Pell Frischmann

Tom na Clach Wind Farm Extension

Appendix 7.B: Abnormal Indivisible Load Route Survey

February 2022

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1 Introduction

1.1 Purpose of the Report

Pell Frischmann (PF) has been commissioned by Nan Clach Extension Limited ('the Applicant'), to undertake a survey of the Abnormal Indivisible Load (AIL) delivery route for wind turbine loads associated with the construction and development of and extension to Tom nan Clach Wind Farm, located to the north west of Grantown-on-Spey.

The Route Survey Report (RSR) has been prepared to help inform the Applicant on the likely issues associated with the development of the site with regards to off-site transport and access for AIL traffic. This report is based upon a desk top review and identifies the key issues associated with AIL deliveries and notes that remedial works, either in the form of physical works or as traffic management interventions will be required to accommodate the predicted loads. A detailed site visit would still be required to fully assess the impact on the study area road network.

The detailed assessment and subsequent designs of any remedial works are beyond the agreed scope of works between PF and the Applicant at this point in time.

It is the responsibility of the wind turbine supplier to ensure that the entirety of the proposed access route is suitable and meets with their satisfaction. The turbine supplier will be responsible for ensuring that the finalised proposals meet with the appropriate levels of health and safety consideration for all road users and in accordance with the relevant legislation at the time of delivery.

2 Site Background

2.1 Site Location

The development site is located to the north west of Grantown-on-Spey, Scottish Highlands. Figure 1 illustrates the general site location.

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Figure 1: Site Location Plan

2.2 Candidate Turbine

The Applicant have indicated that they wish to consider the worst case components from a Vestas V136 at a tip height of 149.9m for use at the site and this blade has been used for this preliminary assessment. The details of the components have been provided by Vestas and are detailed in Table 1 below.

Table 1: Turbine Size Summary

Component	Length (m)	Width (m)	Height / Min Diameter (m)	Weight (t)
Blade	66.50	4.265	2.750	15.701
Nacelle Housing	12.940	3.981	3.387	67.566
Top Tower	29.000	3.350	3.268	41.500
Mid Tower	28.840	3.650	3.350	58.500
Base Tower	21.726	(4.010) 3.650	3.650	73.500

2.3 Proposed Delivery Equipment

To provide a robust assessment scenario based upon the known issues along the access route, it has been assumed that all blades would be carried on a Superwing Carrier trailer to reduce the need for mitigation in constrained sections of the route.

The base and mid towers would be carried on a 4+7 clamp trailer. The hub, nacelle housing, and top towers would be carried on a six-axle step frame trailer. The worst case loads for these sections will be considered in a further study.

Figure 2: Superwing Carrier Trailer



Figure 3: Tower Trailer



3 Access Route Review

3.1 Port of Entry

The proposed Port of Entry (POE) is Inverness Harbour. The port is the closest suitable port to site and as such is in line with the Government's "Water Preferred" policy towards AIL movements.

The port has been used by renewables deliveries in the past for a large number of wind farms and has sufficient quay and storage space and is well located for the strategic trunk road network.

3.2 Proposed Access Routes

This study has been undertaken using site visit videos recorded previously for nearby sites and Google Streetview images. A full site visit will be required at a later stage to confirm the details noted in the report and assessments.

The proposed access route to the site access junction from KGV Docks is as follows:

- Loads would exit Inverness Harbour and turn left onto Stadium Road;
- At Longman Roundabout loads would turn left and continue south on the A9;
- · North of Granish loads would turn left onto the A95 and then left again to stay on the A95 northbound;
- At Dulnain Bridge loads would turn left onto the A938 westbound; and
- At Duthill loads would turn right onto the B9007 northbound and proceed to the proposed site access.

The proposed southern access route is illustrated in Figure 4.

Figure 4: Proposed Access Route



3.3 Route Constraints

The constraints noted on northern route are detailed in Table 2. These cover all constraints from the port access gate through to the proposed site access junction. No consideration of the transport issues within the development site have been undertaken in this report.

Plans illustrating the location of the constraints are provided in Appendix A.

Table 2: Northern Route Constraint Points and Details

POI	Constraint Constraint	Details
1	Exit from Inverness Harbour	Loads will exit the port and turn left onto Stadium Road.
		A swept path assessment has been undertaken and indicates that loads will over-run and over-sail past the port fence to the south west of the harbour access road into the storage area. The existing fence will need to be removed and a load bearing surface provided.
		An agreement with the Harbour Trust will need to be made to enable the proposed works and to ensure that the area is clear of stored materials during deliveries.
		Swept path assessment SK01 is included in Appendix B.
2, 3	Stadium Road	Loads will proceed on Stadium Road.
		A swept path assessment has been undertaken and indicates that loads will require both traffic lanes on the road. No physical mitigation measures are required.
		Swept path assessment SK02 is included in Appendix B.

POI	Constraint	Details
4	A9 Longman Roundabout	Loads will take the first exit at the roundabout to join the A9.
		A swept path assessment has been undertaken and indicates that loads will oversail the splitter island where all traffic bollards should be removed.
		Loads will then proceed southbound on the A9.
		Swept path assessment SK03 is included in Appendix B.
5	A9 / A95 Junction	Loads will turn left to join the A95.
		A swept path assessment has been undertaken and indicates that on turning left, the blade tip will over-sail the crash barrier on the western verge of the A9 where it is recommended that a land search is completed to confirm the extent of adopted boundary available.
		Loads will over-run both splitter islands where load bearing surfaces should be laid. Two bollards and one road sign should be removed from each island.
		Loads will over-sail the inside of the left turn where a section of crash barrier, three road signs and several trees should be removed. Potential third party land required.
		Swept path assessment SK04 is included in Appendix B.

POI	Constraint	Details
6	A95 / B9152 Junction	Loads will turn left at the junction to remain on the A95 and proceed northbound. A swept path assessment has been undertaken and indicates that the blade tip will over-sail two bollards and one road sign on the splitter island. Loads will over-run and over-sail the inside of the turn where a load bearing surface should be laid, and one road sign and one bollard should be removed. A land search should be completed to confirm the extent of adopted boundary available. Loads will oversail the south western verge on approach to the junction, however no physical mitigation is required.
		Swept path assessment SK05 is included in Appendix B.
7	A95 South of Avie Lochan	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend.
8	A95 Avie Lochan	Loads will proceed northbound on the A95. A swept path assessment has been undertaken and indicates that loads will over-sail both verges through the first right-hand bend. On the outside of the bend the blade tip will oversail the safety barrier. Four chevron signs should be removed. On the inside of the bend a section of fence and one utility pole should be removed. Third party land is required. Swept path assessment SK06 is included in Appendix B.

POI	Constraint	Details
9	A95 Avie Lochan	Loads will oversail and overrun the verge through the outside of the bend where a load bearing surface should be laid and traffic bollards and one road sign should be removed.
		Loads will oversail the verge on the inside of the bend. Swept path assessment SK06C is included in Appendix B.
10	A95 West of Loch Vaa	included in Appendix B. Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend. Throughout the route, the tree canopy needs to be trimmed to provide a clear 5m head height. Trimming of the tree canopy can be subject to ecological constraints and it is suggested that early consultation with Transport Scotland is undertaken to agree cutting times and permits.
11	A95 Kinveachy	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend. Throughout the route, the tree canopy needs to be trimmed to provide a clear 5m head height. Trimming of the tree canopy can be subject to ecological constraints and it is suggested that early consultation with Transport Scotland is undertaken to agree cutting times and permits.
12	A95 Chapelton	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend. Loads will oversail the inside of the right bend.

POI	Constraint	Details
13	A95 East Chapelton	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
14	A95 Dochlaggie	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend.
15	A95 Dochlaggie	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend. The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section. The clearances to overhead power lines at this location should be reviewed with the utility provider prior to loads moving to ensure that there is sufficient head height and flashover protection for all temperature ranges.

POI	Constraint	Details
16	A95 Lynchurn	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend.
17	A95 East of Lynchurn	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend.
18	A95 East of Lynchurn	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
19	A95 Lower Lackgie	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.

POI	Constraint	Details
20	A95 Lower Lackgie	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
21	A95 / A938 Junction	Due to the length of the proposed loads and the orientation of the road junction it is not possible to utilise the existing junction and the mitigation used by the original Tom na Clach Wind Farm that is located in the verge. It is proposed that loads will turn left onto a new track in advance of the junction. Detailed discussions with Transport Scotland and The Highland Council should be held to confirm the proposed mitigation as a new junction will be created on both the A9 and A938. A swept path assessment has been undertaken and indicates that a load bearing surface should be laid to create a new track through the field to the north of the A9. A section of fence, stone walls and several trees should be removed within the field and the drainage ditches should be culverted. Third party land is required. Swept path assessment SK07 is included in Appendix B.

POI	Constraint	Details
22	A938 Dulnain Bridge	Loads will proceed westbound on the A938. A swept path assessment has been undertaken and indicates that a load bearing surface should be provided on the southern verge, potentially in the form of load bearing plates. Existing utilities should be protected. Loads will over-sail the northern verge though no physical mitigation measures are required. Parking should be suspended during the delivery period and a Temporary Traffic Regulation Order (TTRO) may be necessary. Swept path assessment SK08 is included in Appendix B.
23	A938 Dulnainbridge Plantation	Loads will proceed westbound on the A938. A swept path assessment has been undertaken and indicates that no physical mitigation measures are required. Swept path assessment SK09 is included in Appendix B.
24	A938 West of Dulnain Bridge	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend.

POI	Constraint	Details
25	A938 Muckrach Farm	Loads will proceed westbound on the A938. A swept path assessment has been undertaken and indicates that the blade tips will over-sail the fence on the outside of the initial right-hand bend. Third party land is required. Loads will over-run and over-sail the outside of the following left bend where load bearing surfaces should be laid. The embankment should be reprofiled (subject to a detailed review on a topographical base plan) and detailed design is required to confirm whether wider area verge strengthening works are required. Vegetation should be cleared from both sides of the road. Swept path assessment SK10 is included in Appendix B.
26	A938 Balnaan	Loads will proceed westbound on the A938. A swept path assessment has been undertaken and indicates that loads will over-run and over-sail the inside of the bend where a load bearing surface should be laid and three bollards should be removed. Vegetation should be trimmed in this location. Loads will also oversail the outside of the bend. Swept path assessment SK11 is included in Appendix B.

POI	Constraint	Details
27	A938 Milton Farm	Loads will proceed westbound on the A938. A swept path assessment has been undertaken and indicates that loads will over-run and over-sail the outside of the bend where a load bearing surface should be laid and several bollards should be removed. Loads will over-run and over-sail the northern verge following the bend where a load bearing surface should be laid. Swept path assessment SK12 is included in Appendix B.
28	A938 Tullochgribban Plantation	Loads will proceed westbound on the A938. A swept path assessment has been undertaken and indicates that loads will overrun and oversail the outside of the righthand bend where a load bearing surface should be laid. Detailed design on a topographical base plan is required to confirm whether wider area verge strengthening works are required Swept path assessment SK13 is included in Appendix B.
29	A938 Tullochgribban Plantation	Loads will straddle the centreline through this section. Oncoming vehicles should be held in advance of the bend. Loads will oversail the inside of the bend however no physical mitigation is required. The clearances to overhead power lines at this location should be reviewed with the utility provider prior to loads moving to ensure that there is sufficient head height and flashover protection for all temperature ranges.

POI	Constraint	Details
30	A938 Loch Mor	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
31, 32, 33	A938 Balnacruie	Loads will continue west on the A938 at Balnacruie through a right / left section. Loads are able to negotiate the initial right bend without mitigation works. The clearances to overhead power lines at this location should be reviewed with the utility provider prior to loads moving to ensure that there is sufficient head height and flashover protection for all temperature ranges. Loads will oversail both verges through the following left bend where the trees should be trimmed. Swept path assessment SK14 is included in Appendix B.

POI	Constraint	Details
34	A938 Easter Duthil	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding.
		Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan.
		Loads will need to be set on higher suspension settings at this section.
35	A938 South of Duthil	Loads will proceed westbound on the A938.
		The OS mapping at this location does not fully identify the road edge. An indicative road edge has been provided for illustration only and should be confirmed through a topographical survey.
		A swept path assessment has been undertaken and indicates that loads will overail the northern verge where a third party land deal may be required. Fencing and road signage will need to be removed and alterations to the embankment levels may be required.
		On the southern verge, two areas of over- run surfacing will be required. Bollards and road signage will need to be relocated and the proximity to one utility pole reviewed.
		The western load bearing surface area will require the use of third party land .
		Swept path assessment SK15 is included in Appendix B.

POI	Constraint	Details
36, 37	A938 Duthil	Loads will continue west on the A938 at Duthill. Loads will oversail both verges through the section without the need for mitigation works.
		Swept path assessment SK15C is included in Appendix B.
38	A938 West of Duthil	Loads will proceed westbound on the
		A938. Loads will oversail both verges through the section without the need for mitigation works. Swept path assessment SK16 is included in Appendix B.
39, 40	A938 / B9007 Junction	Loads will turn right to join the B9007. A swept path assessment has been undertaken and indicates that loads will oversail the southern verge where trimming of vegetation will be required. A load bearing surface in the western verge will be required, requiring all vegetation and fencing to be removed. Third party land is required.
		Swept path assessment SK17 is included in Appendix B.

POI	Constraint	Details
41	B9007 South of Lochgorm	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
42	B9007 Lochgorm	Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that the blade will oversail the inside of the left bend. Swept path assessment SK18 is included in Appendix B.
43	B9007 Lyndeor	Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that loads will oversail both verges through the bend where vegetation should be cleared. Swept path assessment SK19 is included in Appendix B.
44, 45	B9007 Northeast of Auchterteang	Loads will continue north on the B9007 through the bend section. Loads will oversail both verges through the sinuous section. No physical mitigation is required. Swept path assessment SK20 is included in Appendix B.

POI	Constraint	Details
46	B9007 North of Auchterteang	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
47	B9007 Falls of Ess	Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that loads will over-sail both verges through the bend. Swept path assessment SK21 is included in Appendix B.
48	B9007 East of Auchtertipper	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
49	B9007 Northeast of Auchtertipper	Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that loads will over-sail both verges through the bend. Swept path assessment SK22 is included in Appendix B.

POI	Constraint	Details
50	B9007 West of Creag Ealraich	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section. Loads will straddle the centreline and oversail the verge on the inside of the bend. No physical mitigation is required however oncoming vehicles should be
		held in advance of the bend.
51	B9007 West of Creag Ealraich	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan.
		Loads will need to be set on higher suspension settings at this section.
52	B9007 Cnocan Buidhe	Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that loads will over-sail both verges through the bend. One traffic pole should be removed from the inside of the right bend. Swept path assessment SK23 is included in Appendix B.

POI	Constraint	Details
53	B9007 Creag a' Ghiuthais	Loads will proceed northbound on the B9007.
		A swept path assessment has been undertaken and indicates that loads will over-sail both verges through the bend.
		The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan.
		Loads will need to be set on higher suspension settings at this section.
		Swept path assessment SK24 is included in Appendix B.
54	B9007 North West of Glentarroch	Loads will straddle the centreline and oversail the verge on the inside of the bend. No physical mitigation is required however oncoming vehicles should be held in advance of the bend.

POI	Constraint	Details
55	B9007 Northeast of Carn nan Clach Garbha	Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that loads will over-sail both verges through the bends. Several snow level indication poles should be removed from the inside of the left-hand bend. The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
56	B9007 North of Carn nan Clach Garbha	in Appendix B. Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that loads will oversail both verges through the left bend. One snow indicator pole should be removed from the western verge. Swept path assessment SK25C is included in Appendix B.
57	B9007 Drochaid Allt Bad an lasgair	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.

POI	Constraint	Details
58	B9007 Drochaid Allt Bad an lasgair	Loads will proceed northbound on the B9007. A swept path assessment has been undertaken and indicates that loads will over-sail both verges through the bend. Swept path assessment SK26 is included in Appendix B.
59	B9007 Drochaid Allt Bad an lasgair	The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding. Alternatively, a centre line vertical assessment could be undertaken from a topographical base plan. Loads will need to be set on higher suspension settings at this section.
60	Proposed Site Access	Loads will turn left into the existing site access junction. A swept path assessment has been undertaken and indicates that loads will oversail and overrun into potential third party land on the inside of the left turn. The junction will need to be upgraded to meet manufacturer standards for the larger loads if it is used to access the proposed site. Swept path assessment SK27 is included in Appendix B.

3.4 Swept Path Assessment Results and Summary

The detailed swept path drawings for the locations assessed are provided in Appendix B for review. The drawings in Appendix B illustrate tracking undertaken for the worst case loads at each location.

The colours illustrated on the swept paths are:

- Grey / Black OS / Topographical Base Mapping;
- Green Vehicle body outline (body swept path);
- Red Tracked pathway of the wheels (wheel swept path); and
- Purple The over-sail tracked path of the load where it encroaches outwith the trailer (load swept path).

Where mitigation works are required, the extents of over-run and over-sail areas are illustrated on the swept path drawings.

Please note that where assessments have been undertaken using Ordnance Survey (OS) base mapping, there can be errors in this data source.

Where provided by the client, topographical data has been utilised. Please note that PF cannot accept liability for errors on the data source, be that OS base mapping or client supplied data.

3.5 Weight Review

It is recommended that a weight review is undertaken via the ESDAL (Electronic Service Delivery for Abnormal Loads) contacts database using the Highways Agency website www.esdal.com.

All of the relevant ESDAL contacts are noted in Table 4 and all will need to be contacted to ascertain if there are any relevant constraints that should be noted. This should be undertaken a later stage, should the site pass the initial due diligence review.

Table 3: ESDAL Contacts

Organisation	Email Address
The Highland Council	abnormal.loads@highland.gov.uk
Transport Scotland	paul.winn@transport.gov.scot
Police Scotland	OSDAbnormalLoadsScotland@scotland.pnn.police.uk
BEAR Scotland	abnormal-load@bearscotland.co.uk
Network Rail	abnormalloadscontact@networkrail.co.uk
Historic Rail Estate	rsgbrb@jacobs.com

3.6 Land Ownership

The limits of road adoption can vary depending upon the location of the site and the history of the road agencies involved. The adopted area is generally defined as land contained within a defined boundary where the road agency holds the maintenance rights for the land. In urban areas, this usually defined as the area from the edge of the footway across the road to the opposing footway back edge.

In rural areas the area of adoption can be open to greater interpretation as defined boundaries may not be readily visible.

3.7 Summary Issues

It is strongly suggested that following a review of the RSR, the Applicant should undertake the following prior to the delivery of the first abnormal loads, to ensure load and road user safety:

- That any necessary topographical surveys are undertaken and the swept path results completed;
- A review of axle loading on structures along the entire access route with the various road agencies is undertaken immediately prior to the loads being transported in case of last minute changes to structures;
- A review of clear heights with utility providers and the transport agencies along the route to ensure that there is sufficient space to allow for loads plus sufficient flashover protection (to electrical installations);
- That any verge vegetation and tree canopies which may foul loads is trimmed prior to loads moving;
- That a review of potential roadworks and or closures is undertaken once the delivery schedule is established in draft form;
- That a test run is completed to confirm the route and review any vertical clearance issues; and
- That a condition survey is undertaken to ascertain the extents of road defects prior to loads commencing to protect the developer from spurious damage claims.

4 Summary

4.1 Summary of Access Review

PF has been commissioned by the Applicant to prepare a Route Survey Report to examine the issues associated with the transport of AIL turbine components to the development site.

This report identifies the key points and issues associated with two proposed routes and outlines the issues that will need to be considered for successful delivery of components.

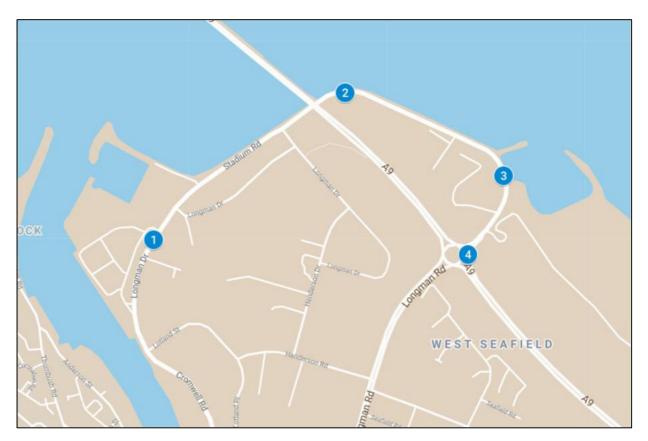
The report is presented for consideration to the Applicant. Various road modifications, structural reviews and interventions are required to successfully access the site. If these are undertaken, access to the consented wind farm site is considered feasible.

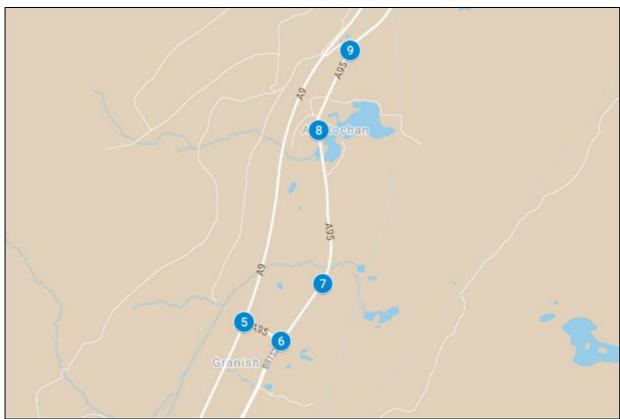
4.2 Further Actions

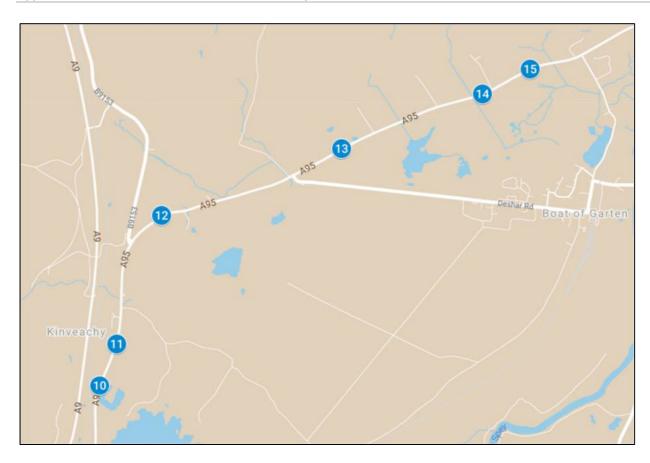
The following actions are recommended to pursue the transport and access issues further:

- Prepare detailed mitigation design proposals to help inform the land option / consultee discussions;
- Obtain the necessary land options;
- Undertake discussion with the affected utility providers and roads agencies;
- Obtain the necessary statutory licences to enable the mitigation measures; and
- Develop a detailed operational Transport Management Plan to assist in transporting the proposed loads.

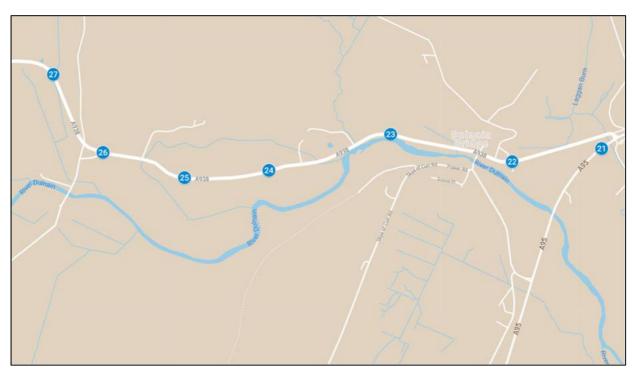
Appendix A Points of Interest

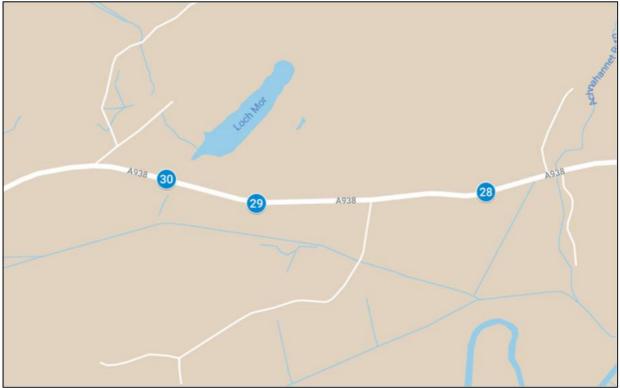




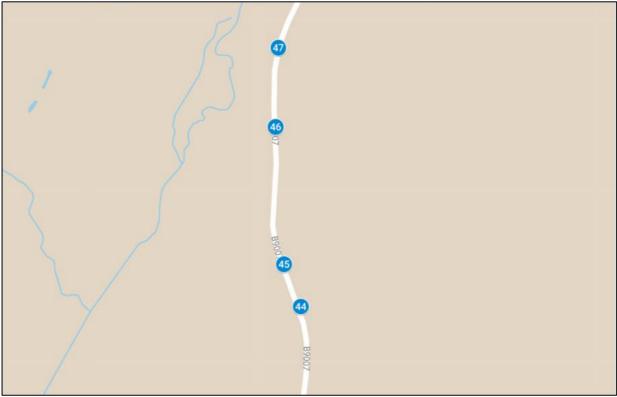




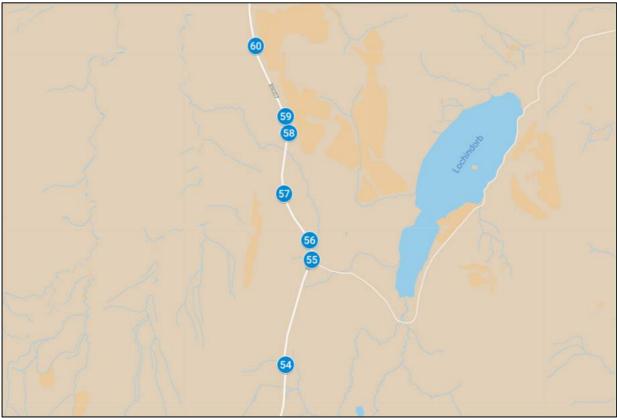




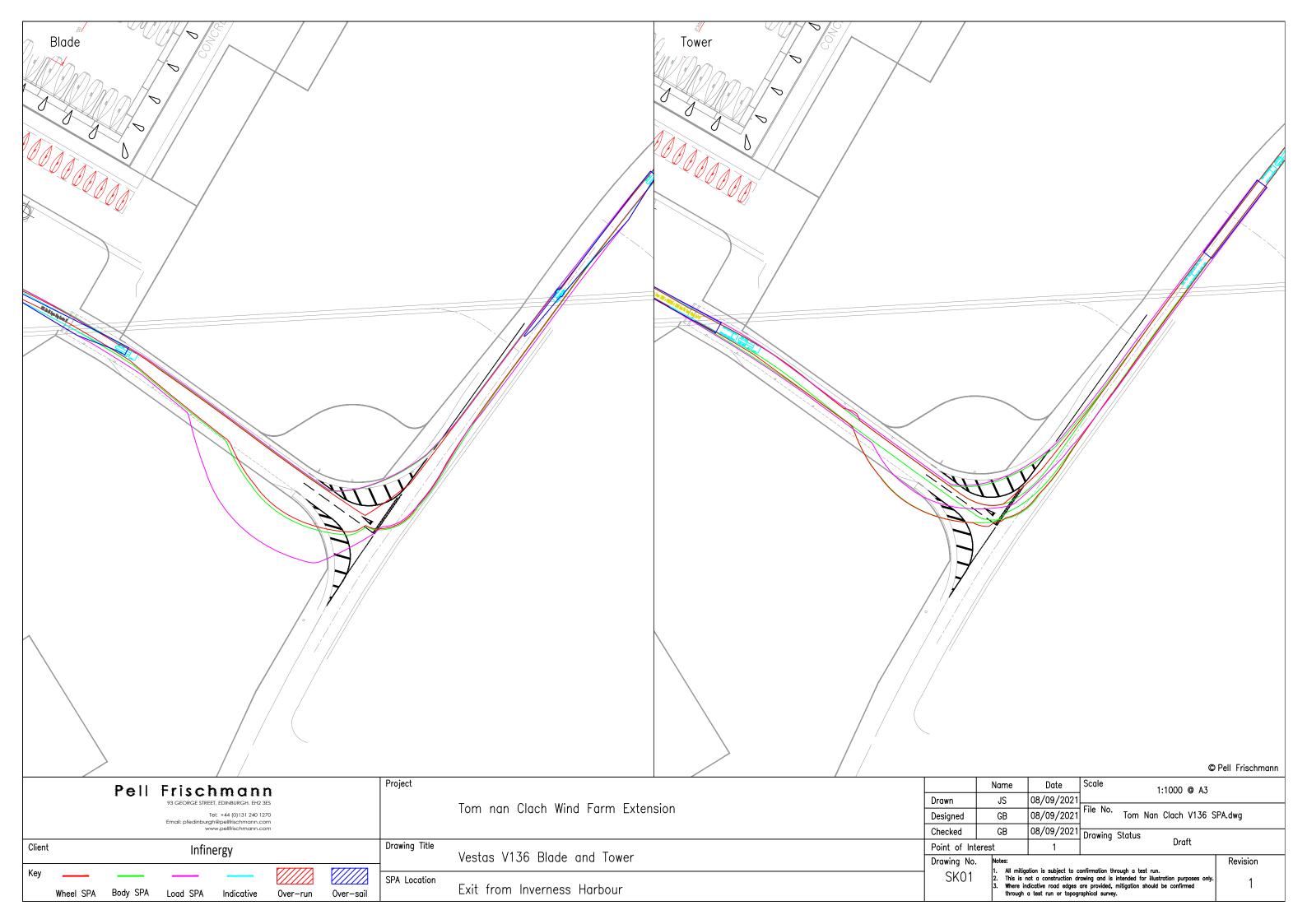




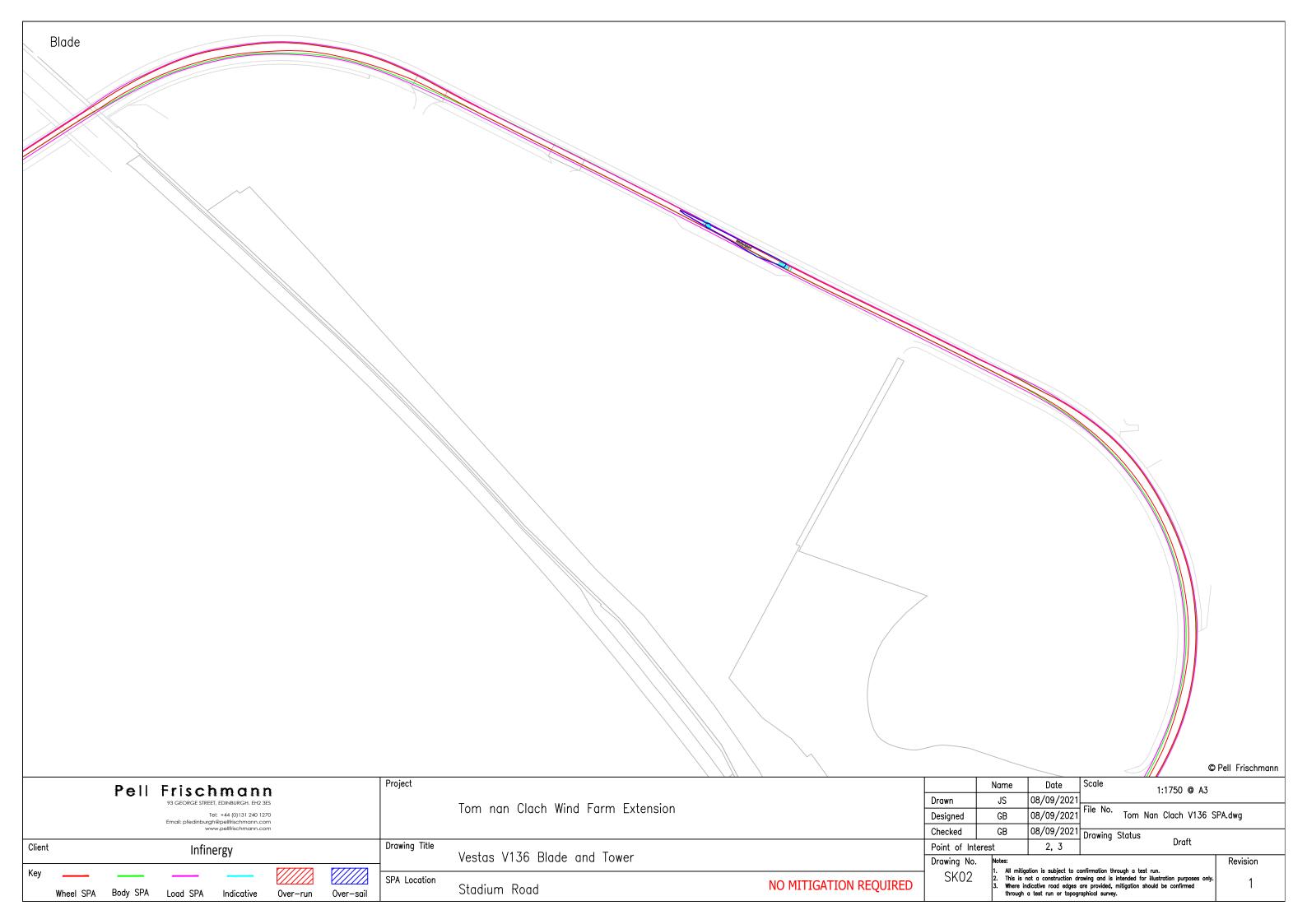


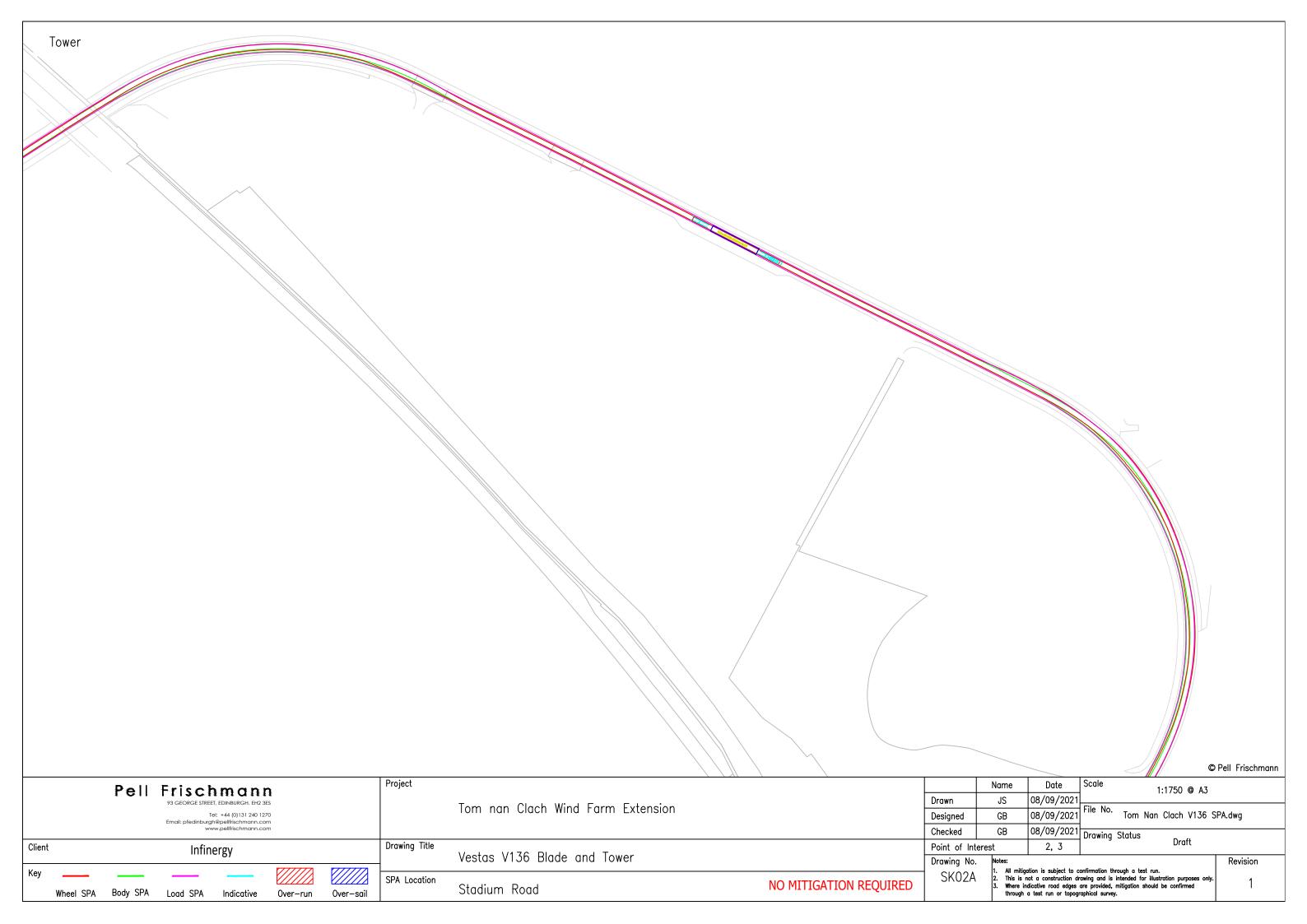


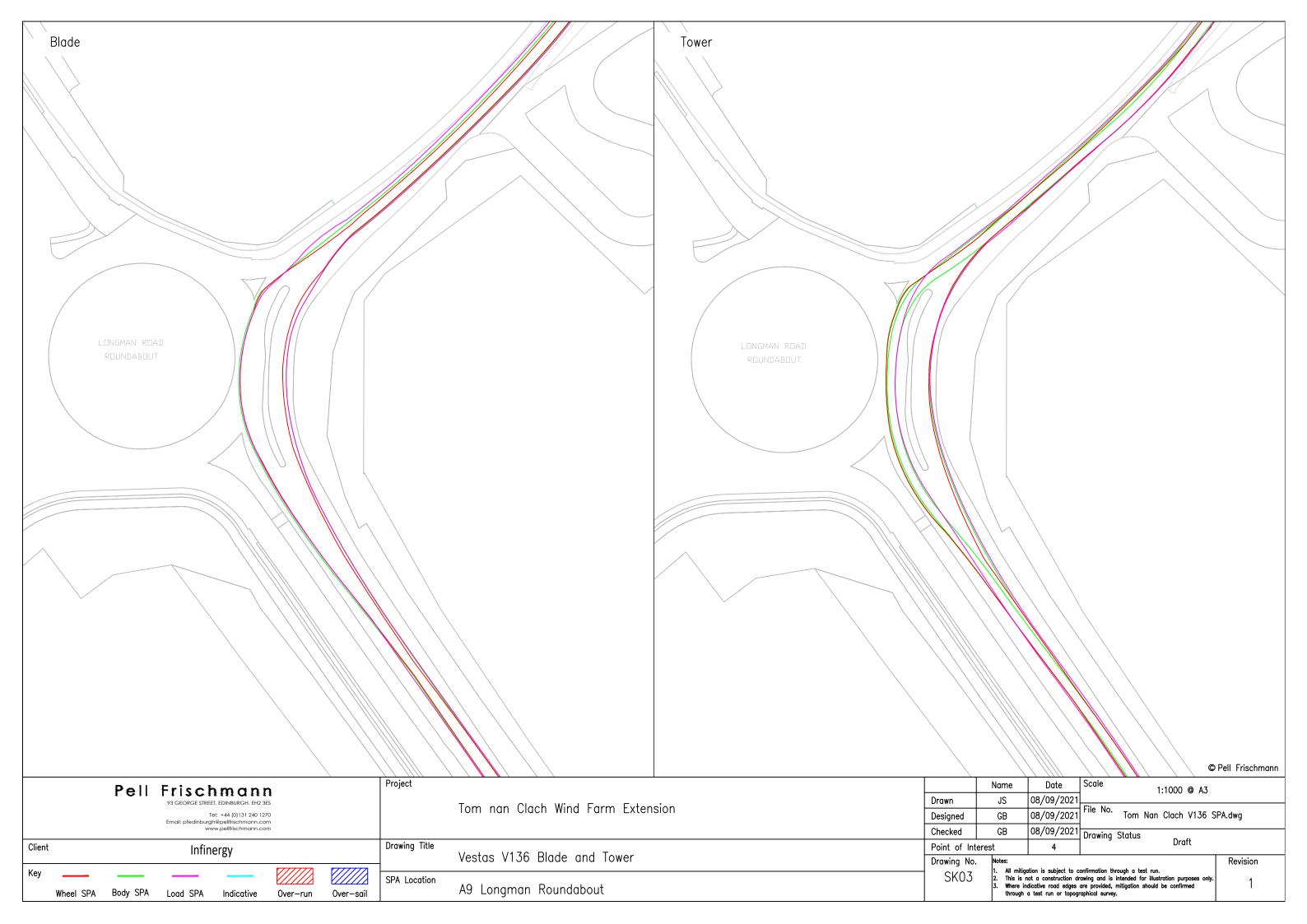
Appendix 7.B: Abnormal Indivisible Load Route Survey Appendix B Swept Path Assessments

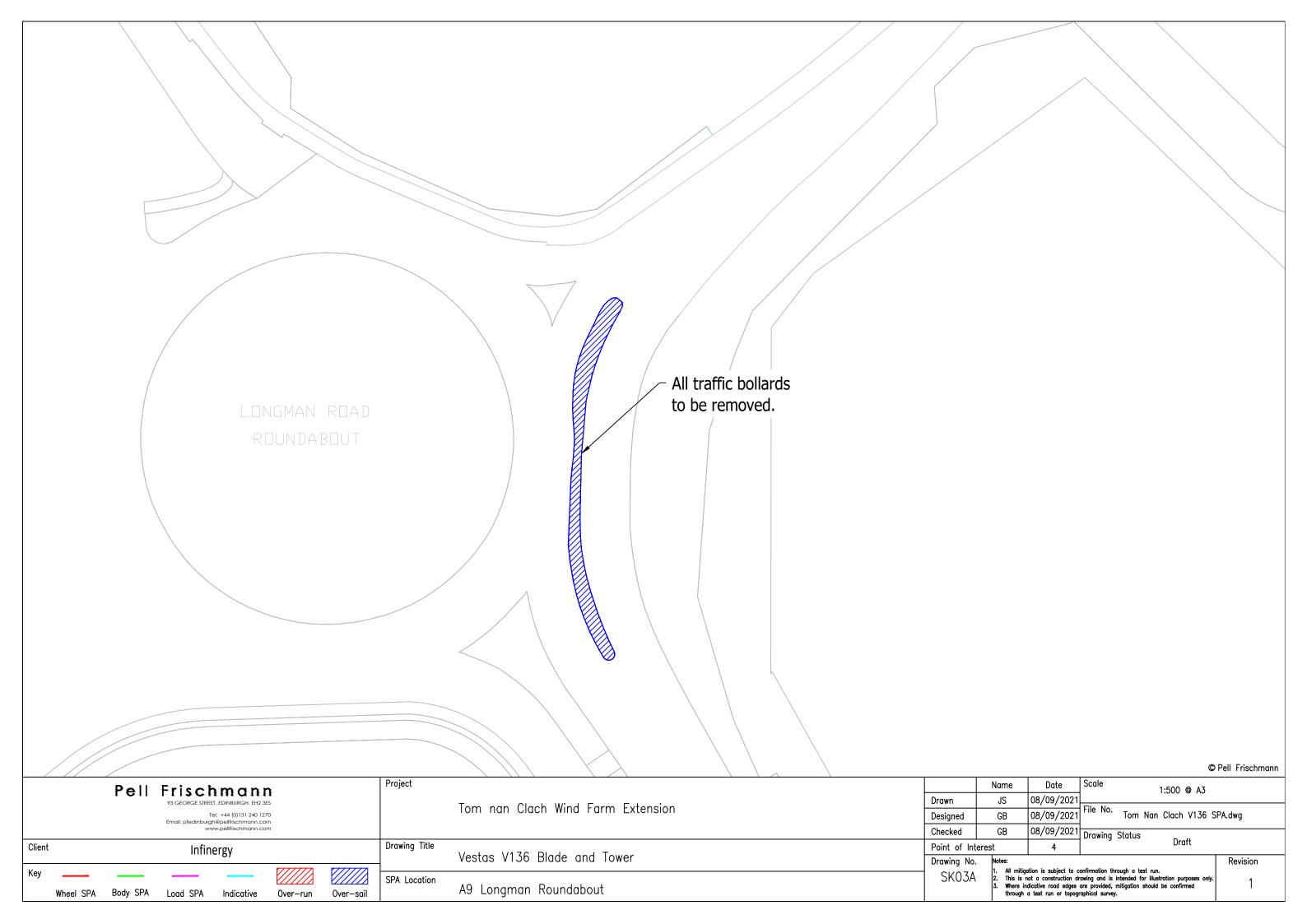


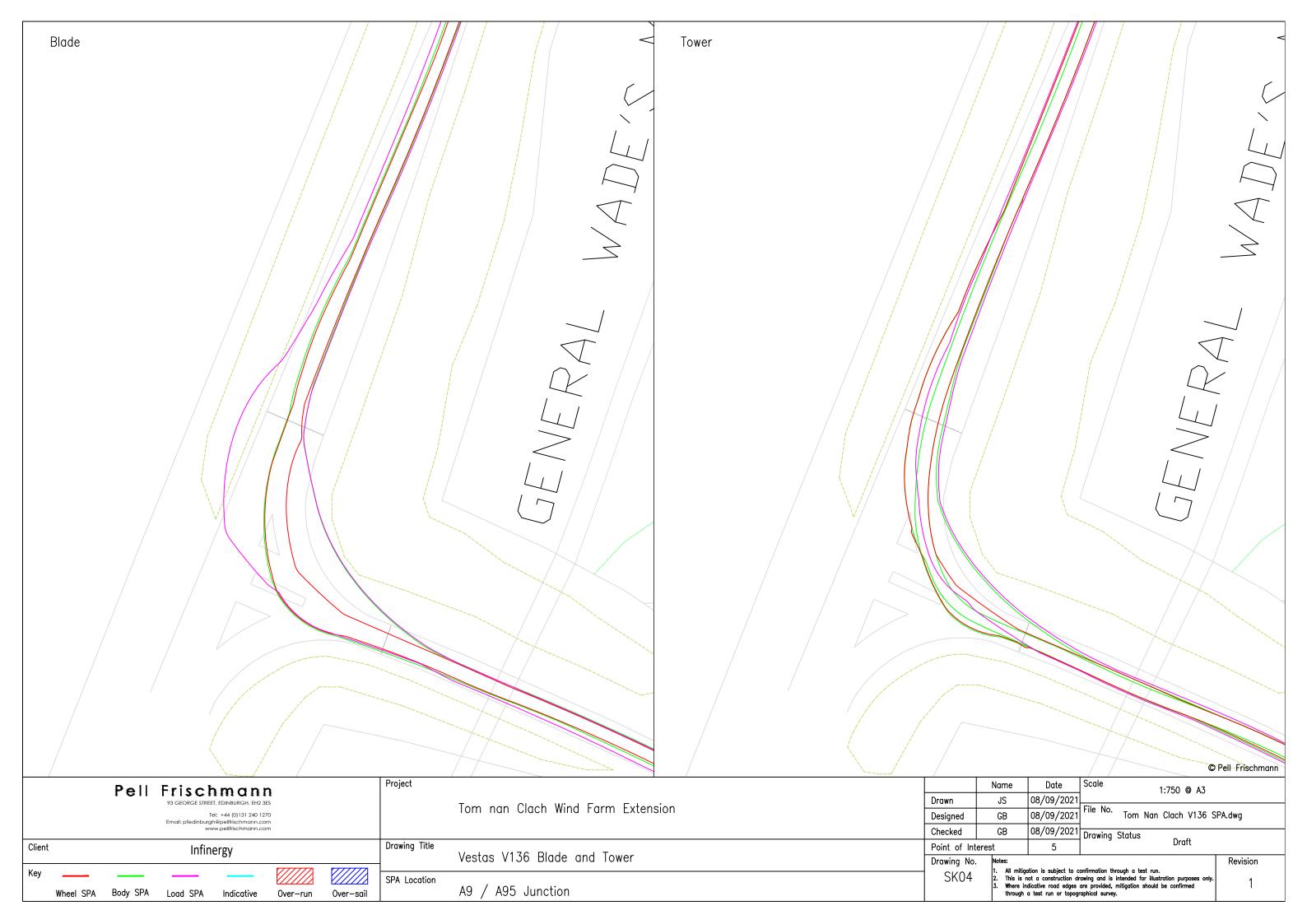


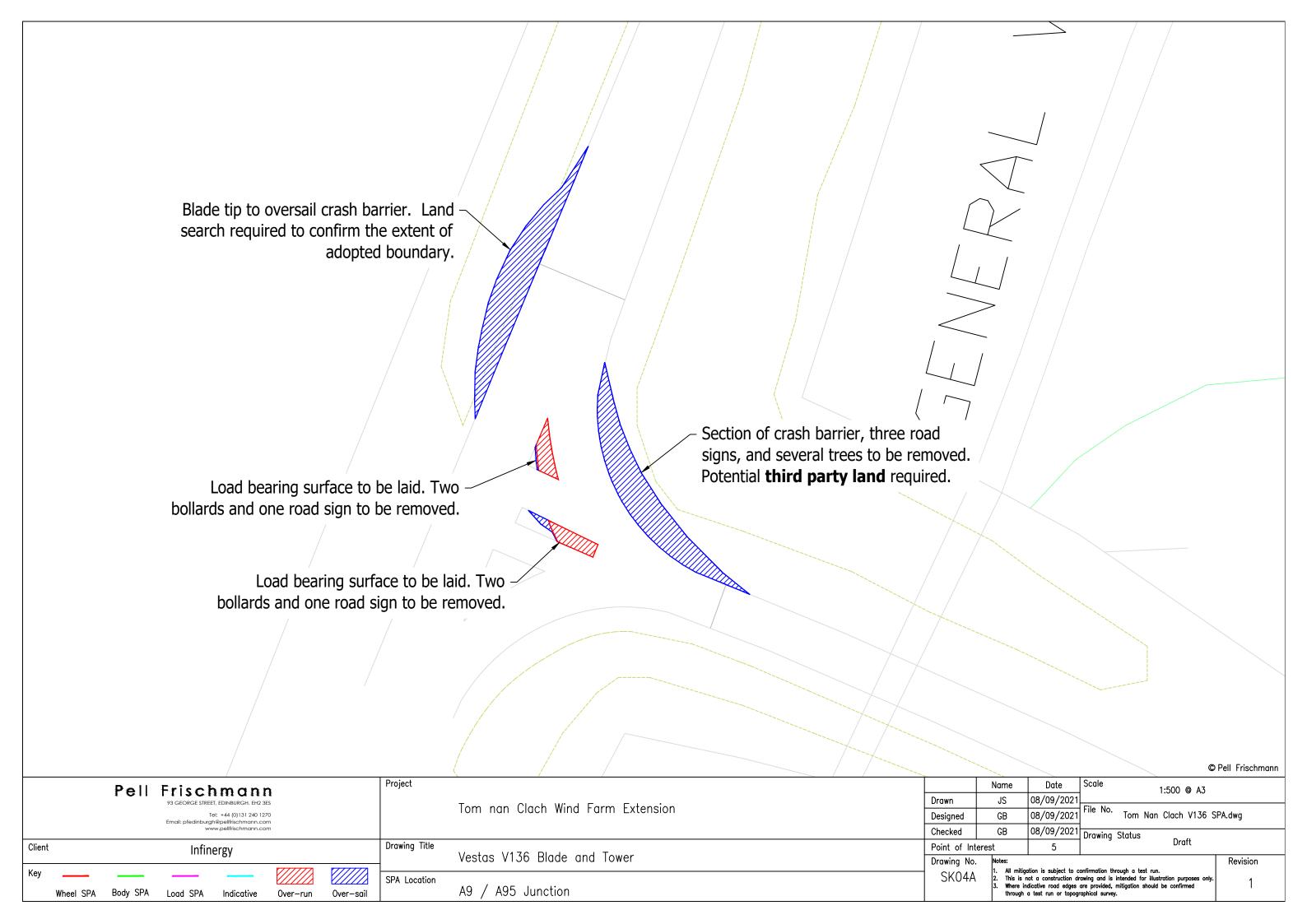


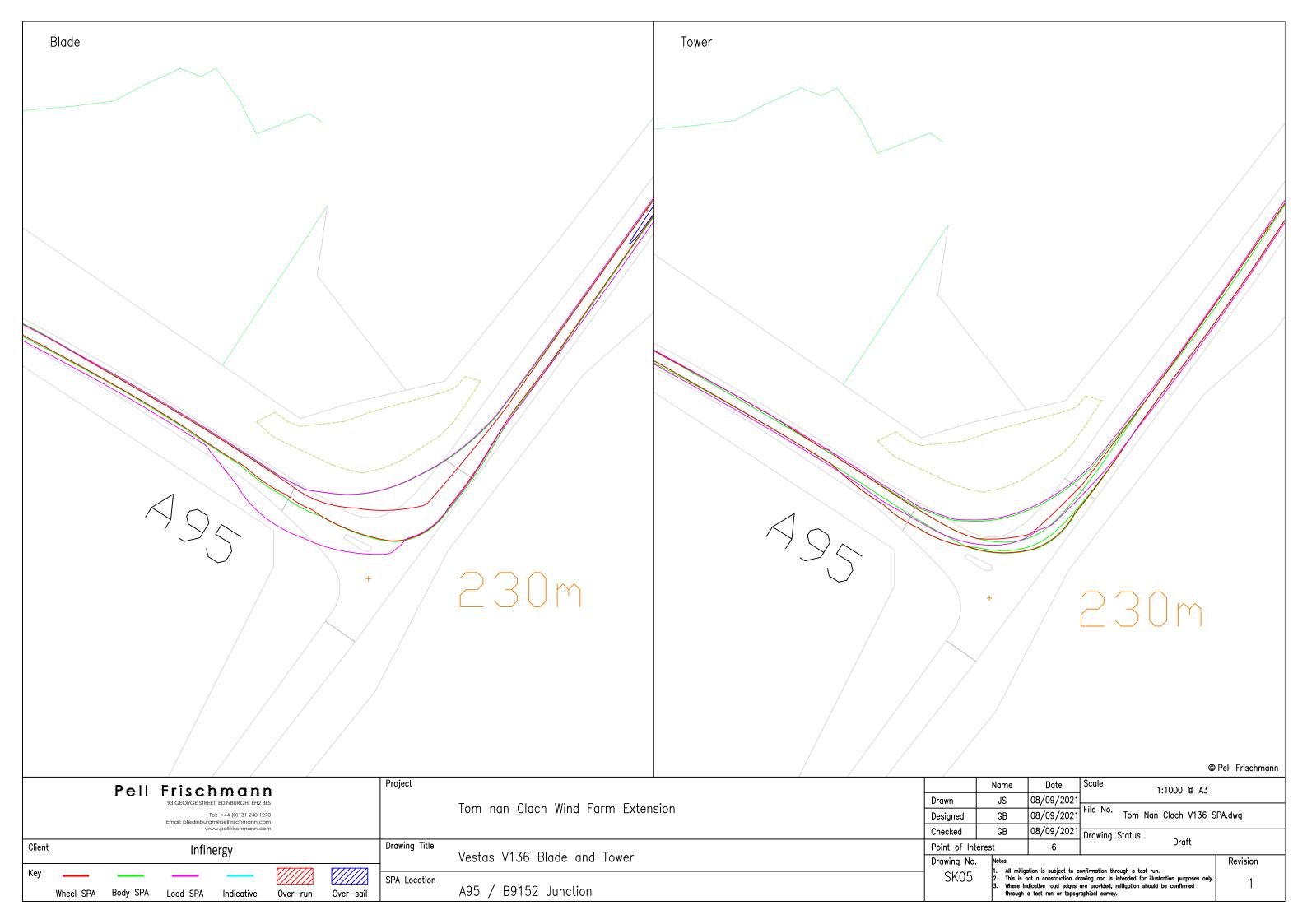


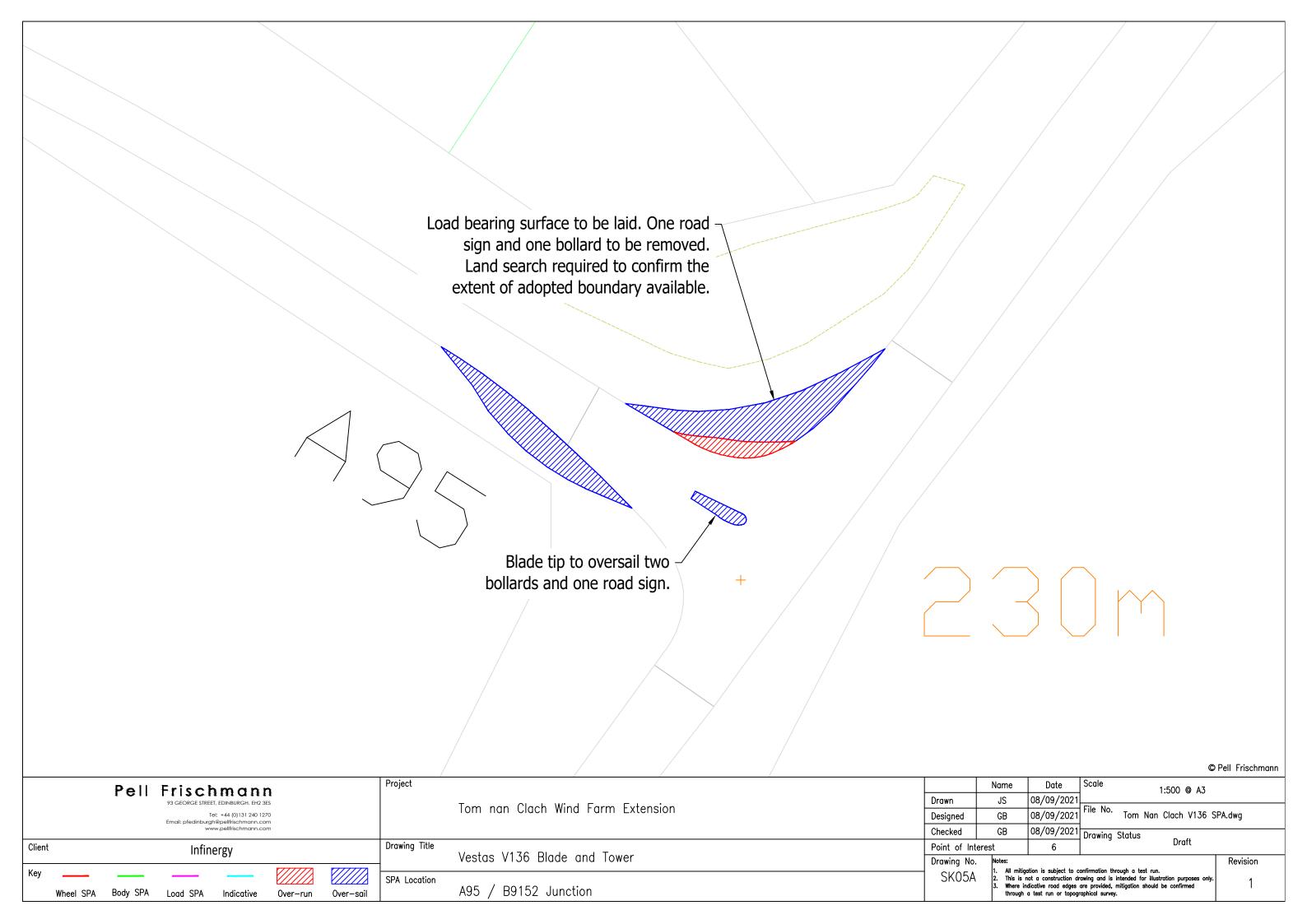


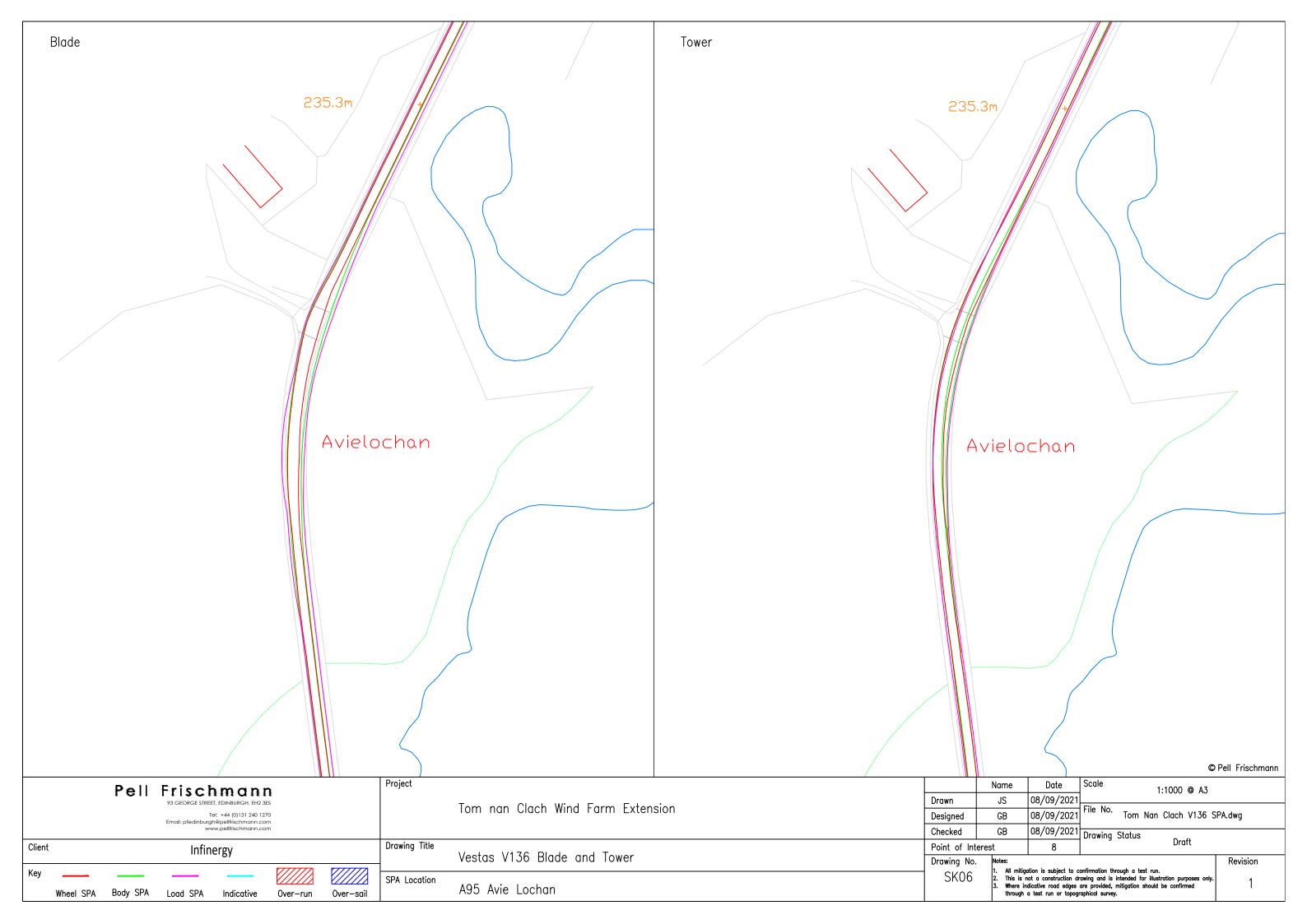


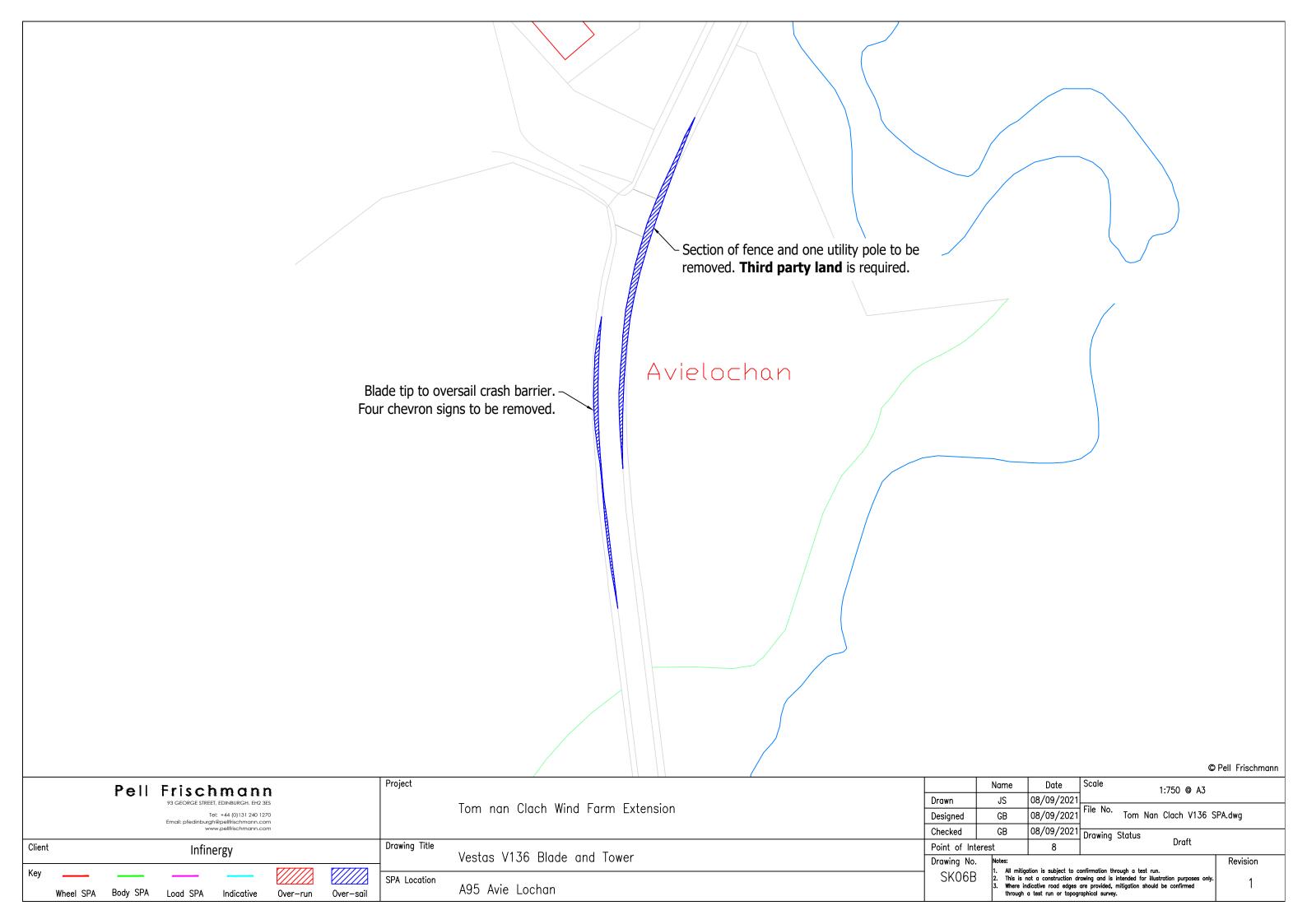


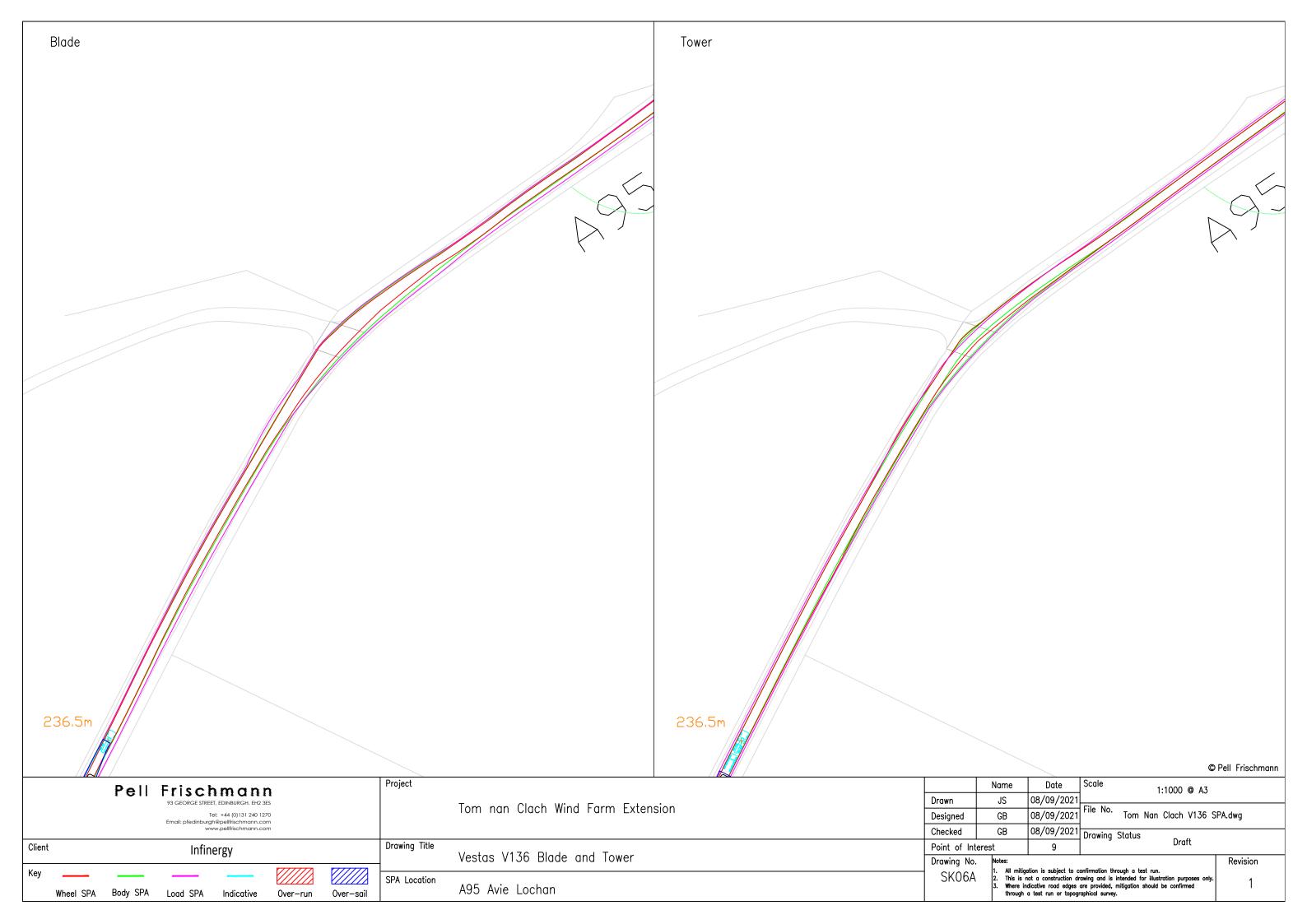


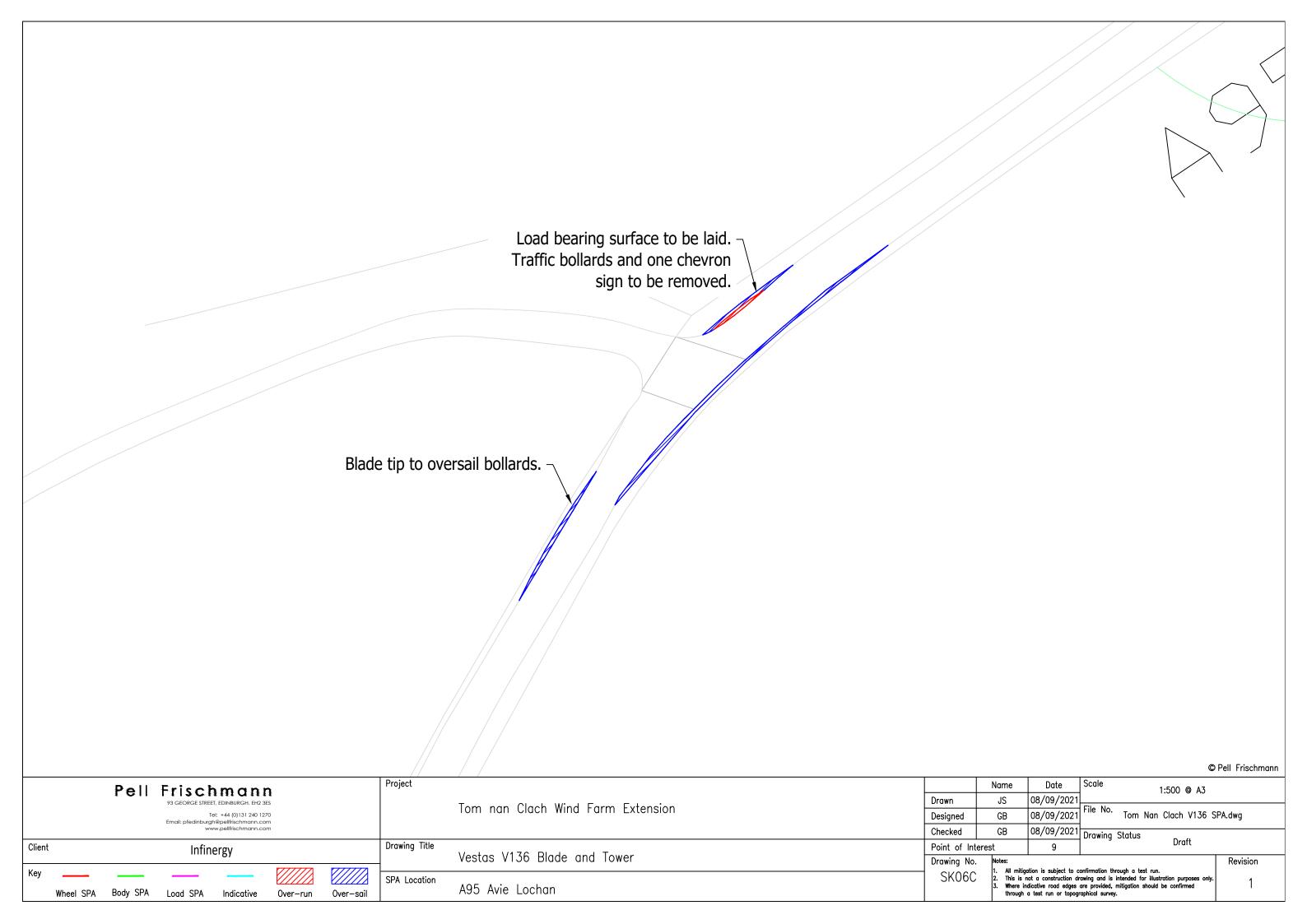




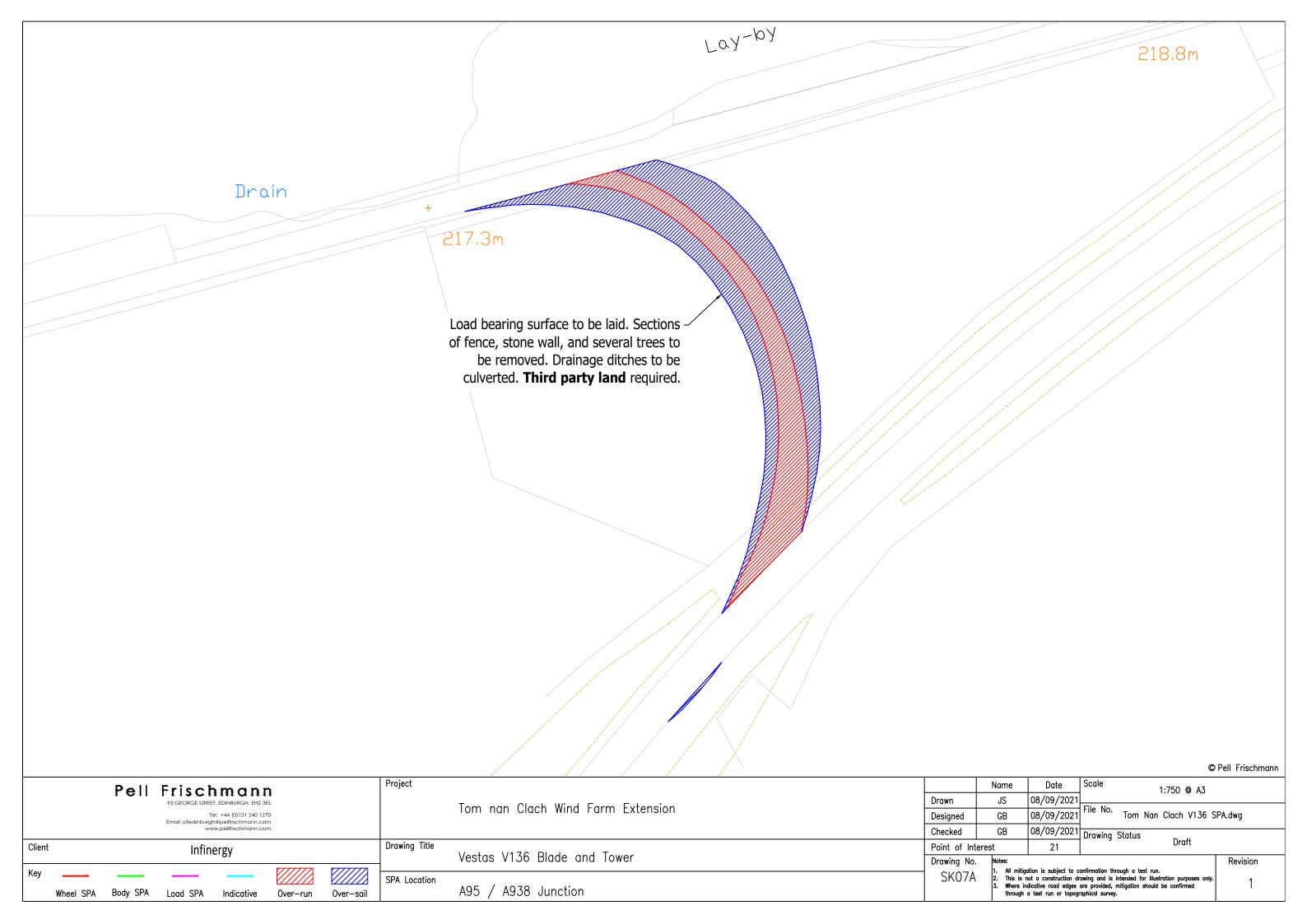


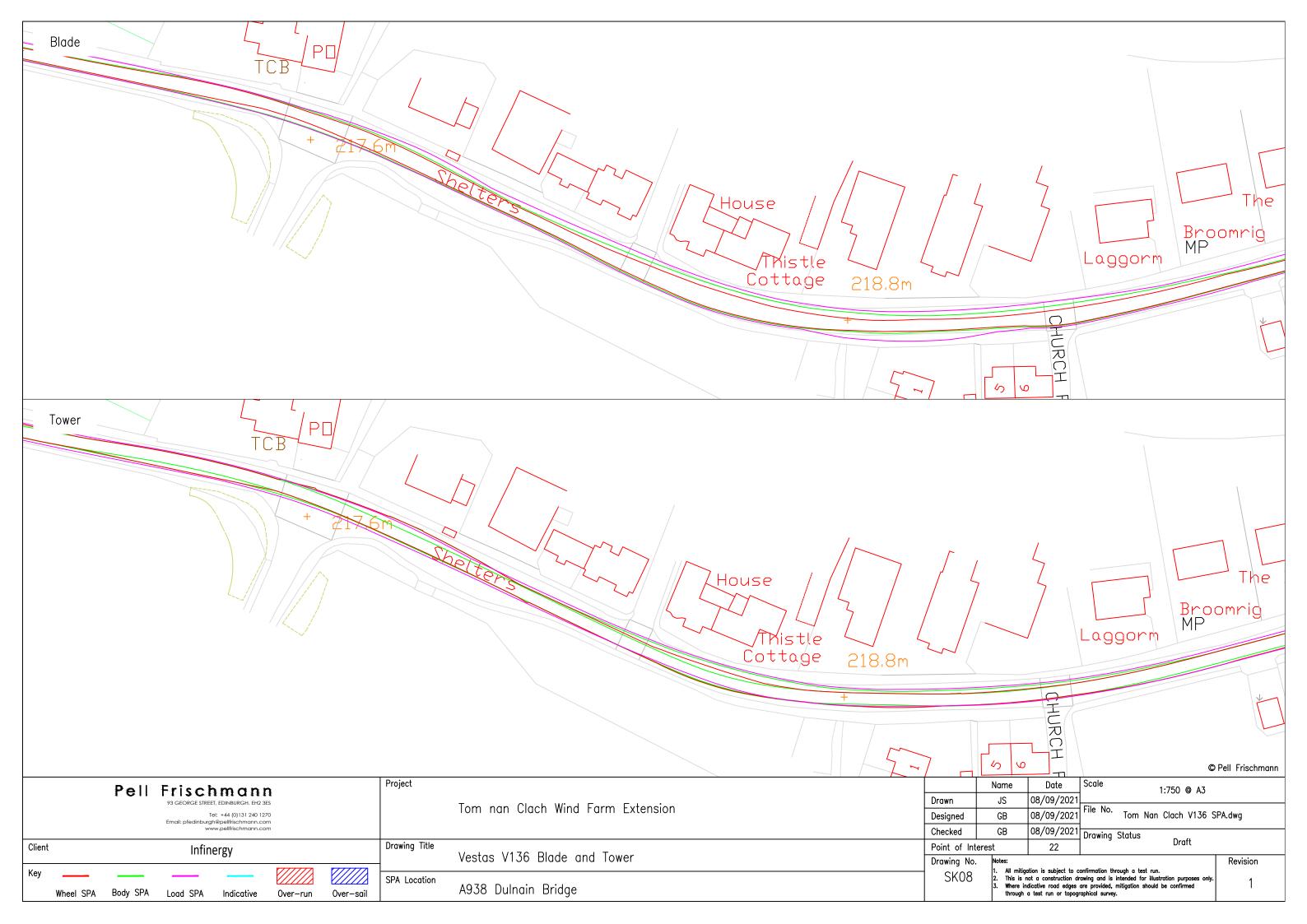


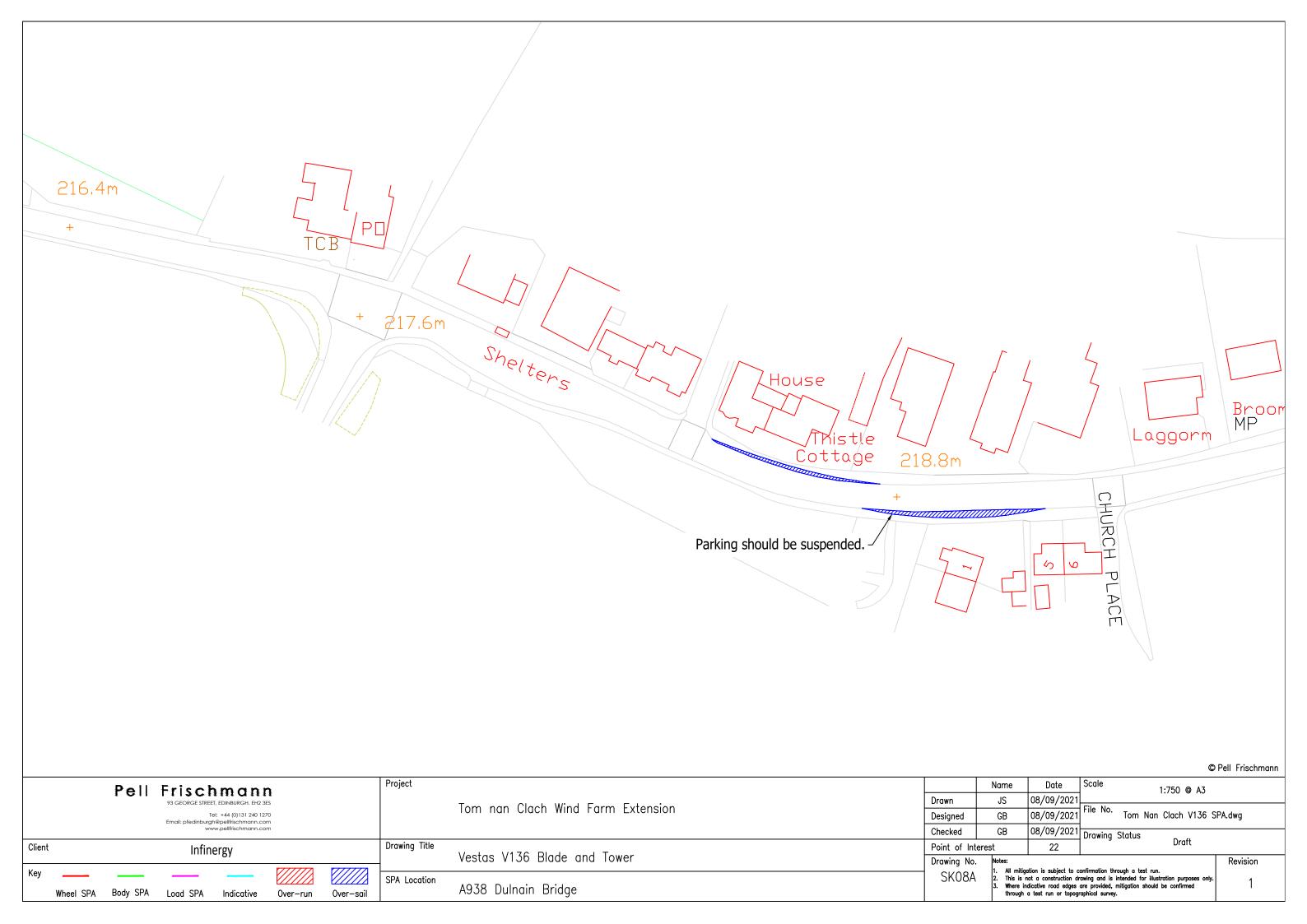


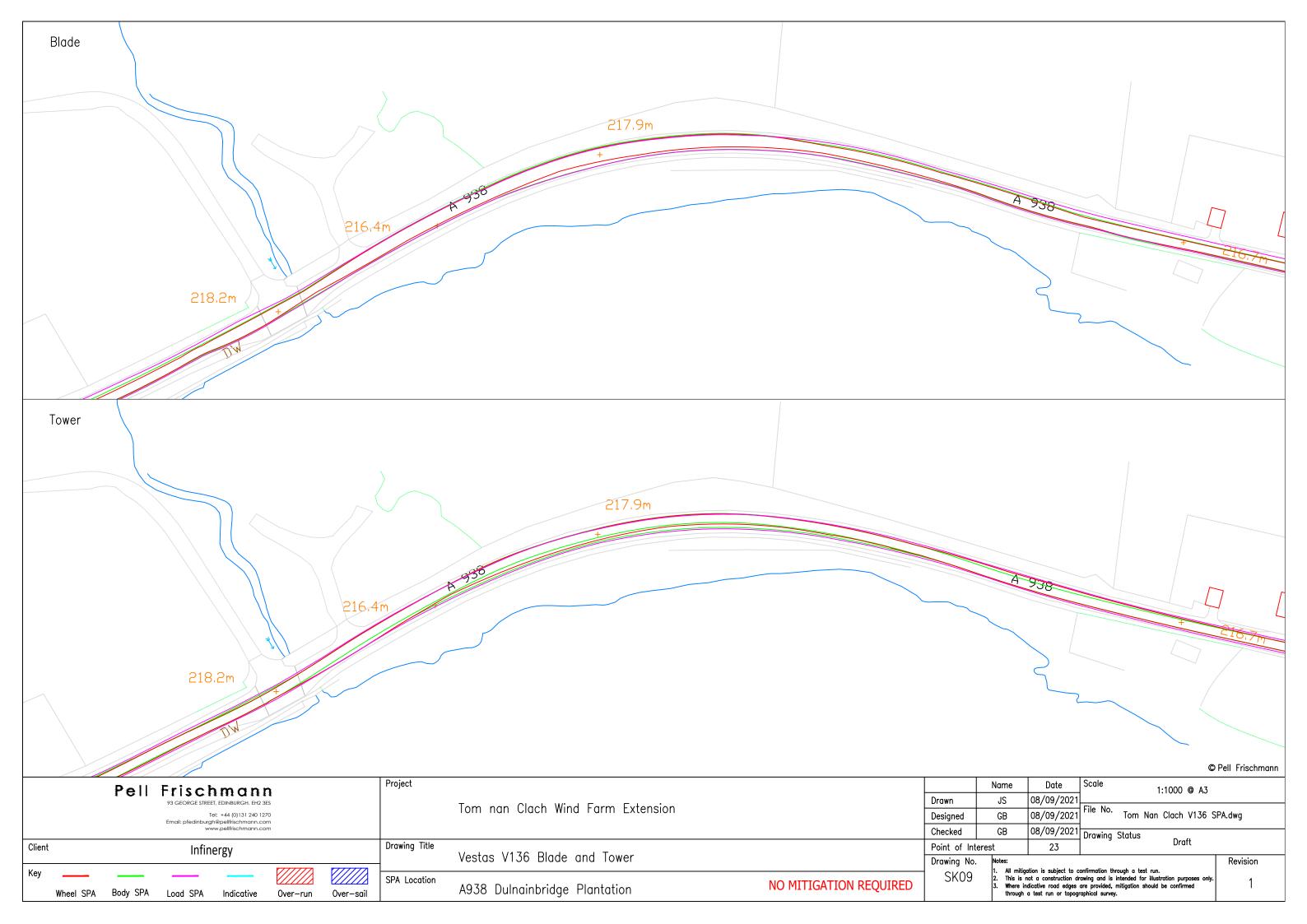


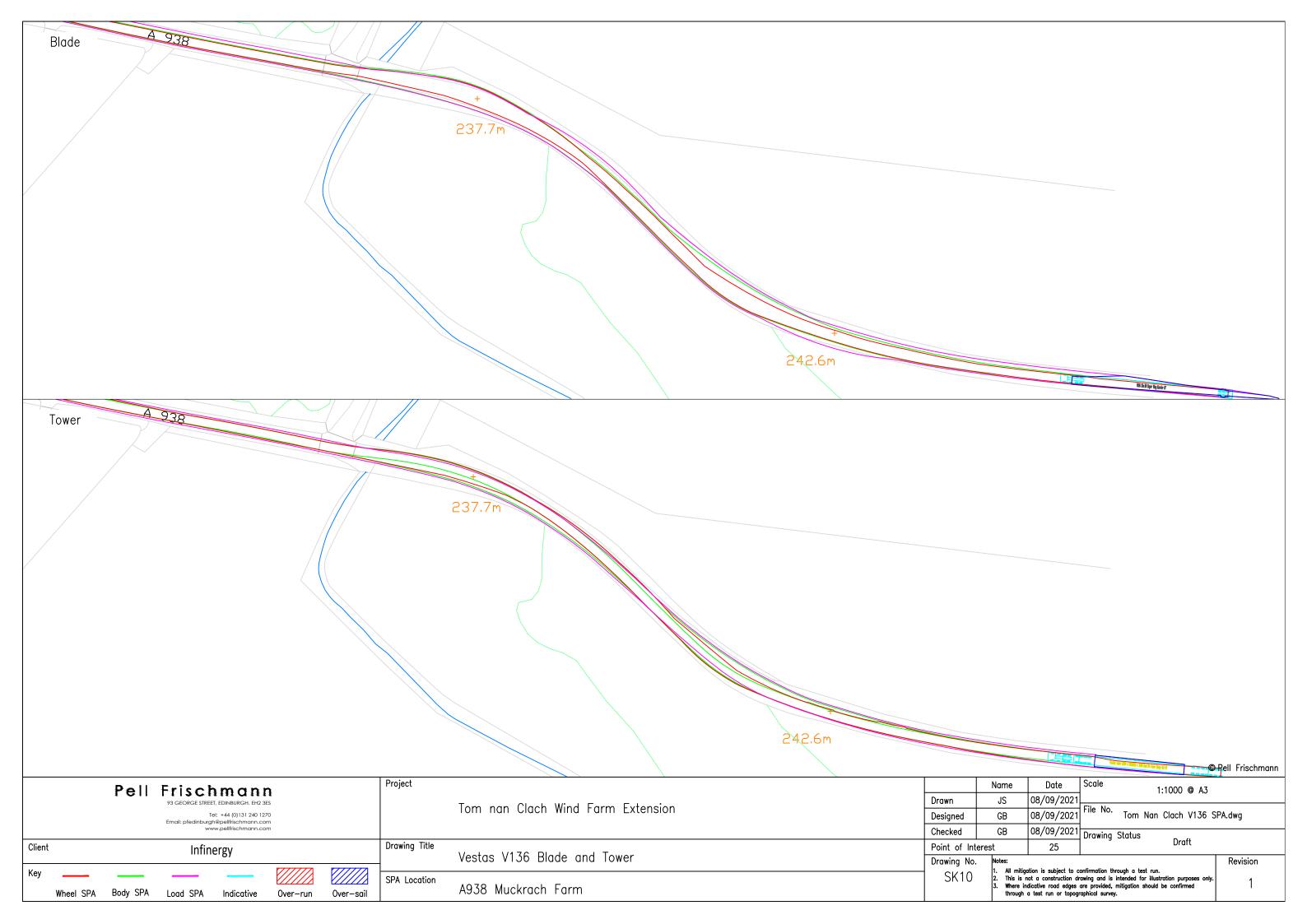


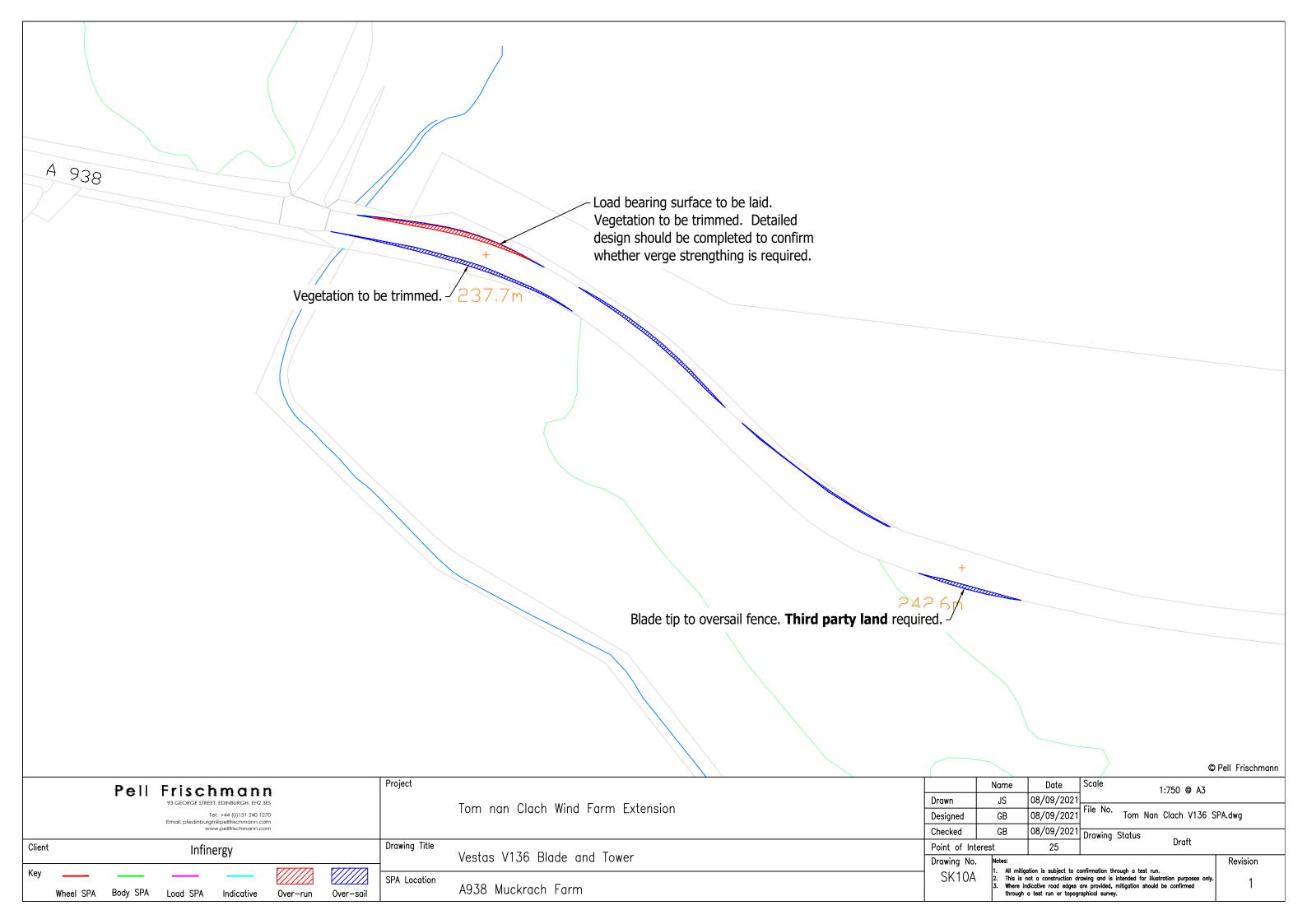


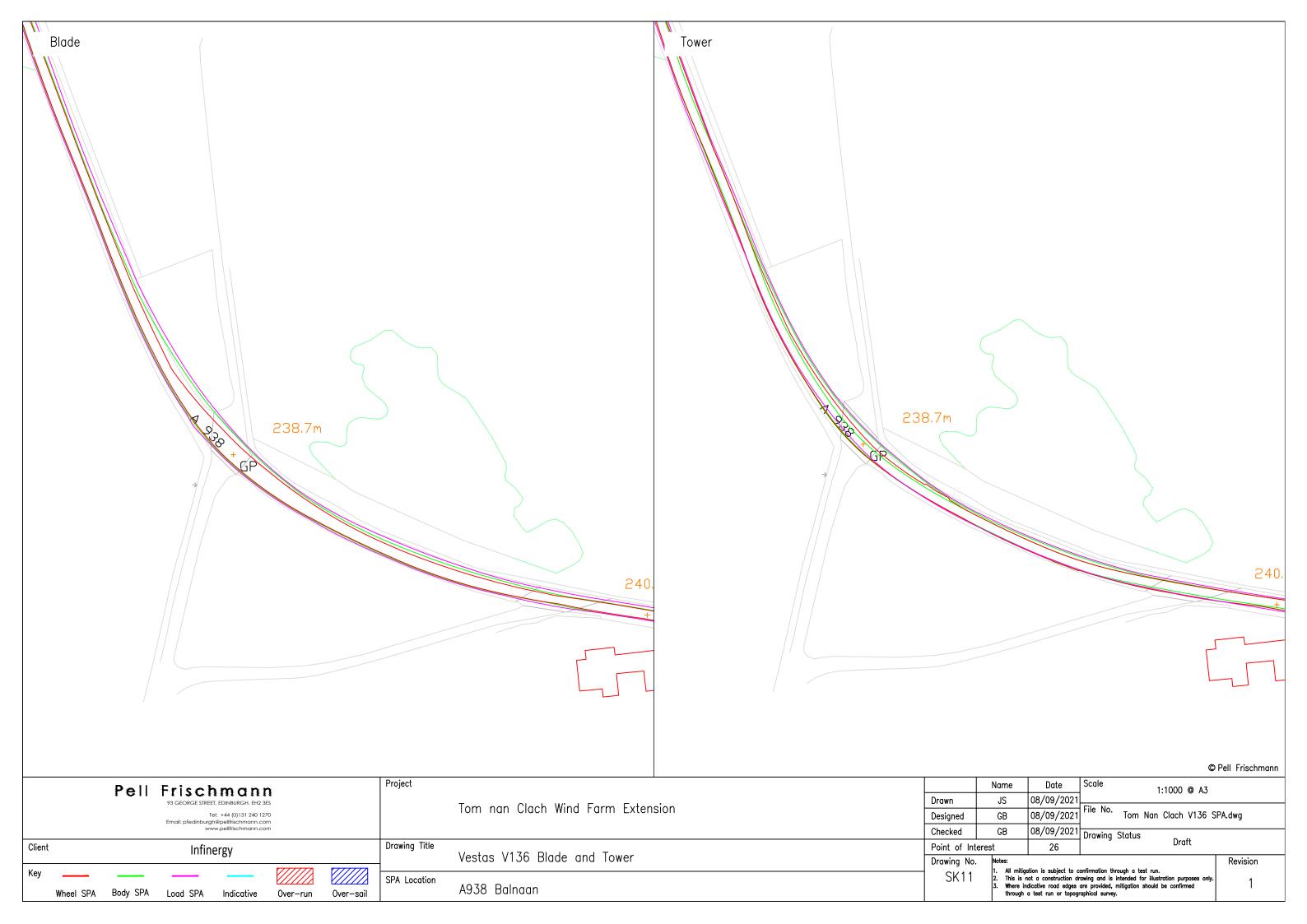


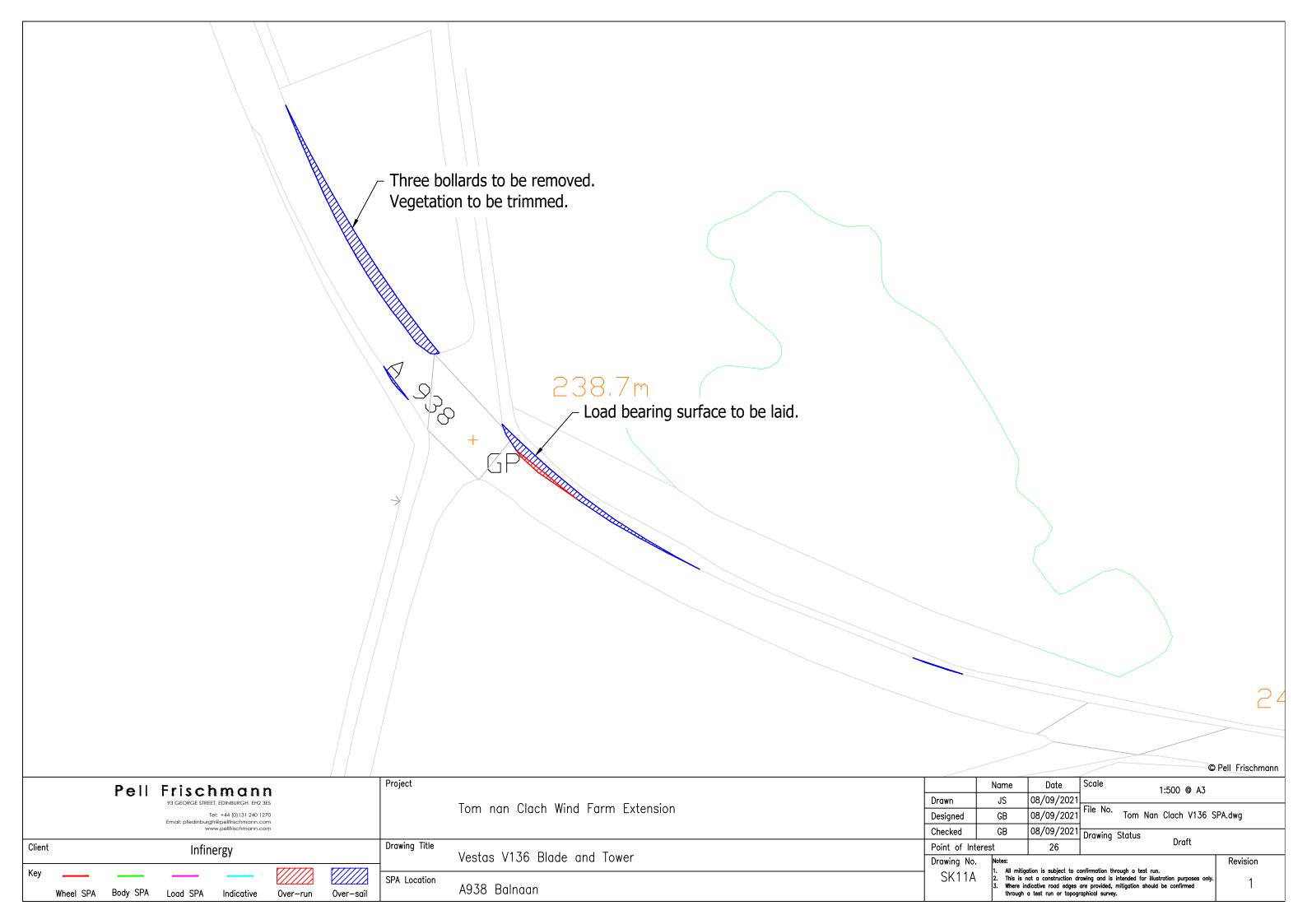


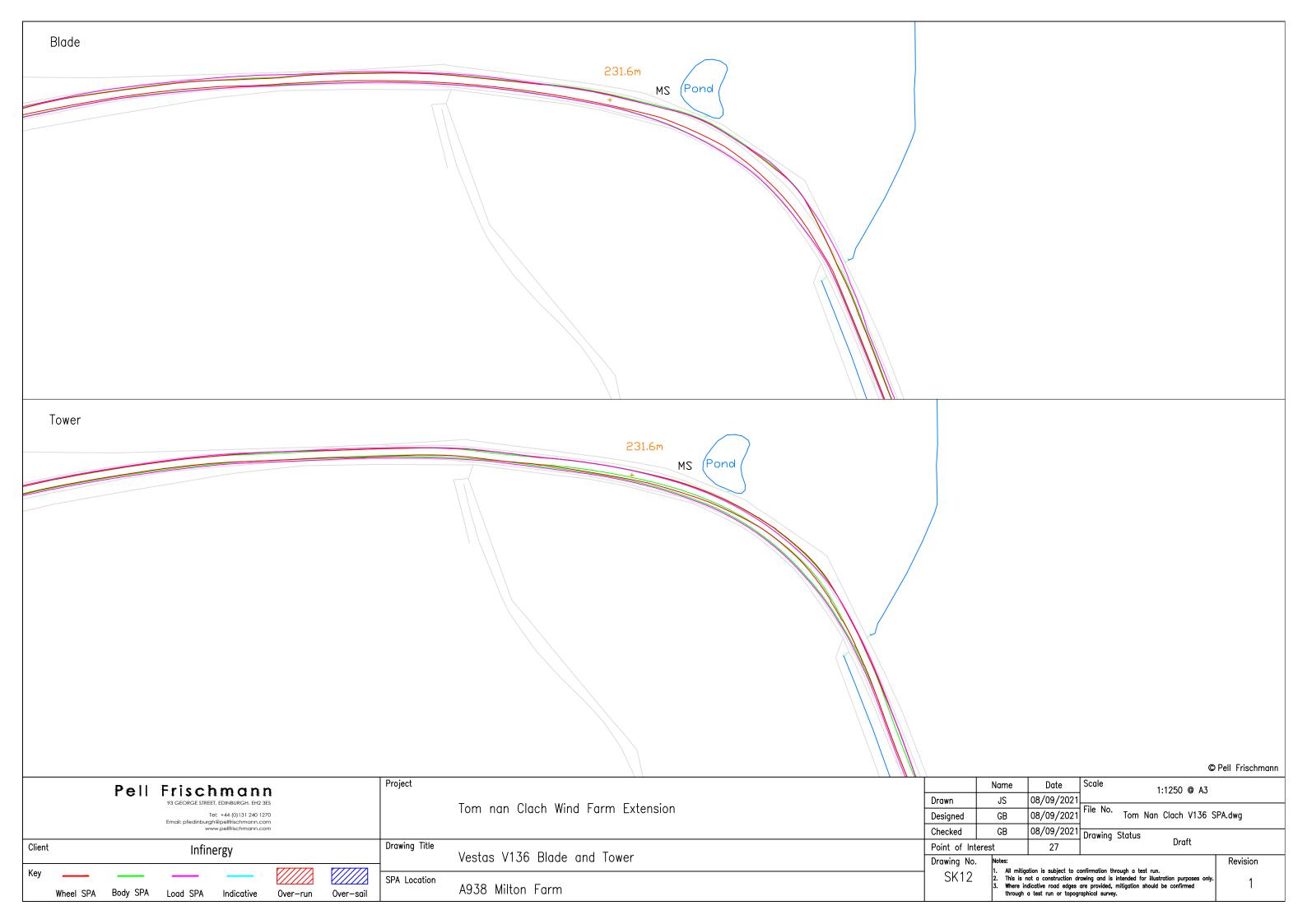


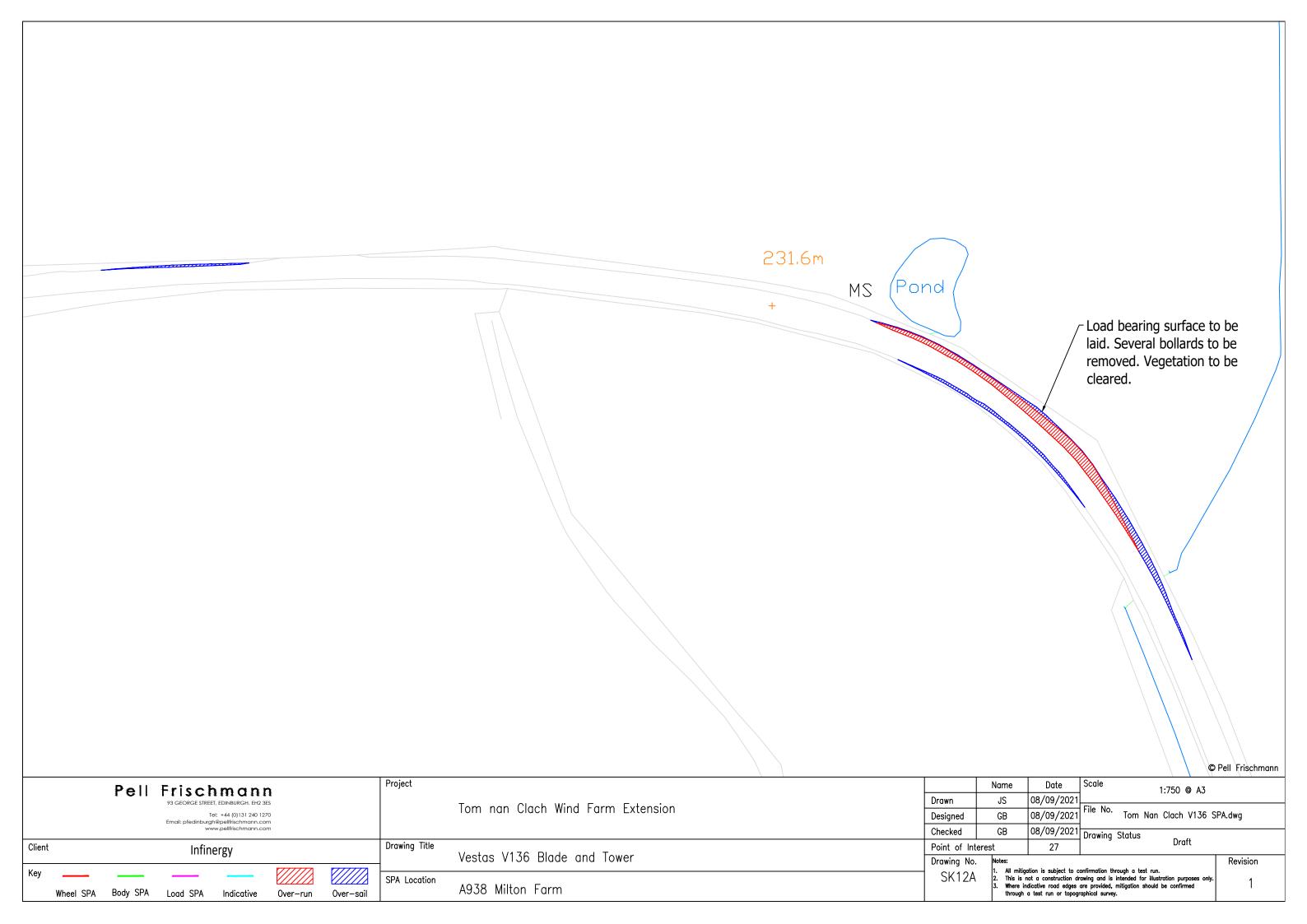


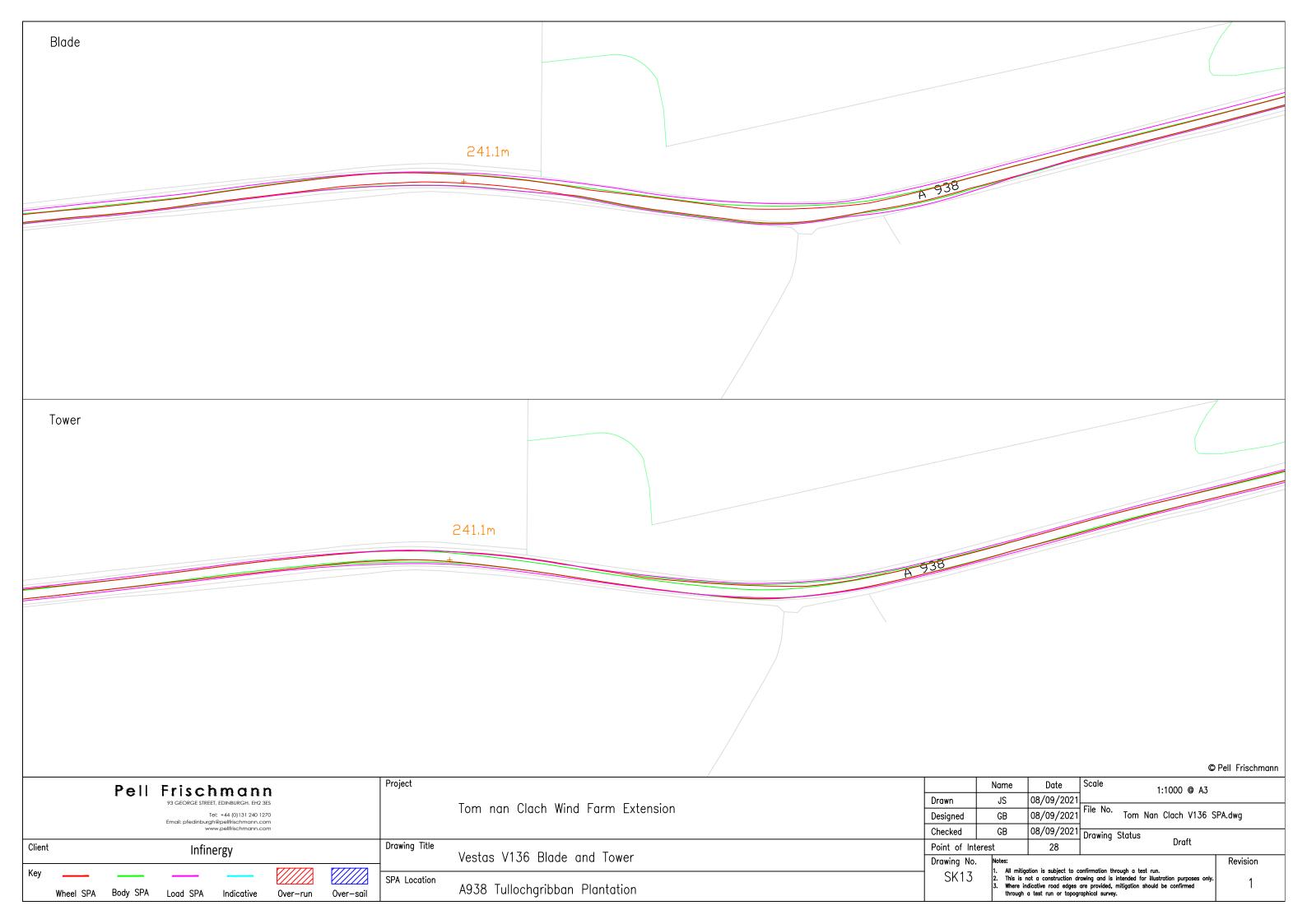


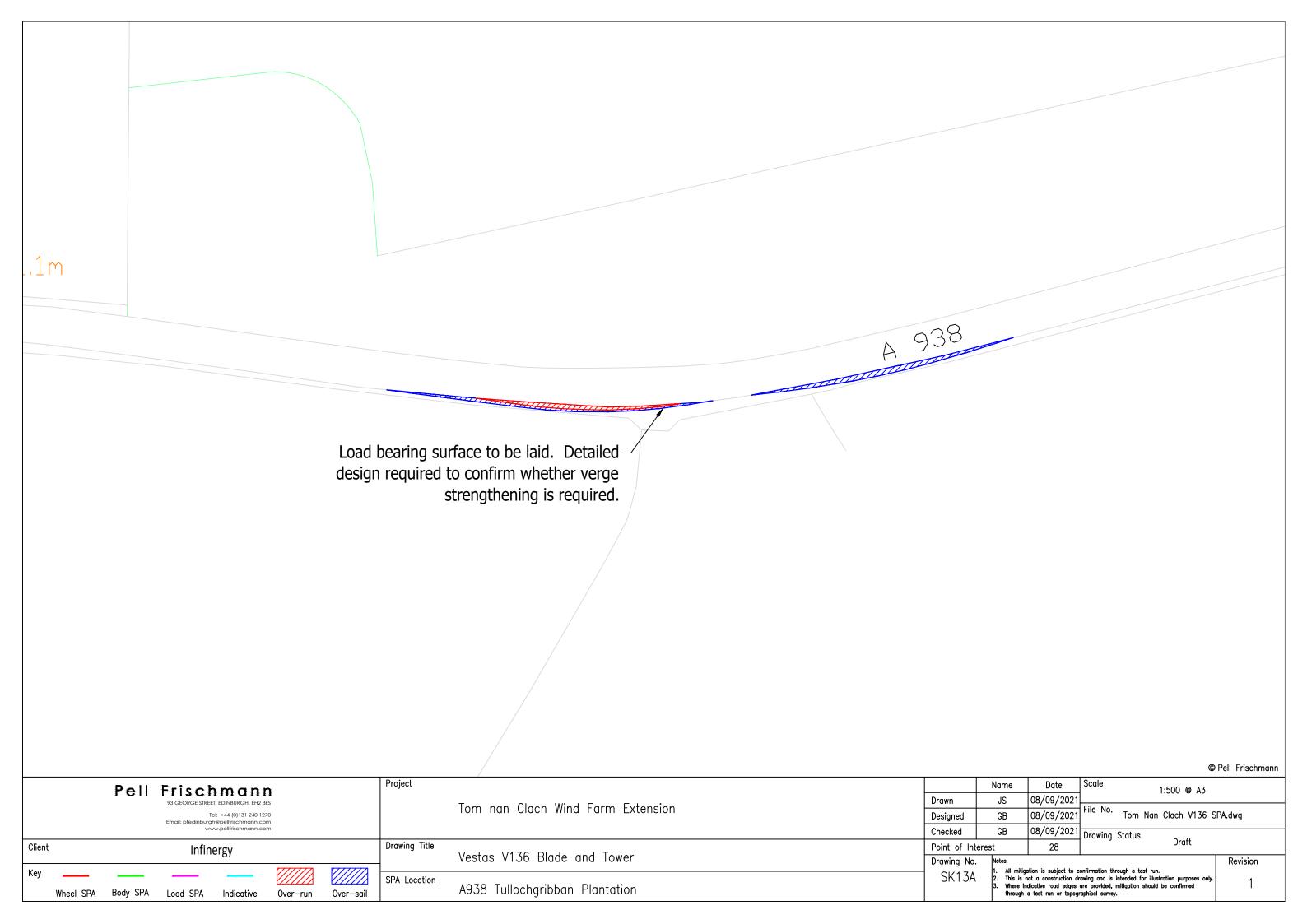


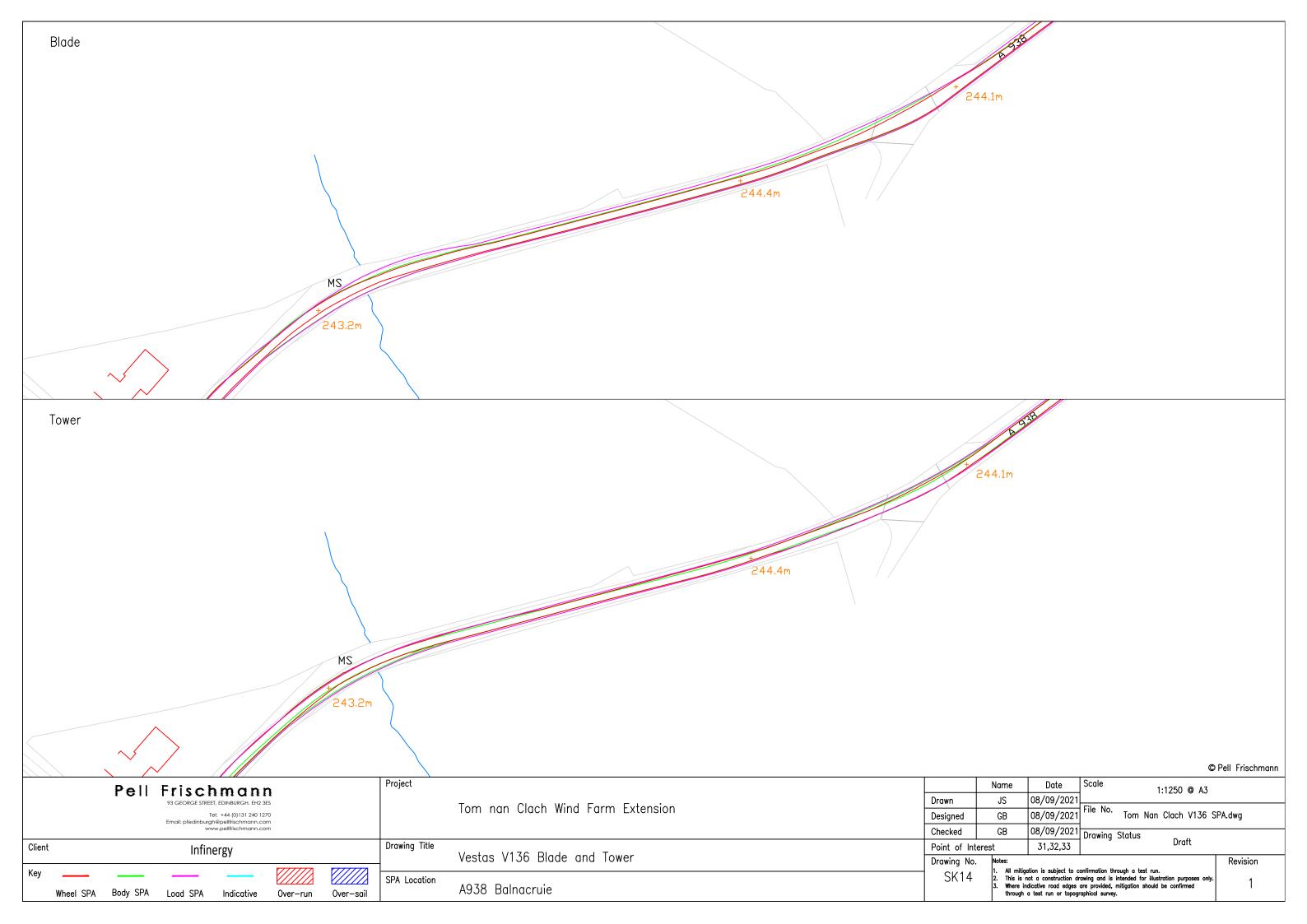


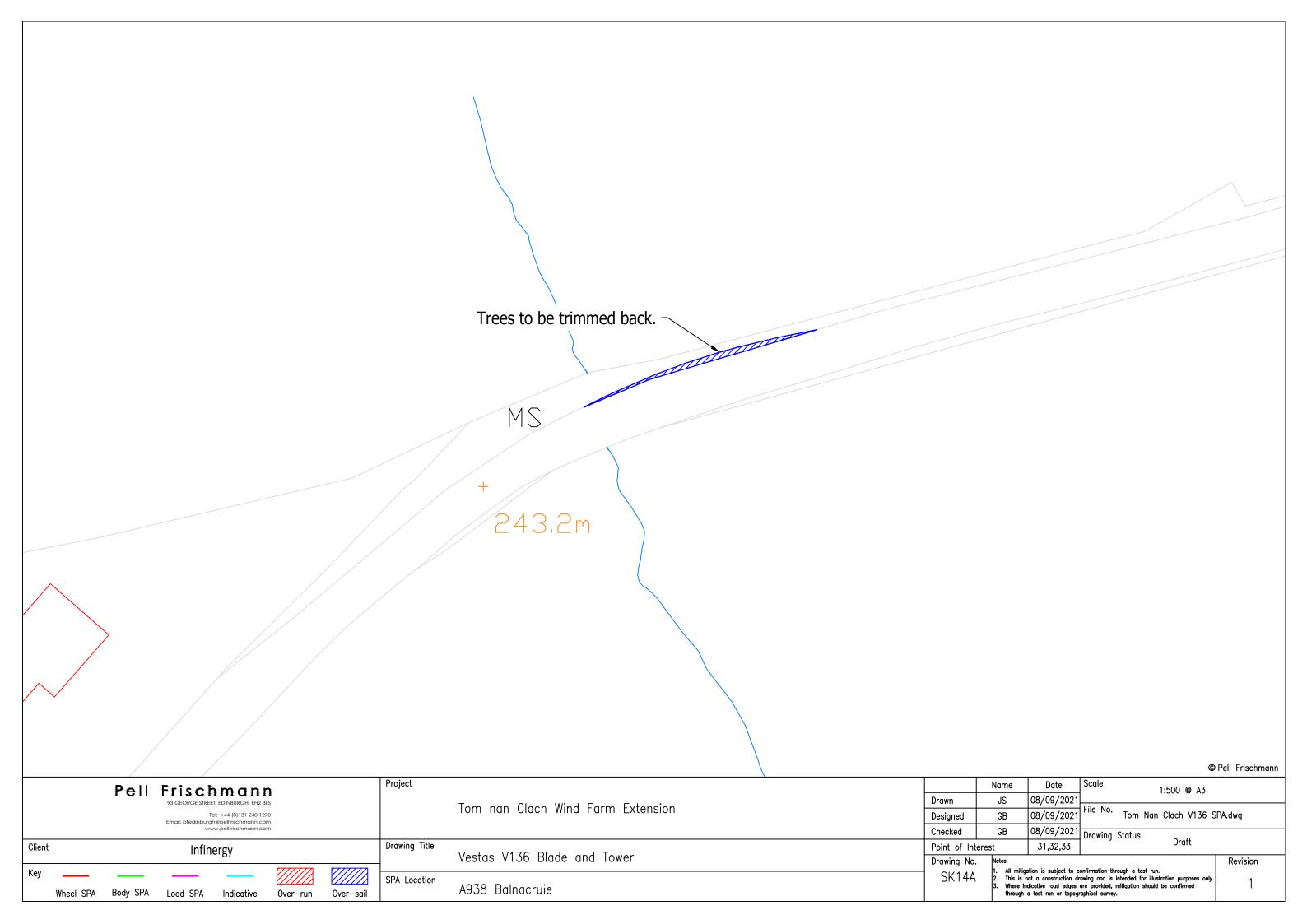


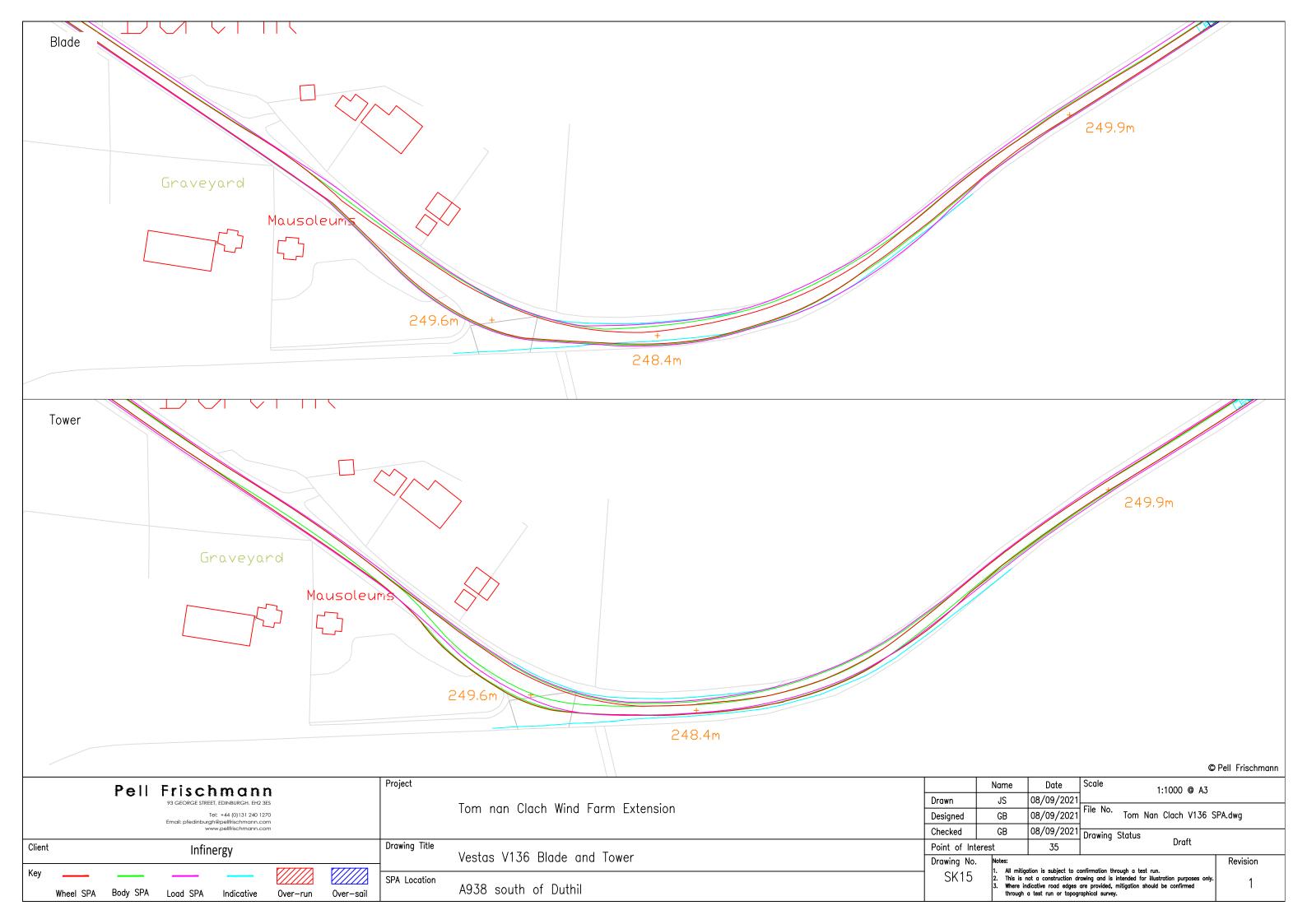


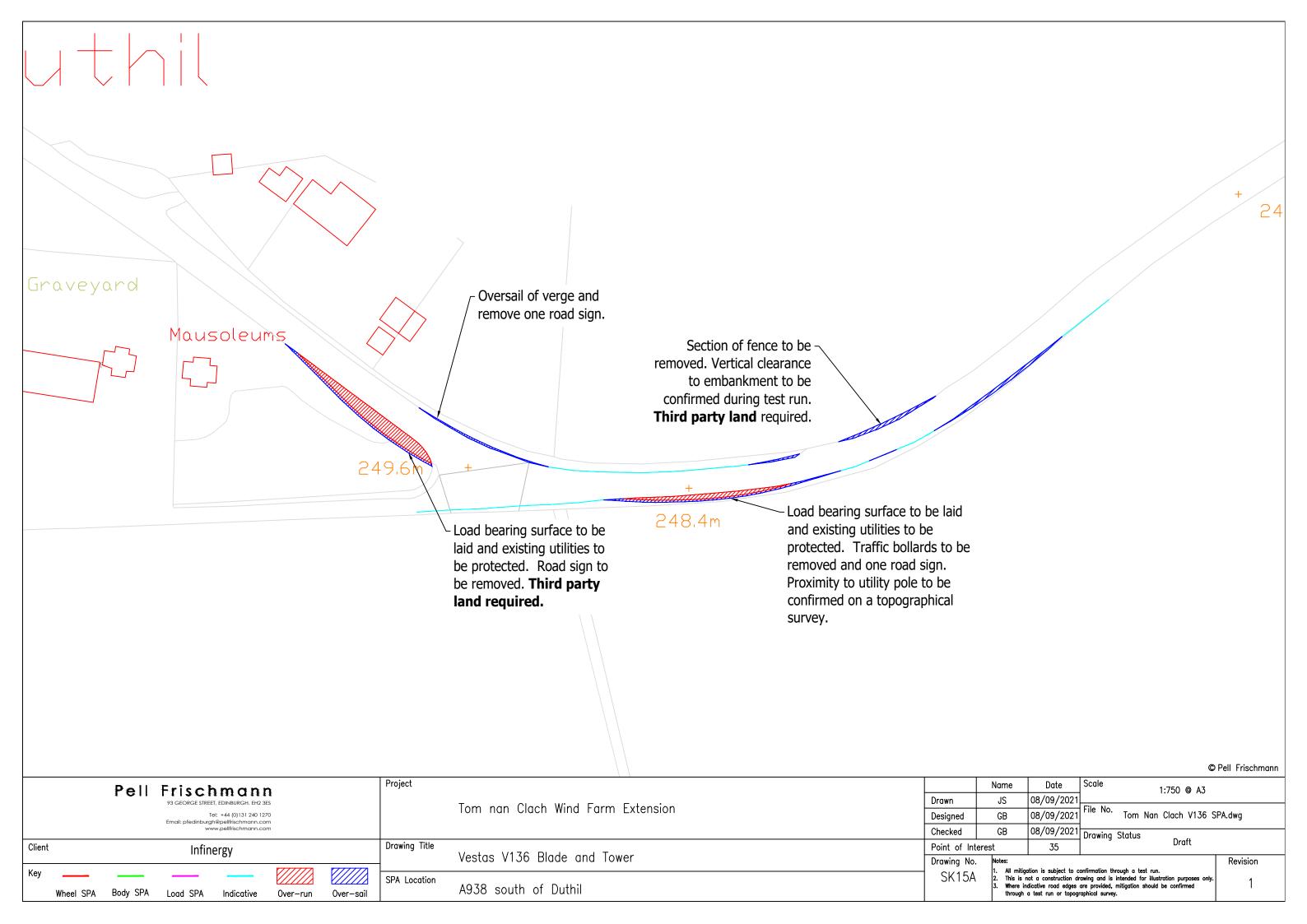


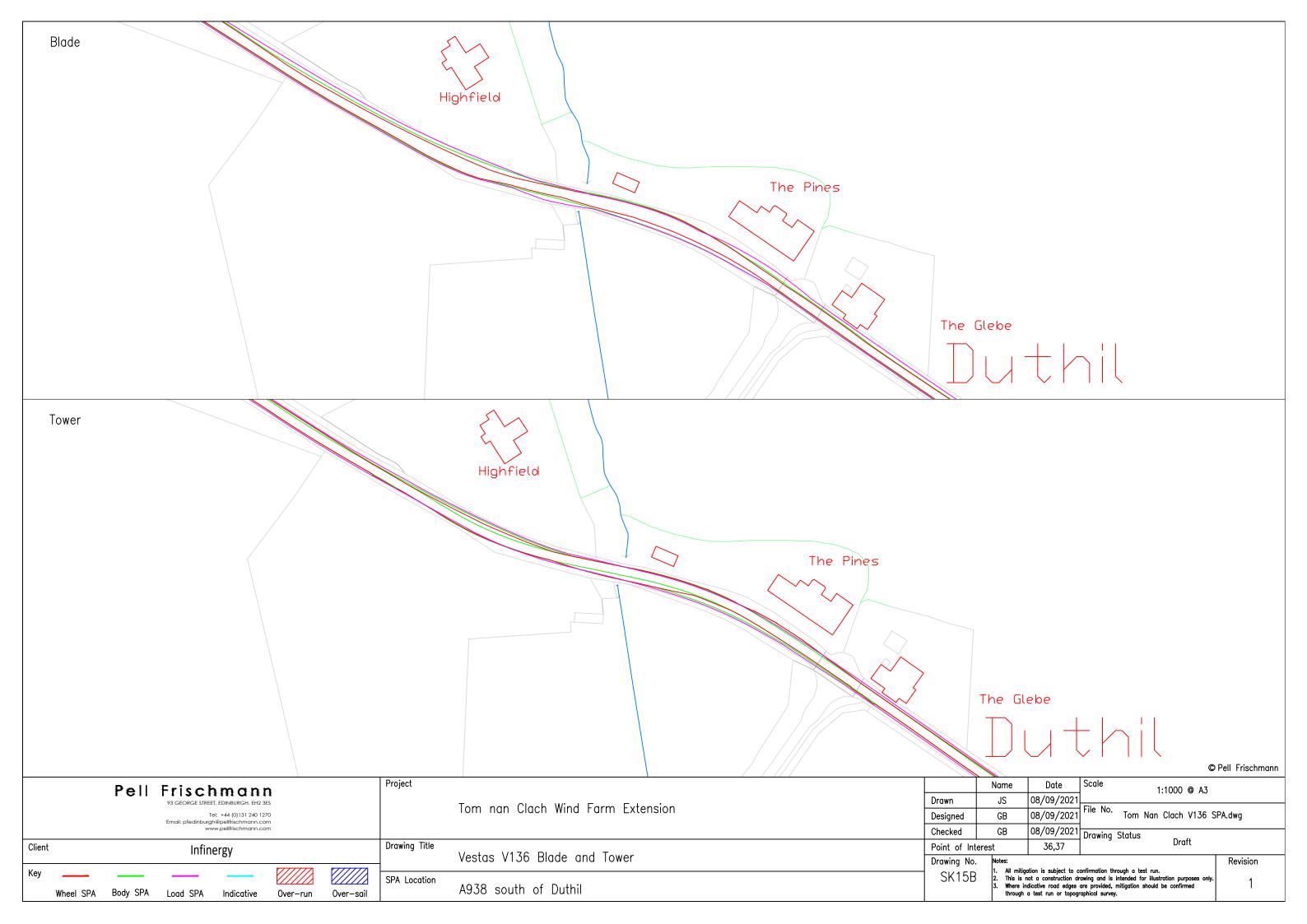


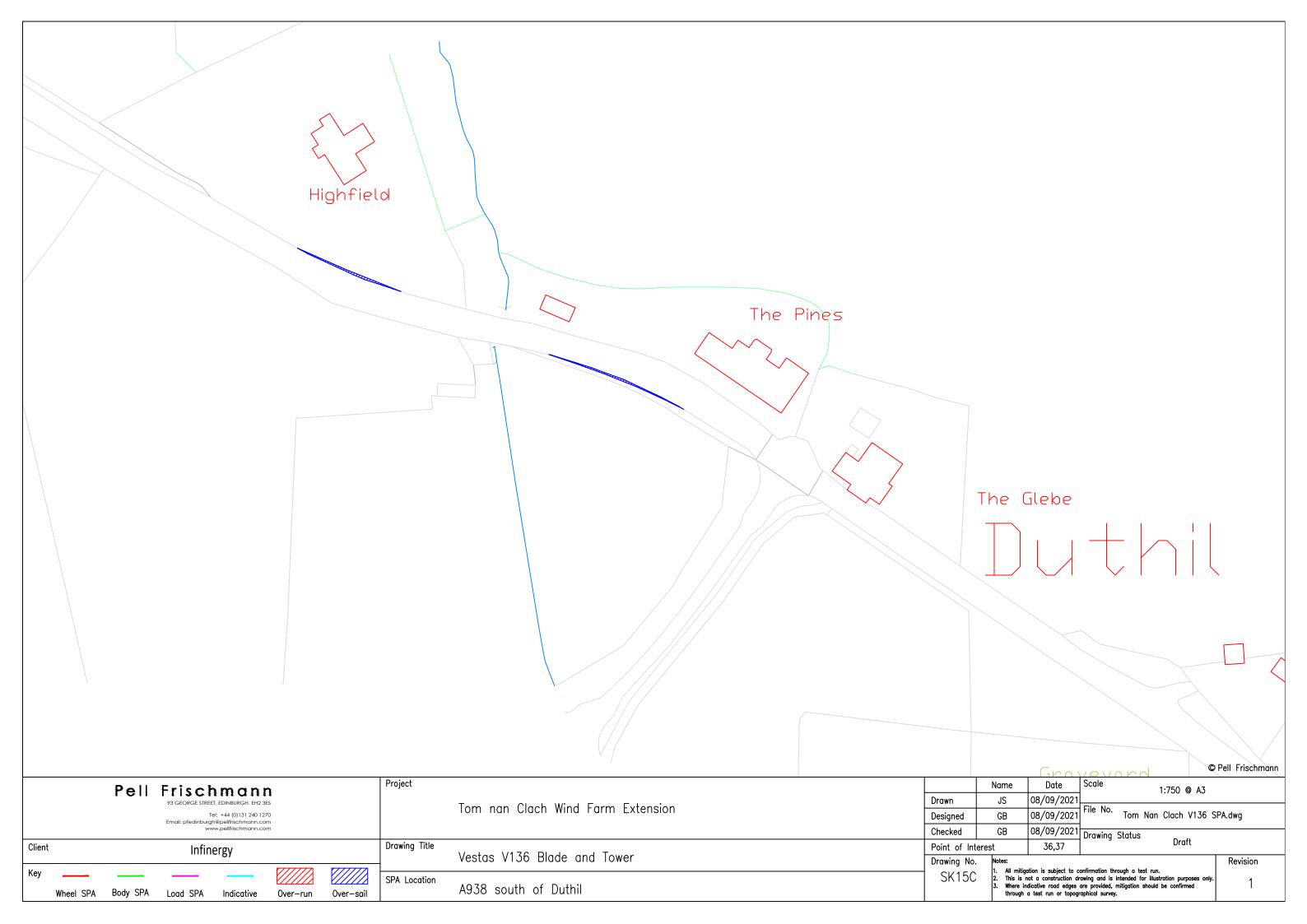


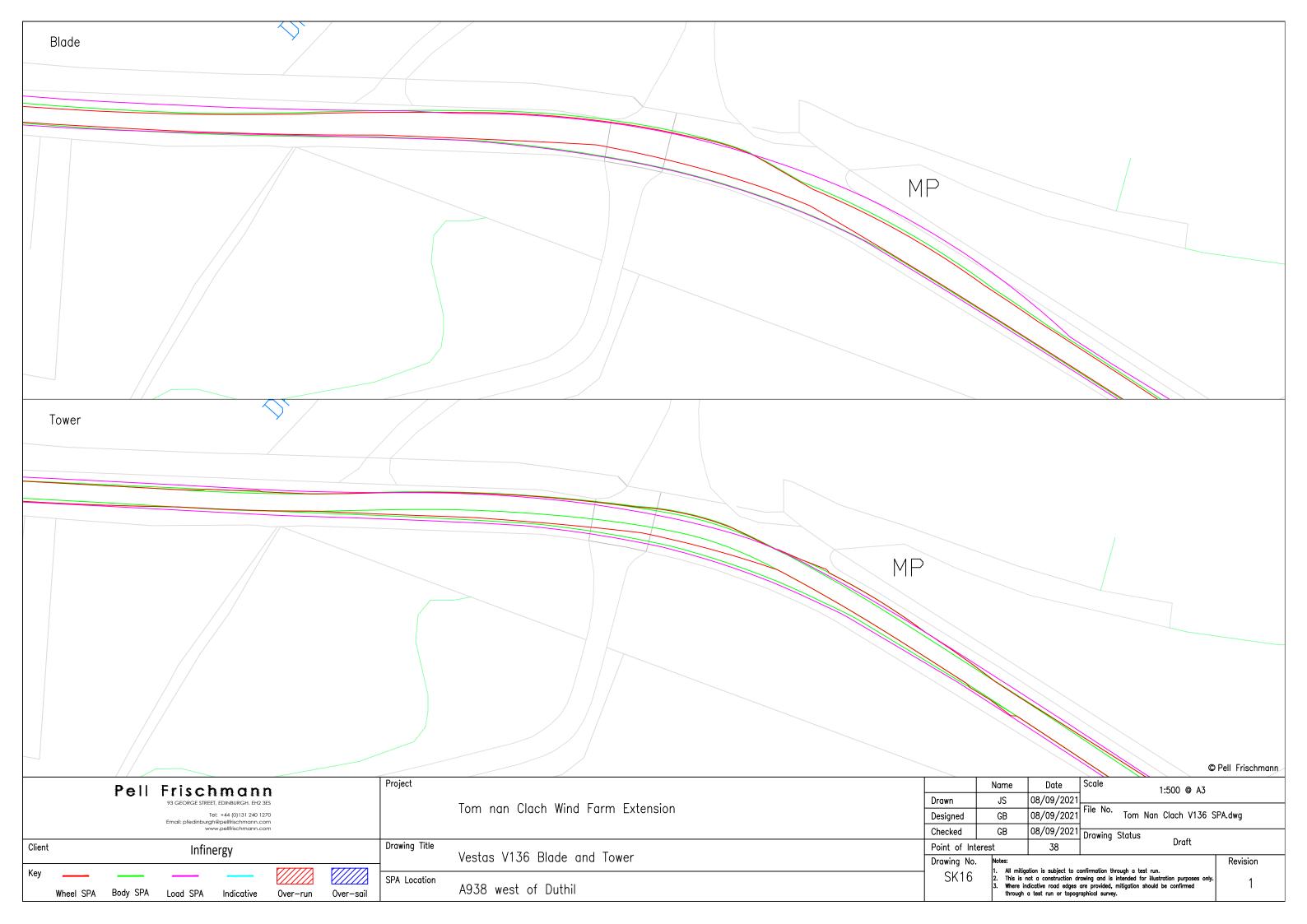


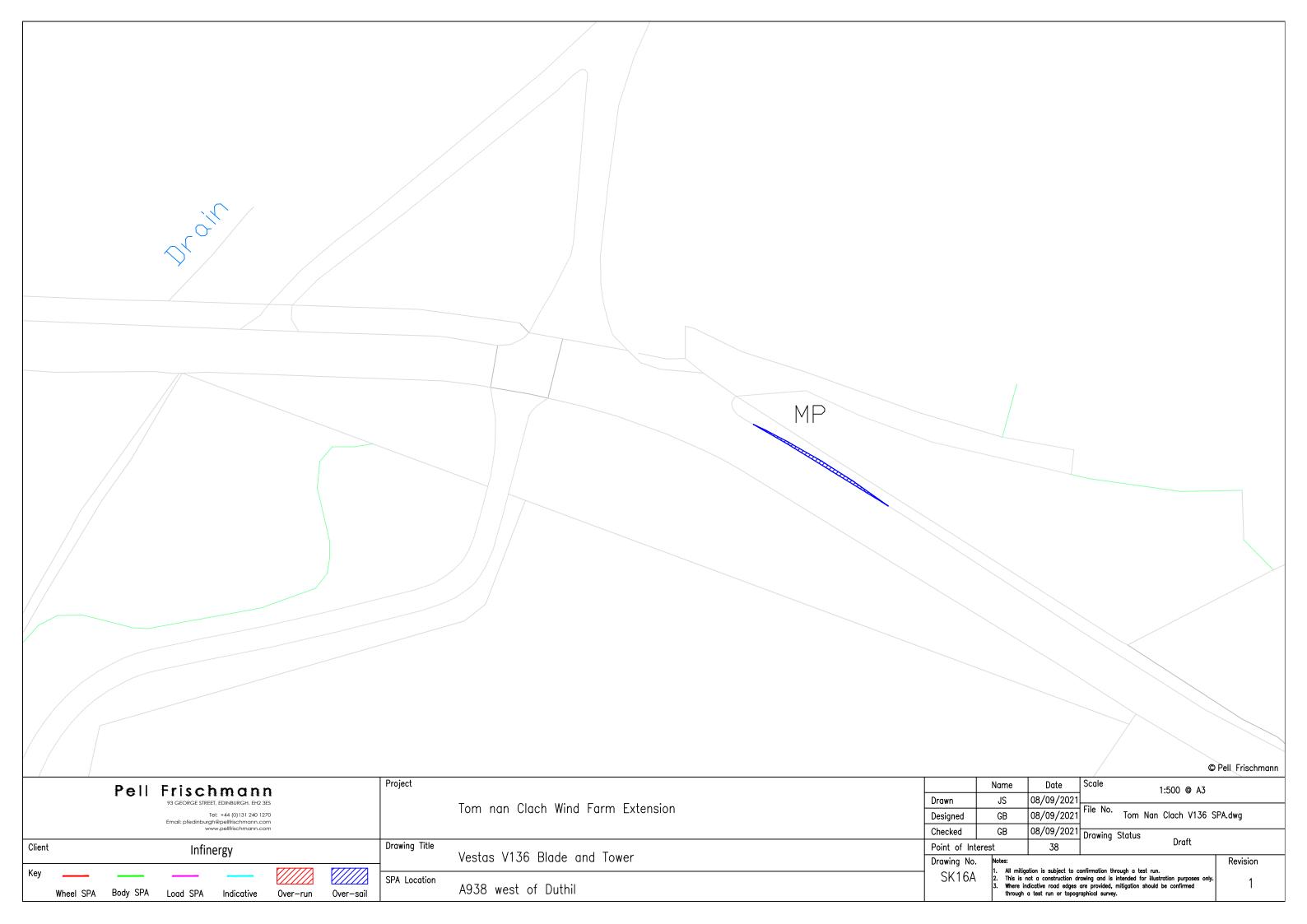


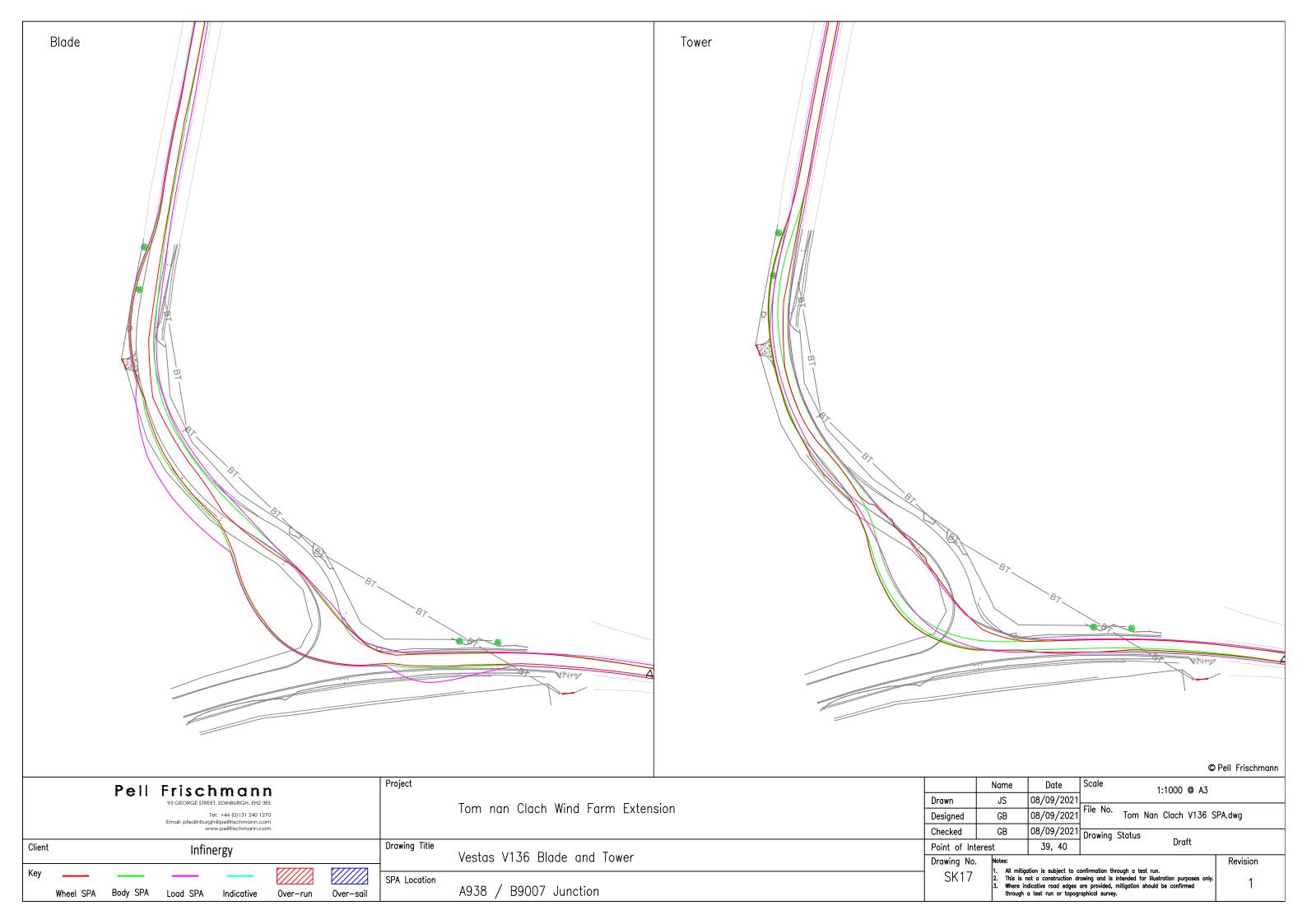


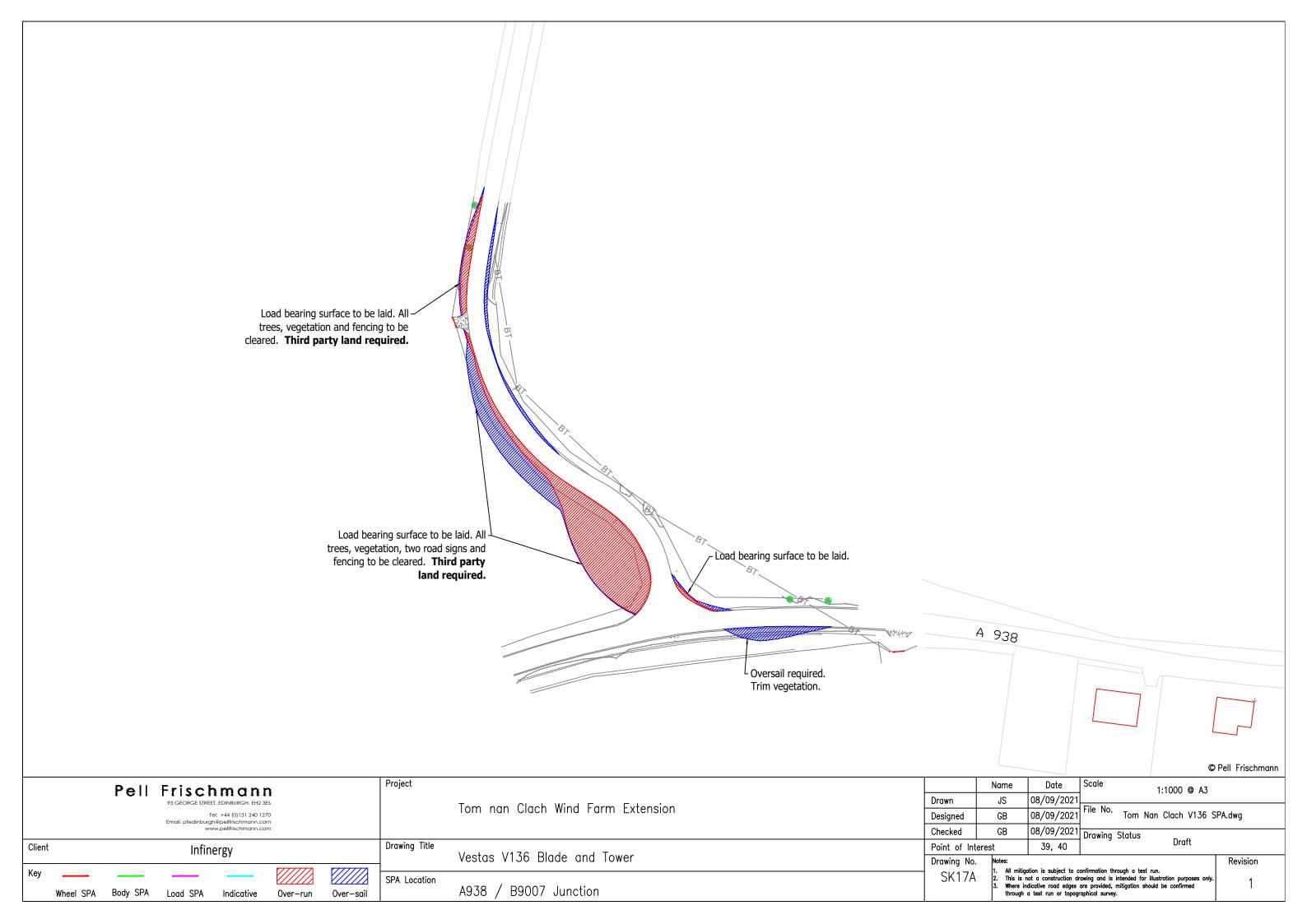




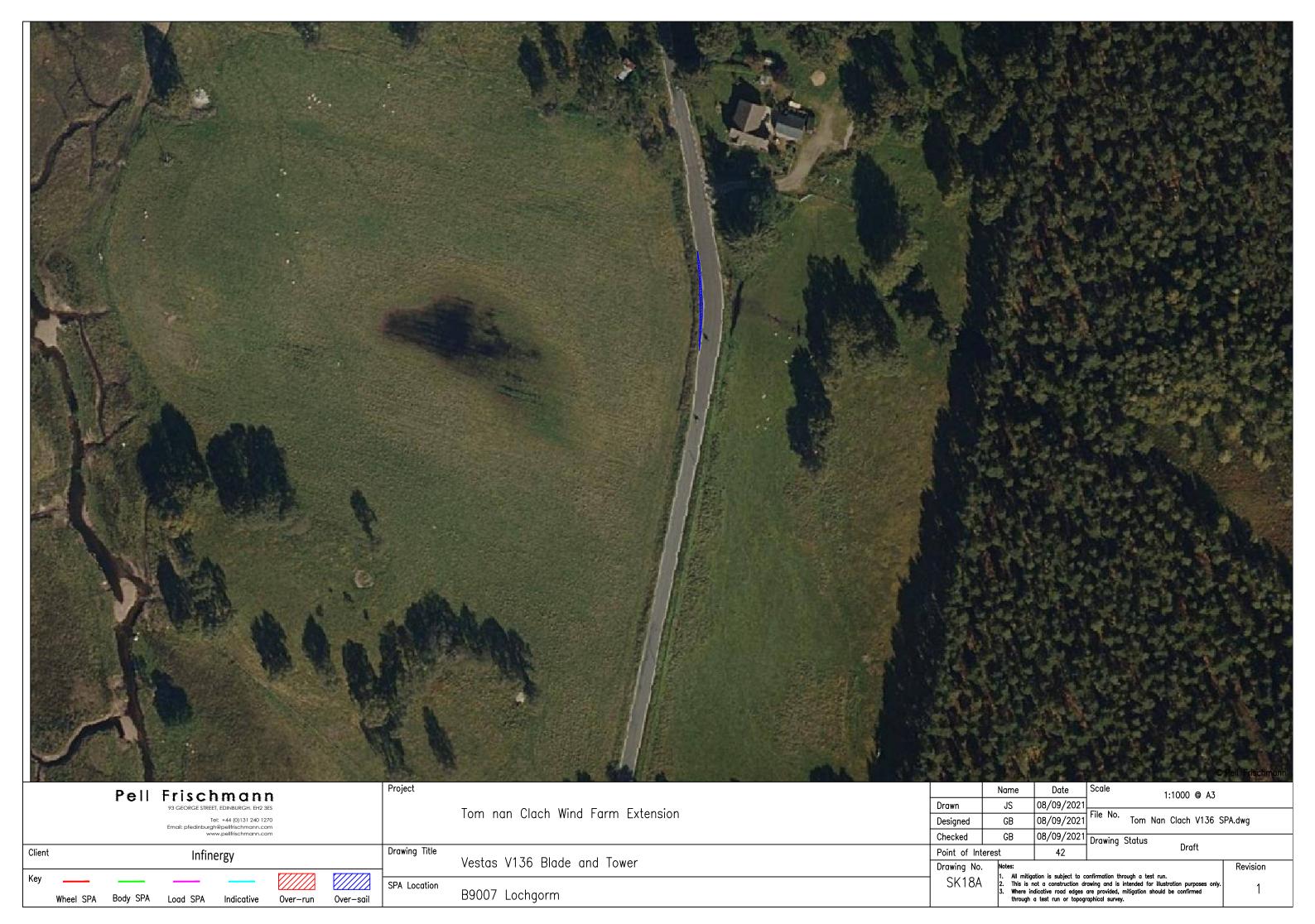




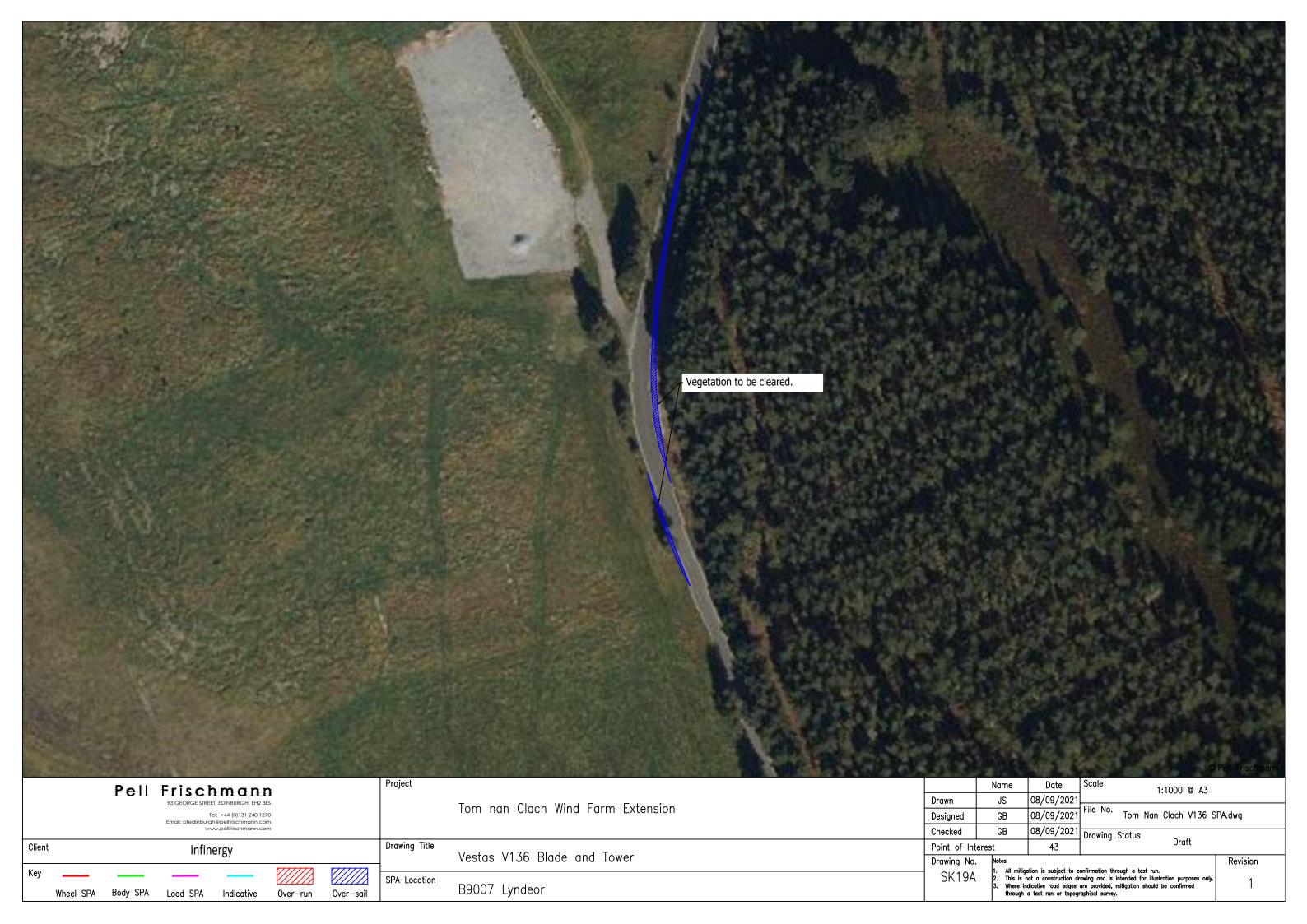




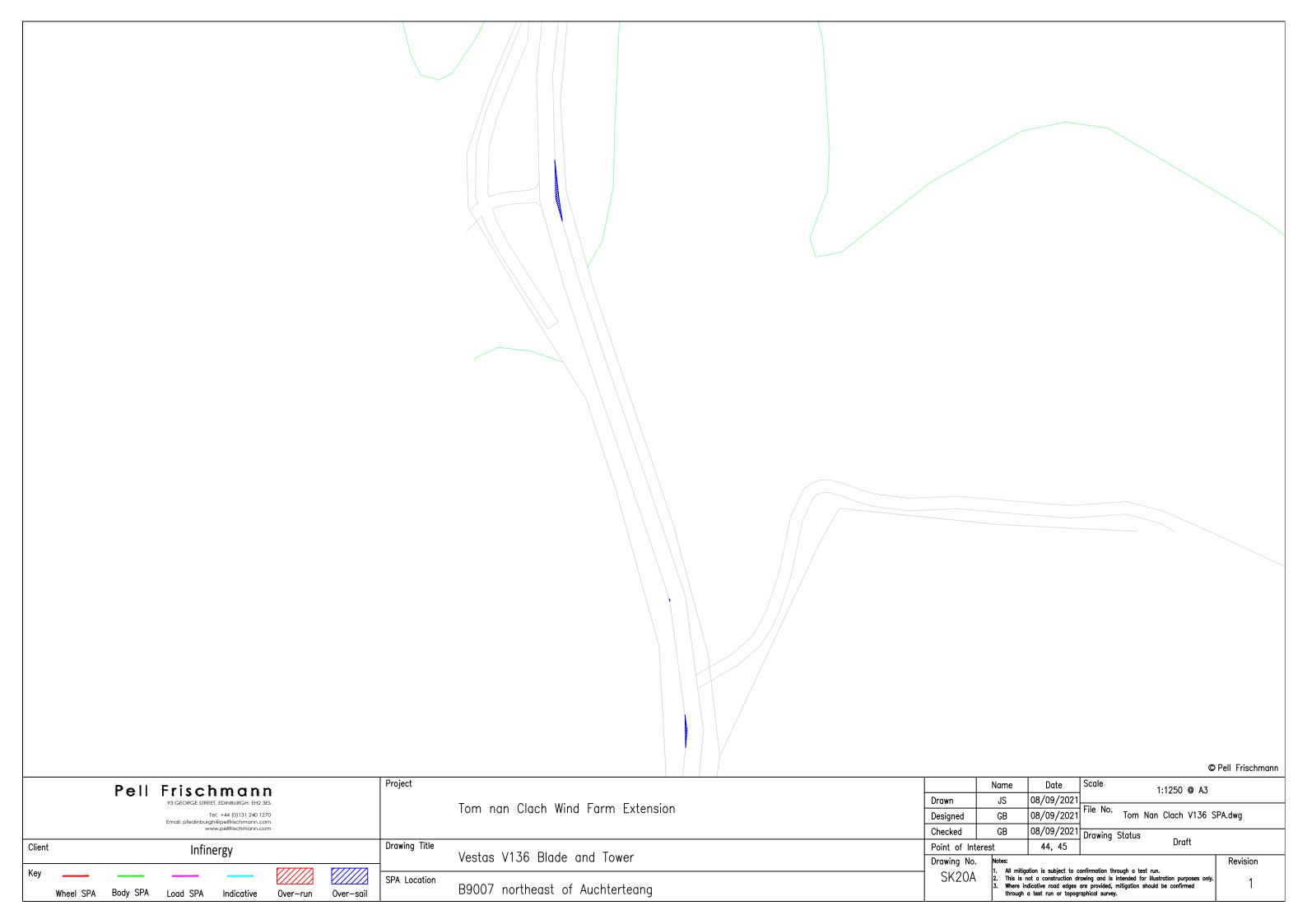




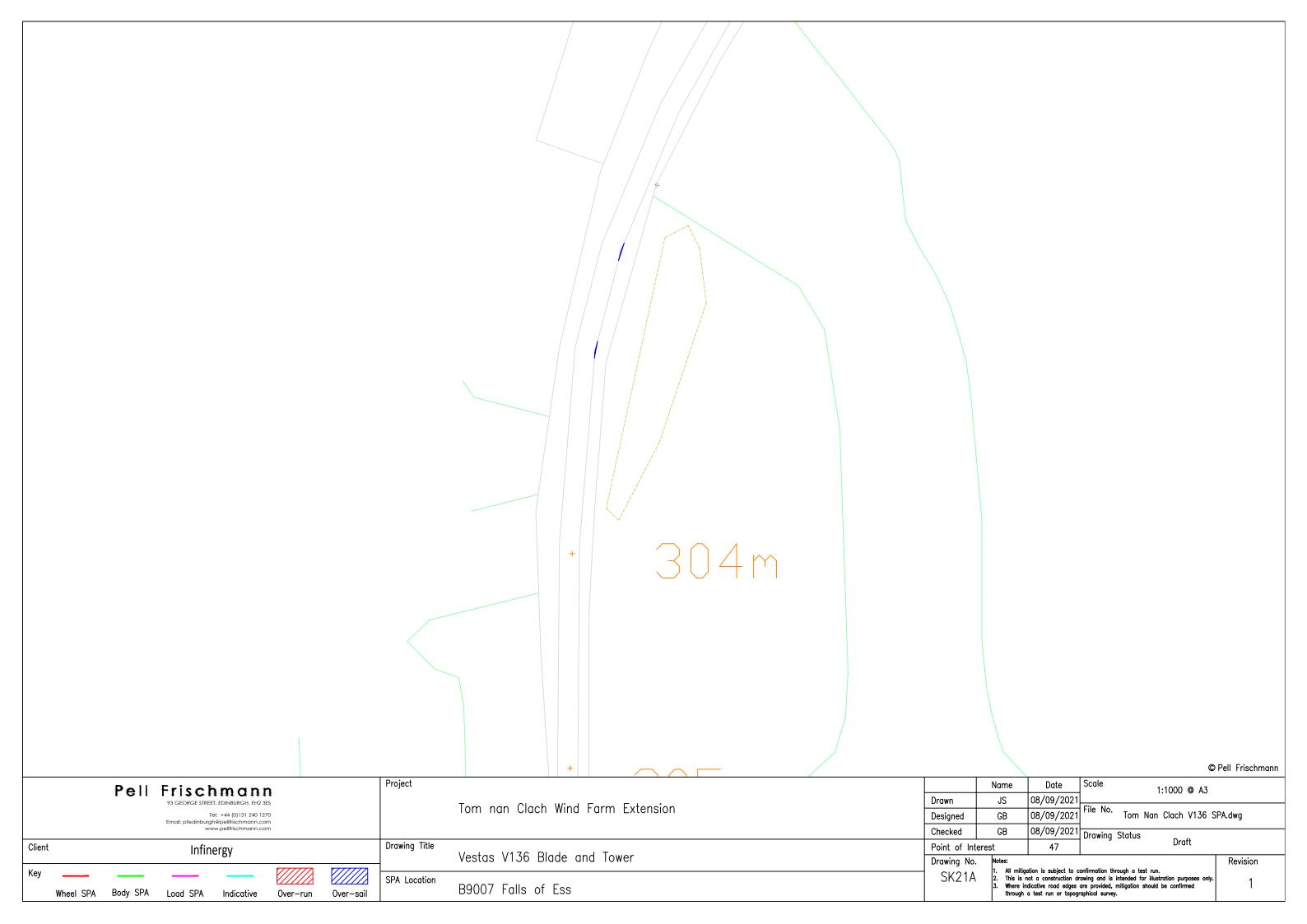


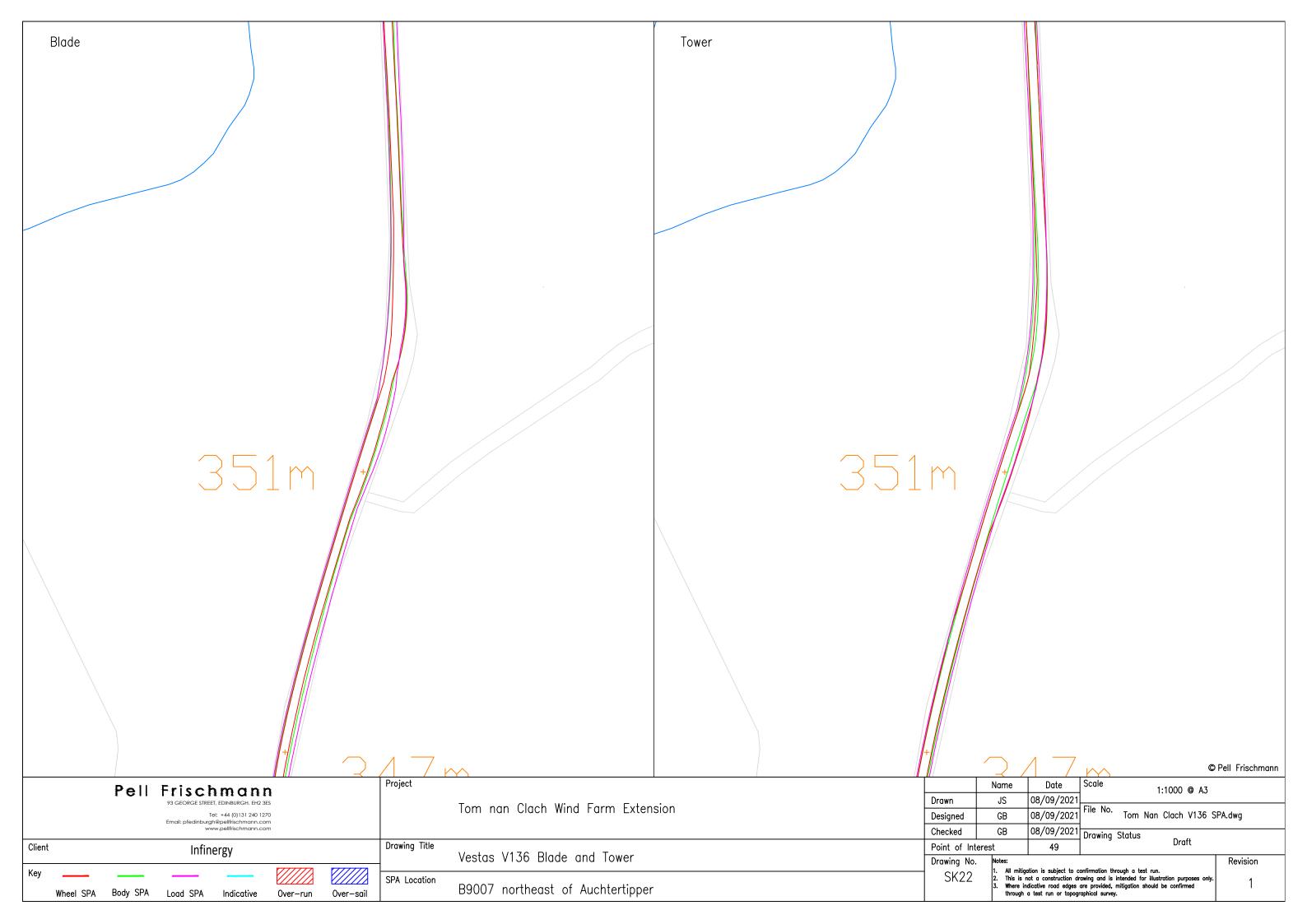


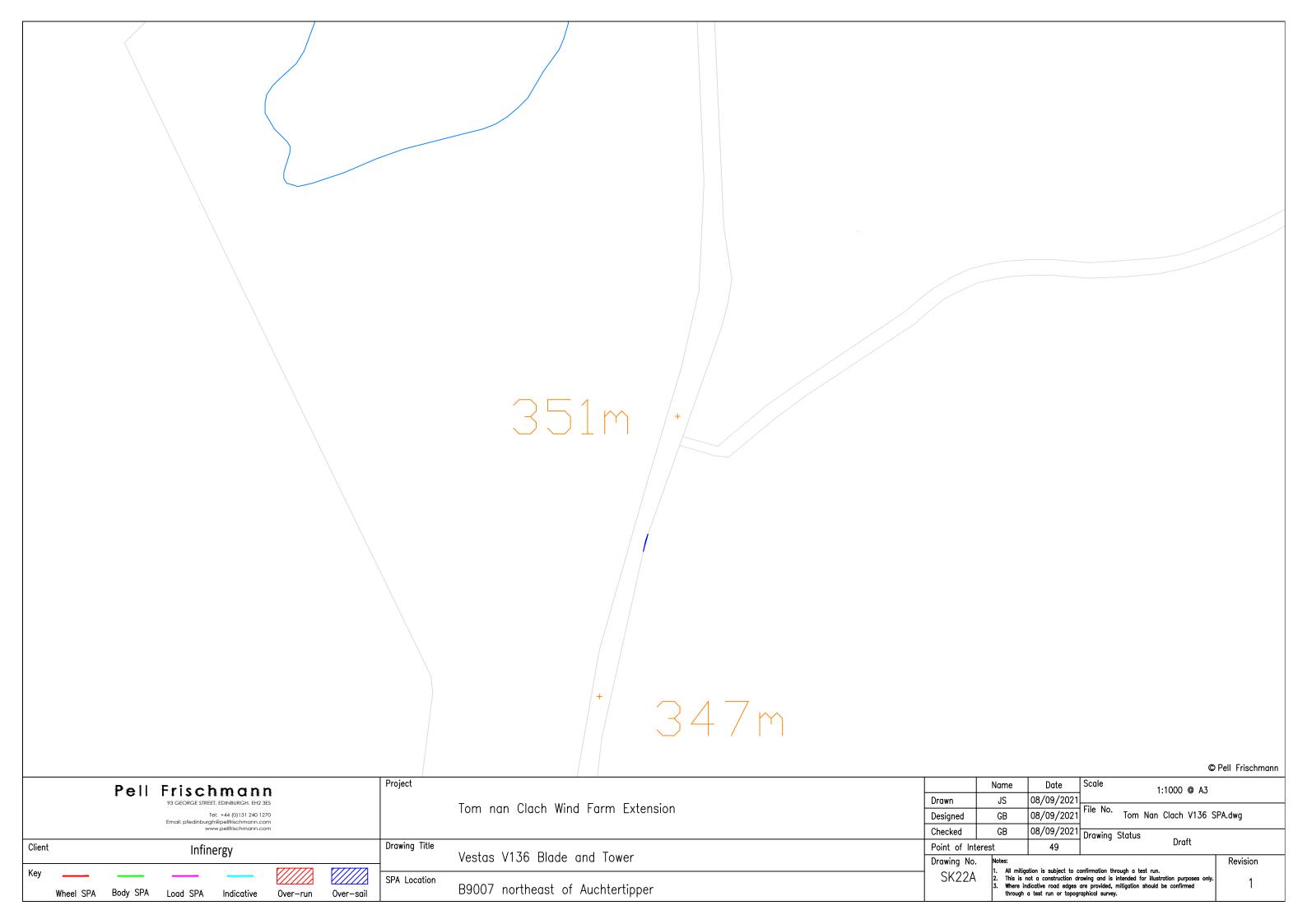


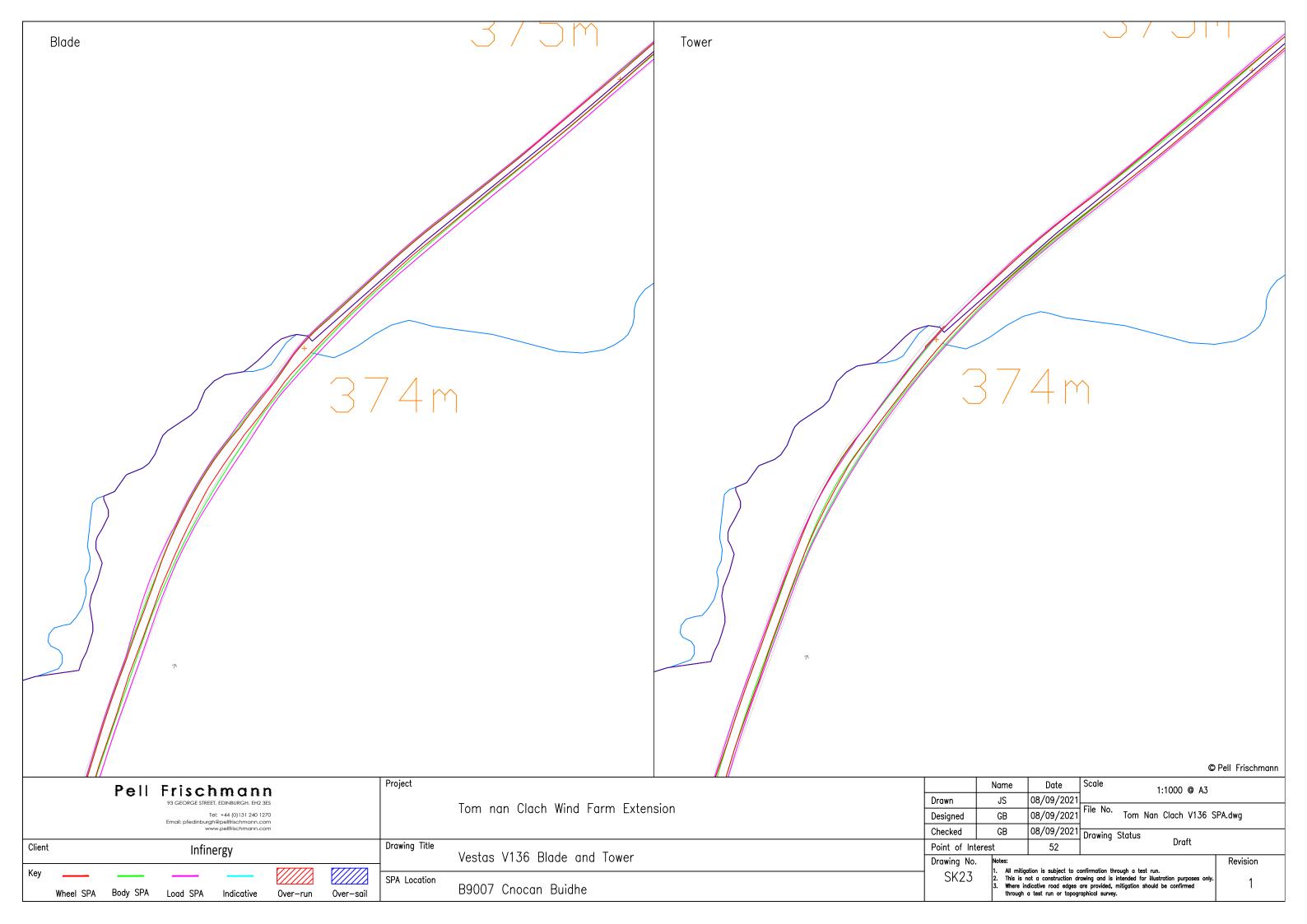


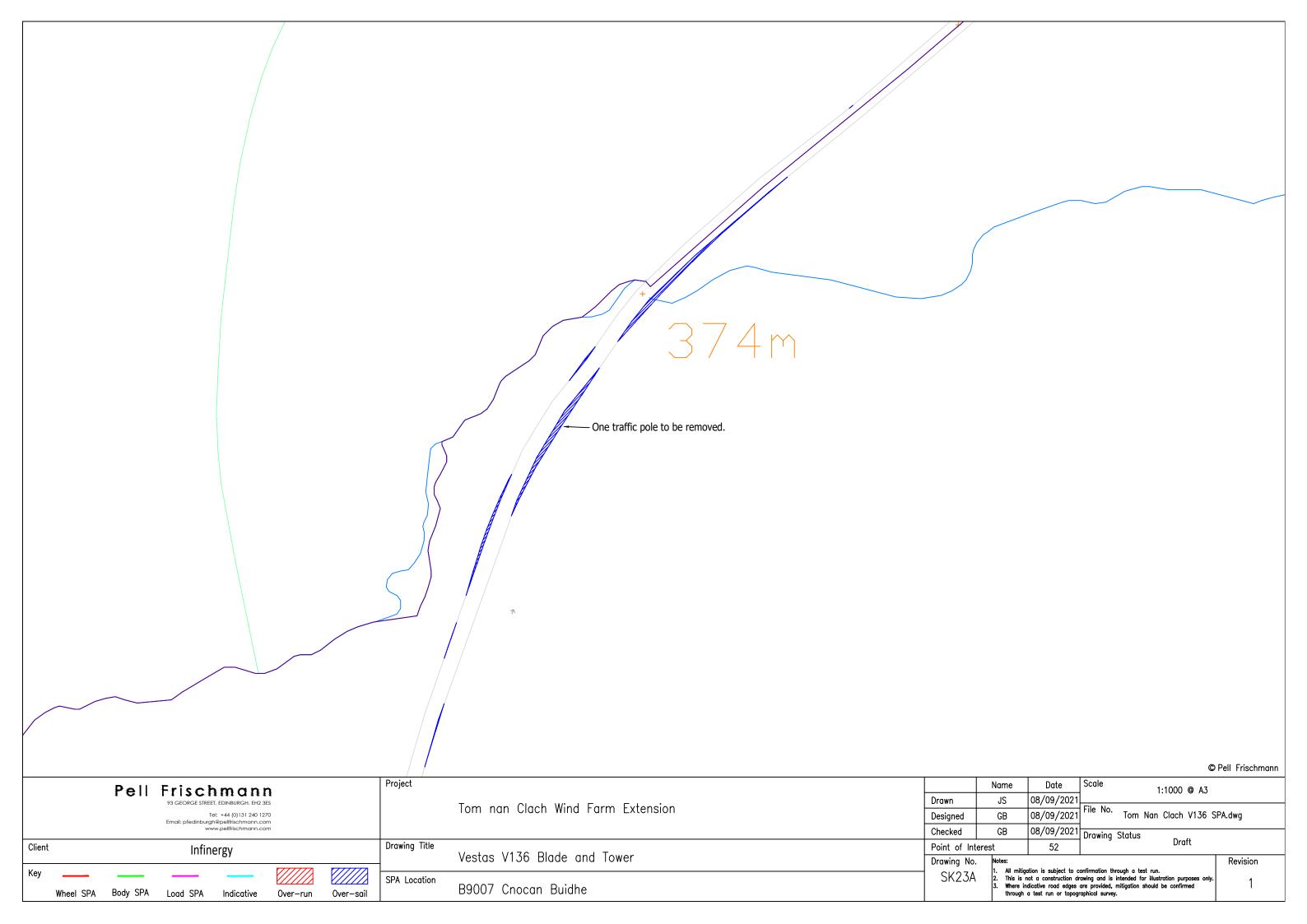


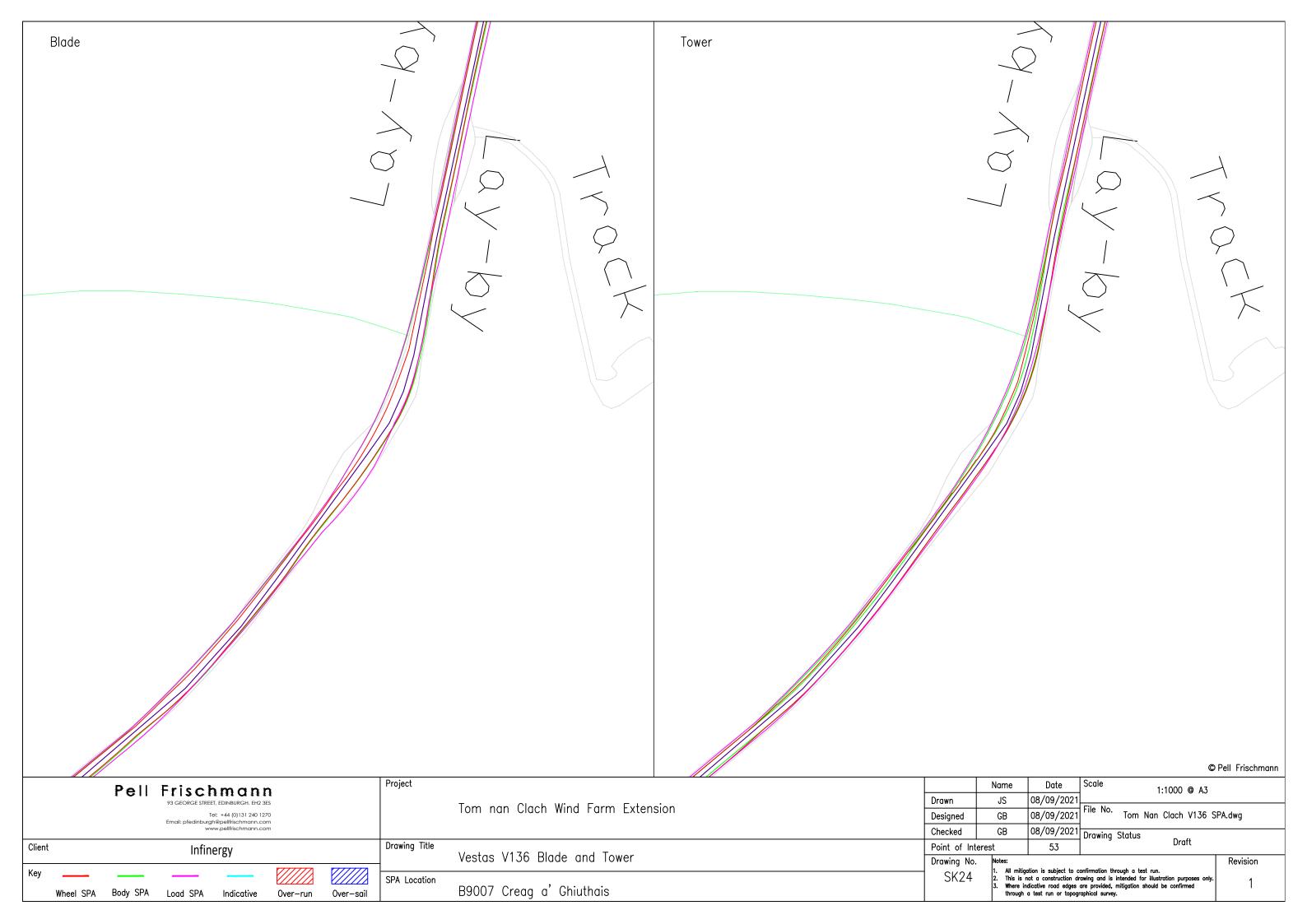


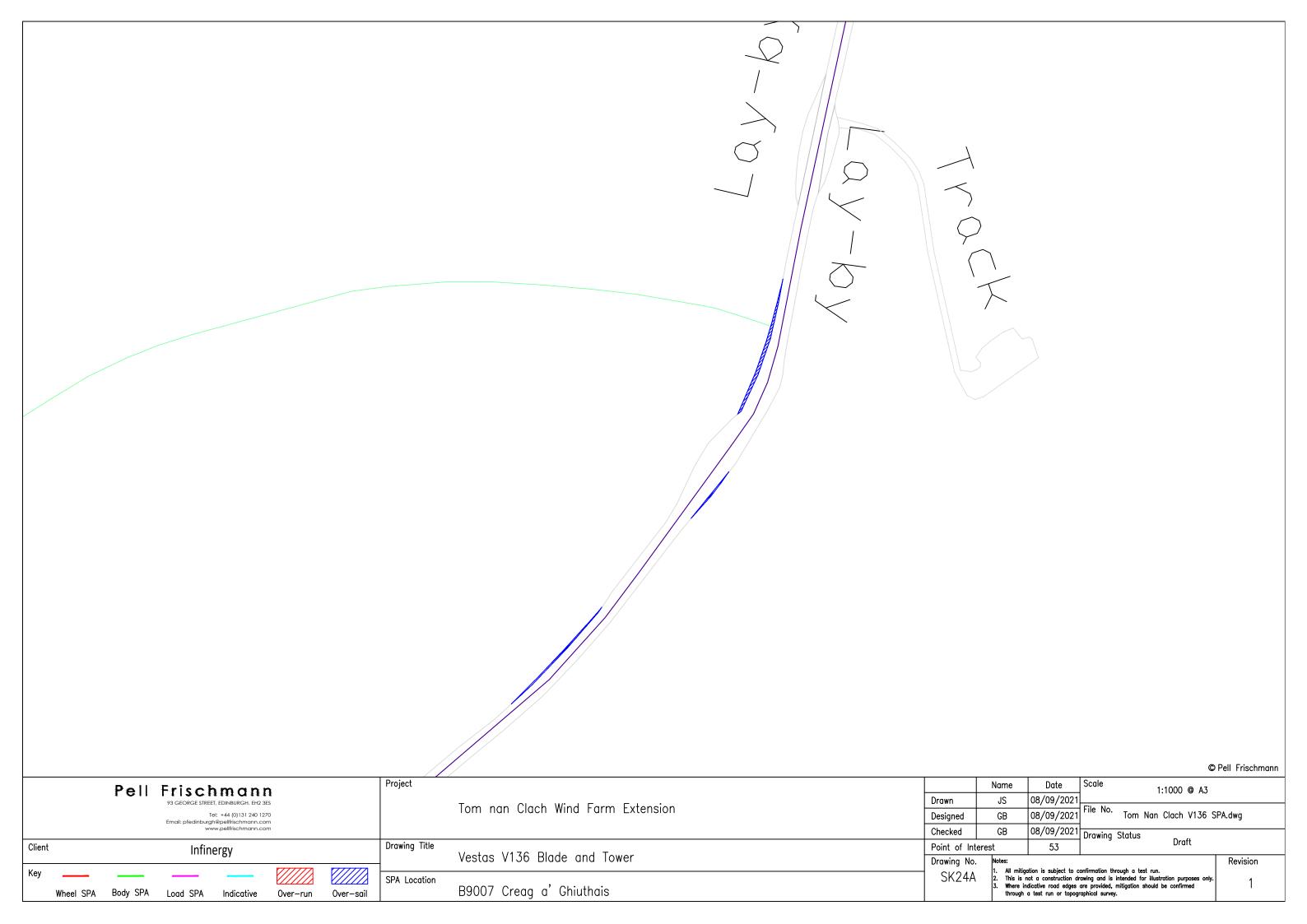


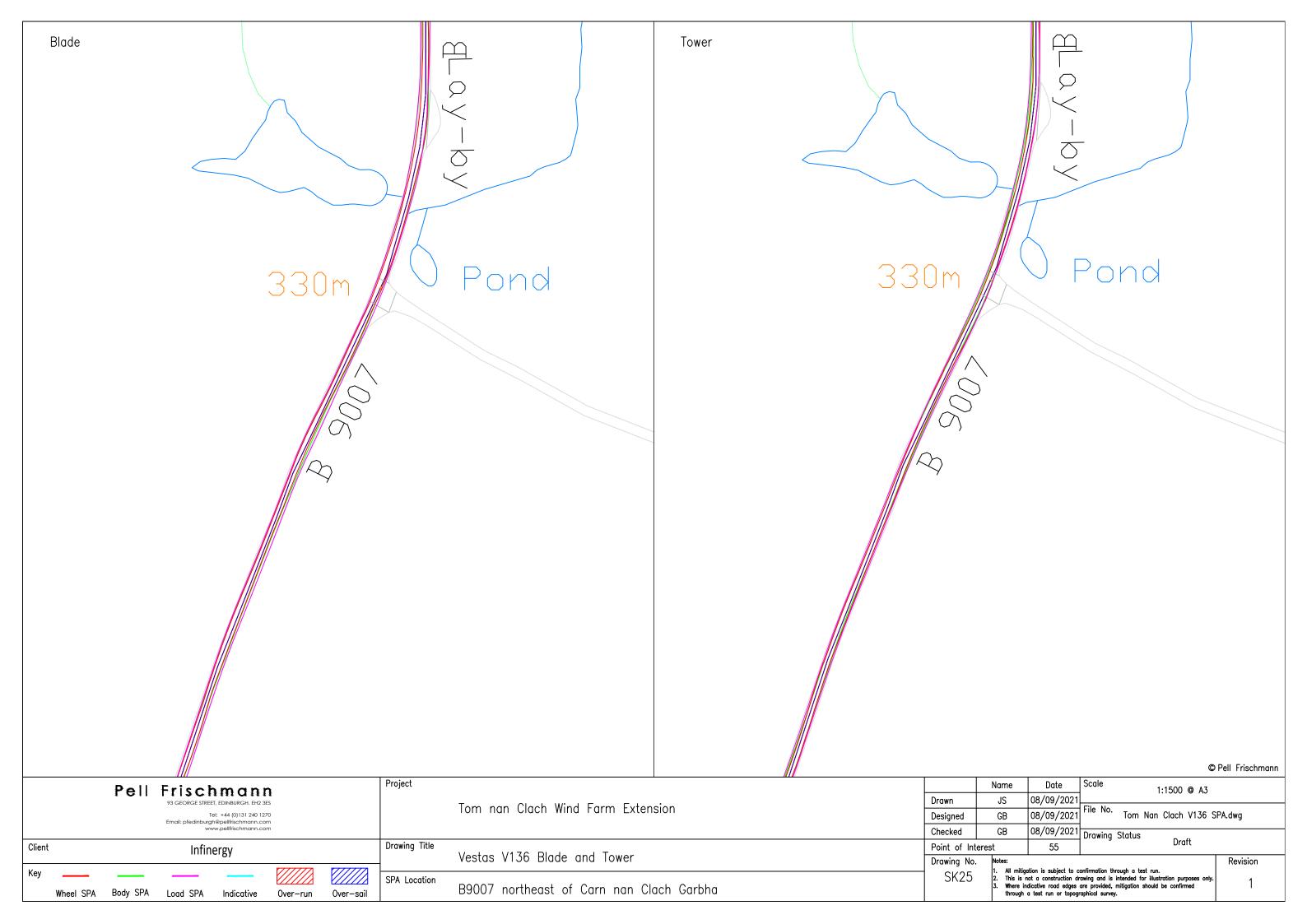


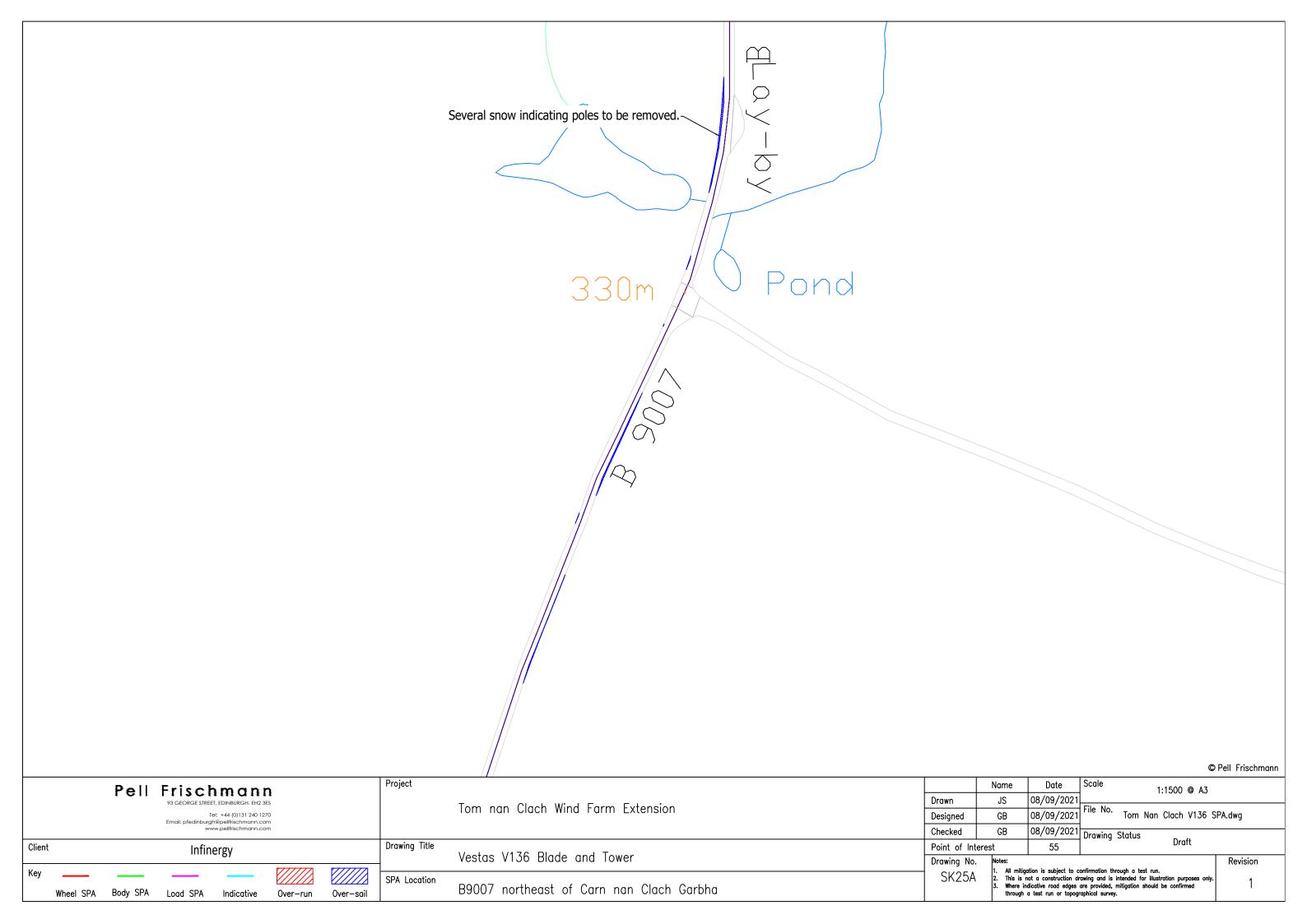


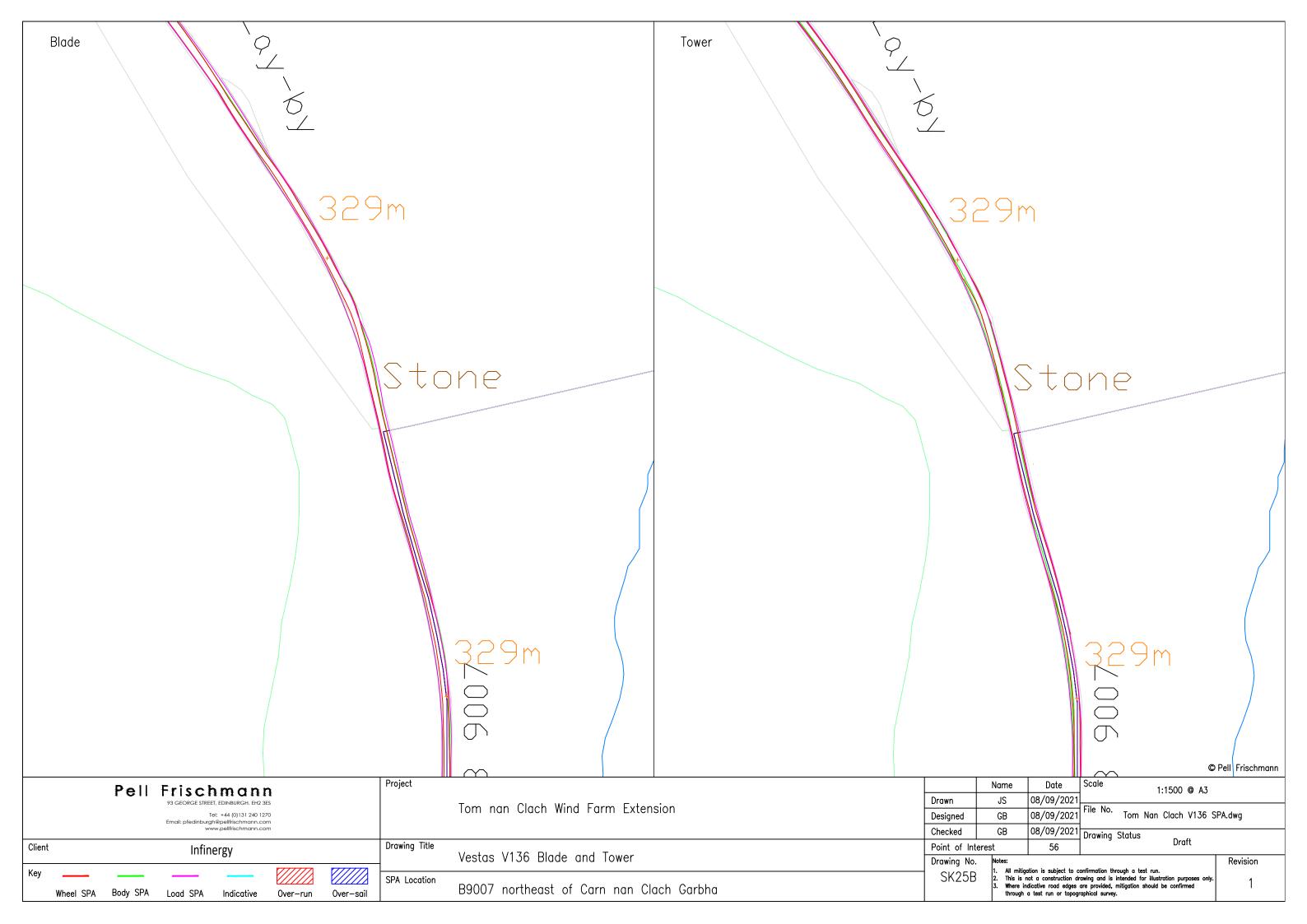


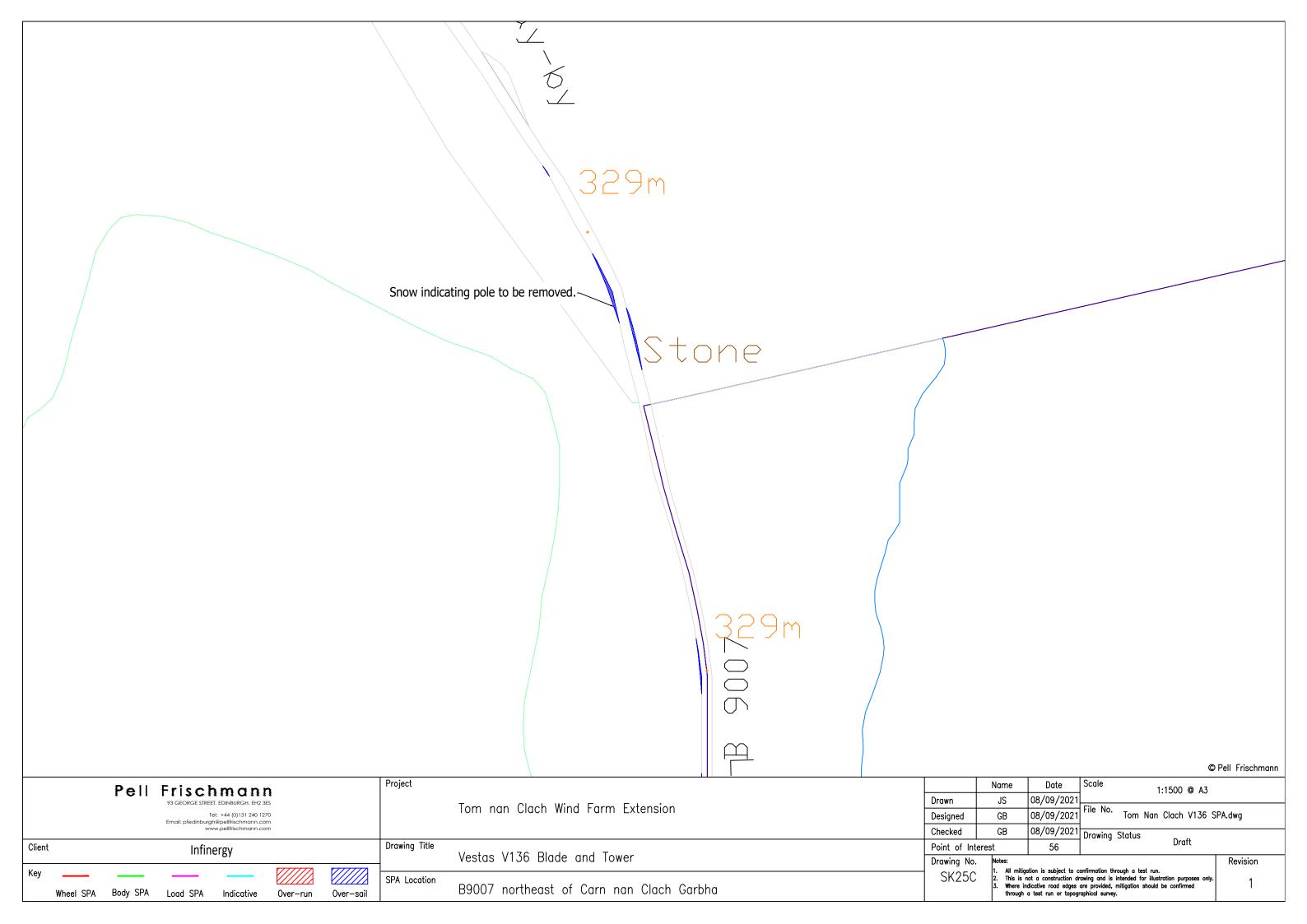


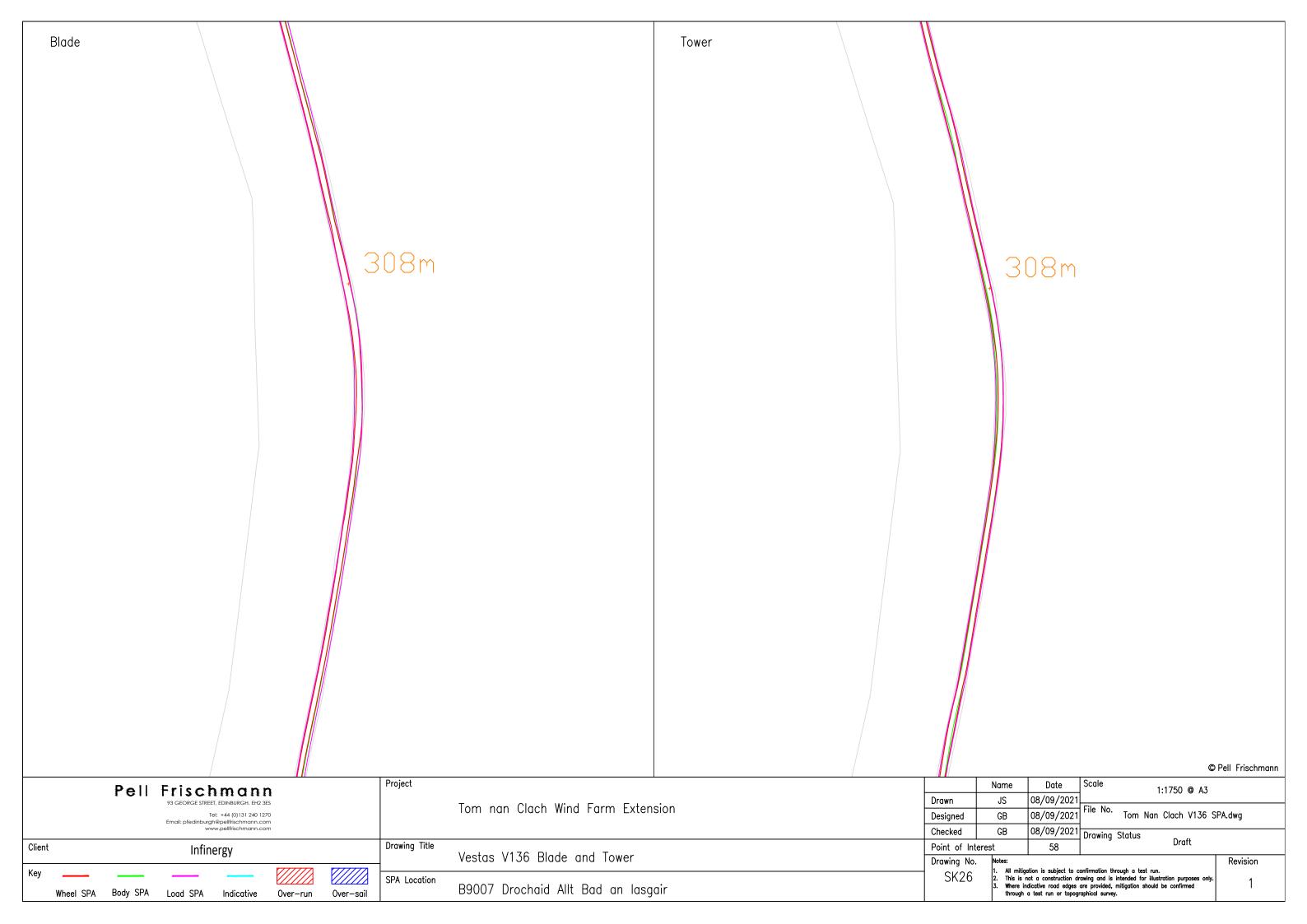


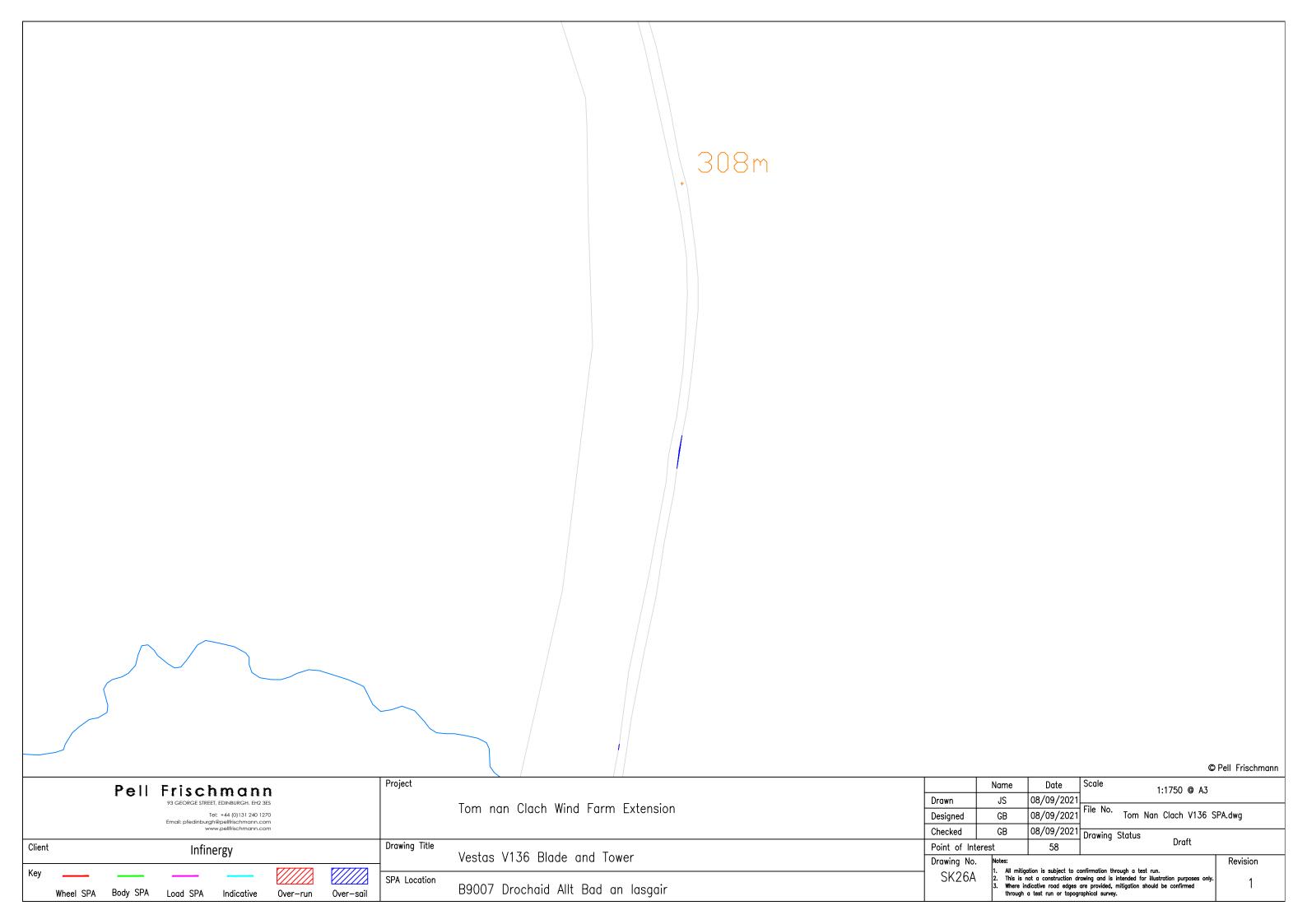


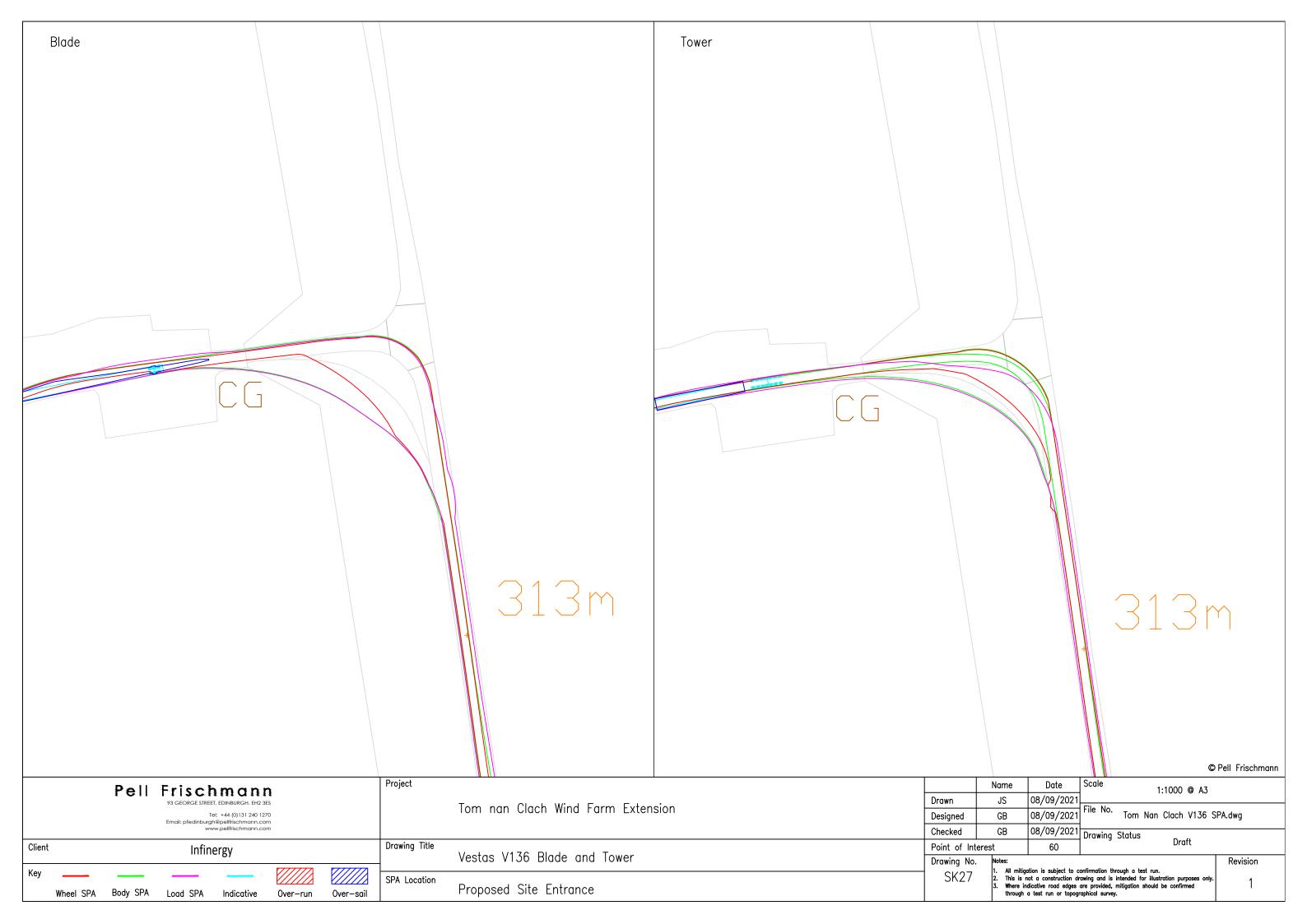


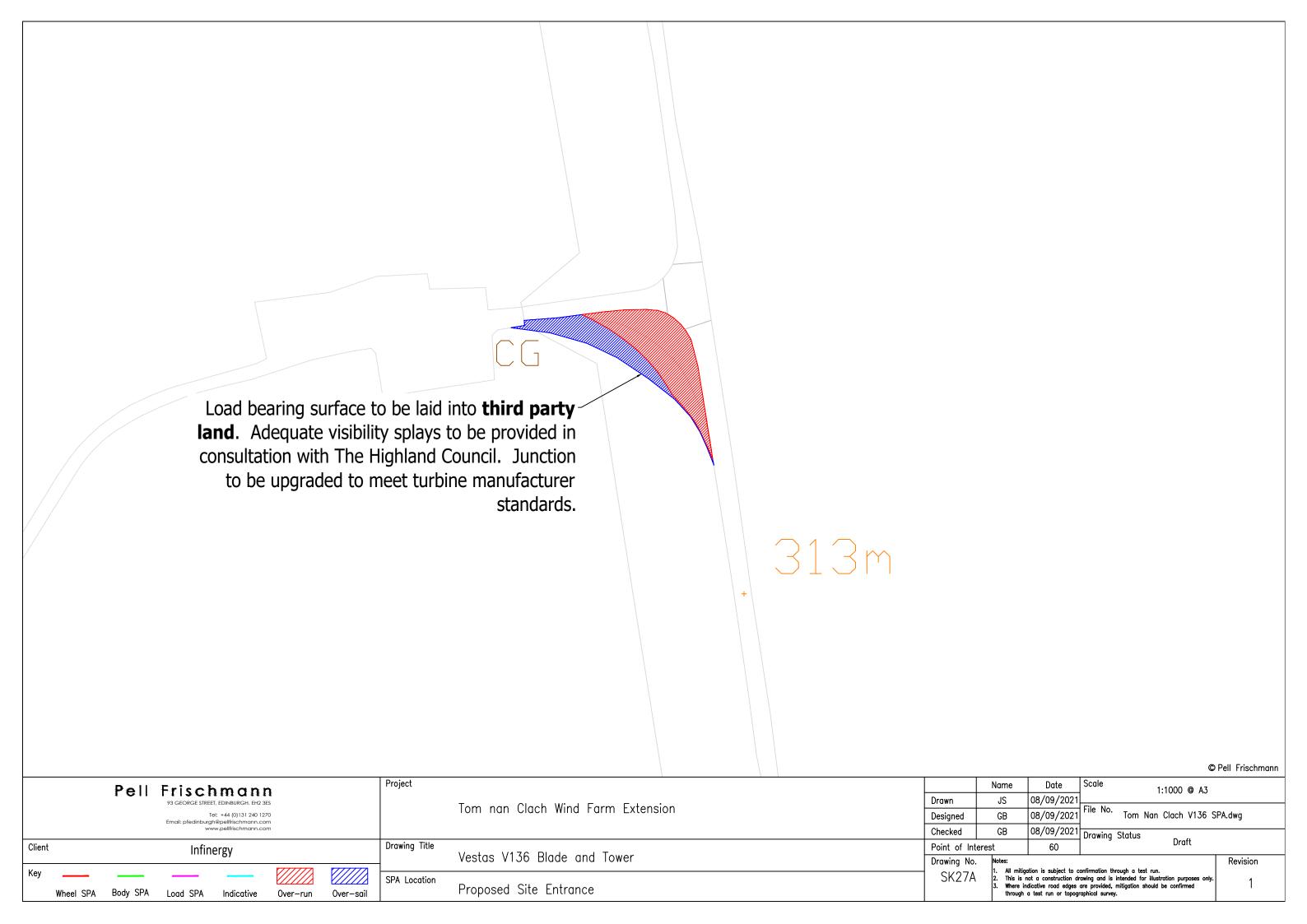












Appendix C Weight Review Correspondence

Tom na Clach Wind Farm Extension Appendix 7.B: Abnormal Indivisible Load Route Survey

From: rsgbrb

Sent: 08 September 2021 10:48

To: Jordan Stirrat

Subject: RE: Tom Nan Clach Wind Farm ESDAL

Dear Jordan,

Thank you for your enquiry.

I have assessed the route, and can confirm that no structures belonging to the Historical Railways Estate will be affected.

I therefore have no further comment, and no objections.

Regards

Tania Howell

Abnormal Loads Officer (on behalf of Highways England Historical Railways Estate)

Jacobs

From: SC Abnormal Loads Sent: 08 September 2021 07:56

To: Jordan Stirrat

Subject: RE: Tom Nan Clach Wind Farm ESDAL

Good morning,

No Scottish Canals structures affected.

Thanks,

Brian.

From: OSD Abnormal Loads Scotland <OSDAbnormalLoadsScotland@scotland.pnn.police.uk>

Sent: 08 September 2021 08:01

To: Jordan Stirrat < JStirrat@pellfrischmann.com>

Subject: RE: Tom Nan Clach Wind Farm ESDAL [OFFICIAL]

OFFICIAL

Good Morning,

In response to your email enquiry dated 07TH September 2021, I can provide the following information on behalf of Police Scotland.

When a haulier has been selected for a particular project and they have been furnished with precise dimensions of the load to be transported by road, thereafter as part of the planning process a detailed route survey is produced by the haulier identifying all potential issues often referred to as "pinch points" along the entire proposed route. The route is then examined and commented upon by Transport Scotland /Transerv and the relevant Local Council amongst other partners.

Police Scotland consider the proposed route primarily from a road safety perspective. If due to the abnormal dimensions it is apparent other road users will be required to be directed to stop along the route by police in order to safely facilitate the movement or encroachment into an opposing undivided carriageway will occur, then police officers will be deployed to warn other road users of the presence of the abnormal load. The timings of the movements are dependent on many factors dependant on the route and Transport Scotland may place restrictions on travel during peak times to ensure journey time reliability along their trunk road network.

In general terms the movement of Abnormal Indivisible Loads (A.I.L) along most if not all routes in more rural areas, from my experience has an impact on the infrastructure of the general area and local community although Police Scotland are not best placed to comment in detail on this subject. Examples of this from previous projects could include, delays to freight traffic travelling to or from ferry ports, delays experienced by bus services including tourist bus tours operated in the area (Invergordon Port being a cruise ship port), delays to teachers and or pupils attending for scheduled school start times and delays to staff and the public attending hospital or medical appointments.

Regards
negarus

Frankie Anderson

Business Support Administrator

Vehicle Recovery & Abnormal Loads Police Scotland

Fife Divisional HQ

Detroit Road

Glenrothes

Fife

KY6 2RJ

From: Paul.Winn

Sent: 08 September 2021 08:14

To: Jordan Stirrat

Subject: RE: Tom Nan Clach Wind Farm ESDAL

Hi

Paul

We would be OK with this in principle if none of the other consultees have any objections.

Paul Winn

Transport Scotland

Network Administrator

Administration Team

Roads Directorate