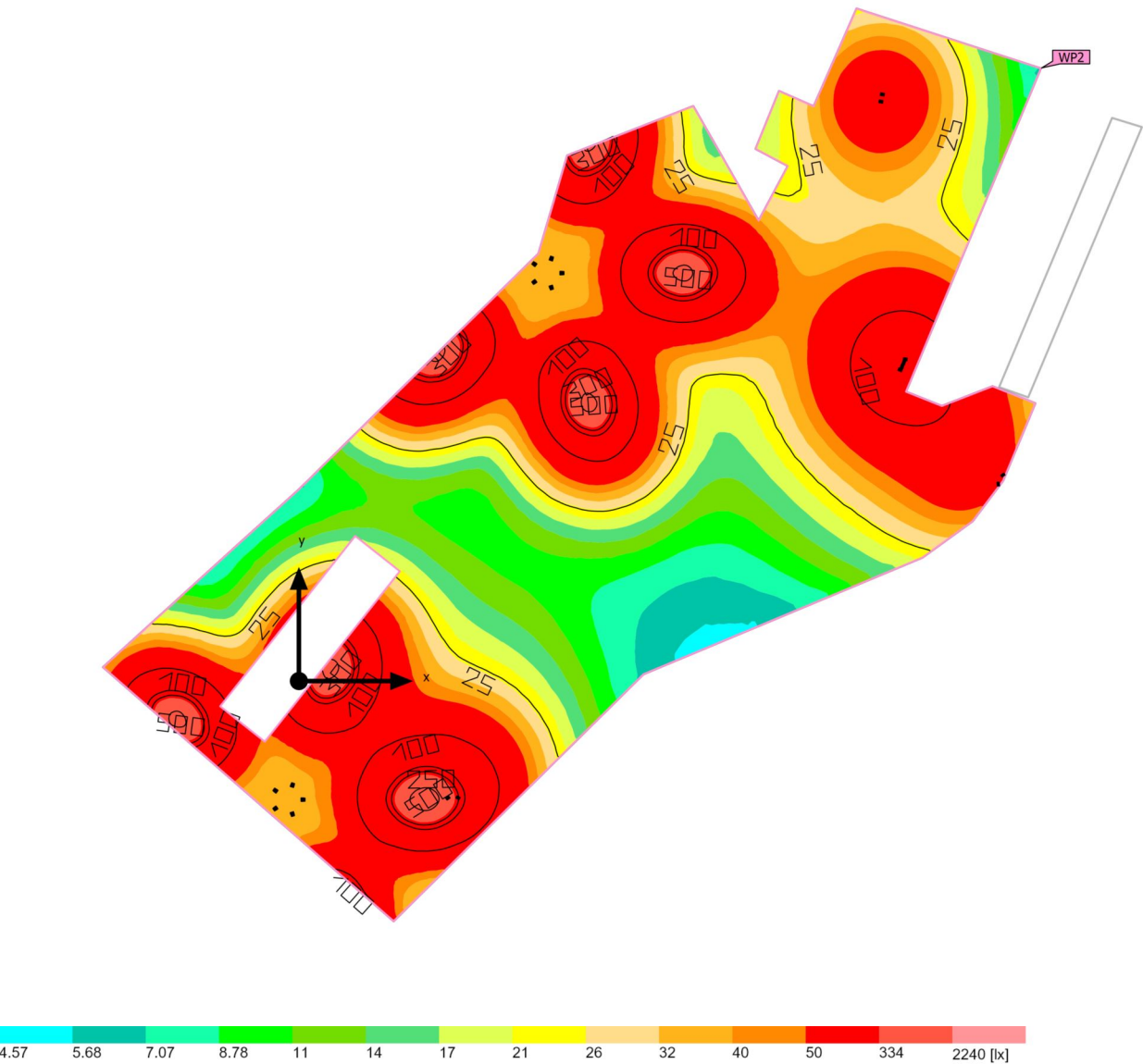


# 18.A

## APPENDIX 18.A Lighting Design Existing Port Summary

Main Port (Light scene 1)

Summary



|                    |                        |                                    |                     |
|--------------------|------------------------|------------------------------------|---------------------|
|                    |                        | Clearance height                   | 0.010 m             |
|                    |                        | Mounting height                    | 12.000 m – 25.000 m |
| Ground area        | 5282.43 m <sup>2</sup> | Height <sub>Working plane</sub>    | 0.000 m             |
| Maintenance factor | 0.80 (fixed)           | Wall zone <sub>Working plane</sub> | 0.000 m             |

## Main Port (Light scene 1)

## Summary

## Results

|                                  | Symbol                           | Calculated                    | Target            | Check | Index |
|----------------------------------|----------------------------------|-------------------------------|-------------------|-------|-------|
| Working plane                    | $\bar{E}_{\text{perpendicular}}$ | 63.9 lx                       | $\geq 50.0$ lx    | ✓     | WP2   |
|                                  | $U_o (g_1)$                      | 0.084                         | $\geq 0.40$       | ✗     | WP2   |
|                                  | Lighting power density           | 1.30 W/m <sup>2</sup>         | –                 |       |       |
|                                  |                                  | 2.04 W/m <sup>2</sup> /100 lx | –                 |       |       |
| Energy estimation <sup>(2)</sup> | Consumption                      | 58254 kWh/a                   | max. 184900 kWh/a | ✓     |       |
| Space                            | Lighting power density           | 1.26 W/m <sup>2</sup>         | –                 |       |       |
|                                  |                                  | 1.97 W/m <sup>2</sup> /100 lx | –                 |       |       |

(1) Based on a rectangular space of 127.151 m x 63.723 m and SHR of 0.25.

(2) Calculated using DIN:18599-4.

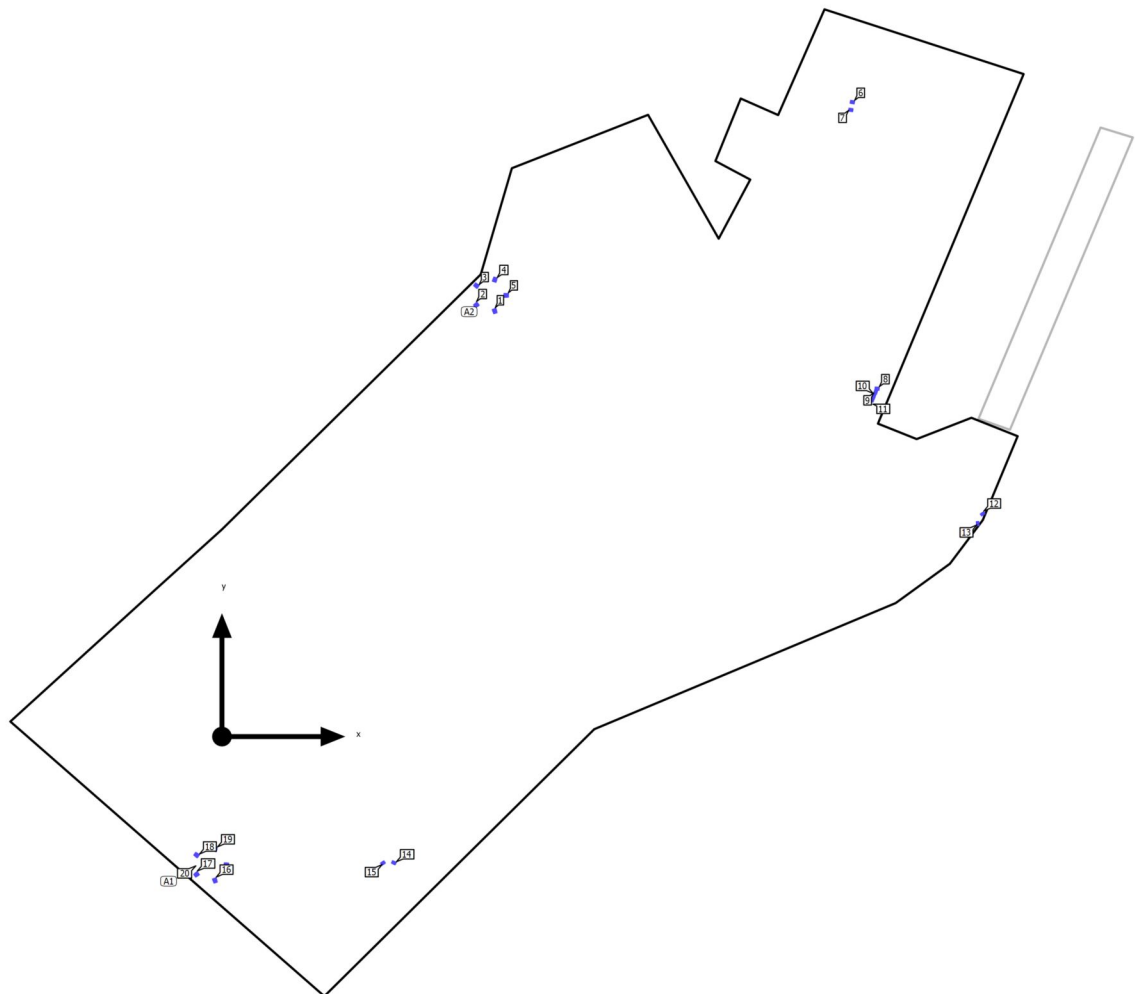
Utilisation profile: General circulation areas at outdoor workplaces (5.1.4 Pedestrian passages, vehicle turning, loading and unloading points)

## Luminaire list

| pcs. | Manufacturer | Article No.       | Article name                                                 | R <sub>UG</sub> | P       | Φ        | Luminous efficacy |
|------|--------------|-------------------|--------------------------------------------------------------|-----------------|---------|----------|-------------------|
| 10   | LEDVANCE     | 40998541<br>96218 | FLOODLIGHT HIGH MAST 500W LUMINAIRE<br>HEAD 500W 740 SYM R12 | –               | 500.0 W | 60000 lm | 120.0 lm/W        |
| 10   | LEDVANCE     | 40580754<br>23732 | FL PFM 165W/4000K SYM 100 BK                                 | 34              | 165.0 W | 20000 lm | 121.2 lm/W        |

Main Port

## Luminaire layout plan



Main Port

## Luminaire layout plan



|              |                                                                    |                           |          |
|--------------|--------------------------------------------------------------------|---------------------------|----------|
| Manufacturer | LEDVANCE                                                           | P                         | 500.0 W  |
| Article No.  | 4099854196218                                                      | $\Phi_{\text{Luminaire}}$ | 60000 lm |
| Article name | FLOODLIGHT HIGH<br>MAST 500W<br>LUMINAIRE HEAD<br>500W 740 SYM R12 |                           |          |
| Fitting      | 1x FL H M LUM V<br>500W 740 SYM R12                                |                           |          |

### 5 x LEDVANCE FLOODLIGHT HIGH MAST 500W LUMINAIRE HEAD 500W 740 SYM R12

| Type                  | Circle Arrangement             | X        | Y         | Mounting height | Luminaire |
|-----------------------|--------------------------------|----------|-----------|-----------------|-----------|
| 1st luminaire (X/Y/Z) | 0.277 m / -13.860 m / 25.000 m | -0.816 m | -15.365 m | 25.000 m        | 16        |
| Arrangement           | A1                             | -2.585 m | -14.790 m | 25.000 m        | 17        |
|                       |                                | -2.585 m | -12.931 m | 25.000 m        | 18        |
|                       |                                | -0.816 m | -12.356 m | 25.000 m        | 19        |
|                       |                                | 0.277 m  | -13.860 m | 25.000 m        | 20        |

### 5 x LEDVANCE FLOODLIGHT HIGH MAST 500W LUMINAIRE HEAD 500W 740 SYM R12

| Type                  | Circle Arrangement             | X        | Y        | Mounting height | Luminaire |
|-----------------------|--------------------------------|----------|----------|-----------------|-----------|
| 1st luminaire (X/Y/Z) | 30.536 m / 47.712 m / 25.000 m | 29.443 m | 46.208 m | 25.000 m        | 1         |
| Arrangement           | A2                             | 27.674 m | 46.783 m | 25.000 m        | 2         |
|                       |                                | 27.674 m | 48.642 m | 25.000 m        | 3         |
|                       |                                | 29.443 m | 49.217 m | 25.000 m        | 4         |

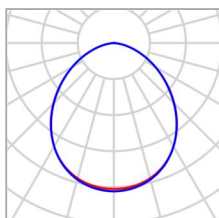
Main Port

**Luminaire layout plan**

| X        | Y        | Mounting<br>height | Luminaire |
|----------|----------|--------------------|-----------|
| 30.536 m | 47.712 m | 25.000 m           | 5         |

Main Port

## Luminaire layout plan



|              |                                 |                           |          |
|--------------|---------------------------------|---------------------------|----------|
| Manufacturer | LEDVANCE                        | P                         | 165.0 W  |
| Article No.  | 4058075423732                   | $\Phi_{\text{Luminaire}}$ | 20000 lm |
| Article name | FL PFM 165W/4000K<br>SYM 100 BK |                           |          |
| Fitting      | 1x LED / CRI >= 80              |                           |          |

### Individual luminaires

| X        | Y         | Mounting height | Luminaire |
|----------|-----------|-----------------|-----------|
| 68.180 m | 68.590 m  | 12.000 m        | 6         |
| 68.019 m | 67.779 m  | 12.000 m        | 7         |
| 70.857 m | 37.608 m  | 12.000 m        | 8         |
| 70.708 m | 37.243 m  | 12.000 m        | 9         |
| 70.469 m | 36.773 m  | 12.000 m        | 10        |
| 70.272 m | 36.410 m  | 12.000 m        | 11        |
| 82.291 m | 24.065 m  | 12.000 m        | 12        |
| 81.759 m | 23.032 m  | 12.000 m        | 13        |
| 18.580 m | -13.662 m | 12.000 m        | 14        |
| 17.419 m | -13.698 m | 12.000 m        | 15        |

Main Port

**Luminaire list** $\Phi_{\text{total}}$ 

800000 lm

 $P_{\text{total}}$ 

6650.0 W

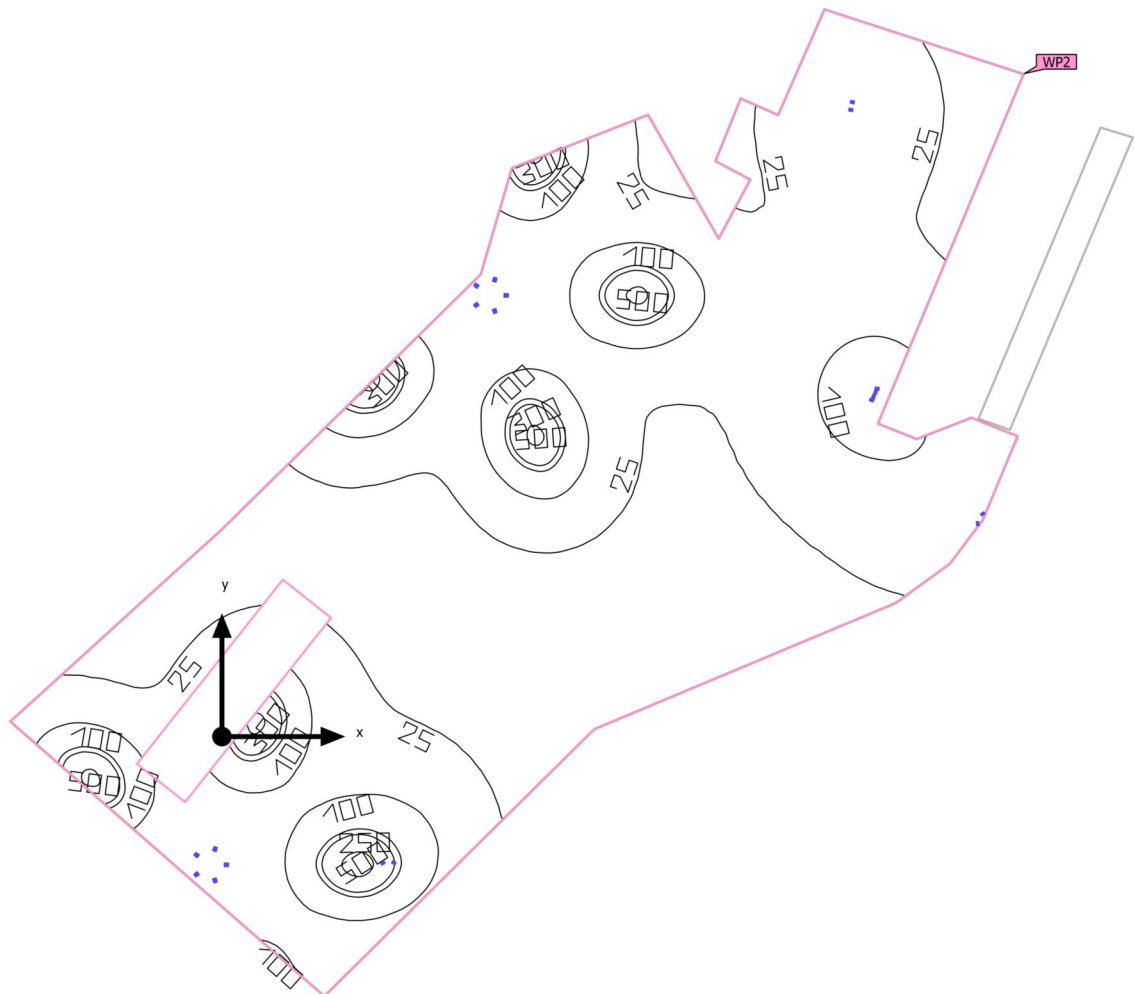
Luminous efficacy

120.3 lm/W

| pcs. | Manufacturer | Article No.       | Article name                                                 | P       | $\Phi$   | Luminous efficacy |
|------|--------------|-------------------|--------------------------------------------------------------|---------|----------|-------------------|
| 10   | LEDVANCE     | 40998541<br>96218 | FLOODLIGHT HIGH MAST 500W LUMINAIRE HEAD<br>500W 740 SYM R12 | 500.0 W | 60000 lm | 120.0 lm/W        |
| 10   | LEDVANCE     | 40580754<br>23732 | FL PFM 165W/4000K SYM 100 BK                                 | 165.0 W | 20000 lm | 121.2 lm/W        |

Main Port (Light scene 1)

## Calculation objects



Main Port (Light scene 1)

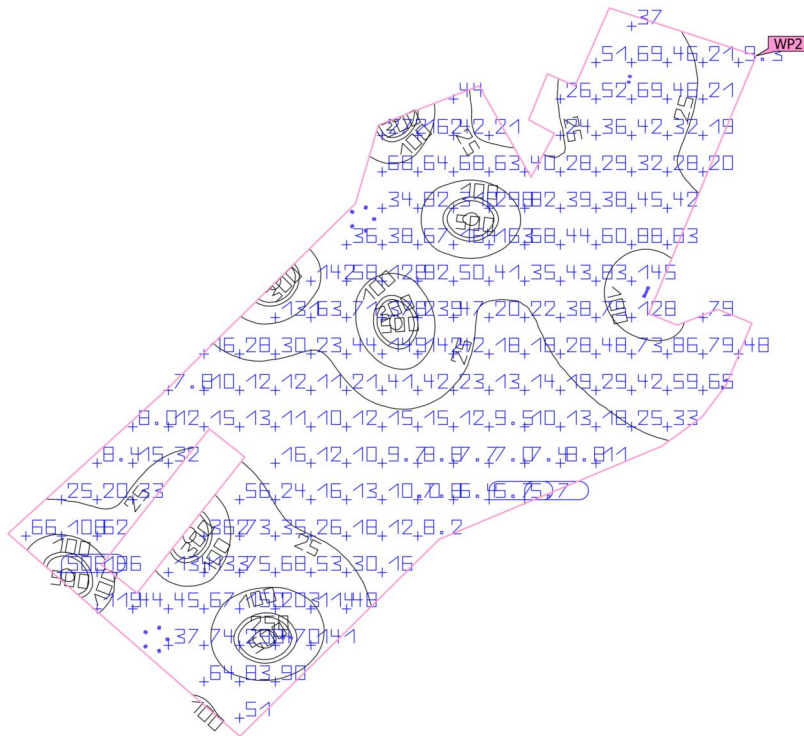
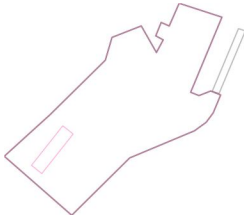
**Calculation objects**

Working planes

| Properties                                                                                               | $\bar{E}$<br>(Target)             | $E_{min}$ | $E_{max}$ | $U_o (g_1)$<br>(Target)       | $g_2$ | Index |
|----------------------------------------------------------------------------------------------------------|-----------------------------------|-----------|-----------|-------------------------------|-------|-------|
| Working plane (Main Port)<br>Perpendicular illuminance (adaptive)<br>Height: 0.000 m, Wall zone: 0.000 m | 63.9 lx<br>( $\geq 50.0$ lx)<br>✓ | 5.35 lx   | 591 lx    | 0.084<br>( $\geq 0.40$ )<br>✗ | 0.009 | WP2   |

Utilisation profile: General circulation areas at outdoor workplaces (5.1.4 Pedestrian passages, vehicle turning, loading and unloading points)

Main Port (Light scene 1)

**Working plane (Main Port)**

| Properties                           | $\bar{E}$<br>(Target) | $E_{min}$ | $E_{max}$ | $U_o (g_1)$<br>(Target) | $g_2$ | Index |
|--------------------------------------|-----------------------|-----------|-----------|-------------------------|-------|-------|
| Working plane (Main Port)            | 63.9 lx               | 5.35 lx   | 591 lx    | 0.084                   | 0.009 | WP2   |
| Perpendicular illuminance (adaptive) | (≥ 50.0 lx)           |           |           | (≥ 0.40)                |       |       |
| Height: 0.000 m, Wall zone: 0.000 m  | ✓                     |           |           | ✗                       |       |       |

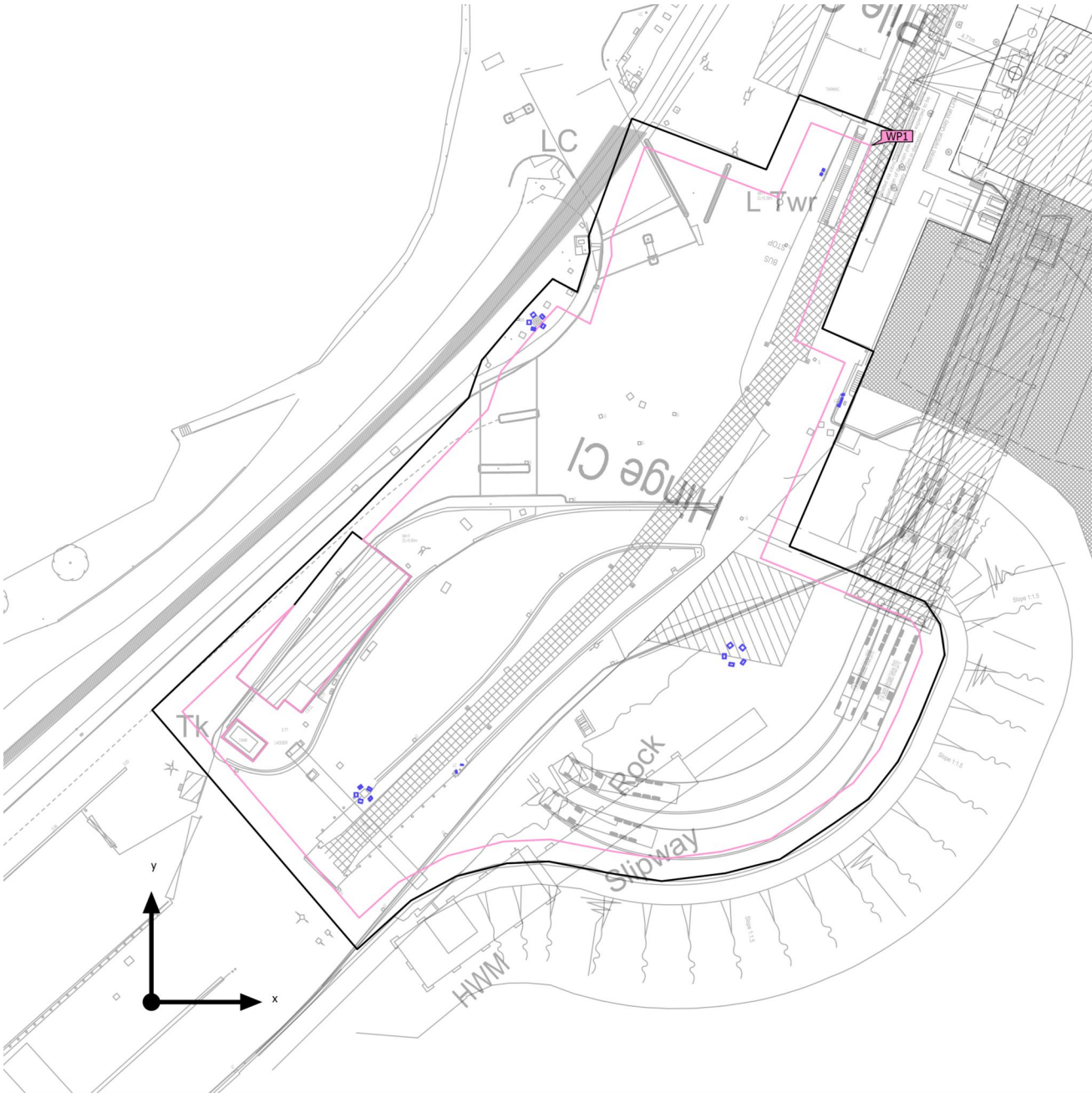
Utilisation profile: General circulation areas at outdoor workplaces (5.1.4 Pedestrian passages, vehicle turning, loading and unloading points)

**18.B**

**APPENDIX 18.B**  
**Lighting Design**  
**Proposed Port Summary**

Main Port Area (Light scene 1)

Summary



|                    |                        |                     |
|--------------------|------------------------|---------------------|
|                    | Clearance height       | 0.010 m             |
|                    | Mounting height        | 12.000 m – 25.000 m |
| Ground area        | 6506.82 m <sup>2</sup> |                     |
| Maintenance factor | 0.80 (fixed)           |                     |
|                    | Height Working plane   | 0.000 m             |

## Main Port Area (Light scene 1)

## Summary

## Results

|                                  | Symbol                           | Calculated                    | Target            | Check | Index |
|----------------------------------|----------------------------------|-------------------------------|-------------------|-------|-------|
| Working plane                    | $\bar{E}_{\text{perpendicular}}$ | 73.2 lx                       | $\geq 30.0$ lx    | ✓     | WP1   |
|                                  | $U_o (g_1)$                      | 0.40                          | $\geq 0.40$       | ✓     | WP1   |
|                                  | Lighting power density           | 1.78 W/m <sup>2</sup>         | –                 |       |       |
|                                  |                                  | 2.43 W/m <sup>2</sup> /100 lx | –                 |       |       |
| Energy estimation <sup>(2)</sup> | Consumption                      | 83921 kWh/a                   | max. 227750 kWh/a | ✓     |       |
| Space                            | Lighting power density           | 1.47 W/m <sup>2</sup>         | –                 |       |       |
|                                  |                                  | 2.01 W/m <sup>2</sup> /100 lx | –                 |       |       |

(1) Based on a rectangular space of 133.060 m x 84.603 m and SHR of 0.25.

(2) Calculated using DIN:18599-4.

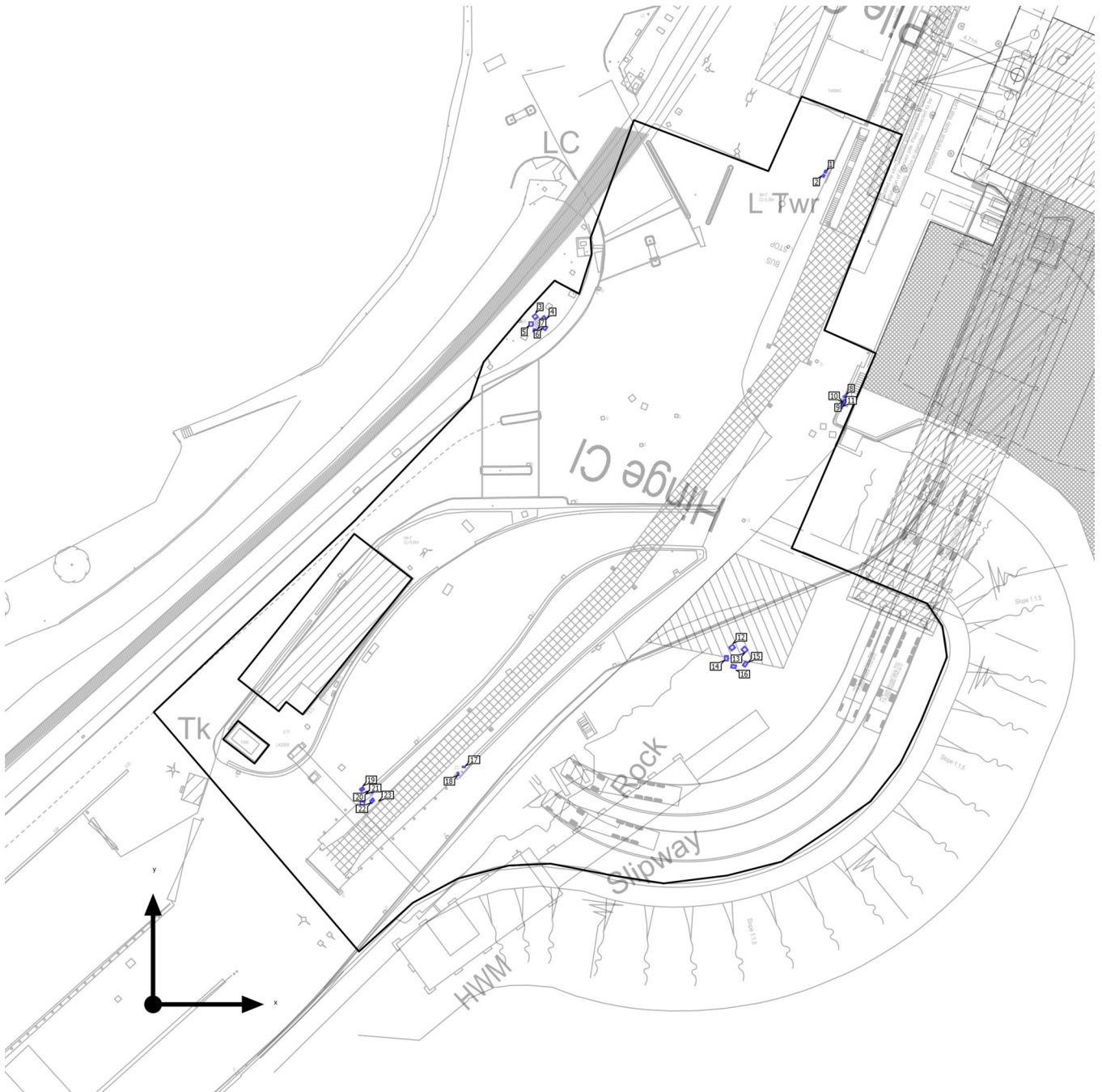
Utilisation profile: General circulation areas at outdoor workplaces (5.1.3 Regular vehicle traffic (max. 40km/h))

## Luminaire list

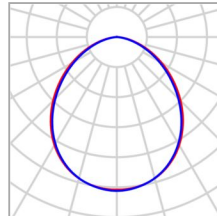
| pcs. | Manufacturer   | Article No.       | Article name                                 | R <sub>UG</sub> | P       | Φ        | Luminous efficacy |
|------|----------------|-------------------|----------------------------------------------|-----------------|---------|----------|-------------------|
| 2    | LEDVANCE       | 40580754<br>23763 | FLOODLIGHT 200 W 4000 K SYM 100 BK           | 35              | 200.0 W | 25000 lm | 125.0 lm/W        |
| 10   | LEDVANCE       | 40580753<br>72528 | ECO CLASS HP FLOOD 500W 840 VN<br>61000LM BK | 15              | 500.0 W | 60439 lm | 120.9 lm/W        |
| 6    | LEDVANCE       | 40580754<br>23732 | FL PFM 165W/4000K SYM 100 BK                 | 35              | 165.0 W | 20000 lm | 121.2 lm/W        |
| 5    | Thorn Lighting | 96635932          | AFP2 2L 288L75-740 A4 CL1 GY [STD]           | –               | 638.0 W | 98472 lm | 154.3 lm/W        |

Main Port Area

## Luminaire layout plan



Main Port Area

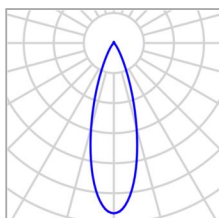
**Luminaire layout plan**

|              |                                       |                           |          |
|--------------|---------------------------------------|---------------------------|----------|
| Manufacturer | LEDVANCE                              | P                         | 200.0 W  |
| Article No.  | 4058075423763                         | $\Phi_{\text{Luminaire}}$ | 25000 lm |
| Article name | FLOODLIGHT 200 W<br>4000 K SYM 100 BK |                           |          |
| Fitting      | 1x FL PFM 200 W<br>4000 K SYM 100 BK  |                           |          |

## Individual luminaires

| X        | Y         | Mounting height | Luminaire |
|----------|-----------|-----------------|-----------|
| 91.746 m | 113.551 m | 12.000 m        | 1         |
| 91.597 m | 113.270 m | 12.000 m        | 2         |

Main Port Area

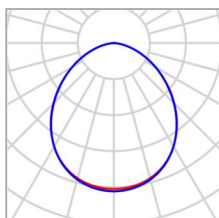
**Luminaire layout plan**

|              |                                                 |                           |          |
|--------------|-------------------------------------------------|---------------------------|----------|
| Manufacturer | LEDVANCE                                        | P                         | 500.0 W  |
| Article No.  | 4058075372528                                   | $\Phi_{\text{Luminaire}}$ | 60439 lm |
| Article name | ECO CLASS HP<br>FLOOD 500W 840 VN<br>61000LM BK |                           |          |
| Fitting      | 1x LED 4000K CRI >= 80                          |                           |          |

## Individual luminaires

| X        | Y        | Mounting height | Luminaire |
|----------|----------|-----------------|-----------|
| 52.186 m | 93.888 m | 25.000 m        | 3         |
| 53.365 m | 93.628 m | 25.000 m        | 4         |
| 51.620 m | 92.880 m | 25.000 m        | 5         |
| 53.469 m | 92.394 m | 25.000 m        | 6         |
| 52.198 m | 92.050 m | 25.000 m        | 7         |
| 28.572 m | 29.329 m | 25.000 m        | 19        |
| 29.751 m | 29.069 m | 25.000 m        | 20        |
| 28.006 m | 28.321 m | 25.000 m        | 21        |
| 29.855 m | 27.836 m | 25.000 m        | 22        |
| 28.584 m | 27.491 m | 25.000 m        | 23        |

Main Port Area

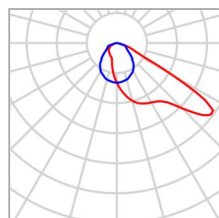
**Luminaire layout plan**

|              |                                 |                           |          |
|--------------|---------------------------------|---------------------------|----------|
| Manufacturer | LEDVANCE                        | P                         | 165.0 W  |
| Article No.  | 4058075423732                   | $\Phi_{\text{Luminaire}}$ | 20000 lm |
| Article name | FL PFM 165W/4000K<br>SYM 100 BK |                           |          |
| Fitting      | 1x LED / CRI >= 80              |                           |          |

## Individual luminaires

| X        | Y        | Mounting height | Luminaire |
|----------|----------|-----------------|-----------|
| 94.476 m | 82.983 m | 12.000 m        | 8         |
| 94.360 m | 82.394 m | 12.000 m        | 9         |
| 94.189 m | 81.923 m | 12.000 m        | 10        |
| 93.920 m | 81.514 m | 12.000 m        | 11        |
| 42.418 m | 32.388 m | 12.000 m        | 17        |
| 41.680 m | 31.452 m | 12.000 m        | 18        |

Main Port Area

**Luminaire layout plan**

|              |                                       |                           |          |
|--------------|---------------------------------------|---------------------------|----------|
| Manufacturer | Thorn Lighting                        | P                         | 638.0 W  |
| Article No.  | 96635932                              | $\Phi_{\text{Luminaire}}$ | 98472 lm |
| Article name | AFP2 2L 288L75-740<br>A4 CL1 GY [STD] |                           |          |
| Fitting      | 1x LED 638 W                          |                           |          |

## Individual luminaires

| X        | Y        | Mounting height | Luminaire |
|----------|----------|-----------------|-----------|
| 79.089 m | 48.693 m | 25.000 m        | 12        |
| 80.726 m | 48.402 m | 25.000 m        | 13        |
| 78.317 m | 47.262 m | 25.000 m        | 14        |
| 80.798 m | 46.487 m | 25.000 m        | 15        |
| 79.259 m | 46.189 m | 25.000 m        | 16        |

Main Port Area

**Luminaire list** $\Phi_{\text{total}}$ 

1266750 lm

 $P_{\text{total}}$ 

9580.0 W

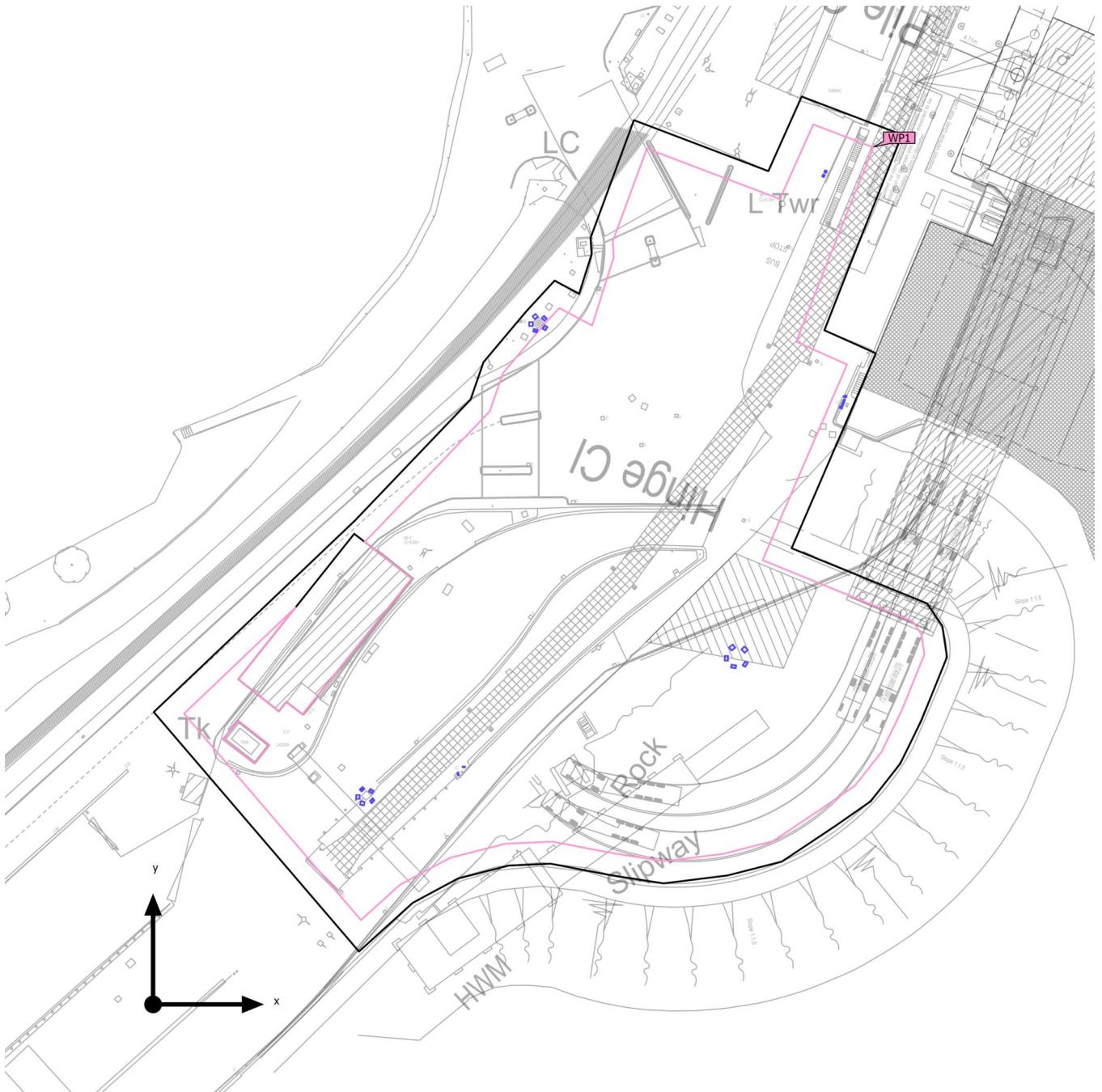
Luminous efficacy

132.2 lm/W

| pcs. | Manufacturer   | Article No.       | Article name                              | P       | $\Phi$   | Luminous efficacy |
|------|----------------|-------------------|-------------------------------------------|---------|----------|-------------------|
| 2    | LEDVANCE       | 40580754<br>23763 | FLOODLIGHT 200 W 4000 K SYM 100 BK        | 200.0 W | 25000 lm | 125.0 lm/W        |
| 10   | LEDVANCE       | 40580753<br>72528 | ECO CLASS HP FLOOD 500W 840 VN 61000LM BK | 500.0 W | 60439 lm | 120.9 lm/W        |
| 6    | LEDVANCE       | 40580754<br>23732 | FL PFM 165W/4000K SYM 100 BK              | 165.0 W | 20000 lm | 121.2 lm/W        |
| 5    | Thorn Lighting | 96635932          | AFP2 2L 288L75-740 A4 CL1 GY [STD]        | 638.0 W | 98472 lm | 154.3 lm/W        |

Main Port Area (Light scene 1)

## Calculation objects



Main Port Area (Light scene 1)

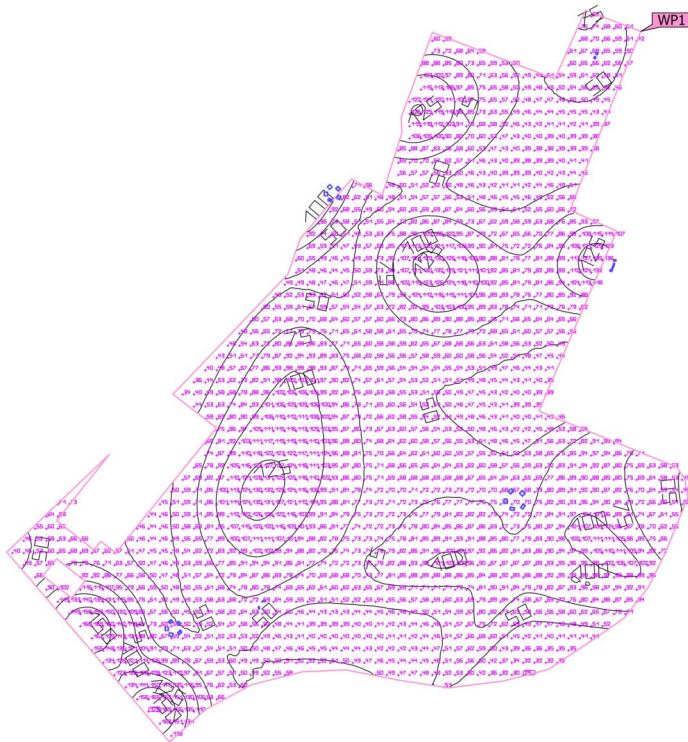
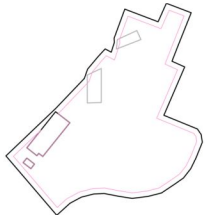
**Calculation objects**

Working planes

| Properties                                                                                                    | $\bar{E}$<br>(Target)             | $E_{min}$ | $E_{max}$ | $U_o (g_1)$<br>(Target)      | $g_2$ | Index |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------|-----------|------------------------------|-------|-------|
| Working plane (Main Port Area)<br>Perpendicular illuminance (adaptive)<br>Height: 0.000 m, Wall zone: 3.000 m | 73.2 lx<br>( $\geq 30.0$ lx)<br>✓ | 29.0 lx   | 171 lx    | 0.40<br>( $\geq 0.40$ )<br>✓ | 0.17  | WP1   |

Utilisation profile: General circulation areas at outdoor workplaces (5.1.3 Regular vehicle traffic (max. 40km/h))

Main Port Area (Light scene 1)

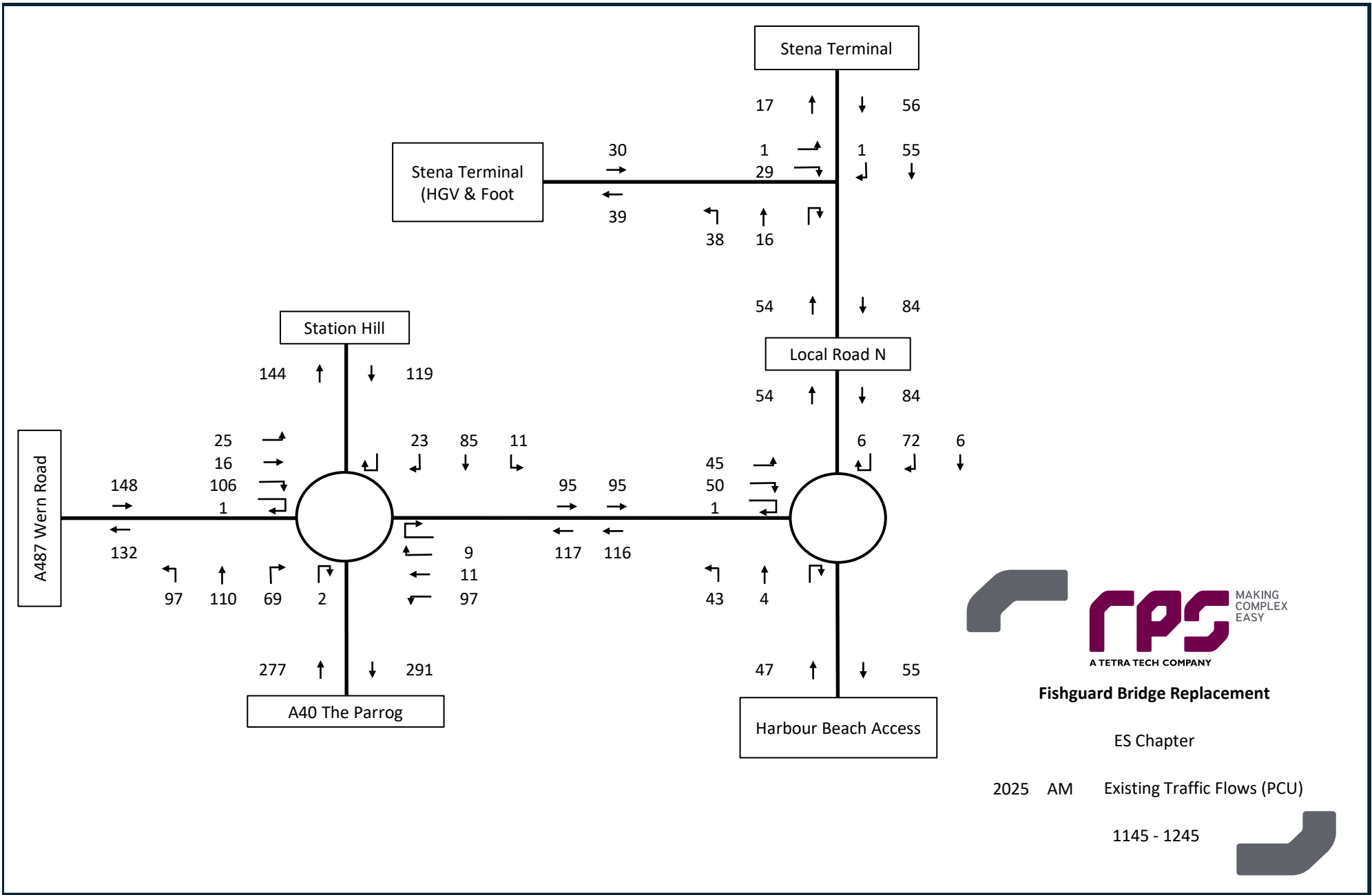
**Working plane (Main Port Area)**

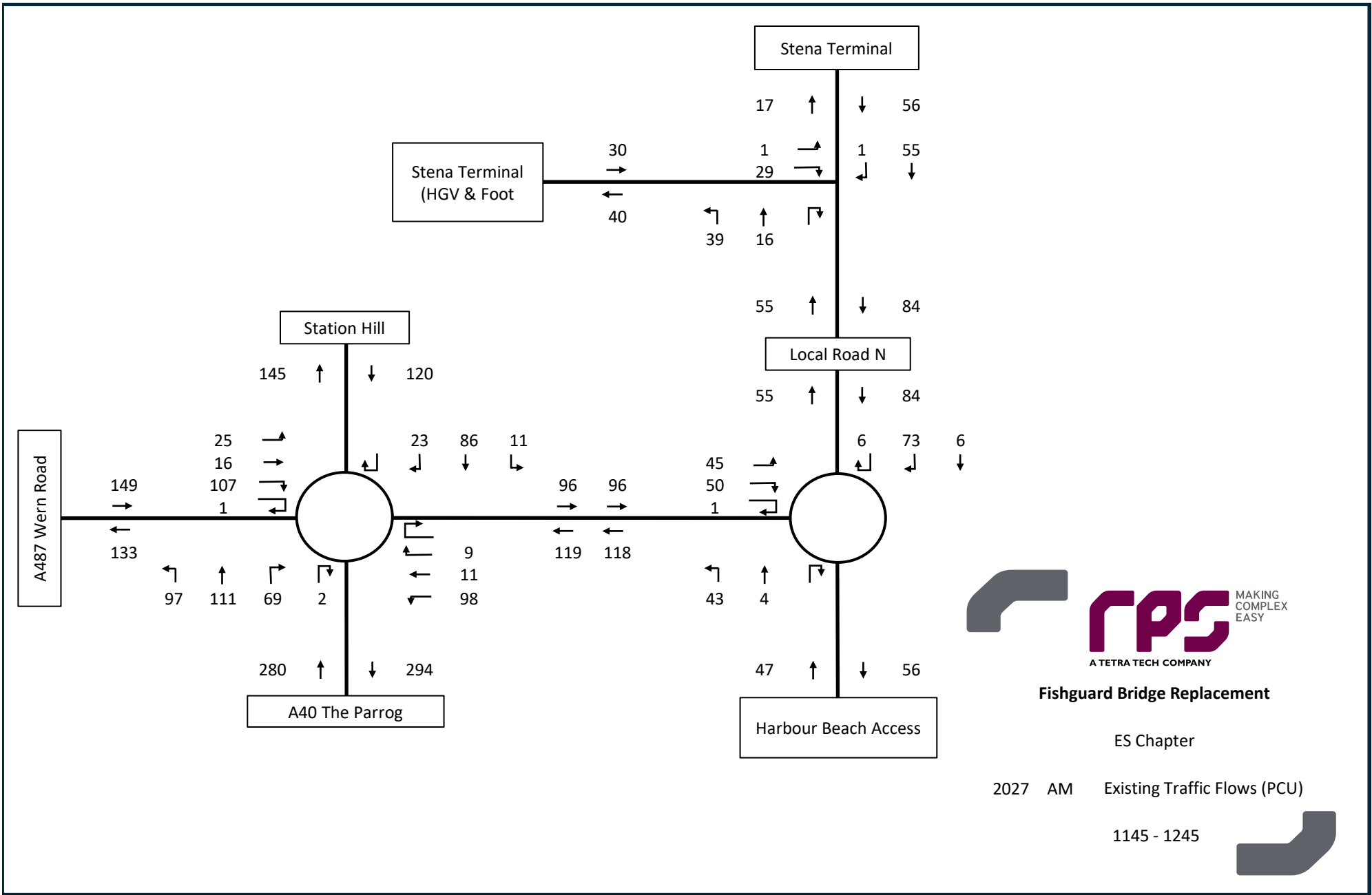
| Properties                           | $\bar{E}$<br>(Target) | $E_{min}$ | $E_{max}$ | $U_o (g_1)$<br>(Target) | $g_2$ | Index |
|--------------------------------------|-----------------------|-----------|-----------|-------------------------|-------|-------|
| Working plane (Main Port Area)       | 73.2 lx               | 29.0 lx   | 171 lx    | 0.40                    | 0.17  | WP1   |
| Perpendicular illuminance (adaptive) | (≥ 30.0 lx)           |           |           | (≥ 0.40)                |       |       |
| Height: 0.000 m, Wall zone: 3.000 m  | ✓                     |           |           | ✓                       |       |       |

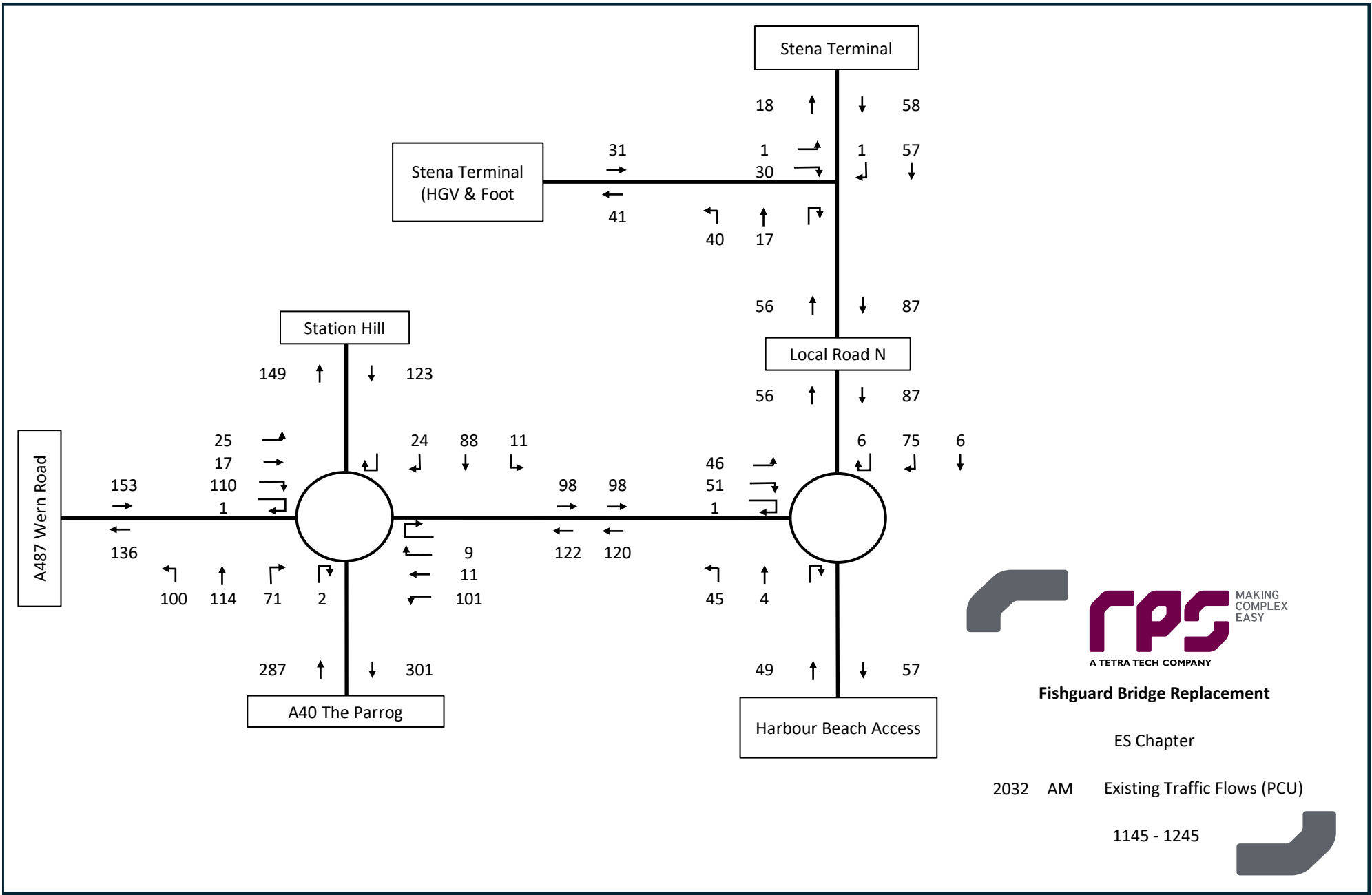
Utilisation profile: General circulation areas at outdoor workplaces (5.1.3 Regular vehicle traffic (max. 40km/h))

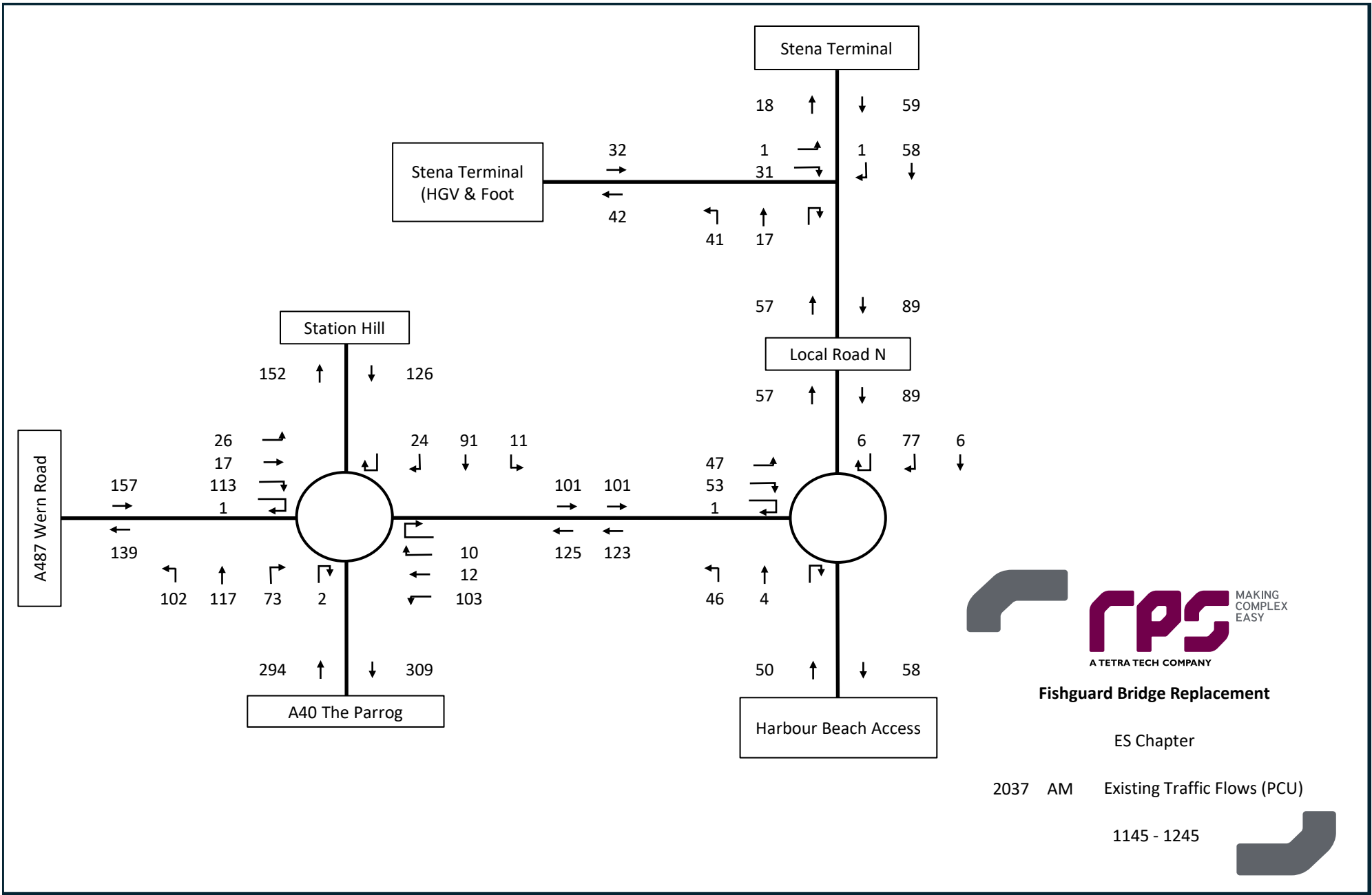
# 19.A

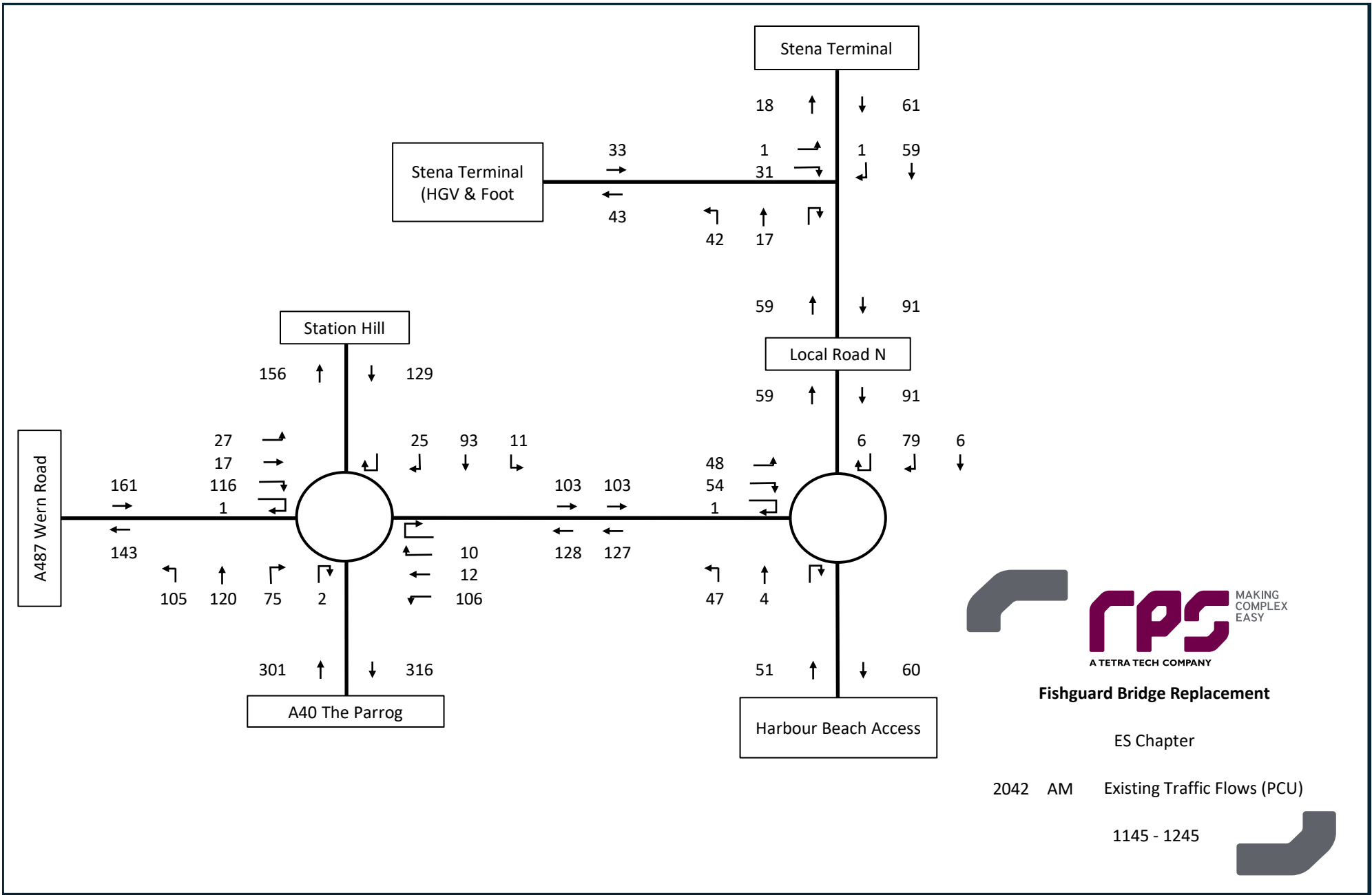
## APPENDIX 19.A Traffic Flows

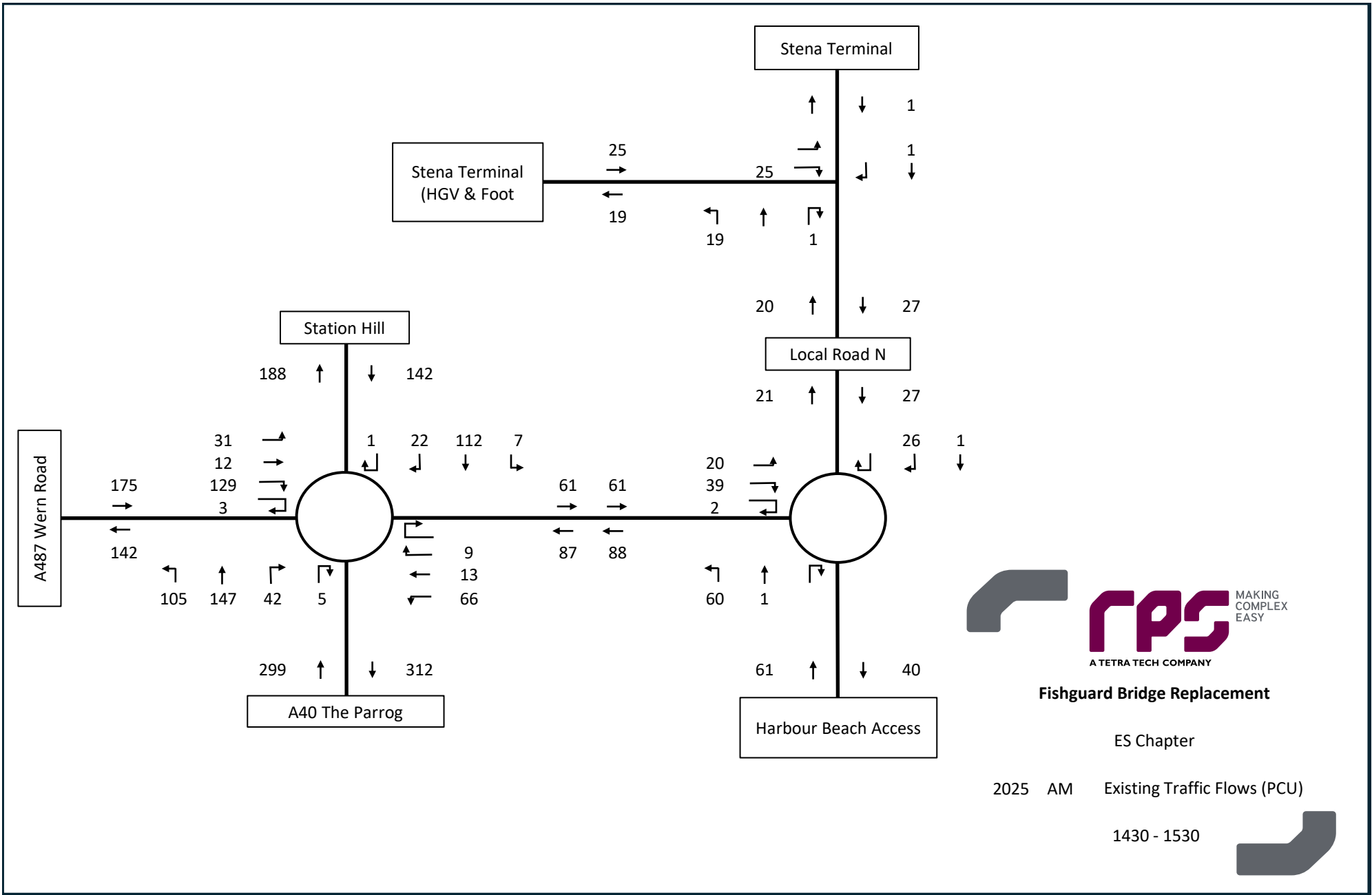


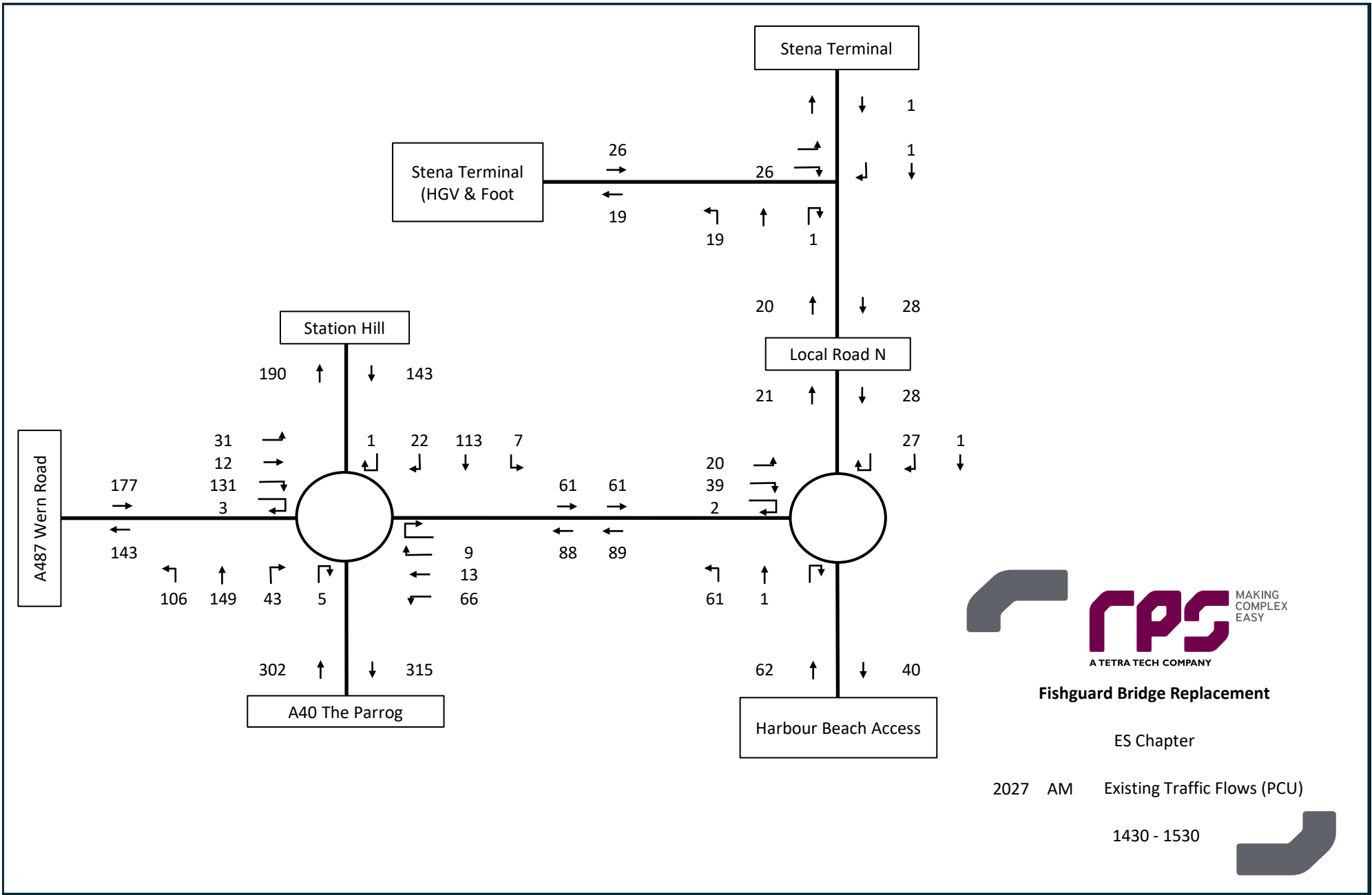


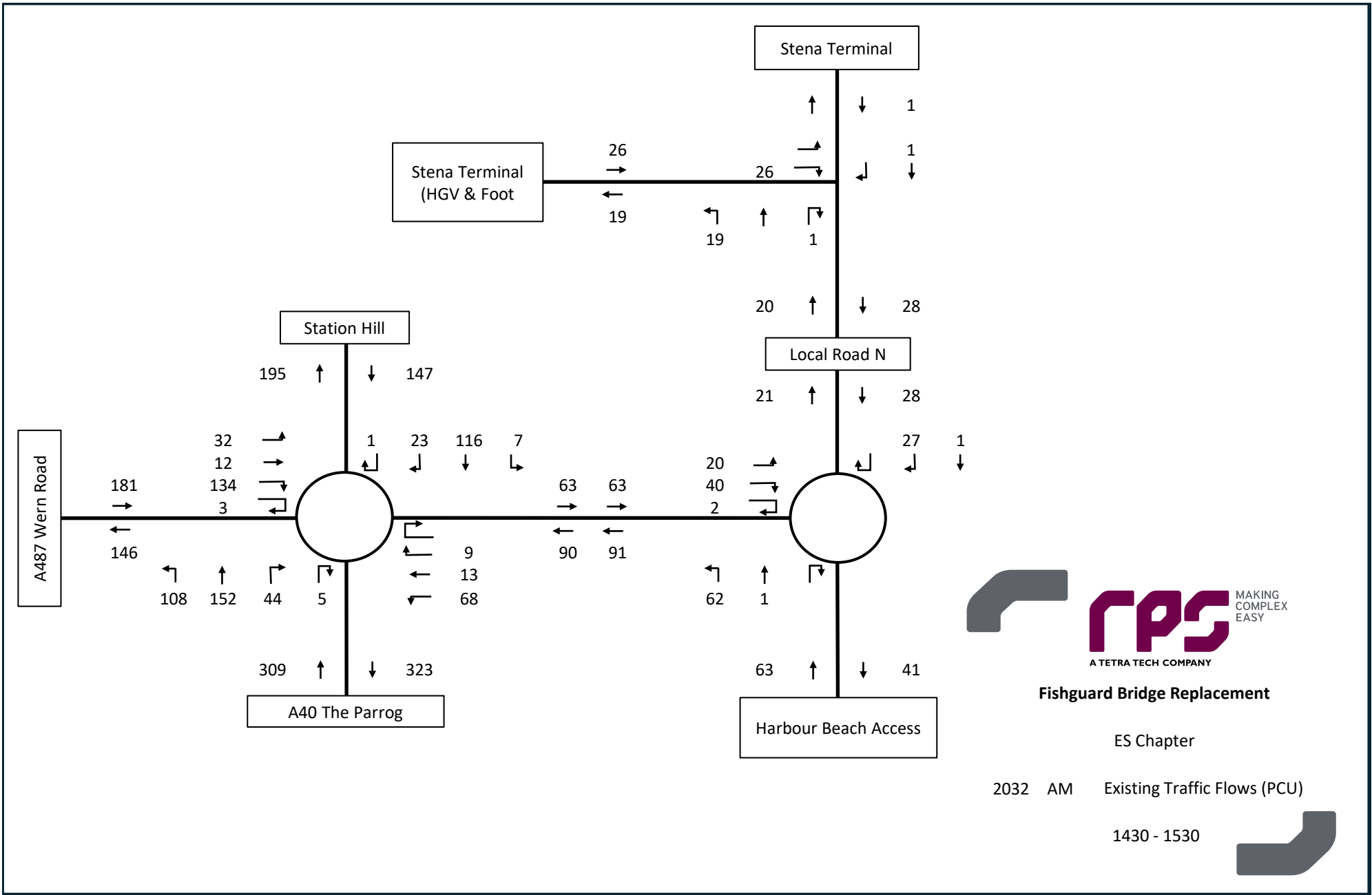


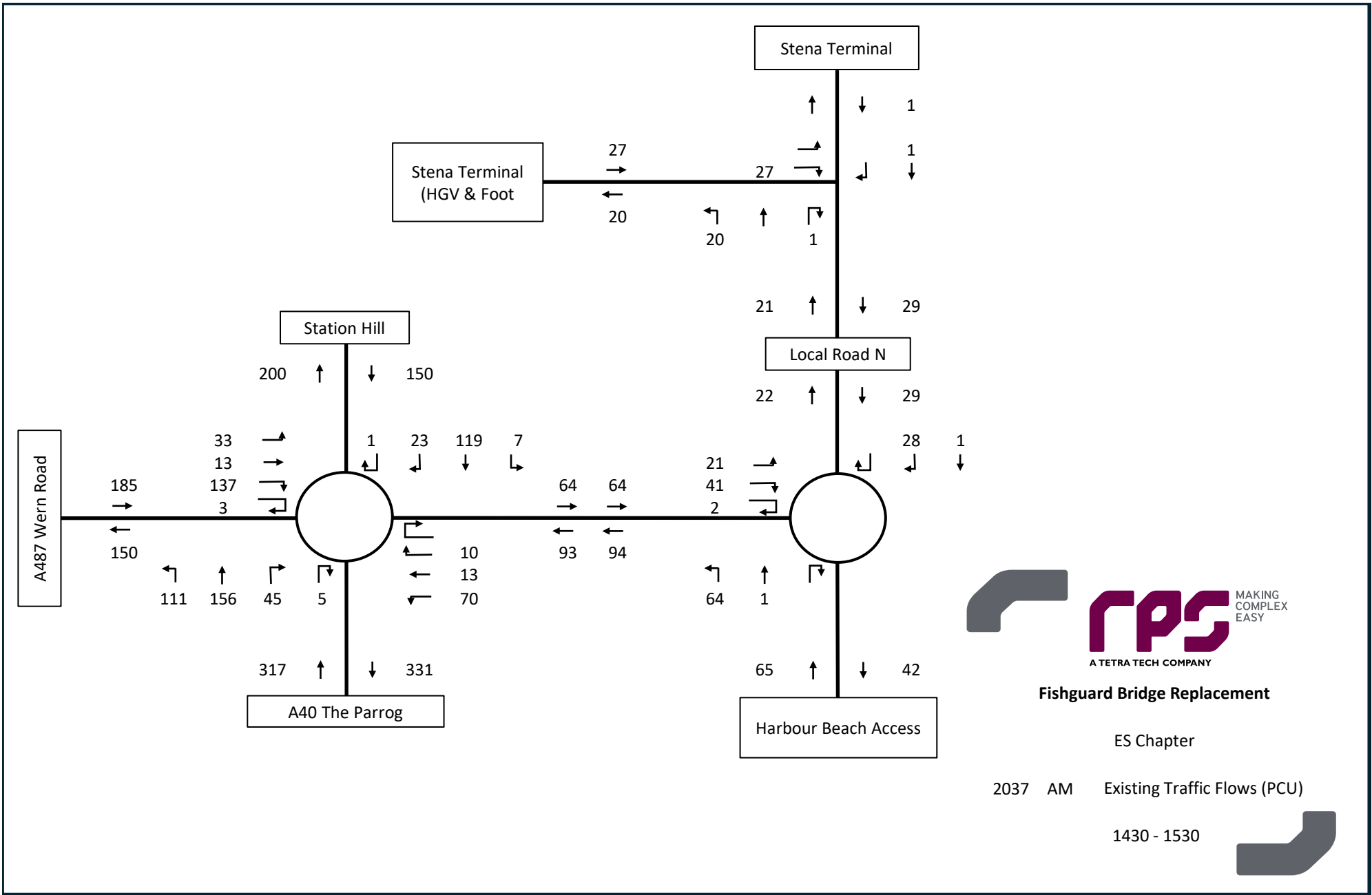


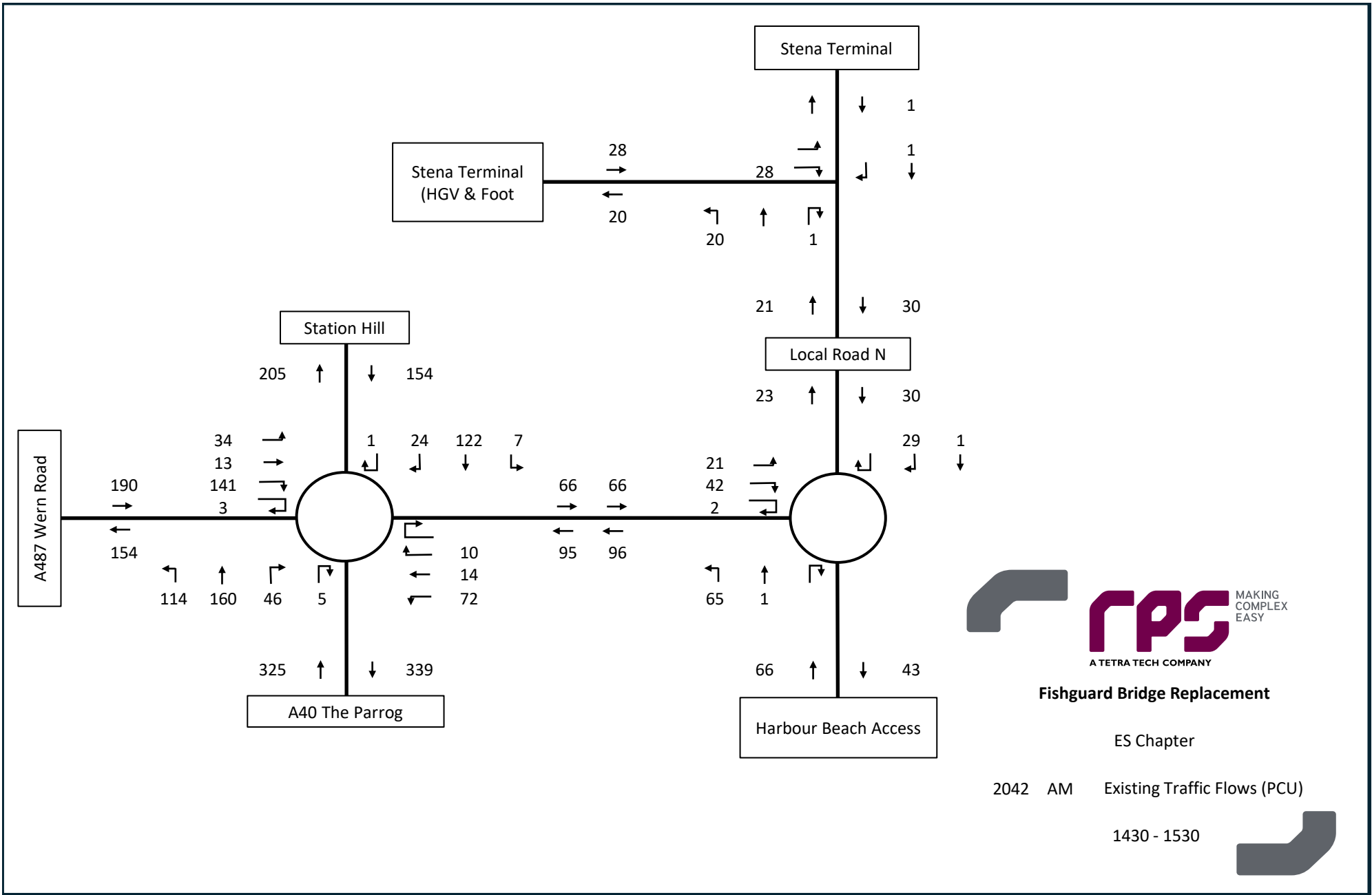












# 21.A

## APPENDIX 21.A Waste Management



# **PORT OF FISHGUARD**

## **WASTE MANAGEMENT PLAN FOR THE RECEPTION AND DISPOSAL OF WASTE FROM SHIPS USING THE PORT OF FISHGUARD**

Stena Line Ltd  
Administration Office  
Fishguard Harbour  
Goodwick  
Pembrokeshire  
SA64 0BX

Tel      01348 404430

*Port of Fishguard  
Waste Management Plan*

|                                                 |                                                                                         |
|-------------------------------------------------|-----------------------------------------------------------------------------------------|
| <b>Port Details</b>                             |                                                                                         |
| <b>Port</b>                                     | <b>Fishguard</b>                                                                        |
| <b>Port Authority or Harbour Master Details</b> |                                                                                         |
| <b>Name</b>                                     | <b>John Goddard (Harbour Master)<br/>Matthew Tucker (Port Manager)</b>                  |
| <b>Address</b>                                  | <b>Stena Line Ltd<br/>Fishguard Harbour<br/>Goodwick<br/>Pembrokeshire<br/>SA64 0BU</b> |
| <b>Telephone</b>                                | <b>01348 404435<br/>07977 469617</b>                                                    |
| <b>E-Mail</b>                                   | <b>matthew.tucker@stenaline.com</b>                                                     |
| <b>Web Resources</b>                            |                                                                                         |
| <b>Port Website</b>                             | <b>www.fishguardport.co.uk</b>                                                          |

**Port of Fishguard Approved Service Provider Details**

**Domestic Waste:**

Greenacres Skip Hire  
Celtic Link Business Park  
Fford Trebrythen  
Pembrokeshire  
SA65 9RE  
Tel: 01348 811444  
Mobile: 07831 248 722

Pembrokeshire County Council  
County Hall  
Haverfordwest  
Pembrokeshire  
SA61 1TP

Tel: 01437 764551

**International Catering Waste**

Viridor(Via Greenacres Skip Hire)  
Trident Park  
Glass Avenue  
Off Ocean way  
Cardiff  
CF24 5EN

Tel: 02920 501149

**Confidential Waste**

Dod I Ben Cyf  
Gwastod  
Abermeurig  
Lampeter  
SA48 8PP

Mobile: 07809146308

Special Waste: Hazardous

LAS Recycling Ltd  
Tregaron Road  
Lampeter  
Ceredigion  
SA48 8LT

Tel: 01570 421421

SafetyKleen UK Ltd  
Springmeadow Road  
Cardiff  
CF3 2ES

02920 796 890

PHS Group  
Block B, Western Industrial Estate  
Caerphilly  
CF83 1XH

Tel: 02920 809098

Slicker Recycling  
7 New Quay Road  
Felxex Industrial Estate  
Newport  
NP19 4PL

Tel: 0330 1598325

Brandon Hire Station  
Red Quarry  
Providence Hill  
Narberth  
SA67 8RE

Tel: 01834 861054

Regency Oils (Wales) Ltd  
Unit 129  
Lamby Industrial Park  
Wentloog Avenue  
Rumney  
Cardiff  
CF3 2EX

Tel: 02920 777297

**Check Waste file**

### **Plan Amendment / Review Record**

The Port Waste Management Plan will be reviewed every three years from 2014

| <b>DATE</b> | <b>AMENDMENT/REVIEW DETAILS</b>                                                                                                                                                                                       | <b>SIGNATURE</b> |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 08.11.00    | 2 Year Review                                                                                                                                                                                                         | RH               |
| 26.07.05    | 2 Year Review                                                                                                                                                                                                         | RH               |
| 26.06.07    | 2 Year Review                                                                                                                                                                                                         | ID               |
| 26.08.09    | 2 Year Review                                                                                                                                                                                                         | ID               |
| 26.09.11    | 2 Year Review                                                                                                                                                                                                         | ID               |
| 25.02.14    | 3 Year Review                                                                                                                                                                                                         | CM               |
| 31.03.17    | 3 Year review                                                                                                                                                                                                         | CM               |
| 11.09.20    | 3 Year review                                                                                                                                                                                                         | CM               |
| 19.01.21    | Annual review- minor changes to Approved Service Provider contact details and Section 7 relating to Cruise Ship visits                                                                                                | CM               |
| 01.02.22    | Annual Review- minor changes to Approved Service Provider contact details, section 7 re Cruise Ship visits and Section 8 and Section 9.                                                                               | CM               |
| 25.01.2023  | Annual review- minor changes to Approved Service Provider contact details and Port Details on page 2, Section 3, Section 7 relating to Cruise Ships, Section 8 Records of Waste and Section 11.2 Environmental charge | CM               |
| 01/09/2023  | 3 Year Review                                                                                                                                                                                                         | CM               |
| 09/10/2024  | Annual Review- minor changes to Port contact details, Approved Service Provider details, Section 7 relating to number of Cruise Ships                                                                                 | MT               |
|             |                                                                                                                                                                                                                       |                  |

### **Summary of Relevant Legislation & Guidance**

This Waste Management Plan has been produced for the Port of Fishguard by Stena Line Ports Ltd., in response to the requirements set out in the following regulations and guidance.

Revision of the Port Reception Facilities Directive (2019/883)

Merchant Shipping and Fishing Vessels (Port Waste Reception Facilities) Regulations 2003

Merchant Shipping and Fishing Vessels (Port Waste Reception Facilities) (Amendment) Regulations 2009

MSN 1678 Special waste regulations 1996

MGN 563 Amendment 1, MGN 631, MGN 632, 2016 Amendments to MS (Port Waste Reception Facilities) Regulation 2003

MARPOL 73/78. Reference to UK Regulation i.e. MS and FV (Port Waste Reception Facilities) Regulation 2003.

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| Appendix A |    | Fishguard Port Reception Facilities                                   |

### Reference Documents

- 1 Guidance on Merchant Shipping and Fishing Vessels (Port Waste Reception Facilities) regulations 2003 and amendments.
- 2 A guide to good practice – IMO Consolidated Guidance for Port Reception Facility Providers and users.

## Section 1 Introduction

This Waste Management Plan for the reception and disposal of ship's waste at the Port of Fishguard was developed to comply with the requirements of Marpol 73/78. Reference to UK Regulation i.e. MS and FV (Port Waste Reception Facilities) Regulation 2003.

### Port of Fishguard Description

Fishguard harbour is comprised of two parts; the principal port facility is located at Goodwick between the end of the East breakwater and the North breakwater where the ferry service is located. This area constitutes the commercial Port run by Stena Line Ports Limited. A smaller natural harbour area is located in the area known as 'Lower Harbour', normally used by small fishery and leisure craft. 'Lower Harbour' is not part of the Port of Fishguard, being outside of the Statutory Harbour Authority area, see Figure 1.

The Port of Fishguard provides berthing and handling facilities for ferry traffic, principally between Rosslare (Ireland) and Fishguard; these vessels include regular scheduled passenger and vehicle ferries. Ferry traffic forms the primary commercial vessel movements; however, occasional calls are made by smaller commercial, military support vessels and fishing craft. The Port also provides a berth for the RNLI inshore and an all-weather lifeboat.

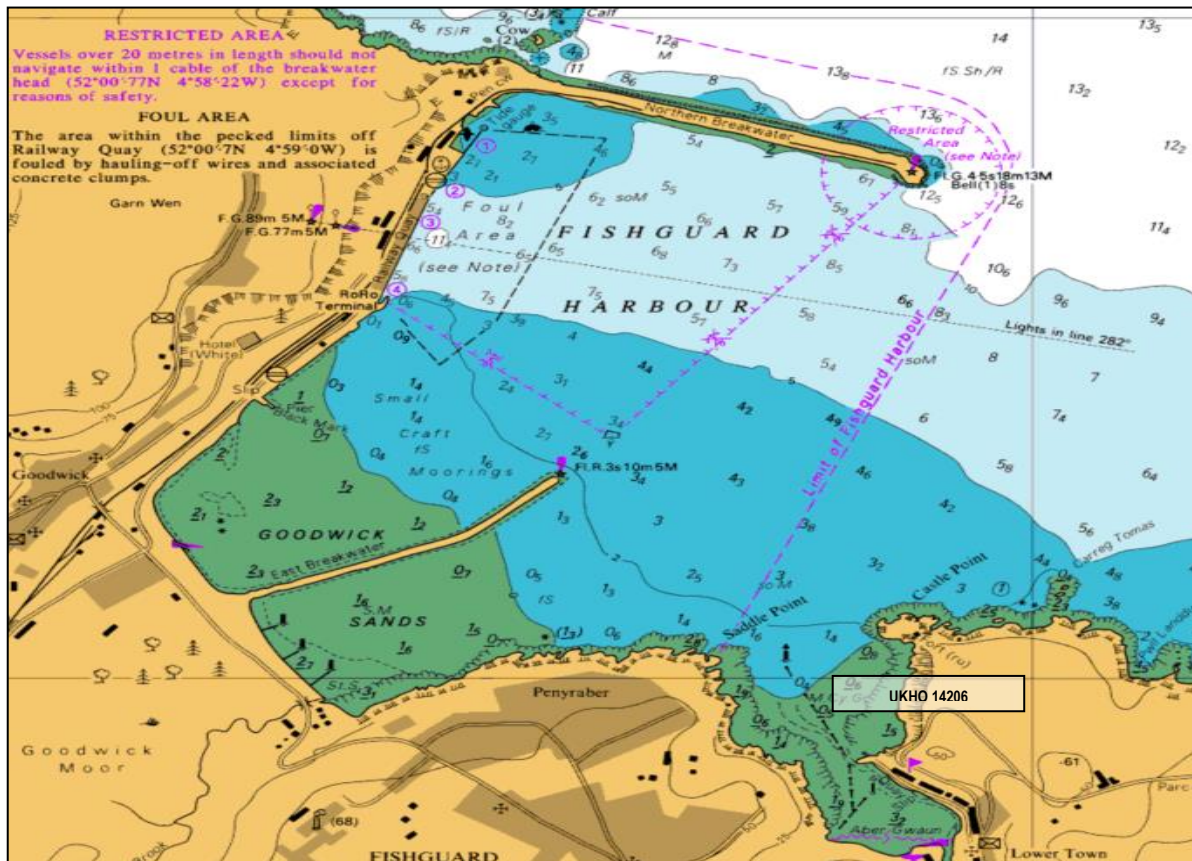


Figure 1 Port of Fishguard Statutory Harbour Authority Area

Waste landed by ships at the Port of Fishguard is a mixture of ship's domestic waste and International Catering Waste (since 2021). Domestic waste is landed by the Stena Line ferry operating on the

Fishguard – Rosslare route. International Catering Waste is landed three times a week by the Ferry and taken by an authorised Waste Carrier for disposal at an approved site.

The ship's Officer notifies the Port Manager if the vessel wants to land special waste (waste other than ship's domestic waste and International Catering Waste). The details of the special waste are noted on a Garbage Waste Transfer Form and given to the Duty Manager who confirms receipt and arranges collection by an authorised hazardous waste contractor.

The agents/owners of ships that use the Port of Fishguard facilities infrequently (cruise ships/bunkering tankers) are emailed a PDF copy of the Port Waste Management Plan when requesting to use the Port facilities.

## **Section 2      Responsibilities**

The Port Manager, or his authorised nominee, is responsible for the day-to-day implementation and control of the Port Waste Management Plan.

## **Section 3      Consultations with persons and organisations using the Port of Fishguard**

The following people were consulted whilst the Port Waste Management Plan was being updated.

| <b>Name</b>    | <b>Company</b>                   | <b>Position</b>              |
|----------------|----------------------------------|------------------------------|
| Senior Master  | Stena Line                       | Senior Master, Stena Nordica |
| Steve Bradley  | GSS, QintiQ, Jevington Logistics | Manager                      |
| Senior Officer | R.N.L.I.                         | RNLI Coxswain                |
| E Sinnott      | Fishing Vessels                  | Fishing boats representative |
| Ports Agent    | GAC, Denholms, ISS               | Agents representative        |

These people are key people representing Port of Fishguard users.

Consultations were conducted on a one-to-one basis as part of the annual Fishguard Marine Port Users meeting with the Port Manager. The implementation of a Port Waste Management Plan was readily agreed by all consulted. Any comments from any of the people consulted are detailed in the minutes of the meeting held annually.

#### **Section 4      Plan Review**

The Waste Management Plan will be reviewed and submitted for approval to the MCA in accordance with the regulations every three years. Any significant changes to the Plan in that period are re submitted for approval within 9 months. All interested parties will be consulted on any proposed future changes.

#### **Section 5      Reporting of Inadequacy of Reception Facilities**

If a ship finds that the facilities at the Port are inadequate, they need to contact the Port Manager or Duty Manger who will investigate the complaint and rectify any deficiency or contact the relevant authorities.

The relevant Authorities are;  
PWR Inadequacies, Clean Ship Operations Team  
Maritime and Coastguard Agency  
Spring Place, 105 Commercial Road  
Southampton  
SO15 1EG  
Email [environment@mcga.gov.uk](mailto:environment@mcga.gov.uk)

In the event of any visiting vessel not adhering to our waste regulations, the Port Manger or Duty Manager similarly will investigate the complaint and rectify any deficiency or contact the relevant authorities.

The relevant Authorities are;  
Maritime and Coastguard Agency  
Cardiff Marine Office  
Anchor Court, Keen Road  
Cardiff  
CF24 5JW  
Email [Cardiffmo@mcga.gov.uk](mailto:Cardiffmo@mcga.gov.uk)

#### **Section 6      Notification by Vessels**

- 6.1            All vessels using the port (other than those with approved MCA exemption) must give notification of waste disposal to the Port in accordance with the form at Annex A of Marine Guidance Note 563 Amendment 1 or submitted on a CERS form previous to entry.
- 6.2            The ship may use their own notification form if the information on that form meets the requirements at Annex A of Marine Guidance Note 563 Amendment 1 and submit it by email. A copy of the notice referred to shall be retained on board the ship until at least the next port of call-in accordance with the MCA requirements.
- 6.3            All notifications received by the port must be retained by Port Administration who will analyse the data to establish trends. The notifications and waste disposal records are retained for a minimum of 5 years on line and/or on hard copy.

**Section 7      Estimated number of vessels using the Port of Fishguard**

The main business of the Port of Fishguard is to provide the services of a ferry terminal for the Stena Line ferry operating between Fishguard and Rosslare. There are two turnaround dockings of ferry boats daily.

A tanker, contracted to World Fuel Services Oil (WFS), supplies monthly to the Port Fuel tank Farm.

Various small workboats are based at the port to service QinetiQ at Aberporth

There were 23 Cruise ships in 2024 with a number of these large vessels who berthed in the Bay, and tendered their passengers into a pontoon.

R.N.L.I. - Fishguard is one of seven stations operating a lifeboat funded by Blue Peter. Fishguard also operates an inshore D class lifeboat.

Small inshore fishing vessels also use the Port facilities on a frequent basis.

There is no indication that the number or type of vessels using the Port of Fishguard will change in the near or distant future.

## **Section 8 Records of waste landed at the Port of Fishguard**

The approximate amounts of ship's waste landed at the Port of Fishguard, based on the last 3 years figures: -

|          | <b>Oily Bilge, Sludge, waste oil</b> | <b>Noxious Liquids</b> | <b>Sewage</b> | <b>Domestic Waste (Plastic, Wood, Steel)</b> | <b>International Catering Waste</b> |
|----------|--------------------------------------|------------------------|---------------|----------------------------------------------|-------------------------------------|
| Received | 600m3                                | None                   | None          | 200m3                                        | 350m3                               |

None of the waste oil or garbage is retained on board. Recycling is currently 74%. Category 1 food waste cannot be recycled, this accounts for the missing 26%.

There is no indication or evidence that the amounts or types of waste landed at the Port of Fishguard are likely to change too much in the near future. Small amounts of oily rags/filters are removed by LAS and recycled from there.

## **Section 9 Waste Reception Facilities**

9.1 Some of the waste landed at the Fishguard Port is ship's International Catering Waste generated by the operation of ships passenger services (galley/bar) and domestic waste. There is no pre-treatment equipment in the port, and no associated processes are undertaken.

9.2 The waste is landed and stored as follows: -

- **International Catering Waste**  
Transferred from Stena Line Ro/Ro ship in skips directly to a licensed tip by a local waste carrier.
- **Domestic Waste.**  
Landed domestic waste is stored in designated areas in the Port of Fishguard and transferred in skips to a licensed tip by a local waste carrier regularly.
- **Special waste**  
Special waste (oily rags/Filters are landed in suitable containers (normally small quantities in drums) and stored in designated areas for disposal by approved contractor.

### 9.3 Waste Minimisation and Recycling

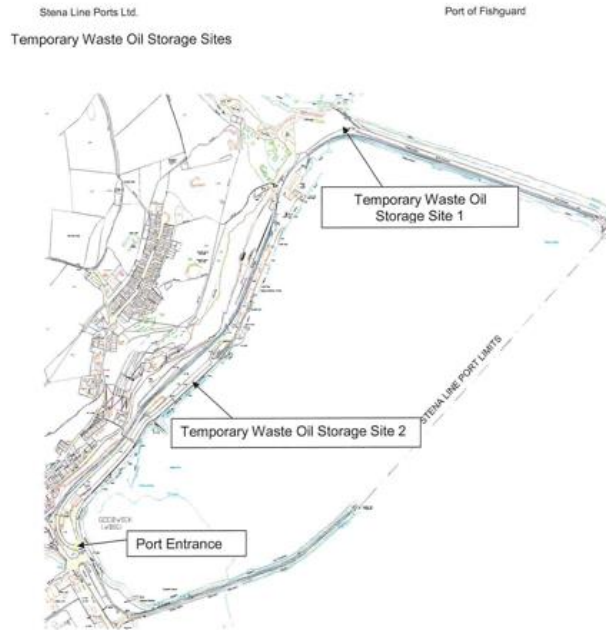
Recycling has the potential to reduce the ship's waste-stream. The Port does have recycling facilities in place to deal with waste requirements, these facilities are used as the respective wastes are segregated prior to landing.

- **Cardboard and paper** – cardboard from the ferry is compacted into bales on board. They are landed and stored in the Port before removal for recycling. Wheelie bins are provided on-board the ferry and at the Port for paper and loose cardboard and sent directly for recycling.
- **Glass**- Specialised glass wheelie bins are provided on-board the ferry and at the Port and sent directly for recycling.
- **Fluorescent Tubes** - A dedicated storage box is provided by the contracted hazardous waste contractor. When full they are exchanged and sent for recycling.
- **Cans and metal**- Sent for recycling.
- **Plastics** - Sent for recycling.
- **Oil Filters** - Landed in sealed designated 200l drums, stored in designated area of port and collected by contracted waste contractor for recycling.
- **Oil Rags and oil absorbent waste granules** - A dedicated storage box is provided by the contracted hazardous waste contractor. When full they are exchanged and sent for recycling.

9.4 The Port of Fishguard policy is to limit the length of time landed waste materials are stored in Port areas, so regular collections are made by licensed waste disposal carriers. This is in line with the general policy of maintaining a high standard of Port appearances for public/customer relations considerations.

Details of the Port of Fishguard waste storage facilities and disposal costs have been in place and agreed by all users.

*Port of Fishguard  
Waste Management Plan*



#### 9.5 Requirements for all other Waste Streams

It is for the Ship's Agent to make the necessary arrangements with approved contractors to meet the requirements for all other waste streams that the ship may wish to land. At the request of the Ship's Agent, Port Control in Fishguard can make arrangements on his behalf with a waste contractor. Charges in addition to the mandatory environment charges would apply.

#### 9.6 Cargo Residues and Hold Cleanings

These by products are not accepted at Fishguard Harbour. The only waste materials accepted ashore at Fishguard is general household waste and only from Ships operating around the UK (other non-Stena Line Ferry Vessels).

#### 9.7 Hazardous Waste includes:

- Tyres
- Asbestos
- Fluorescent lamps
- Lead acid batteries
- Raw meats
- Bilge Water
- Electrical equipment (televisions, monitors, telephones, etc)
- Paint tins & Paint (even if empty and/or where the contents are dry)
- Dry cell batteries (small AA. Mobile phone, etc)
- Drums that contain oil or oily residues etc
- Any other hazardous material
- Oil contaminated material
- Acids
- Aerosols
- Solvents
- Oil
- Oil filters & cleaning rags

#### 9.8 Sewage

This is not accepted at Fishguard Harbour.

#### **9.9 MARPOL Annex IV Sewage**

The 2009 amendments to the Port Waste Reception Facilities Regulations (Statutory Instrument 2009/1176), bring sewage within the definition of “ship-generated waste”.

#### **9.10 For all other waste items not listed (e.g. pyrotechnics, clinical waste, etc.)**

Arrangements must be made initially through the Ships Agent for disposal by an approved waste contractor.

Cost of arrangement and disposal of these waste streams will be charged in addition to the mandatory environment charge.

#### **9.11 International Catering Waste**

The EC Regulation No. 1069/2009 lays down the conditions, which control the disposal of catering waste from ships operating internationally. This regulation only applies to ships operating from beyond the European Union.

Only Cat 1 Catering Waste from Stena Line Vessels is accepted and is classified as Category 1 animal by-products.

This material must be kept separate, clearly identified and transferred without undue delay to an approved disposal site by a transporter registered as a waste carrier by the Environment Agency.

International Waste when despatched from the port must be accompanied by a Commercial Document which includes the following information:

- Date of Despatch
- Description of material, including category
- Quantity
- Place of origin of the material
- Name and address of carrier
- Name and address of receiver

The Commercial Document must be produced in triplicate and a copy retained for at least two years and can act as the record required by the legislation.

### **Section 10 Other Port Users**

Other users and organisations within the port area of jurisdiction have the need to handle and / or dispose of normal and special wastes generated by their business activities and these are not covered by this plan.

The handling of such wastes at these locations is governed by the ‘Duty of Care’ as laid down by the Environmental Protection Act 1990. Therefore, all wastes generated by these facilities will be disposed of via arrangements with licensed waste contractors.

#### **10.1 Communication with Irregular Port traffic**

The key requirements of this Waste Management Plan will be communicated to irregular non-scheduled traffic such as cruise ships; bulk carriers; tankers; survey ships and rig

support vessels by the Port Harbourmaster prior to arrival.

## **Section 11      Charging Procedures**

### **11.1      Non-Exempted Vessels**

All non-exempted vessels are required to pay a mandatory Environmental Charge for the provision of waste reception facilities whether they use them or not. This charge will cover the cost of disposal of general landfill garbage only.

### **11.2      Environmental Charge**

The level of charge will ensure that each ship which is required to pay the charges will make a significant contribution towards the costs of the waste reception facilities in the port which it provides. Including but not necessarily limited to the follow:

- Setting Up Costs
- Running Costs
- Administration Costs
- Waste Reception
- Treatment and Final Disposal

The port has calculated these by taking 30% of the total of all fixed and labour costs associated with providing all the waste facilities, excluding port and ferry waste disposal. The total cost is divided by the number of other vessels using the port.

The Environmental Charge is currently GBP £55/80 per vessel depending on GRT and is included in the harbour dues. This charge is kept under review.

### **11.3      Ferries**

Ferries that arrange their own waste disposal are charged directly by the contractor for their services and no port facilities are involved therefore no charge is levied by the Port.

Any ferries that land their waste through the port system are charged the appropriate fee by the Port to cover all fixed and disposal costs.

### **11.4      Bunker Vessels**

Bunker vessels that come into the port, not for cargo operations, but to refuel vessels only and therefore do not use the port waste facilities will not pay the Environmental Charge.

### **11.5      Cruise Ships**

Cruise Ships whose requirements for waste disposal are likely to be significantly greater than ferries or cargo ships, may necessitate extra facilities on a case by case basis. The cost of these extra requirements will be charged in addition to the port mandatory Environmental Charge.

### **11.6      Exemptions**

Vessels can apply for an exemption from some requirements of the Port Waste Reception Regulations. Ships so entitled should apply directly to the Maritime Coastguard Agency in accordance with MGN 563 Amendment 1, MGN 631, MGN 632, 2016 Amendments to MS (Port Waste Reception Facilities) Regulation 2003, who will then advise Port Control if a vessel is operating in Fishguard has received such an exemption.

## Appendix A

### Fishguard Port Reception Facilities

|                                               | <b>Annex 1- Oily Wastes</b>                                                                                                     | <b>Annex II</b>                 | <b>Annex IV</b>        | <b>Annex V</b>                   | <b>Annex VI</b>                                           |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------|----------------------------------|-----------------------------------------------------------|
| <b>Example of Waste</b>                       | Oily Bilge Water, Sludge, Slops, Dirty ballast water, Scale and sludge from tanker cleaning, Oily mixtures containing chemicals | Noxious or hazardous substances | Sewage                 | General Waste (only UK vessels)  | Ozone depleting substances, Exhaust gas cleaning residues |
| <b>Type of Facility</b>                       | NOT CURRENTLY ACCEPTED                                                                                                          | NOT CURRENTLY ACCEPTED          | NOT CURRENTLY ACCEPTED | 1100 ltr Wheelie bin             | NOT CURRENTLY ACCEPTED                                    |
| <b>Capacity of Facility</b>                   |                                                                                                                                 |                                 |                        | up to 10 x 1100 ltr wheelie bins |                                                           |
| <b>Availability of the reception facility</b> |                                                                                                                                 |                                 |                        | 24 hours                         |                                                           |
| <b>Minimum notice required</b>                |                                                                                                                                 |                                 |                        | 24 hours                         |                                                           |
| <b>Charging system</b>                        |                                                                                                                                 |                                 |                        | as per Port Charges              |                                                           |

Workboats, pilot boats and other similar vessels that operate within the port area of jurisdiction, and do not normally leave the port area, fall outside the requirement to notify, deliver or pay charges.

A list of exempted vessels will be held by Port Control if applicable.



**21.B**

**APPENDIX 21.B**  
**Asbestos Report**



## **New Off-ramp Project StenaLine Fishguard**

### **Demolition/Refurbishment Asbestos Survey**

**February 2025**



**ESP Environmental Ltd**  
**12a Soar Road,**  
**Bynea, Llanelli**  
**Carmarthenshire**  
**SA14 9LG**  
**01554 253 333 / 01792 881770**  
**[info@espenvironmental.com](mailto:info@espenvironmental.com)**



**New Offramp Project  
StenaLine Fishguard**

**Demolition/Refurbishment  
Asbestos Survey**

**February 2025**

**Monitoring Date:** 24<sup>th</sup> February 2025

**Project Number:** P202543

**Client Organisation:** Stena Line Ports Ltd

**Client Address:** Fishguard Harbour  
Goodwick  
Pembroke  
SA64 0BX

**Monitoring Organisation:** ESP Environmental Ltd

**Organisation Address:** 12a Soar Road  
Bynea  
Llanelli  
Carmarthenshire  
SA14 9LG

**Date of Report/Completion:** 3<sup>rd</sup> March 2025

**Report Approved by:** Adam Sizer AFOH

**Function:** Occupation Hygienist  
Managing Director  
P402 – Building Surveys and Bulk Sampling  
P405 – Management of Asbestos in Buildings

**Signed:**

A handwritten signature in black ink, appearing to read 'A Sizer', is positioned above a horizontal dotted line.

## Document Control Sheet

**Project** New Off-ramp Project - StenaLine Fishguard

**Job Number** P202543

**Title** Demolition/Refurbishment Asbestos Survey

|                               | Prepared By                                                                                           | Reviewed By                                                                                            | Approved By                                                                                             |
|-------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Original</b>               | <b>Name</b><br><b>A.Sizer</b><br><i>BOHS P402 and P405</i>                                            | <b>Name</b><br><b>P.Court</b><br><i>BOHS P402 and P405</i>                                             | <b>Name</b><br><b>A.Sizer</b><br><i>BOHS P402 and P405</i>                                              |
| <b>Date</b><br><br>03.03.2025 | <b>Signature</b><br> | <b>Signature</b><br> | <b>Signature</b><br> |

### Caveat

Every effort has been made to identify all asbestos materials so far as reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard to visual examination and necessary bulk sampling. It is always possible after a survey that asbestos based materials of one sort or another may remain undiscovered in the property or area covered by that survey, this could be due to various reasons:

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes i.e. paint, over boarding, disguising etc. where this is the case then its detection will be impaired and a management survey may not detect such materials.
- Asbestos may very well be hidden as part of the structure to a building and not visible until the structure is dismantled at a later date.
- Where an area has previously been stripped of asbestos i.e. plant rooms, ducts etc. and new coverings added, it must be pointed out that asbestos removal techniques have improved steadily over the years since its introduction. Most notably would be the Control of Asbestos Regulations 2012 laying down certain enforceable guidelines. Asbestos removal prior to this regulation would not be of today's standard and therefore debris or residue may be present below new coverings.
- In the building where asbestos has been located and it is clear that not all areas have been investigated, any material that is found to be suspicious and not detailed as part of the survey should be treated with caution and sampled accordingly.
- Certain materials contain asbestos to varying degrees and some may be less densely contaminated at certain locations (Artex for example). Where this is the case, the sample taken may not be representative of the whole product throughout.
- Where a survey is carried out under the guideline of the owner of the property, or his representative, then the survey will be as per his instructions and guidance at that time.  
ESP Environmental cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the nature and necessity of sampling for asbestos some damage is unavoidable and will be limited to just that necessary for the taking of the sample

**New Off-ramp Project  
StenaLine Fishguard**

**Demolition/Refurbishment Asbestos Survey**

**February 2025**

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# **1. Introduction**

# 1. Introduction

---

- 1.1 ESP Environmental was commissioned by StenaLine/RPS, to undertake a Demolition/Refurbishment Asbestos Survey on targeted areas for the new off-ramp project at Fishguard Port. The survey was carried out in accordance with HSG 264, and with the scope of work detailed in our proposal AS/250203, dated 7<sup>th</sup> February 2025.
- 1.2 The project has nine targeted areas.
1. Old lifeboat slipway
  2. Side loader overpass
  3. Substation
  4. Link span machine control room
  5. Ramp head hut
  6. Link span control room
  7. Link span
  8. Jack up ramp
  9. Link span road
- 1.3 The basic requirements of the assessments were: -
- To identify asbestos containing materials (ACM) in the areas affected by the planned new construction.
  - To carry out risk assessment on the identified ACM's.
  - To provide recommendations for safe removal.
- 1.4 The assessment consisted of material sampling and laboratory analysis for asbestos materials. The procedures adopted during the works are presented in Appendix A.
- 1.5 Asbestos fibres can present an airborne hazard. An assessment of the potential for exposure to harmful asbestos fibres from ACM should be evaluated for the material's potential to release fibres into the air. Fibre release may occur spontaneously due to the normal ageing and subsequent deterioration of the material, and may also occur suddenly due to disturbance of the materials by maintenance, renovation, accident and excessive vibration or water damage.
- 1.6 The recommendations provided in Section 4 of this report are based upon the results of the sampling exercise and subsequent Risk Assessments.
- 1.7 The site survey was carried out on the 24<sup>th</sup> February 2025.

## **2. Survey Results**

## 2. Survey Results

- 2.1 Our initial walkover of the site indicated that the collection of twenty-two samples would provide an adequate basis for a Risk Assessment.
- 2.2 The twenty-two samples identified as being potential ACM were collected, double bagged and labelled with an appropriate unique sample number. The sample area was then sprayed with a suitable sealing agent. The samples were submitted to Scopes Asbestos Analysis Services Ltd. Basildon, Essex for analysis. Scopes are a UKAS accredited laboratory, No.2707. C. Bolton carried out the quality assurance of analysis using the following approved methods.
- 2.3 The samples were analysed on the 26<sup>th</sup> February 2025 using Polarised Light Microscopy (PLM) coupled with dispersion staining as detailed in the HSG 284 (Asbestos in Bulk Materials). The result of the sample analysis, which was reported on the 26<sup>th</sup> February 2025, is detailed in Table 1.

**Table 1**  
**Bulk Asbestos Analysis**

| Sample No. | Location                              | Product Type          | Extent            | Level of Identification | Results |
|------------|---------------------------------------|-----------------------|-------------------|-------------------------|---------|
| FG 213     | Jack up ramp engine bay               | Soundproofing         | 40m <sup>2</sup>  | None Detected           | N/A     |
| FG 214     | Jack up ramp                          | Floor Coating         | 150m <sup>2</sup> | None Detected           | N/A     |
| FG 215     | Jack up ramp around legs controls     | Denzo Tape            | Small Amounts     | None Detected           | N/A     |
| FG 216     | Jack up ramp around legs and supports | Paint                 | 200m <sup>2</sup> | None Detected           | N/A     |
| FG 217     | Link Span Machine Controls            | Roof Felt             | 16m <sup>2</sup>  | None Detected           | N/A     |
| FG 218     | Link Span Control kiosk               | Glass Fibre Panelling | 15m <sup>2</sup>  | None Detected           | N/A     |
| FG 219     | Link Span                             | Denzo Tape            | Small Amounts     | None Detected           | N/A     |
| FG 220     | Link Span Machine Controls            | Window Putty          | 12m Run           | None Detected           | N/A     |
| FG 221     | Side loader Overpass                  | Road Coating          | 650m <sup>2</sup> | None Detected           | N/A     |

| Sample No. | Location                  | Product Type          | Extent            | Level of Identification | Results                                         |
|------------|---------------------------|-----------------------|-------------------|-------------------------|-------------------------------------------------|
| FG 222     | Side loader Flap          | Flap Coating          | 32m <sup>2</sup>  | None Detected           | N/A                                             |
| FG 223     | Ramp Head Hut             | Internal Paint        | 15m <sup>2</sup>  | None Detected           | N/A                                             |
| FG 224     | Ramp Head Hut             | Roof Felt             | 4m <sup>2</sup>   | None Detected           | N/A                                             |
| FG 225     | Side loader Overpass      | Concrete Leg Pillars  | 10m <sup>2</sup>  | None Detected           | N/A                                             |
| FG 226     | Link Span                 | Denzo Tape            | 80m Run           | None Detected           | N/A                                             |
| FG 227     | Substation DC Block       | Cement Arc Arrestors  | Small Amounts     | <b>Detected</b>         | <b>Chrysotile (White Asbestos)</b>              |
| FG 228     | Substation DC Block       | Rope Seal             | Small Amounts     | None Detected           | N/A                                             |
| FG 229     | Substation Generator Room | Duct Lagging          | 8m <sup>2</sup>   | <b>Detected</b>         | <b>Amosite (Brown) &amp; Chrysotile (White)</b> |
| FG 230     | Substation Generator Room | Gasket                | Small Amounts     | <b>Detected</b>         | <b>Chrysotile (White Asbestos)</b>              |
| FG 231     | Old Lifeboat Slipway      | Bitumen Coating       | 250m Run          | None Detected           | N/A                                             |
| FG 232     | Old Lifeboat Slipway      | Cement Coating        | 250m <sup>2</sup> | None Detected           | N/A                                             |
| FG 233     | Slipway Road              | Expansion Joint       | 9m Run            | None Detected           | N/A                                             |
| FG 234     | Slipway Road              | Road Concrete         | 120m <sup>2</sup> | None Detected           | N/A                                             |
| FG 235     | External Substation       | Electrical Insulation | Small Amounts     | <b>Presumed</b>         | <b>Chrysotile (White Asbestos)</b>              |

2.4 Site drawings identifying the locations of the samples are detailed in Appendix D.

### **3. Assessment of Risk**

### 3. Assessment of Risk

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Of the seventeen representative samples taken, two were found to be Asbestos Containing Materials (ACM)

- Sample FG 227, Cement Arc Arrestors **Chrysotile (White Asbestos)**  
DC Panels, Substations  
*All similar switchgear is presumed to contain similar ACM.*
  - Sample FG 229, Duct Lagging **Amosite (Brown Asbestos)**  
Old Generator Exhaust, Substation
  - Sample FG 230, Gaskets **Chrysotile (White Asbestos)**  
Old Generator, Substation
- Presumed**  
Sample FG 235, Electrical Insulation **Chrysotile (White Asbestos)**  
*External rear of Substation*

The electrical switch controls the power to the fuel pump to the rear of the substation; the unit was live during the site visit. Therefore, no access was available and the unit is presumed to contain asbestos material.

#### Observations

##### 1. Old lifeboat slipway

The structure of the slipway is concrete material, with a cement coating on sides and underneath. Metal runners down the ramp coated with a bitumen coating. All samples were negative for asbestos.

##### 2. Side loader overpass

The structure is metal construction with a coating over the road and side flap. Concrete leg pillar supports throughout the length of the structure. Control booth and engine room were inspected and no potential ACM were located. All samples were negative for asbestos.

##### 3. Substation

Concrete block walls and concrete slab flooring and roof topped with a new roof felt. The unused DC block has multiple switch units with asbestos containing cement arc arrestors. The generator room holds the disused generator with asbestos containing duct lagging.

Potentially the generator may contain asbestos materials inside of the unit but was not accessible at time of survey. A small isolator switch to the rear external of the substation which controls the fuel pump is presumed to contain asbestos insulation. Unable to access the internal live switchgear on day of the survey. **Positive Asbestos samples detected.**

4. **Link span machine control room**  
Brick and concrete block building with fibreboard ceilings under felt roof. Machinery inside was inspected and no potential ACMs were found. All samples were negative for asbestos.
5. **Ramp head hut**  
Concrete block building with wooden board ceilings under felt roof. All samples were negative for asbestos.
6. **Link span control room**  
Small control kiosk constructed of fibreglass panelling  
All samples were negative for asbestos.
7. **Link span**  
Mechanical pullies both side of the linkspan bridge which control the adjustable height. Constructed of metal frames sitting on top of concrete pillars. All samples were negative for asbestos.
8. **Jack up ramp**  
Floating badge secured to the sea bed by four height adjustable jacks. Machinery inside the engine bay was inspected and no potential ACMs were found. All samples were negative for asbestos.
9. **Link span road**  
The road leading to the Link span has two sections, a length of concrete road concrete with expansion joints, the second section is a tarmac road. There are were no potential ACMs visible during the survey. All samples were negative for asbestos.

## **4. Recommendation**

## 4. Recommendation

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- 4.1 Occupants and any persons intending to carry out work in any of the areas identified as containing asbestos must be made aware of the location of the asbestos materials and advised of the appropriate precautions and safe working practice with ACM.
- 4.2 Removal of cement and gaskets material products is classified as unlicensed work and can be carried out by any competent person. It is recommended that the electrical units and the section containing gaskets are disposed of as complete units/sections. This avoids any unnecessary release of fibres during removal.
- 4.3 **The duct lagging of the old generator is strictly Notifiable licenced work and must be carried out by an Asbestos Licenced Contractor.**
- 4.4 The ACM must be treated with respect and suitable Personal Protective Equipment must be worn. Adequate precautions must be taken to reduce the spread of ACM in accordance with the Approved Code of Practice L143 and in compliance with the "Control of Asbestos Regulations 2012". Any asbestos waste must be disposed of in the correct manner.

**All personnel involved in the asbestos stripping operation should be trained in the techniques to be used and wear suitable protective clothing and facemasks.**

- 4.5 The waste ACM must be double bagged and labelled as "Asbestos Waste". This material must be transported and disposed of in the correct manner. Guidance on working with asbestos can be obtained from the Health and Safety Executive or downloaded from the HSE website.  
<https://www.hse.gov.uk/asbestos/essentials/>

# **Appendix A**

## **Details of the Procedures for Undertaking the Surveys and Sample Testing**

## **Details of procedures for undertaking the surveys and sample testing**

1. Prior to the site survey, ESP Environmental undertook a site assessment to plan the commissioned work.
2. Prior to collection of the samples a risk assessment was carried out on each product type suspected of containing Asbestos Containing Material (ACM). Priority risk assessment is then completed if necessary. This identifies whether or not sections of the building needed to be isolated during the sample collection and whether or not any other special precautions needed to be taken.
3. A trained member of staff qualified to the required BOHS P402 standard collected a material sample, labelling each sample area with a unique number.
4. A digital photograph was taken for each sample location and downloaded onto a computer for later inclusion into this report.
5. Sampling protocols were in accordance with HSG 264, the Control of Asbestos Regulation (CAR) 2012, Health and Safety Executive Guidance and The Asbestos (Licensing) Regulations 1993.
6. The current legislation CAR 2012 supersedes the following: - The Control of Asbestos Regulation 2006, The Control of Asbestos at Work Regulations 2002, the Control of Asbestos at Work Regulations 1987 as amended by the Control of Asbestos at Work (Amendment) Regulations 1992, The Control of Asbestos at Work (Amendment) Regulation 1998.
8. In accordance with HSG 264 the sample areas were sprayed with a water/surfactant rinse prior to collection of the sample. Samples were then sealed within a double bag and issued a unique sample reference number, prior to delivery to the analytical laboratory.
9. Samples were delivered to a UKAS accredited laboratory and analysed in accordance with MDHS 77 Asbestos in Bulk Materials.

## **Appendix B**

### **Photographs and Risk Assessments of Samples Containing ACMs**

| ESP Environmental Limited - Asbestos Risk Assessment                                                                    |           |                                                                |            | Asbestos Assessment Type                                  |             | Demolition/Refurbishment Survey                                                                                                                                                                                                                        |                         |
|-------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|------------|-----------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Job No                                                                                                                  | P202543   | Date                                                           | 25/02/2025 |                                                           | Surveyor/s  | Adam Sizer & Paul Court                                                                                                                                                                                                                                |                         |
| Location                                                                                                                | Fishguard | Building                                                       | Stenaline  |                                                           | Room Number | Substation                                                                                                                                                                                                                                             | Access Yes              |
| A - Product Type                                                                                                        |           | Extent                                                         |            | Identification                                            |             | Similar to                                                                                                                                                                                                                                             | Sample ID & Description |
| 1 - Plastic, mastic, bitumen vinyl, textured coating, cement, Debris from these products                                |           | m <sup>2</sup>                                                 |            | Sampled                                                   |             | Yes                                                                                                                                                                                                                                                    | FG 227                  |
| 2 - Insulating board, millboard, cloth, gasket, rope, paper, debris from these products                                 |           | m Run                                                          |            | Str, Presumed                                             |             |                                                                                                                                                                                                                                                        | Cement Arc Arrestor     |
| 3 - Thermal lagging, sprayed coating, loose insulation, mattress/bagged insulation, packing, debris from these products |           | Small Amounts Items                                            |            | Yes                                                       |             | Presumed                                                                                                                                                                                                                                               | DC Panel                |
| Material, Risk Assessment Scores                                                                                        |           |                                                                |            |                                                           |             |                                                                                                                                                                                                                                                        |                         |
| B - Product Type                                                                                                        |           | C - Damage / Deterioration                                     |            | D - Surface treatment                                     |             | Prelim Material Score (A + B + C + D)                                                                                                                                                                                                                  |                         |
| 1 - Chrysotile                                                                                                          |           | 0 - Good Condition                                             |            | 0 - Reinforced Composite material                         |             | 4                                                                                                                                                                                                                                                      |                         |
|                                                                                                                         |           | 1 - Low damage, Few Scratches, Broken edges                    |            | 0 - Painted/Sealed cement                                 |             |                                                                                                                                                                                                                                                        |                         |
| 2 - Amosite                                                                                                             |           | 2 - Medium damage, Significant Breakages,                      |            | 1 - Enclosed spray/lagging/rope                           |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 1 - Painted/encapsulated Board                            |             |                                                                                                                                                                                                                                                        |                         |
| 3 - Crocidolite                                                                                                         |           | 3 - Visible Debris                                             |            | 1 - Unsealed cement                                       |             | If Prelim materials Score is 5 or above complete priority risk assessment below                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 2 - Unsealed Board                                        |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 2 - Encapsulated spray/lagging                            |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 2 - Encapsulated textile/paper                            |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 3 - Unsealed spray/lagging/textile                        |             |                                                                                                                                                                                                                                                        |                         |
| Priority Risk Assessment                                                                                                |           |                                                                |            |                                                           |             |                                                                                                                                                                                                                                                        |                         |
|                                       |           | Likelihood of Disturbance                                      |            | Human Exposure Potential                                  |             | Maintenance Activity                                                                                                                                                                                                                                   |                         |
|                                                                                                                         |           | Location                                                       |            | Number of Occupants                                       |             | 0 - Minor disturbance, e.g. possibility of contact when gaining access<br>1 - Low disturbance, e.g. changing light bulb in AIB ceiling<br>2 - Medium disturbance, e.g. lifting one or two AIB<br>3 - High disturbance, e.g. removing a number of tiles |                         |
|                                                                                                                         |           | 0 - Outdoors                                                   |            | 0 - None                                                  |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 1 - Large rooms or well vented areas                           |            | 1 - 1 to 3                                                |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 2 - Rooms up to 100m <sup>2</sup>                              |            | 2 - 4 to 10                                               |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 3 - Confined Spaces                                            |            | 3 - >10                                                   |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | Accessibility                                                  |            | Frequency of use                                          |             | Frequency of maintenance                                                                                                                                                                                                                               |                         |
|                                                                                                                         |           | 0 - Inaccessible or unlikely to be disturbed                   |            | 0 - Infrequent                                            |             | 0 - ACM unlikely to be disturbed                                                                                                                                                                                                                       |                         |
|                                                                                                                         |           | 1 - Occasionally likely to be disturbed                        |            | 1 - Monthly                                               |             | 1 - Once per year                                                                                                                                                                                                                                      |                         |
|                                                                                                                         |           | 2 - Easily disturbed                                           |            | 2 - Weekly                                                |             | 2 - More than once per year                                                                                                                                                                                                                            |                         |
|                                                                                                                         |           | 3 - Routinely disturbed                                        |            | 3 - Daily                                                 |             | 3 - More than once per month                                                                                                                                                                                                                           |                         |
|                                      |           | Extent / Amount                                                |            | Average time each use                                     |             | Priority Risk Score                                                                                                                                                                                                                                    |                         |
|                                                                                                                         |           | 0 - Small amounts/items                                        |            | 0 - <1 hour                                               |             | 4                                                                                                                                                                                                                                                      |                         |
|                                                                                                                         |           | 1 - <10m <sup>2</sup> or 10m run                               |            | 1 - 1 to 3 hours                                          |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 2 - 10 to 50m <sup>2</sup> , or 10 to 50m run                  |            | 2 - 3 to 6 hours                                          |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 3 - > 50m <sup>2</sup> or 50m run                              |            | 3 - > 6 hours                                             |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | Normal Occupant Activity                                       |            | Comments                                                  |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 0 - Rare disturbance, e.g. little used storeroom               |            | All similar switchgear is presumed to contain similar ACM |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 1 - Low disturbance, e.g. office type activity                 |            |                                                           |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 2 - Periodic disturbance, e.g. industrial vehicle              |            |                                                           |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 3 - High disturbance, e.g. fire doors with AIB in constant use |            |                                                           |             |                                                                                                                                                                                                                                                        |                         |

| ESP Environmental Limited - Asbestos Risk Assessment                                                                    |           |                                                                |                     | Asbestos Assessment Type                                           |                       | Demolition/Refurbishment Survey                                                 |                                    |
|-------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|---------------------|--------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------|------------------------------------|
| Job No                                                                                                                  | P202543   |                                                                | Date                | 25/02/2025                                                         |                       | Surveyor/s                                                                      | Adam Sizer & Paul Court            |
| Location                                                                                                                | Fishguard |                                                                | Building            | Stenaline                                                          | Room Number           | Generator Room                                                                  | Access Yes                         |
| <b>A - Product Type</b>                                                                                                 |           |                                                                | <b>Extent</b>       |                                                                    | <b>Identification</b> |                                                                                 | <b>Sample ID &amp; Description</b> |
| 1 - Plastic, mastic, bitumen vinyl, textured coating, cement, Debris from these products                                |           |                                                                | m²                  | 8                                                                  | Sampled               | Yes                                                                             | FG 229                             |
| 2 - Insulating board, millboard, cloth, gasket, rope, paper, debris from these products                                 |           |                                                                | m Run               |                                                                    | Str, Presumed         |                                                                                 | Old Genarator Exhaust Lagging      |
| 3 - Thermal lagging, sprayed coating, loose insulation, mattress/bagged insulation, packing, debris from these products |           |                                                                | Small Amounts Items |                                                                    | Presumed              |                                                                                 |                                    |
| <b>Material, Risk Assessment Scores</b>                                                                                 |           |                                                                |                     |                                                                    |                       |                                                                                 |                                    |
| <b>B - Product Type</b>                                                                                                 |           | <b>C - Damage / Deterioration</b>                              |                     | <b>D - Surface treatment</b>                                       |                       | <b>Prelim Material Score (A + B + C + D)</b>                                    |                                    |
| 1 - Chrysotile                                                                                                          |           | 0 - Good Condition                                             |                     | 0 - Reinforced Composite material                                  |                       | 6                                                                               |                                    |
|                                                                                                                         |           |                                                                |                     | 0 - Painted/Sealed cement                                          |                       |                                                                                 |                                    |
|                                                                                                                         |           | 1 - Low damage, Few Scratches, Broken edges                    |                     | 1 - Enclosed spray/lagging/rope                                    |                       |                                                                                 |                                    |
| 2 - Amosite                                                                                                             |           |                                                                |                     | 1 - Painted/encapsulated Board                                     |                       |                                                                                 |                                    |
|                                                                                                                         |           | 2 - Medium damage, Significant Breakages,                      |                     | 1 - Unsealed cement                                                |                       | If Prelim materials Score is 5 or above complete priority risk assessment below |                                    |
|                                                                                                                         |           |                                                                |                     | 2 - Unsealed Board                                                 |                       |                                                                                 |                                    |
| 3 - Crocidolite                                                                                                         |           | 3 - Visible Debris                                             |                     | 2 - Encapsulated spray/lagging                                     |                       |                                                                                 |                                    |
|                                                                                                                         |           |                                                                |                     | 2 - Encapsulated textile/paper                                     |                       |                                                                                 |                                    |
|                                                                                                                         |           |                                                                |                     | 3 - Unsealed spray/lagging/textile                                 |                       |                                                                                 |                                    |
| <b>Priority Risk Assessment</b>                                                                                         |           |                                                                |                     |                                                                    |                       |                                                                                 |                                    |
|                                       |           | <b>Likelihood of Disturbance</b>                               |                     | <b>Human Exposure Potential</b>                                    |                       | <b>Maintenance Activity</b>                                                     |                                    |
|                                                                                                                         |           | <b>Location</b>                                                |                     | <b>Number of Occupants</b>                                         |                       | 0 - Minor disturbance, e.g. possibility of contact when gaining access          |                                    |
|                                                                                                                         |           | 0 - Outdoors                                                   |                     | 0 - None                                                           |                       | 1 - Low disturbance, e.g. changing light bulb in AIB ceiling                    |                                    |
|                                                                                                                         |           | 1 - Large rooms or well vented areas                           |                     | 1 - 1 to 3                                                         |                       | 2 - Medium disturbance, e.g. lifting one or two AIB                             |                                    |
|                                                                                                                         |           | 2 - Rooms up to 100m²                                          |                     | 2 - 4 to 10                                                        |                       | 3 - High disturbance, e.g. removing a number of tiles                           |                                    |
|                                                                                                                         |           | 3 - Confined Spaces                                            |                     | 3 - >10                                                            |                       |                                                                                 |                                    |
|                                                                                                                         |           | <b>Accessibility</b>                                           |                     | <b>Frequency of use</b>                                            |                       | <b>Frequency of maintenance</b>                                                 |                                    |
|                                                                                                                         |           | 0 - Inaccessible or unlikely to be disturbed                   |                     | 0 - Infrequent                                                     |                       | 0 - ACM unlikely to be disturbed                                                |                                    |
|                                                                                                                         |           | 1 - Occasionally likely to be disturbed                        |                     | 1 - Monthly                                                        |                       | 1 - Once per year                                                               |                                    |
|                                                                                                                         |           | 2 - Easily disturbed                                           |                     | 2 - Weekly                                                         |                       | 2 - More than once per year                                                     |                                    |
| 3 - Routinely disturbed                                                                                                 |           | 3 - Daily                                                      |                     | 3 - More than once per month                                       |                       |                                                                                 |                                    |
|                                      |           | <b>Extent / Amount</b>                                         |                     | <b>Average time each use</b>                                       |                       | 3                                                                               | 9                                  |
|                                                                                                                         |           | 0 - Small amounts/items                                        |                     | 0 - <1 hour                                                        |                       |                                                                                 |                                    |
|                                                                                                                         |           | 1 - <10m² or 10m run                                           |                     | 1 - 1 to 3 hours                                                   |                       |                                                                                 |                                    |
|                                                                                                                         |           | 2 - 10 to 50m², or 10 to 50m run                               |                     | 2 - 3 to 6 hours                                                   |                       |                                                                                 |                                    |
|                                                                                                                         |           | 3 - > 50m² or 50m run                                          |                     | 3 - > 6 hours                                                      |                       |                                                                                 |                                    |
|                                                                                                                         |           | <b>Normal Occupant Activity</b>                                |                     | <b>Comments</b>                                                    |                       |                                                                                 |                                    |
|                                                                                                                         |           | 0 - Rare disturbance, e.g. little used storeroom               |                     | Lagging is Notifiable Licenced Removal Only by Licenced Contractor |                       |                                                                                 |                                    |
|                                                                                                                         |           | 1 - Low disturbance, e.g. office type activity                 |                     |                                                                    |                       |                                                                                 |                                    |
|                                                                                                                         |           | 2 - Periodic disturbance, e.g. industrial vehicle              |                     |                                                                    |                       |                                                                                 |                                    |
|                                                                                                                         |           | 3 - High disturbance, e.g. fire doors with AIB in constant use |                     |                                                                    |                       |                                                                                 |                                    |

| ESP Environmental Limited - Asbestos Risk Assessment                                                                    |                                                                |                                             |                                                       | Asbestos Assessment Type           |                                                                                                                                                                                                                                                        | Demolition/Refurbishment Survey                                                 |                         |  |
|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--|
| Job No                                                                                                                  | P202543                                                        | Date                                        | 25/02/2025                                            |                                    | Surveyor/s                                                                                                                                                                                                                                             | Adam Sizer & Paul Court                                                         |                         |  |
| Location                                                                                                                | Fishguard                                                      | Building                                    | Stenaline                                             |                                    | Room Number                                                                                                                                                                                                                                            | Substation - Generator Room                                                     | Access Yes              |  |
| A - Product Type                                                                                                        |                                                                | Extent                                      |                                                       | Identification                     |                                                                                                                                                                                                                                                        | Similar to                                                                      | Sample ID & Description |  |
| 1 - Plastic, mastic, bitumen vinyl, textured coating, cement, Debris from these products                                |                                                                | m <sup>2</sup>                              |                                                       | Sampled                            |                                                                                                                                                                                                                                                        | Yes                                                                             | FG 230                  |  |
| 2 - Insulating board, millboard, cloth, gasket, rope, paper, debris from these products                                 |                                                                | m Run                                       |                                                       | Str, Presumed                      |                                                                                                                                                                                                                                                        |                                                                                 | Old Generator - Gasket  |  |
| 3 - Thermal lagging, sprayed coating, loose insulation, mattress/bagged insulation, packing, debris from these products |                                                                | Small Amounts Items                         |                                                       | Yes                                |                                                                                                                                                                                                                                                        | Presumed                                                                        |                         |  |
| Material, Risk Assessment Scores                                                                                        |                                                                |                                             |                                                       |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
| B - Product Type                                                                                                        |                                                                | C - Damage / Deterioration                  |                                                       | D - Surface treatment              |                                                                                                                                                                                                                                                        | Prelim Material Score (A + B + C + D)                                           |                         |  |
| 1 - Chrysotile                                                                                                          |                                                                | 0 - Good Condition                          |                                                       | 0 - Reinforced Composite material  |                                                                                                                                                                                                                                                        | 3                                                                               |                         |  |
|                                                                                                                         |                                                                |                                             |                                                       | 0 - Painted/Sealed cement          |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         |                                                                | 1 - Low damage, Few Scratches, Broken edges |                                                       | 1 - Enclosed spray/lagging/rope    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         |                                                                |                                             |                                                       | 1 - Painted/encapsulated Board     |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
| 2 - Amosite                                                                                                             |                                                                | 2 - Medium damage, Significant Breakages,   |                                                       | 1 - Unsealed cement                |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         |                                                                |                                             |                                                       | 2 - Unsealed Board                 |                                                                                                                                                                                                                                                        | If Prelim materials Score is 5 or above complete priority risk assessment below |                         |  |
| 3 - Crocidolite                                                                                                         |                                                                | 3 - Visible Debris                          |                                                       | 2 - Encapsulated spray/lagging     |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         |                                                                |                                             |                                                       | 2 - Encapsulated textile/paper     |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         |                                                                |                                             |                                                       | 3 - Unsealed spray/lagging/textile |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
| Priority Risk Assessment                                                                                                |                                                                |                                             |                                                       |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                       | Likelihood of Disturbance                                      |                                             | Human Exposure Potential                              |                                    | Maintenance Activity                                                                                                                                                                                                                                   |                                                                                 |                         |  |
|                                                                                                                         | Location                                                       |                                             | Number of Occupants                                   |                                    | 0 - Minor disturbance, e.g. possibility of contact when gaining access<br>1 - Low disturbance, e.g. changing light bulb in AIB ceiling<br>2 - Medium disturbance, e.g. lifting one or two AIB<br>3 - High disturbance, e.g. removing a number of tiles |                                                                                 |                         |  |
|                                                                                                                         | 0 - Outdoors                                                   |                                             | 0 - None                                              |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 1 - Large rooms or well vented areas                           |                                             | 1 - 1 to 3                                            |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 2 - Rooms up to 100m <sup>2</sup>                              |                                             | 2 - 4 to 10                                           |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 3 - Confined Spaces                                            |                                             | 3 - >10                                               |                                    | 3 - High disturbance, e.g. removing a number of tiles                                                                                                                                                                                                  |                                                                                 |                         |  |
|                                                                                                                         | Accessibility                                                  |                                             | Frequency of use                                      |                                    | Frequency of maintenance                                                                                                                                                                                                                               |                                                                                 |                         |  |
|                                                                                                                         | 0 - Inaccessible or unlikely to be disturbed                   |                                             | 0 - Infrequent                                        |                                    | 0 - ACM unlikely to be disturbed                                                                                                                                                                                                                       |                                                                                 |                         |  |
|                                                                                                                         | 1 - Occasionally likely to be disturbed                        |                                             | 1 - Monthly                                           |                                    | 1 - Once per year                                                                                                                                                                                                                                      |                                                                                 |                         |  |
|                                                                                                                         | 2 - Easily disturbed                                           |                                             | 2 - Weekly                                            |                                    | 2 - More than once per year                                                                                                                                                                                                                            |                                                                                 |                         |  |
| 3 - Routinely disturbed                                                                                                 |                                                                | 3 - Daily                                   |                                                       | 3 - More than once per month       |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                      | Extent / Amount                                                |                                             | Average time each use                                 |                                    | Priority Risk Score                                                                                                                                                                                                                                    |                                                                                 | Total Risk Score        |  |
|                                                                                                                         | 0 - Small amounts/items                                        |                                             | 0 - <1 hour                                           |                                    |                                                                                                                                                                                                                                                        |                                                                                 | 3                       |  |
|                                                                                                                         | 1 - <10m <sup>2</sup> or 10m run                               |                                             | 1 - 1 to 3 hours                                      |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 2 - 10 to 50m <sup>2</sup> , or 10 to 50m run                  |                                             | 2 - 3 to 6 hours                                      |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 3 - > 50m <sup>2</sup> or 50m run                              |                                             | 3 - > 6 hours                                         |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | Normal Occupant Activity                                       |                                             | Comments                                              |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 0 - Rare disturbance, e.g. little used storeroom               |                                             | All similar joints is presumed to contain similar ACM |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 1 - Low disturbance, e.g. office type activity                 |                                             |                                                       |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 2 - Periodic disturbance, e.g. industrial vehicle              |                                             |                                                       |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |
|                                                                                                                         | 3 - High disturbance, e.g. fire doors with AIB in constant use |                                             |                                                       |                                    |                                                                                                                                                                                                                                                        |                                                                                 |                         |  |

| ESP Environmental Limited - Asbestos Risk Assessment                                                                    |           |                                                                |            | Asbestos Assessment Type                                          |             | Demolition/Refurbishment Survey                                                                                                                                                                                                                        |                         |
|-------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------|------------|-------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Job No                                                                                                                  | P202543   | Date                                                           | 25/02/2025 |                                                                   | Surveyor/s  | Adam Sizer & Paul Court                                                                                                                                                                                                                                |                         |
| Location                                                                                                                | Fishguard | Building                                                       | Stenaline  |                                                                   | Room Number | External rear of Substation                                                                                                                                                                                                                            | Access Yes              |
| A - Product Type                                                                                                        |           | Extent                                                         |            | Identification                                                    |             | Similar to                                                                                                                                                                                                                                             | Sample ID & Description |
| 1 - Plastic, mastic, bitumen vinyl, textured coating, cement, Debris from these products                                |           | m <sup>2</sup>                                                 |            | Sampled                                                           |             |                                                                                                                                                                                                                                                        | FG 235                  |
| 2 - Insulating board, millboard, cloth, gasket, rope, paper, debris from these products                                 |           | m Run                                                          |            | Str, Presumed                                                     |             |                                                                                                                                                                                                                                                        | Electrical insulation   |
| 3 - Thermal lagging, sprayed coating, loose insulation, mattress/bagged insulation, packing, debris from these products |           | Small Amounts Items                                            |            | Yes                                                               | Presumed    | Yes                                                                                                                                                                                                                                                    |                         |
| Material, Risk Assessment Scores                                                                                        |           |                                                                |            |                                                                   |             |                                                                                                                                                                                                                                                        |                         |
| B - Product Type                                                                                                        |           | C - Damage / Deterioration                                     |            | D - Surface treatment                                             |             | Prelim Material Score (A + B + C + D)                                                                                                                                                                                                                  |                         |
| 1 - Chrysotile                                                                                                          |           | 0 - Good Condition                                             |            | 0 - Reinforced Composite material                                 |             | 4                                                                                                                                                                                                                                                      |                         |
|                                                                                                                         |           |                                                                |            | 0 - Painted/Sealed cement                                         |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 1 - Low damage, Few Scratches, Broken edges                    |            | 1 - Enclosed spray/lagging/rope                                   |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 1 - Painted/encapsulated Board                                    |             |                                                                                                                                                                                                                                                        |                         |
| 2 - Amosite                                                                                                             |           | 2 - Medium damage, Significant Breakages,                      |            | 1 - Unsealed cement                                               |             | If Prelim materials Score is 5 or above complete priority risk assessment below                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 2 - Unsealed Board                                                |             |                                                                                                                                                                                                                                                        |                         |
| 3 - Crocidolite                                                                                                         |           | 3 - Visible Debris                                             |            | 2 - Encapsulated spray/lagging                                    |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 2 - Encapsulated textile/paper                                    |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           |                                                                |            | 3 - Unsealed spray/lagging/textile                                |             |                                                                                                                                                                                                                                                        |                         |
| Priority Risk Assessment                                                                                                |           |                                                                |            |                                                                   |             |                                                                                                                                                                                                                                                        |                         |
|                                       |           | Likelihood of Disturbance                                      |            | Human Exposure Potential                                          |             | Maintenance Activity                                                                                                                                                                                                                                   |                         |
|                                                                                                                         |           | Location                                                       |            | Number of Occupants                                               |             | 0 - Minor disturbance, e.g. possibility of contact when gaining access<br>1 - Low disturbance, e.g. changing light bulb in AIB ceiling<br>2 - Medium disturbance, e.g. lifting one or two AIB<br>3 - High disturbance, e.g. removing a number of tiles |                         |
|                                                                                                                         |           | 0 - Outdoors                                                   |            | 0 - None                                                          |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 1 - Large rooms or well vented areas                           |            | 1 - 1 to 3                                                        |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 2 - Rooms up to 100m <sup>2</sup>                              |            | 2 - 4 to 10                                                       |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 3 - Confined Spaces                                            |            | 3 - >10                                                           |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | Accessibility                                                  |            | Frequency of use                                                  |             | Frequency of maintenance                                                                                                                                                                                                                               |                         |
|                                                                                                                         |           | 0 - Inaccessible or unlikely to be disturbed                   |            | 0 - Infrequent                                                    |             | 0 - ACM unlikely to be disturbed                                                                                                                                                                                                                       |                         |
|                                                                                                                         |           | 1 - Occasionally likely to be disturbed                        |            | 1 - Monthly                                                       |             | 1 - Once per year                                                                                                                                                                                                                                      |                         |
|                                                                                                                         |           | 2 - Easily disturbed                                           |            | 2 - Weekly                                                        |             | 2 - More than once per year                                                                                                                                                                                                                            |                         |
| 3 - Routinely disturbed                                                                                                 |           | 3 - Daily                                                      |            | 3 - More than once per month                                      |             |                                                                                                                                                                                                                                                        |                         |
|                                      |           | Extent / Amount                                                |            | Average time each use                                             |             | Priority Risk Score                                                                                                                                                                                                                                    | Total Risk Score        |
|                                                                                                                         |           | 0 - Small amounts/items                                        |            | 0 - <1 hour                                                       |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 1 - <10m <sup>2</sup> or 10m run                               |            | 1 - 1 to 3 hours                                                  |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 2 - 10 to 50m <sup>2</sup> , or 10 to 50m run                  |            | 2 - 3 to 6 hours                                                  |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 3 - > 50m <sup>2</sup> or 50m run                              |            | 3 - > 6 hours                                                     |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | Normal Occupant Activity                                       |            | Comments                                                          |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 0 - Rare disturbance, e.g. little used storeroom               |            | no access into live unit - Presumed containing asbestos materials |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 1 - Low disturbance, e.g. office type activity                 |            |                                                                   |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 2 - Periodic disturbance, e.g. industrial vehicle              |            |                                                                   |             |                                                                                                                                                                                                                                                        |                         |
|                                                                                                                         |           | 3 - High disturbance, e.g. fire doors with AIB in constant use |            |                                                                   |             |                                                                                                                                                                                                                                                        |                         |

## **Appendix C**

### Negative Sample Locations and Photos

## Negative Samples. Photos and Locations

FG 213



FG 214



FG 215



FG 216



FG 217



Sound Proofing



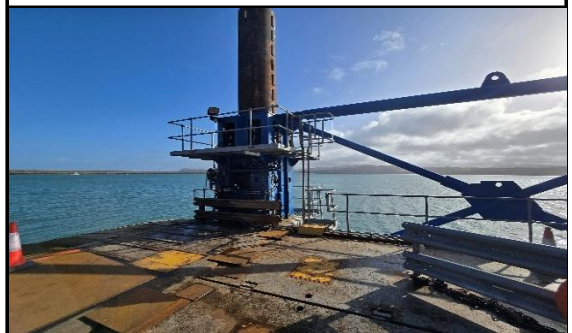
Floor Coating



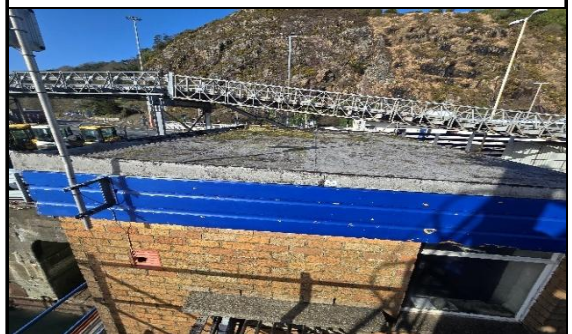
Denzo Tape



Paint



Roof Felt



## Negative Samples. Photos and Locations

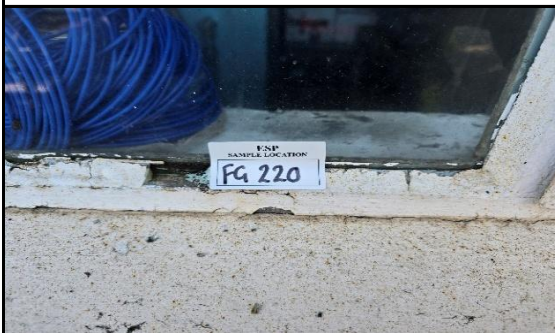
FG 218



FG 219



FG 220



FG 221



FG 222



Glass fibre Wall Panelling



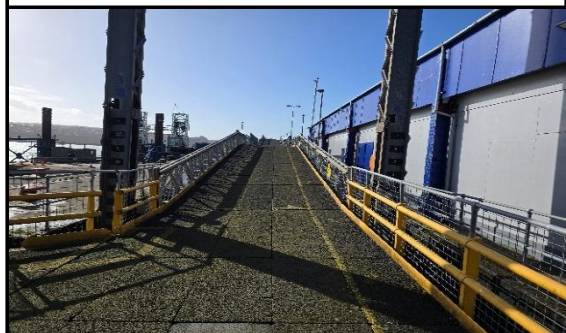
Denzo Tape



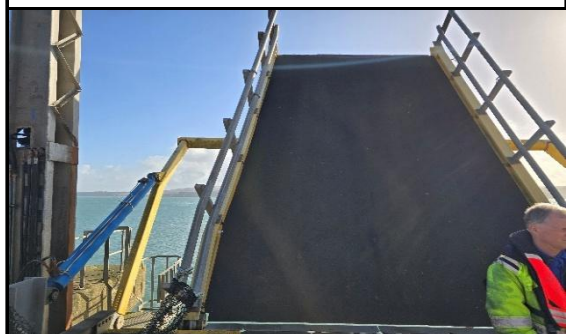
Window Putty



Road Covering



Flap Coating



## Negative Samples. Photos and Locations

FG 223



FG 224



FG 225



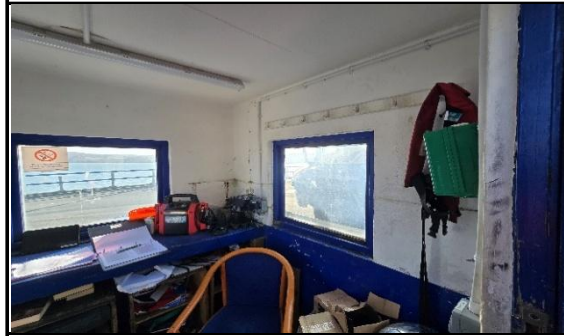
FG 226



FG 228



Internal Paint



Roof Felt



Concrete Pillars



Denzo Tape



Rope Seal



## Negative Samples. Photos and Locations

FG 231



FG 232



FG 233



FG 234



Ramp Bitumen Coating



Cement Coating



Expansion Joint



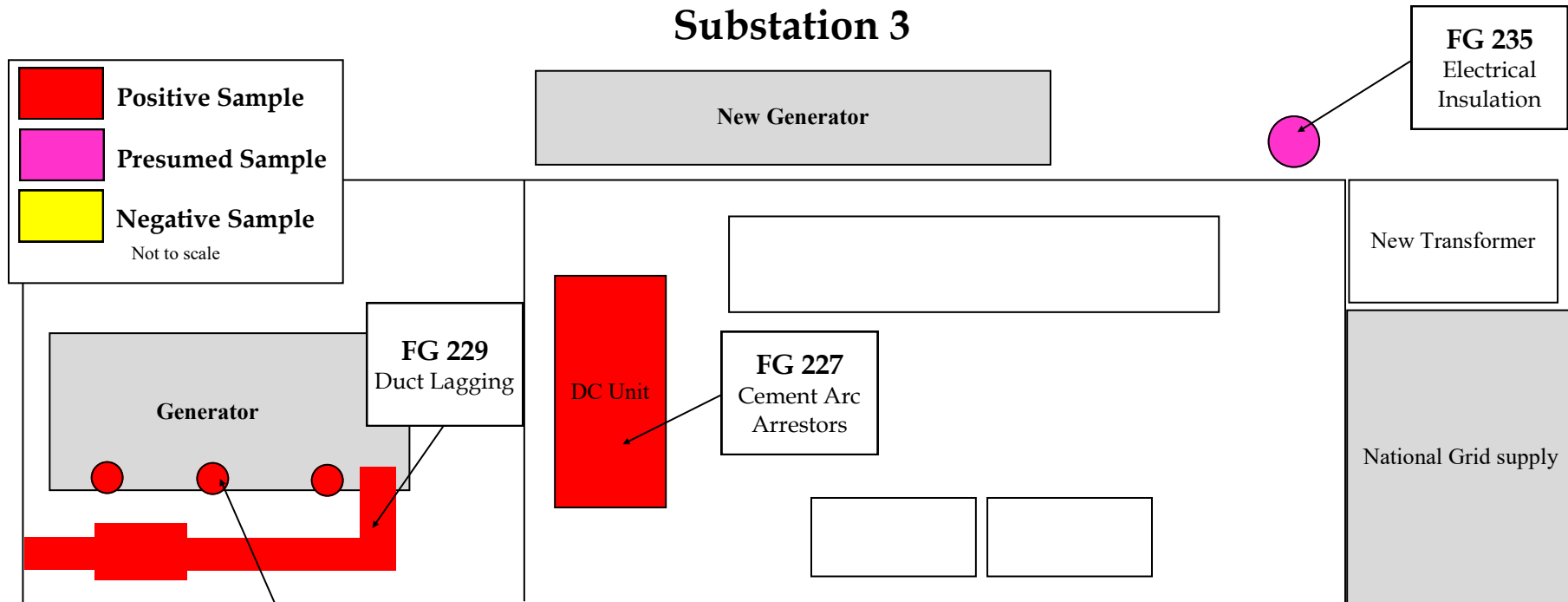
Concrete Road



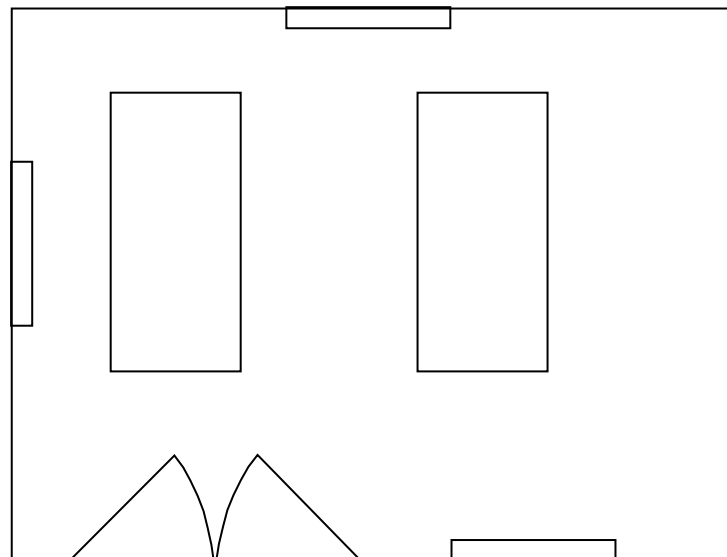
## **Appendix D**

### **Plans of Buildings for Sample Locations**

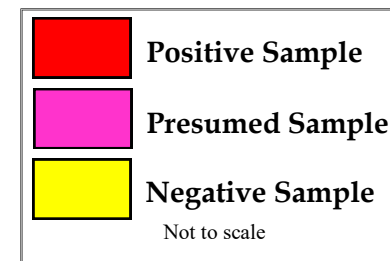
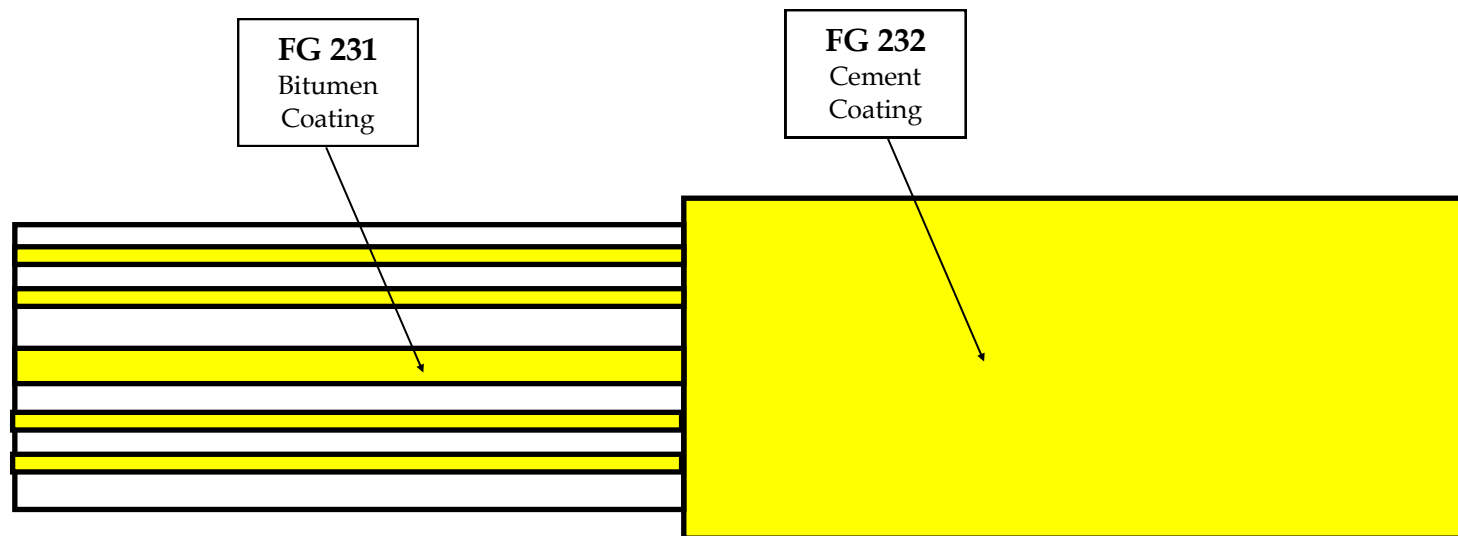
## Substation 3



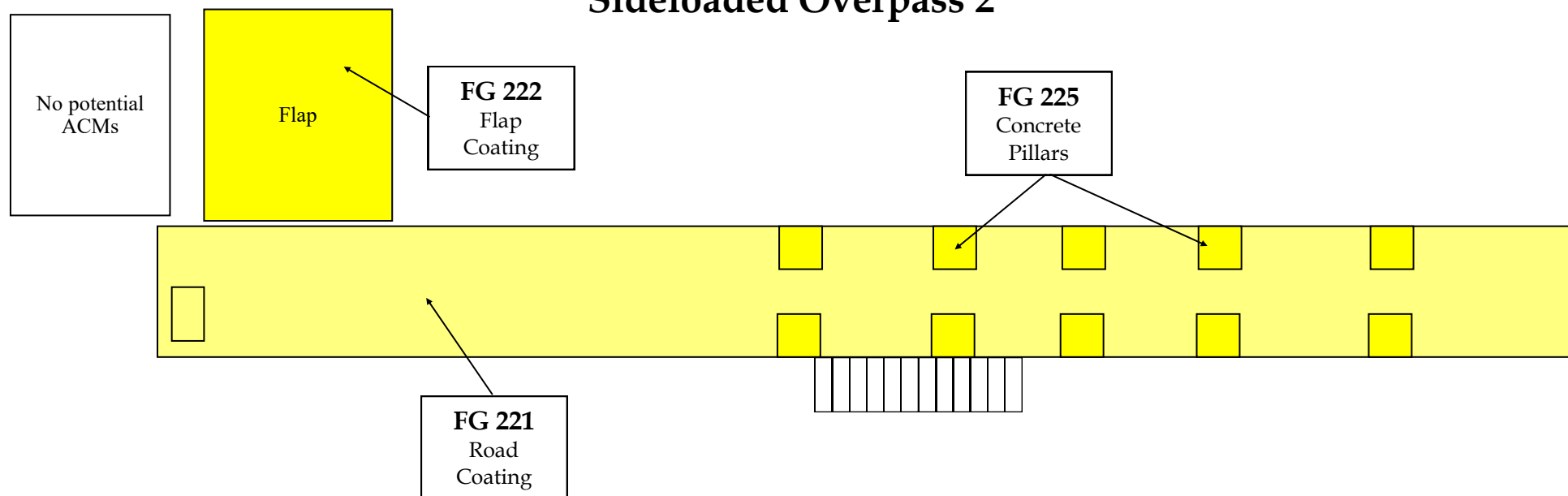
## Link-Span Machine Controls 4



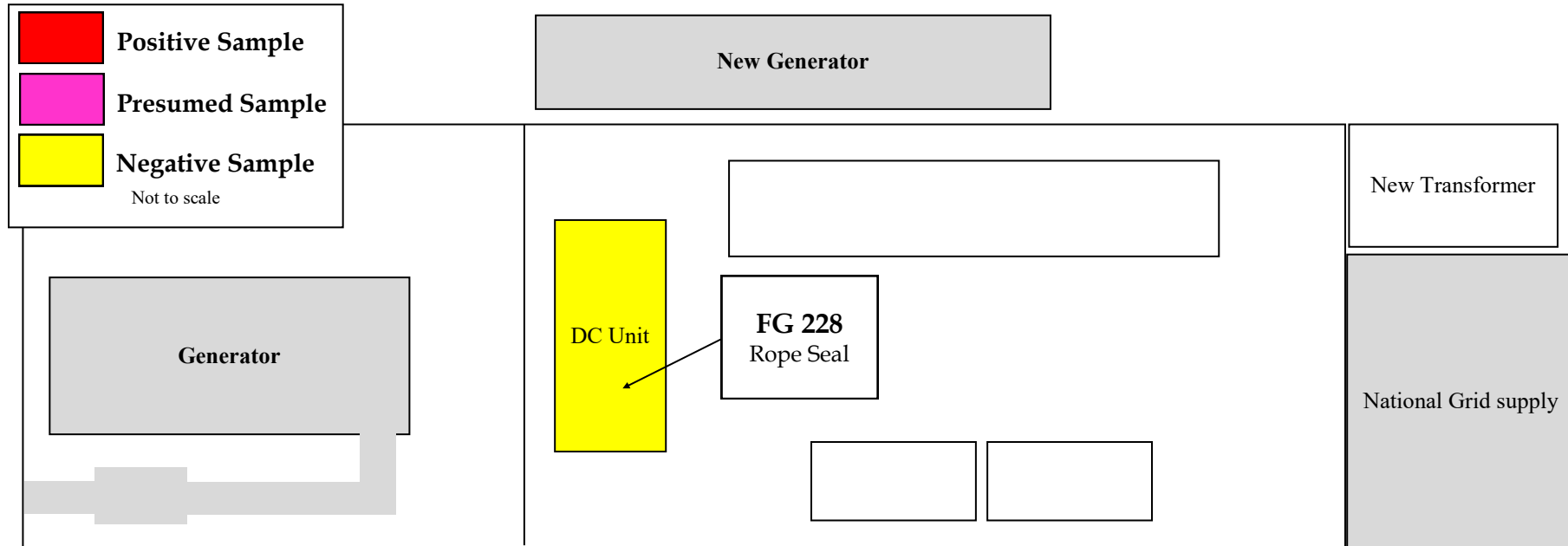
## Slipway 1



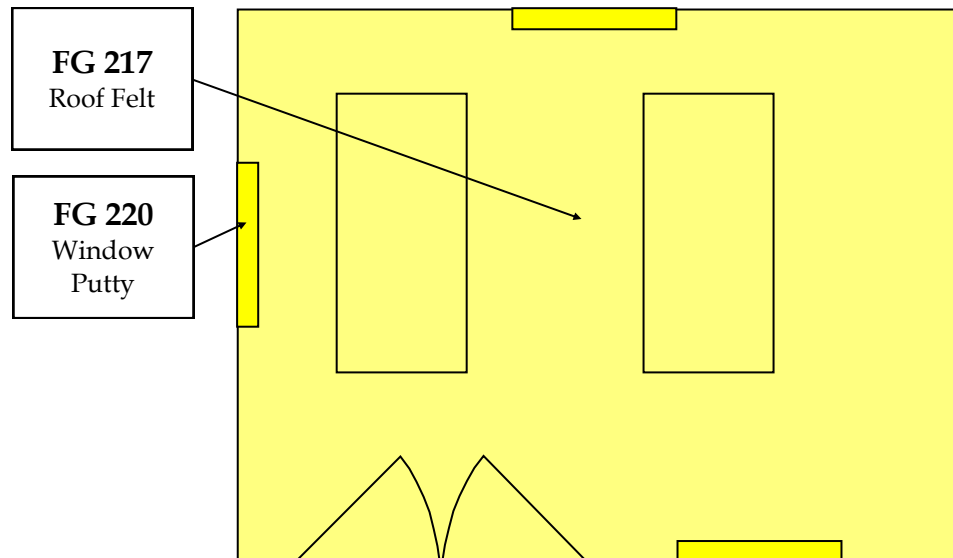
## Sideloaded Overpass 2



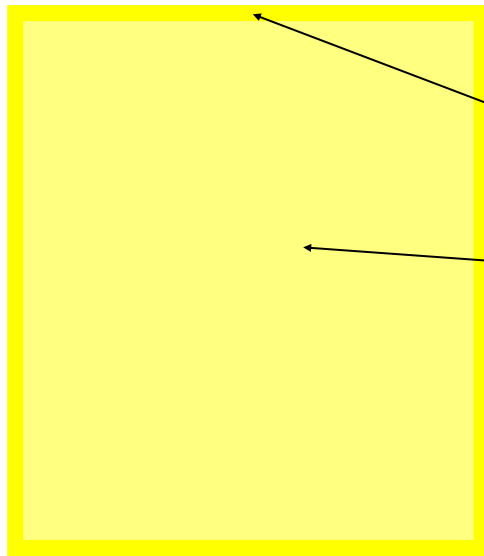
## Substation 3



## Link-Span Machine Controls 4



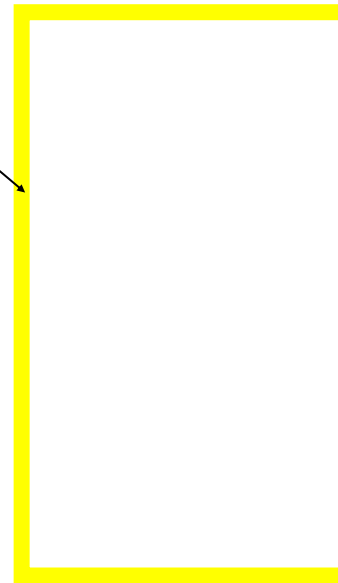
## Ramp Head Hut 5



**FG 223**  
Wall Paint

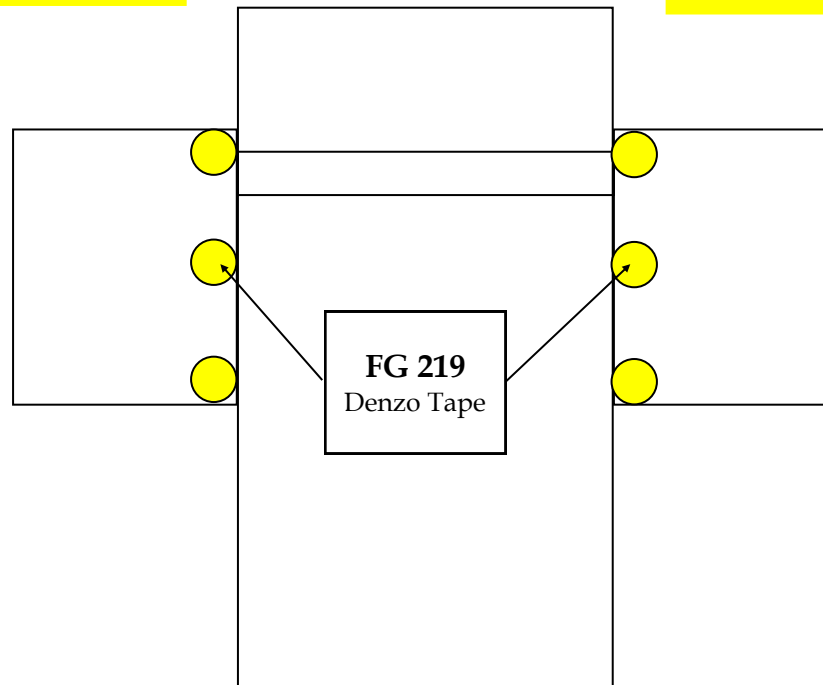
**FG 224**  
Roof Felt

## Link-Span Controls 6

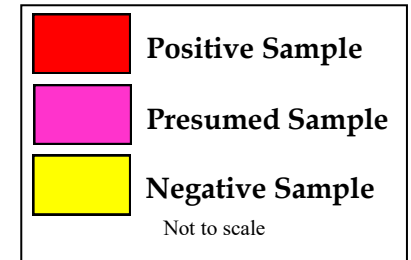


**FG 218**  
Fibre Gass  
Walls

## Link-Span 7



**FG 219**  
Denzo Tape



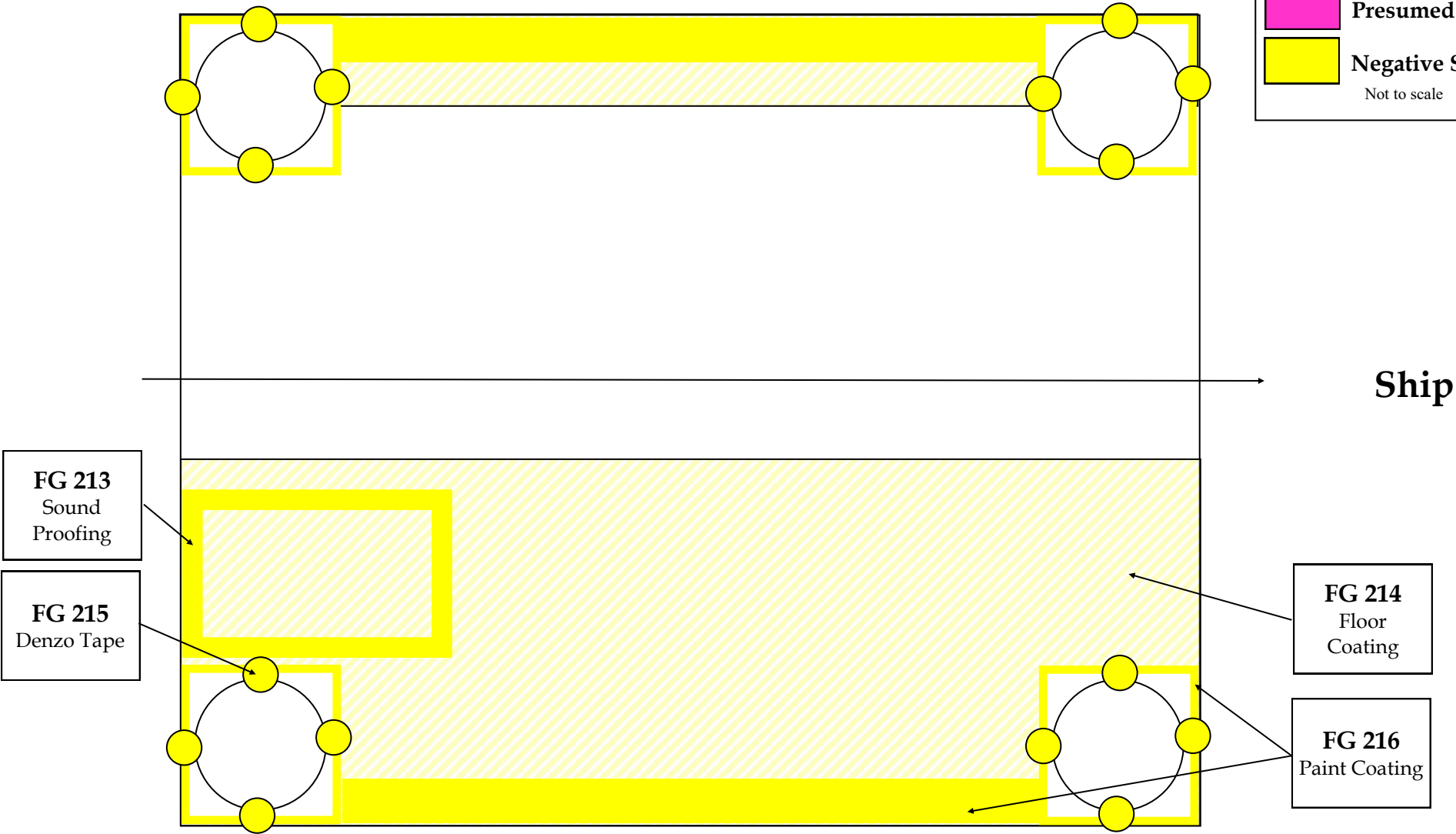
Jack up ramp 8

Positive Sample

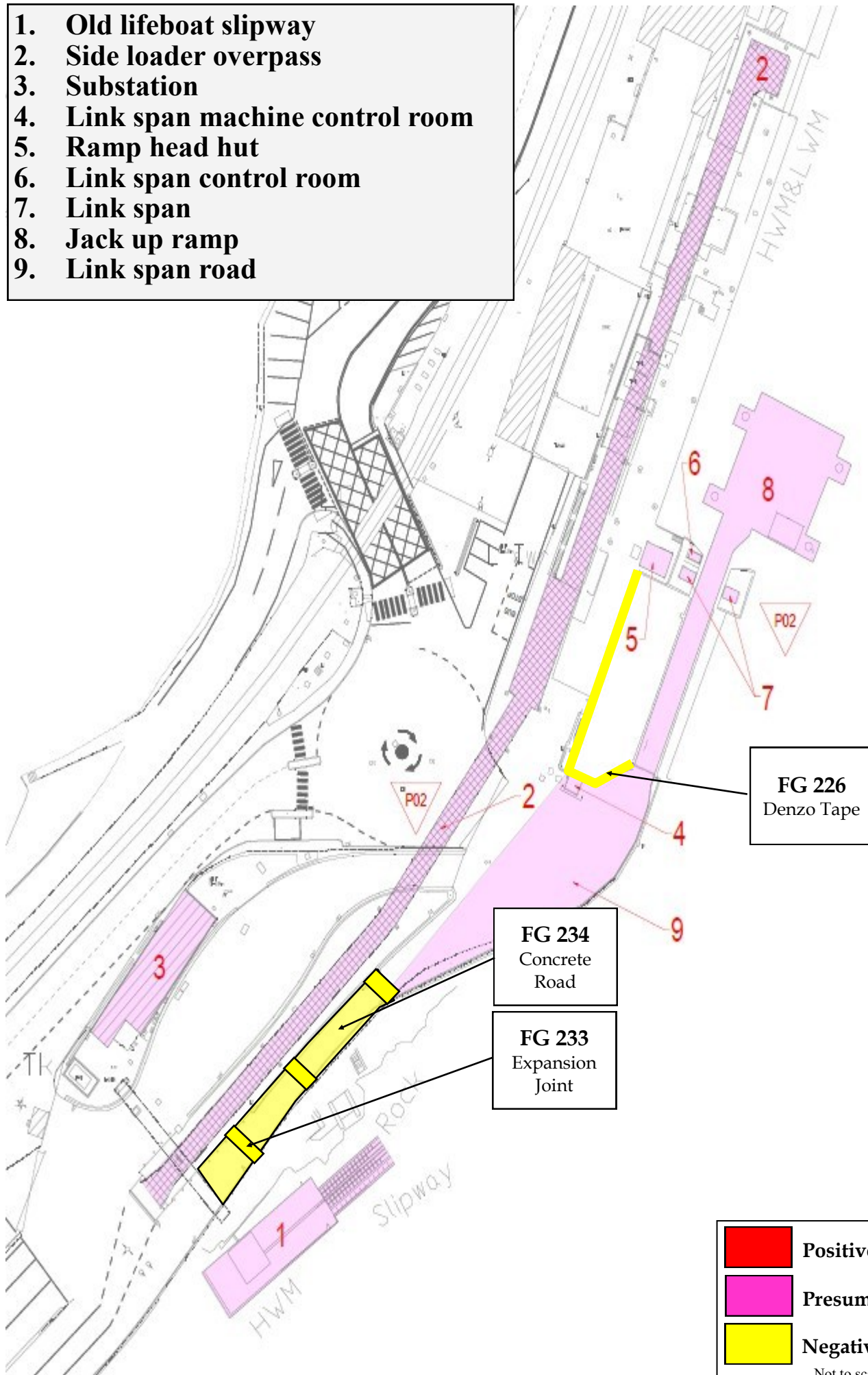
Presumed Sample

Negative Sample

Not to scale



1. Old lifeboat slipway
2. Side loader overpass
3. Substation
4. Link span machine control room
5. Ramp head hut
6. Link span control room
7. Link span
8. Jack up ramp
9. Link span road



# **Appendix E**

## **Analysis Results Sheets**



## CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES

STANDARD  
PREMIUM  
EMERGENCY

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Client:               | ESP ENVIRONMENTAL LTD                                             |
| Address:              | 12A SOAR ROAD, BYNEA<br>LLANELLI,<br>CARMARTHENSHIRE,<br>SA14 9LG |
| Attention:            | MR ADAM SIZER                                                     |
| Site Address:         | STENALINE FISHGUARD                                               |
| Date sample taken:    | 25/02/25                                                          |
| Date sample received: | 26/02/25                                                          |
| Date of Analysis:     | 27/02/25                                                          |

|                     |             |
|---------------------|-------------|
| Analysis Report No. | SCO/25/5602 |
| Report Date.        | 27/02/25    |
| Site Ref No.        | P202543     |
| Page No:            | 1 Of 1      |
| No. of Samples:     | 11          |
| Obtained:           | DELIVERED   |

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Scopes Asbestos Analysis "in house" method of transmitted/polarised light microscopy and centre stop dispersion staining, based on HSE's HSG248. If samples have been DELIVERED the site address and actual sample location is as given by the client at the time of delivery. Scopes Asbestos Analysis Services Limited are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Scopes Asbestos Analysis Services Limited cannot be held responsible for the interpretation of the results shown. Results relate only to the items tested.

| SCOPE SAMPLE No. | CLIENT SAMPLE No. | Sample Location | Fibre Type Detected |
|------------------|-------------------|-----------------|---------------------|
| 1                | FG 213            | SOUND PROOFING  | NADIS               |
| 2                | FG 214            | FLOOR COATING   | NADIS               |
| 3                | FG 215            | DENZO TAPE      | NADIS               |
| 4                | FG 216            | PAINT           | NADIS               |
| 5                | FG 217            | ROOF FELT       | NADIS               |
| 6                | FG 218            | KIOSK           | NADIS               |
| 7                | FG 219            | DENZO TAPE      | NADIS               |
| 8                | FG 220            | WINDOW PUTTY    | NADIS               |
| 9                | FG 221            | FLOOR COVERING  | NADIS               |
| 10               | FG 222            | COATING         | NADIS               |
| 11               | FG 223            | PAINT           | NADIS               |

KEY: NADIS – No Asbestos Detected in Sample

Note: All samples will be retained for a minimum of six months. Reports & Records are retained for a minimum of 5 years.

Note: This Certificate for Identification of Asbestos Fibres shall not be reproduced except in full without the written approval of the Laboratory.

Note: All Analysis is performed in House on the registered premises (below).

Note: Where an 'A' appears at the end of the analysis report number this means an amendment has been made to the original report. Information that has been amended will be marked with an \*

|              |            |                       |                         |
|--------------|------------|-----------------------|-------------------------|
| Analysed by: | T MULLIGAN | Authorised signatory: |                         |
|              |            | Print name:           | C.BOLTON – DEPUTY Q.C.M |

**BULK 001-VER 8 14-JUN-22-QCM**

Unit 14 Britannia Court, Burnt Mills Industrial Estate, Basildon, Essex, SS13 1EU  
**Tel:** 01268 724785 **Fax:** 01268 724796 **Mob:** 07765 685132 **E-Mail:** [enquiries@scopesaasl.co.uk](mailto:enquiries@scopesaasl.co.uk)  
Company Reg No: 5191390 Reg Address: As above



## CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES

STANDARD  
PREMIUM  
EMERGENCY

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Client:               | ESP ENVIRONMENTAL LTD                                             |
| Address:              | 12A SOAR ROAD, BYNEA<br>LLANELLI,<br>CARMARTHENSHIRE,<br>SA14 9LG |
| Attention:            | MR ADAM SIZER                                                     |
| Site Address:         | STENALINE FISHGUARD                                               |
| Date sample taken:    | 25/02/25                                                          |
| Date sample received: | 26/02/25                                                          |
| Date of Analysis:     | 27/02/25                                                          |

Analysis Report No.

SCO/25/5603

Report Date.

27/02/25

Site Ref No.

P202543

Page No:

1 Of 1

No. of Samples:

11

Obtained:

DELIVERED

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Scopes Asbestos Analysis "in house" method of transmitted/polarised light microscopy and centre stop dispersion staining, based on HSE's HSG248. If samples have been DELIVERED the site address and actual sample location is as given by the client at the time of delivery. Scopes Asbestos Analysis Services Limited are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Scopes Asbestos Analysis Services Limited cannot be held responsible for the interpretation of the results shown. Results relate only to the items tested.

| SCOPE SAMPLE No. | CLIENT SAMPLE No. | Sample Location | Fibre Type Detected |
|------------------|-------------------|-----------------|---------------------|
| 1                | FG 224            | ROOF FELT       | NADIS               |
| 2                | FG 225            | CEMENT          | NADIS               |
| 3                | FG 226            | DENZO TAPE      | NADIS               |
| 4                | FG 227            | ARC ARRESTOR    | CHRYSTILE           |
| 5                | FG 228            | ROPE SEAL       | NADIS               |
| 6                | FG 229            | LAGGING         | AMOSITE             |
| 7                | FG 230            | GASKET          | CHRYSTILE           |
| 8                | FG 231            | PAINT           | NADIS               |
| 9                | FG 232            | CEMENT          | NADIS               |
| 10               | FG 233            | EXPANSION JOINT | NADIS               |
| 11               | FG 234            | CEMENT          | NADIS               |

KEY: NADIS – No Asbestos Detected in Sample

Note: All samples will be retained for a minimum of six months. Reports & Records are retained for a minimum of 5 years.

Note: This Certificate for Identification of Asbestos Fibres shall not be reproduced except in full without the written approval of the Laboratory.

Note: All Analysis is performed in House on the registered premises (below).

Note: Where an 'A' appears at the end of the analysis report number this means an amendment has been made to the original report. Information that has been amended will be marked with an \*

|              |            |                       |                         |
|--------------|------------|-----------------------|-------------------------|
| Analysed by: | T MULLIGAN | Authorised signatory: |                         |
|              |            | Print name:           | C.BOLTON – DEPUTY Q.C.M |

BULK 001-VER 8 14-JUN-22-QCM

Unit 14 Britannia Court, Burnt Mills Industrial Estate, Basildon, Essex, SS13 1EU  
Tel: 01268 724785 Fax: 01268 724796 Mob: 07765 685132 E-Mail: [enquiries@scopesaasl.co.uk](mailto:enquiries@scopesaasl.co.uk)  
Company Reg No: 5191390 Reg Address: As above

## **Appendix F**

### Monitoring Staff Certificates



***Adam Sizer***

has satisfactorily completed the examination process and has  
duly been awarded the

***Proficiency Certificate***  
***In***  
***P402 – Buildings Surveys and Bulk***  
***Sampling for Asbestos***

A handwritten signature in black ink, appearing to read 'Ian Kellie', with a long horizontal line extending from the end.

**Ian Kellie**  
**Chief Examiner**

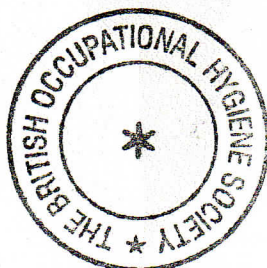


**January 2014**  
**Certificate No. 20130808-28788-1398**

### ***Paul Court***

has demonstrated by examination and practical assessment that he has attained the necessary proficiency in the following specified field of Occupational Hygiene and is duly awarded the

### ***Proficiency Certificate*** ***in*** ***Buildings Surveys and*** ***Bulk Sampling*** ***for Asbestos***



  
Chief Examiner

January 2005