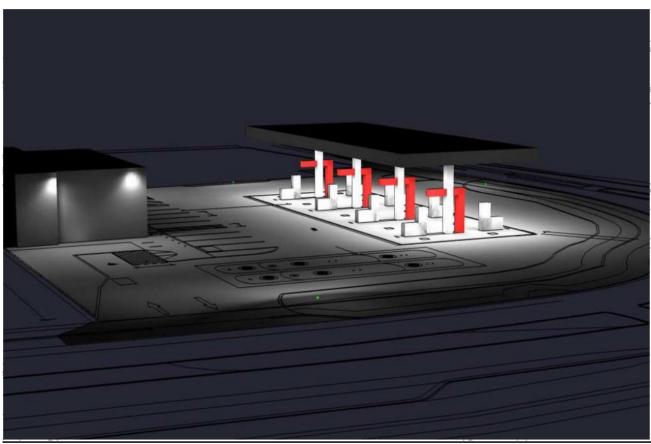


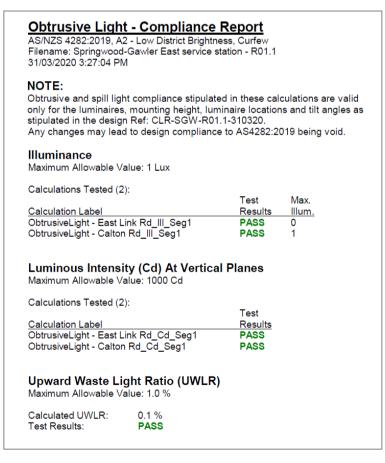
Figure 9 – Proposed Lighting Model (3D perspective)



3.0 LIGHT SPILL ASSESSMENT

The criteria for vertical light spills outline in AS 4282-2019 - Control of The obtrusive effects of outdoor lighting, Table 3.2:

- Non-Curfew hour (between 6am– 11pm) maximum of 5 lux across the boundary line A2 Low District Brightness' under Zone A2 of AS4282:2019 Tables 3.1 and 3.2
- Curfew hour (between 11pm- 6am) maximum of 1 lux across the boundary line A2 Low District Brightness' under Zone A4 of AS4282:2019 Tables 3.1 and 3.2







Obtrusive Light - Compliance AS/NZS 4282:2019, A2 - Low District Brighton Filename: Springwood-Gawler East service s 31/03/2020 3:25:44 PM	ess, Non-Curfe	w L1
NOTE: Obtrusive and spill light compliance stipulate only for the luminaires, mounting height, lum stipulated in the design Ref: CLR-SGW-R01 Any changes may lead to design compliance	ninaire location .1-310320.	s and <mark>t</mark> ilt angles as
Illuminance Maximum Allowable Value: 5 Lux		
Calculations Tested (2): <u>Calculation Label</u> ObtrusiveLight - East Link Rd_III_Seg1 ObtrusiveLight - Calton Rd_III_Seg1	Test Results PASS PASS	Max. <u>Illum.</u> 0 1
Luminous Intensity (Cd) At Vertica Maximum Allowable Value: 7500 Cd	l Planes	
Calculations Tested (2): <u>Calculation Label</u> ObtrusiveLight - East Link Rd_Cd_Seg1 ObtrusiveLight - Calton Rd_Cd_Seg1	Test <u>Results</u> PASS PASS	
Upward Waste Light Ratio (UWLR) Maximum Allowable Value: 1.0 %)	
Calculated UWLR: 0.1 % Test Results: PASS		

Figure 11 – Spill Check at Pre-Curfew timings

Assessment had been conducted based on 7 metre high working planes on all boundaries, measuring from the highest point of impacted observation points on adjoining properties in the direct sight of line with height point of luminaries.

Boundary vertical spill had been measured at ground level, and 6m into the adjoining properties.

Figure 12, 13 & 14 below indicates the measured points for light spills at Calton Road & Gawler East Link Road



Figure 12 – Obtrusive light calculations boundary – Carlton Road

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Figure 13 – Obtrusive light calculations boundary – Gawler East Link Road



Figure 14 – Obtrusive light calculations boundary – South Boundary

Calculation Summary			
Project: Obtrusive			
Label	CalcType	Units	Max
ObtrusiveLight - South boundary_Cd_Seg1	Obtrusive - Cd	N.A.	256
ObtrusiveLight - South boundary_Cd_Seg2	Obtrusive - Cd	N.A.	201
ObtrusiveLight - South boundary_Cd_Seg3	Obtrusive - Cd	N.A.	178
ObtrusiveLight - South boundary_Ill_Seg1	Obtrusive - II	Lux	1
ObtrusiveLight - South boundary_III_Seg2	Obtrusive - II	Lux	1
ObtrusiveLight - South boundary_Ill_Seg3	Obtrusive - Il	Lux	1
ObtrusiveLight - Calton Rd_Cd_Seg1	Obtrusive - Cd	N.A.	303
ObtrusiveLight - Calton Rd_Ill_Seg1	Obtrusive - II	Lux	1
ObtrusiveLight - East Link Rd_Cd_Seg1	Obtrusive - Cd	N.A.	211
ObtrusiveLight - East Link Rd_III_Seg1	Obtrusive - II	Lux	0

ALL LIGHTING CALCULATION BOUNDARIES SPAN UP TO 7M HEIGHT

Figure 15 – Obtrusive light Calculations Summary (complying AS 4282)



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4.0 ILLUMINATION LEVEL ASSESSMENT

The illumination level on the proposed car park and associated driveway etc had been conducted based on the recommendation of AS1158.3.1.

Based on the proposed lighting layout, the lighting level measured are as below shown in Figures 15 & 16:



Figure 16





Calculation Summary							
Label	Units	Avg	Max	Min	Min/Avg	Max/Avg	Min/Max
Canopy - Bays - Floor	Lux	287.5	385	190	0.66	1.34	N.A.
Carpark	Lux	21.1	61	7	0.33	2.90	N.A.
Carpark - Vert 1	Lux	N.A.	74	8	N.A.	N.A.	N.A.
Carpark - Vert 2	Lux	N.A.	45	3	N.A.	N.A.	N.A.
Disp - Typ 1 - At 1m	Lux	293.8	320	264	0.90	1.09	N.A.
Disp - Typ 1 - Vert at 1500mm	Lux	181.0	187	172	0.95	1.03	N.A.
Disp - Typ 2 - At 1m	Lux	279.5	316	250	0.89	1.13	N.A.
Disp - Typ 2 - Vert at 1500mm	Lux	183.5	188	176	0.96	1.02	N.A.
Disp - Typ 3 - At 1m	Lux	300.0	326	273	0.91	1.09	N.A.
Disp - Typ 3 - Vert at 1500mm	Lux	187.0	193	178	0.95	1.03	N.A.
Disp - Typ 4 - At 1m	Lux	290.5	320	273	0.94	1.10	N.A.
Disp - Typ 4 - Vert at 1500mm	Lux	189.0	195	180	0.95	1.03	N.A.
Disp - Typ 5 - At 1m	Lux	361.8	371	344	0.95	1.03	N.A.
Disp - Typ 5 - Vert at 1500mm	Lux	183.8	190	175	0.95	1.03	N.A.
Disp - Typ 6 - At 1m	Lux	366.5	375	352	0.96	1.02	N.A.
Disp - Typ 6 - Vert at 1500m	Lux	187.8	193	180	0.96	1.03	N.A.
Disp - Typ 7 - At 1m	Lux	404.3	434	377	0.93	1.07	N.A.
Disp - Typ 7 - Vert at 1500m	Lux	174.8	179	167	0.96	1.02	N.A.
Disp - Typ 8 - At 1m	Lux	395.5	428	379	0.96	1.08	N.A.
Disp - Typ 8 - Vert at 1500m	Lux	174.8	180	166	0.95	1.03	N.A.
Entry-Exit - N-W	Lux	23.2	67	2	0.09	2.89	N.A.
Entry-Exit - S-E	Lux	16.6	57	2	0.12	3.44	N.A.
Vehicle circulation	Lux	75.6	238	8	0.11	3.15	N.A.
Vehicle circulation - Vert 1	Lux	N.A.	201	2	N.A.	N.A.	N.A.
Vehicle circulation - Vert 2	Lux	N.A.	245	3	N.A.	N.A.	N.A.

Figure 17

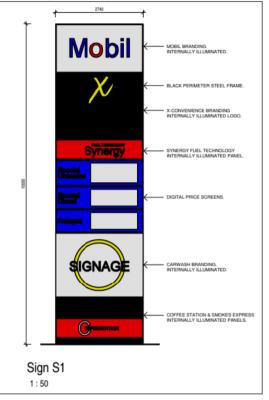






5.0 SIGNAGE ILLUMINANCE LEVEL ASSESSMENT

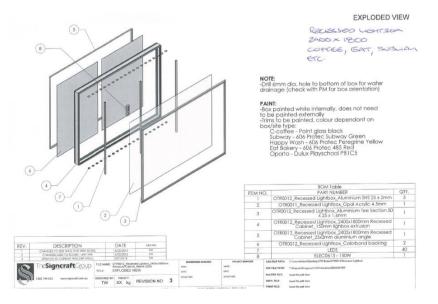
We note that the signage contractor is unable to provide the photometric data for the advertising signs at this stage.



Hence further investigation and coordination with the manufacturer (SIGNCRAFT) had been conducted. This includes the provision of details of the signage construction.

Illuminated Sign Brand Light box - for Mobil / X-Convenience, Signage etc as shown above;

The illuminated signs illuminated are side mounted LED strips. The led strips have a 160 degree beam angle which will provide no direct glare to the signage panel and a softer and even light to the signage box.



01 AK 12 of 14 Two different LED (0.48Watts and 1.4 watts had been included in the sign to accommodate a smoother intensity on the illuminated signs.)

The brand light box will be completed with a dimmable driver Mean Well HLG -150H which will be dimmed down measured on site to ensure the *veiling luminance from the advertising signs not exceeding 0.25cd/m*.





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Illuminated Sign Brand Light box

The illuminated signs are illuminated with side mounted LED strips. The led strips have a 160 degree beam angle which will provide no direct glare to the signage panel and a softer and even light to the signage box.

We recommended that a dimmable controller ELEC0613-150Watt is installed for pylon signs. Pylon signs are suggested to be dimmed to meet the pre-curfew hours limited to a maximum of 5 lux across the boundary line, and the curfew hour limited to a maximum 1 lux (Light output to road way).

6.0 CONCLUSION

The modelled maximum spill on all boundaries for external lighting based on the above lighting layout and type complies with the criteria outlined in AS4282:2019.

The modelled illumination level on ground plane on the proposed carpark (main and disabled both) based on the above lighting layout and type complies with the criteria outlined in AS1158.3.1:2020

We trust the above is satisfactory. However, should there be any further clarifications/assistance please do not hesitate to contact the undersigned or Adrian Ko

For and on behalf of **TMK Consulting Engineers**

<u>ADRIAN KO</u> SENIOR ASSOCIATE







PLANNING CONDITIONS

1. That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and following plans submitted in Development Application No 490/E008/19.

Reason: to ensure the development is constructed in accordance with endorsed plans and application details.

2. The proposed Class 1 separator and treatment device (indicated as SPEL Puraceptor or similar) shall be installed onsite in working order prior to the commencement of the use hereby approved.

Reason: To ensure that infrastructure is provided in an orderly manner.

3. Prior to Development Approval being granted, an Engineered Site Works Plan shall be prepared with site levels and access gradients required on site, including the amount and type of fill, in consultation with the Council and to the reasonable satisfaction of the State Commission Assessment Panel.

Reason: to ensure that the site can be developed at levels appropriate to surrounding localities.

Noise

4. All sound attenuation measures, treatments and operational restrictions recommended in the Sonus Environmental Noise Assessment (Report Number: S6185C2) dated September 2019 entitled Retail Development Springwood must be implemented prior to the occupation of the site and adhered to on a continuous basis.

Reason: to ensure appropriate noise attenuation measures are in place.

Car Park /Access

5. All vehicle car parks, driveways and vehicle entry and manoeuvring areas shall be designed and constructed in accordance with Australian Standards (AS/NZS 2890.1:2004 and AS/NZS 2890.6.2009) and be constructed, drained and paved with bitumen, concrete or paving bricks in accordance with sound engineering practice and appropriately line marked to the reasonable satisfaction of the State Commission Assessment Panel prior to the occupation or use of the development.

Reason: to ensure safe and functional parking and manoeuvring areas.

6. All bicycle parks shall be designed and constructed in accordance with Australian Standard 2890.3-2015.

Reason: to ensure safe and functional parking and manoeuvring areas.

7. All car parking areas, driveways and vehicle manoeuvring areas shall be maintained at all times to the reasonable satisfaction of the State Commission Assessment Panel.

Reason: to ensure safe and functional parking and manoeuvring areas.

8. All materials and goods shall be loaded and unloaded within the boundaries of the subject land.

Reason: to ensure safe and functional parking and manoeuvring areas.

9. All loading and unloading, parking and manoeuvring areas shall be designed and constructed to ensure that all vehicles can safely enter and exit the subject land in a forward direction.

Reason: to ensure safe and functional parking and manoeuvring areas.

10. All access points, car parking and vehicle manoeuvring areas shall be of an allweather surface and must be maintained in a good condition at all times.

Reason: to ensure safe and functional parking and manoeuvring areas.

Waste

- 11. Waste storage areas shall be:
 - a) Where possible undercover or contained within the building

b) Constructed or bunded to prevent the entry of external stormwaterc) Constructed to drain to a stormwater treatment system/device capable of removing pollutants

Reason: To ensure waste collection from the development is appropriately managed, so as to minimise impacts to on surrounding properties.

12. Prior to occupation of the development, final details of the waste collection arrangements which identify how waste would be stored, transported and disposed of, shall be submitted to the satisfaction of the State Commission Assessment Panel.

Reason: To ensure waste collection from the development is appropriately managed, so as to minimise impacts to on surrounding properties.

- 13. Waste collection associated with the hereby approved use shall be limited between the following hours:
 - 9am and 7pm on a Sundays and public holidays; and
 - 7am and 7pm on any other day

Reason: To ensure waste collection from the development is appropriately managed, so as to minimise impacts to on surrounding properties.

Lighting

14. External lighting shall be restricted to that necessary for security and safety purposes only and shall be directed and shielded in such a manner as to not cause nuisance to adjacent properties or motorists.

Reason: to ensure external lighting does not introduce undue potential for hazards to users of the adjacent road network or adjacent properties in accordance with the necessary standard

15. All external lighting on the site shall be designed and constructed to conform to Australian Standard (AS 4282-1997) and be carried out in accordance with the Lighting Report prepared by TMK Consulting Engineers dated 1st April 2020.

Reason: to ensure external lighting does not introduce undue potential for hazards to users of the adjacent road network or adjacent properties in accordance with the necessary standard.

Stormwater

16. All stormwater design and construction shall be in accordance with Australian Standard AS/NZS 3500.3:2015 (Part 3) to ensure that stormwater does not adversely affect any adjoining property or public road.

Reason: to ensure stormwater infrastructure is designed and constructed to minimise potential for flood risk to adjoining property or public roads associated with stormwater runoff in accordance with the necessary standard.

Landscaping

17. Landscaping shall be carried out in accordance with the Landscaping Plan submitted by Brown Falconer Drg. No. 3298 DA 05 Rev 5.

Reason: to ensure the landscaping is maintained and nurtured at all times

18. Landscaping shown on the approved plans shall be established prior to the operation of the development and shall be maintained and nurtured at all times with any diseased or dying plants being replaced.

Reason: to ensure the landscaping is maintained and nurtured at all times

19. A watering system shall be installed at the time landscaping is established and operated so that all plants receive sufficient water to ensure their survival and growth

Reason: to ensure the landscaping is maintained and nurtured at all times

20. Mechanical plant shall be designed to be screened from public view and to the satisfaction of SCAP.

Reason: to ensure the landscaping is maintained and nurtured at all times.

Advertising Signage

21. Illuminated signs shall not be of a light intensity to cause a light overspill nuisance to adjacent occupiers, or cause a distraction to drivers on adjacent public roads.

Reason: to ensure illuminated signs do not cause nuisance to sensitive receivers.

22. Signage on this site visible from the adjacent roads shall not contain any element that flashes, scrolls, moves or changes, or imitates a traffic control device.

Reason: to ensure that signs do not cause a hazard for nearby traffic

23. Signage upon the site shall be finished in a material of low reflectivity to minimise the likelihood of sun/headlamp glare.

Reason: to ensure that signs do not cause a hazard for nearby traffic

24. The advertisement(s) and support structure(s) shall be prepared and erected in a professional and workmanlike manner and maintained in good repair at all times, to the reasonable satisfaction of SCAP.

Reason: to ensure the safety of signs and their support structures.

EPA CONDITIONS

25. Prior to operation, all fuel storage tanks (apart from diesel and LPG) must be fitted with a Stage 1 vapour recovery system (which includes underground storage tank vent pipes being fitted with a pressure vacuum relief valve) that directs the displaced vapours back into the tank during filling.

Reason: To ensure the subject land is suitable for its intended use.

26. Prior to operation, all fuel dispensers (apart from diesel and LPG) must be fitted with a Stage 2 vapour recovery system that directs vapours back into the tank during vehicle refuelling.

Reason: To ensure the subject land is suitable for its intended use.

27. All underground fuel storage tanks must be double-walled and fitted with an Automatic Tank Gauging (ATG) detection system.

Reason: To ensure the subject land is suitable for its intended use.

28. Prior to use, all fill lines between the underground storage tanks and fuel dispensers must be double-contained and fitted with a pressure leak detection system.

Reason: To ensure the subject land is suitable for its intended use.

29. All runoff from hardstand areas (including the refuelling and fuel delivery areas) of the site (refer to Stormwater Plan and Concrete Grading Plan prepared by Sagero, Project No. SA190020, Drawing No. C01 and C02 Issue C dated August 2019) must be directed via grates and grade changes to a forecourt full retention oil/water separator (no bypass function) that:

a. has as a minimum spill capture capacity of 10,000 litres

b. reduces oil content in the outlet to less than 5 mg/L (as confirmed by independent third party scientific testing)

- c. operates effectively in the event of a power failure
- d. has an alarm connected by telemetry to appropriate maintenance personnel.

Reason: To ensure the subject land is suitable for its intended use.

30. The full retention oil/water separator must be maintained in accordance with the manufacturer operational and maintenance requirements to ensure design capacity and treatment standards are available at all times.

Reason: To ensure the subject land is suitable for its intended use.

31. Any sludge or residues collected within the full retention oil/water separator is considered waste and must be removed by an EPA licenced waste transporter.

Reason: To ensure the subject land is suitable for its intended use.

ADVISORY NOTES

- a. This Development Plan Consent will expire after 12 months from the date of this Notification, unless final Development Approval from Council has been received within that period or this Consent has been extended by the State Commission Assessment Panel.
- b. The applicant is also advised that any act or work authorised or required by this Notification must be substantially commenced within 1 year of the final Development Approval issued by Council and substantially completed within 3 years of the date of final Development Approval issued by Council, unless that Development Approval is extended by the Council.
- c. The applicant has a right of appeal against the conditions which have been imposed on this Development Plan Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide, (telephone number 8204 0289).
- d. A Construction Environmental Management Plan (CEMP) shall be prepared in collaboration with the Town of Gawler (Council) and be implemented in accordance with current industry standards including the Local Nuisance and Litter Control Act 2016, the EPA publications "Handbook for Pollution Avoidance on Commercial and Residential Building Sites Second Edition" and were applicable, "Environmental Management of On-site Remediation" to minimise environmental harm and disturbance during constriction.

The management plan should incorporate, without being limited to the following matters:

- Timing, staging and methodology of the construction process and working hours;
- Traffic management strategies;
- Control and management of construction noise, vibration, dust and mud;
- Management of infrastructure services during construction and reestablishment of local amenity and landscaping;
- Stormwater and groundwater management during construction;
- Site security, fencing and safety and management of impact on local amenity for residents, traffic and pedestrians;
- Disposal of construction waste, any hazardous waste and refuse in an appropriate manner according to the nature of the waste;
- Protection and cleaning of roads and pathways;
- Overall site clean-up;
- Work in the public realm;
- Hoardings; and
- Tradesperson vehicle parking.
- e. The applicant is reminded of its general environmental duty, as required by Section 25 of the *Environment Protection Act*, to take all reasonable and practicable measures to ensure that the activities on the whole site, including during construction, do not pollute the environment in a way which causes or may cause environmental harm. To demonstrate the general environmental duty has been met, the design of the leak detection systems associated with the fuel storage tanks and

fuel lines should meet the requirements of Australian Standard 4897-200. The design, installation and operation of underground petroleum storage systems.

- f. The applicant is reminded the emission of noise from the premises is subject to control under the Environment Protection Act and Regulations 1993, and the applicant (or person with the benefit of this consent) should comply with those requirements.
- g. If at any stage contamination is identified which poses actual or potential harm to water that is not trivial, a notification of contamination which affects or threatens groundwater (pursuant to section 83A of the Environment Protection Act 1993) must be submitted to the EPA.
- h. EPA information sheets, guidelines documents, codes of practice, technical bulletins etc. can be accessed on the following web site: <u>http://www.epa.sa.gov.au</u>.

An environmental authorisation in the form of a licence is required for the operation of this development. The applicant is required to contact the Environment Protection Authority before acting on this approval to ascertain licensing requirements. Information on applying for a licence (including licence application forms) can be accessed here:

http://www.epa.sa.gov.au/business and industry/applying for a licence.

- i. The applicant is reminded of their obligations under the Local Nuisance and Litter Control Act 2016 and the Environment Protection Act 1993, with regard to the appropriate management of environmental impacts and matters of local nuisance. For further information about appropriate management of construction sites, please contact Town of Gawler.
- j. All stormwater and wastewater disposal from the site shall be connected to Council infrastructure and be engineered to the satisfaction of the Town of Gawler.
- k. Prior to occupation of the development, the applicant is reminded of their obligations under S221 of the Local Government Act 1999 to enter into an agreement with the Town of Gawler, detailing works required to be undertaken to the Gawler East Link Road (GELR) and any adjoining local roads.
- I. A final detailed Stormwater Management Plan prepared in consultation with the Town of Gawler shall be implemented for the site. The details of the plan shall be incorporated within the Building Rules Consent documentation