

CLYDEPORT DIVE POLICY



INTRODUCTION

A permit-to-dive is not simply permission to carry out a dangerous job. It is an essential part of a system which determines how that job can be carried out safely, and helps communicate this to those doing the job. It should not be regarded as an easy way to eliminate hazard or reduce risk. **The issue of a permit does not, by itself, make a job safe** - that can only be achieved by those preparing for the work, those supervising the work and those carrying it out.

The permit-to-dive system should ensure that authorised and competent people have thought about foreseeable risks and that such risks are avoided by using suitable precautions.

Those carrying out the job should think about and understand what they are doing to carry out their work safely, and take the necessary precautions for which they have been trained and made responsible.

This policy defines roles and responsibilities and instructions for the issue, use and closure of permits within the dive permit system. It highlights hazards found in the Terminals and defines actions in the event of a dive emergency.

Roles and Titles

Role	Title	Responsibility
Person requiring the job to be done	Client	Third party, terminal manager or Harbour Authority
Person working under the terms of the permit	Permit user	Dive Contractor
Person authorising the permit for issue	Permit Authoriser	Clydeport Marine Manager (on behalf of Group Harbour Master)
Person accepting the permit on behalf of the permit user(s)	Permit recipient	Dive Supervisor
Person in control of the location where work is to be carried out (Area Owner)	Terminal/Location Responsible Person	Terminal or engineering manager or Harbour Authority (for areas outside terminal boundaries)
Marine Area Advisor	Clyde LPS Operator	Information on Shipping Movements and Navigational Warnings
Person carrying out checks as detailed on the permit	Site checker	Clydeport Terminal or engineering Manager or Marine Manager (for areas outside the terminal)
Person responsible for making isolations	Isolating authority	Clydeport Engineer

Clydeport Marine Authorisation Table

Authorising position	Limitations
Group Harbour Master	None
Senior Manager Marine Operations	None
Manager Marine Operations	None
Manager Marine Services	None

It is essential that people authorised to issue permits-to-dive have sufficient knowledge of the Clydeport Dive Policy and the hazards associated with the relevant dive operation area. This will allow them to identify those hazards and control measures (eg isolations) correctly.

Clydeport Terminal Manager Authorisation Table (acting as Terminal/Location Responsible Person)

Authorising position	Limitations
Terminal Manager	None
Assistant Terminal Manager	None
Business Unit Manager	None
Operations Manager	None
Operations Training Manager	None
Container Operations Supervisor	None
Maintenance Team Leader	None
Engineering Manager	None

Clydeport Electrical Isolation Authorisation Table

Authorising position	Limitations
Authorising Engineer	None
Senior Authorised Person	None
Senior Authorised Person	None
Senior Authorised Person	None

Electrical isolations are carried out in accordance with the Electrical Safety Rules for Low Voltage and High Voltage Systems. Authorised personnel are split into Authorised and competent classes and restrictions applied as per the table below.

Class of Person	Activity	Documentation	
		Issue & Cancel	Receive & Clear
Duty SAP	<ul style="list-style-type: none"> ■ Control of defined HV System ■ Switch HV System ■ Test HV Systems ■ Enter substations 	<ul style="list-style-type: none"> ■ Permit to Work (HV&LV) ■ Sanction for Test ■ Limitation of Access ■ Isolation Certificate ■ Transfer of Control 	<ul style="list-style-type: none"> ■ Permit to Work (HV&LV) ■ Sanction for Test ■ Limitation of Access ■ Isolation Certificate ■ Transfer of Control (ext.)
SAP	<ul style="list-style-type: none"> ■ Switch HV System to instruction of Duty SAP ■ Test HV System 	<ul style="list-style-type: none"> ■ Permit to Work (HV&LV) ■ Sanction for Test ■ Limitation of Access ■ Isolation Certificate 	<ul style="list-style-type: none"> ■ Transfer of Control ■ Permit to Work (HV&LV) ■ Sanction for Test
AP (HV)	<ul style="list-style-type: none"> ■ Switch HV System to instruction of Duty SAP ■ Perform Single Point Isolation of HV equipment without reference to Duty SAP ■ HV work within authorisation under a Safety Document ■ LV work & testing within authorisation ■ Enter substations 	<ul style="list-style-type: none"> ■ Limitation of Access ■ Isolation Certificate (HV) without reference to the Duty SAP ■ Isolation Certificate (LV) 	<ul style="list-style-type: none"> ■ Permit to Work (HV & LV) ■ Limitation of Access ■ Isolation Certificate (HV & LV)
AP (LV)	<ul style="list-style-type: none"> ■ Isolate LV equipment ■ LV work & testing within authorisation under a Safety Document ■ LV work & testing within Authorisation ■ Enter substations 	<ul style="list-style-type: none"> ■ Isolation Certificate (LV) 	<ul style="list-style-type: none"> ■ Permit to Work (LV) ■ Limitation of Access ■ Isolation Certificate (LV)
CP (HV)	<ul style="list-style-type: none"> ■ HV & LV work within authorisation under a Safety Document ■ LV work & testing within authorisation ■ Enter substations 		<ul style="list-style-type: none"> ■ Permit to Work (HV&LV) ■ Limitation of Access ■ Isolation Certificate (HV&LV)
CP (LV)	<ul style="list-style-type: none"> ■ LV work within authorisation under a Safety Document ■ LV work & testing within authorisation ■ Enter substations 		<ul style="list-style-type: none"> ■ Permit to Work (LV) ■ Limitation of Access
CP (Non Elec)	<ul style="list-style-type: none"> ■ Enter substations ■ Non electrical work within authorisation. 		<ul style="list-style-type: none"> ■ Limitation of Access

Responsibilities

Group Harbour Master

The Group Harbour Master shall ensure that:

1. A suitably trained and experienced management team is assigned responsibility to ensure an appropriate permit-to-dive system is introduced;
2. appropriate procedures are established and maintained for all dive operations done under the permit-to-work system;
3. arrangements are made for the workforce to be made aware of the permits and permissions process;
4. the permit-to-dive system is monitored to ensure that it is effective and correctly applied;
5. the permit-to-dive system is audited and reviewed;
6. copies of permits, permissions or records of their issue, are kept for a specified period to enable auditing or incident investigation;
7. sufficient resources are provided to enable the permit-to-dive system to be properly implemented.

Marine Management Team (acting as the client, permit authoriser or location Responsible Person)

As part of their duties, assigned by the Group Harbour Master, the Marine Management Team should ensure that the following;

1. All work requiring a permit-to-dive or permission is identified;
2. the permit or permission contains a clear description of the work to be done, its location, start time and duration;
3. permits or permissions for work activities that may interact or affect another site activity are adequately controlled;
4. all other work that would create a hazard if undertaken at the same time is suspended and made safe;
5. limitations on the timing and scope of the work are defined as well as actions to be taken in the event of site emergencies;
6. ensure that they appoint a diving contractor who is competent to undertake the duties and ensure they are adequately inducted;
7. identify known hazards to the diving contractor, such as tides, currents, location of sluices and other underwater obstructions and contaminated water;
8. support the diving supervisor and diving contractor in the event of an emergency;
9. to ensure they countersign the permit and carry out the appropriate permit site visits as prescribed in the Permit Authorisation and Supervision section below.

Terminal Management Team (acting as client, acting as Terminal/Location Responsible Person)

When dive operations are taking place within the Terminal area, the Terminal Manager shall ensure;

1. That a responsible person is appointed within the terminal to co-ordinate and control **the finalised issue and return of permits**. The terminal manager must nominate a representative with sufficient authority to carry out this function on their behalf;
2. the terminal manager is responsible for landside site safety, to ensure that the area used by the dive team is free from hazard, including infrastructure and terminal equipment hazards to divers, allowed adequate space to operate and access to the area is well signed and restricted as necessary;
3. to ensure they countersign the permit and carry out the appropriate permit site visits as prescribed in the Permit Authorisation and Supervision section below and comply with the issue, use and closure instructions;
4. terminal managers are to be aware of all waterside hazards within their terminal and ensure they have a full operational picture for the duration of the permit.

Local Port Service Team (acting as a marine area advisor)

When dive operations are taking place, the LPS operator shall;

1. Identify conflicting shipping movements and record on the permit or permission form
2. If intended dive is in conflict with potential hazards, including tugs, workboats and dredgers, inform the permit authoriser before countersigning the permit or permission form.
3. Countersign the permit or permission and forwards to the Terminal/Location Responsible person;
4. For the period of the dive operation; have available HW/LW and slack tide times;
5. record when dive operations commence and the diver(s) enter the water. Record when the diver leaves the water and when operations are suspended and dive operations are complete;
6. inform mariners in the vicinity or potential to cause conflict with regular VHF Nav Warnings;
7. record contact numbers for the Dive Supervisor and a second party should the need arise;
8. record initial incident or accident information (separately) and provide a copy on request;
9. retain a copy of the Dive permit or permission and ensure sufficient information is given to oncoming shifts about current and future dive operations in handovers.
10. Return the completed Dive permit or permission once diving is complete to the Marine Manager.

Dive Contractors' Management (acting as permit recipient or permit user)

The management of contracting companies should:

1. Ensure that they understand the principles of Diving at Work Regulations 1997 ACOP L104/2014 and all subsequent amendments;
2. Provide a Dive Project Plan and RAMS to the Harbour Authority;
3. ensure that they hold a copy of Clydeport's Dive Policy;
4. ensure that all performing authorities and permit users are properly trained, and understand the permit-to-dive system noting general conditions, precautions and controls and/or any other specific arrangements made for a job, area or location in which they are to work;
5. ensure that up-to-date records of trained performing authorities are kept. It is the responsibility of every person who has control over, or is engaged in a diving project to do his or her utmost to ensure the safety of every person engaged on that project

A diving contractor must be appointed in writing before the dive project begins and if two or more contractors are working together then they must agree that only one of them acts as the main diving contractor.

Dive Companies operating within the Clydeport Jurisdiction will be subject to audit prior to being placed on a list of Approved Dive Companies for the Clyde. Non-compliant Dive Companies will not be permitted to operate within the Clydeport Harbour Authority district.

Dive Contractors' Supervisory personnel (acting as permit recipient or permit user)

The Dive Supervisor, whether employed by the Harbour Authority (Permit to Dive) or by a third party (Permission to Dive), should ensure before the start of the diving project, that:

1. The diving project is properly and safely managed
2. Ensure that risk assessments are carried out
3. Ensure that diving is carried out from a safe and suitable place
4. Ensure a suitable diving project plan is prepared, including emergency procedures
5. The supervisor and dive team is fully briefed and aware of the contents of the dive plan
6. There is a sufficient amount of qualified and competent personnel on the dive team to carry out the project safely
7. Appoint supervisors in writing and state the extent of their control
8. Ensure that plant and equipment is mobilised safely and all members of the dive team is familiar with the equipment
9. Ensure a dedicated compression chamber is available for the duration of the dive project
10. Adequate first aid training, first aid trained personnel and equipment are on site
11. As far as is possible ensure the whole team is fit for the task
12. Diving project records are kept in a clear and concise format and are stored safely for at least two years after the last entry
13. All other relevant legislation is complied with
14. they and the people working with them understand the operation of (and the consequences of non-compliance with) the permit-to-Dive System;
15. fully understand their responsibilities under the permit-to-dive;
16. they inform the Permit Authoriser when a job has been completed, suspended, conditions alter or if the task needs to be altered;
17. no diving is to take place until a permit has been issued;
18. **If in doubt, STOP THE JOB!**
19. The dive project is not necessarily complete once the last diver has returned to atmospheric pressure. Many decompression procedures require the diver to remain in the close vicinity of a compression chamber for a specified time in case there is a need for treatment of symptoms of decompression illness. The diving project is only completed once that time period has expired.

Simultaneous activities

The Terminal/Location Responsible Person is responsible for controlling and deconflicting simultaneous/ adjacent area activities. That person shall have an overview of all operations on site, planned and under way.

The Terminal/Location Responsible Person is to liaise with the LPS and the Permit recipient to ensure dive site safety is not compromised. This may include additional control measures, (such as VHF Navigational warnings by Estuary Radio) or constraints and the use of Notice to Mariners (NtM) to highlight the operation.

The Dive Supervisor shall inform the LPS Operator/Harbour Authority of any diving incident. The Dive Contractor shall share the full report of a diving related incident to the Harbour Authority for further investigation/lessons identified as required by the Port Marine Safety Code.

Permit Authorisation and Supervision

A permit-to-work system will be fully effective only if the permits are co-ordinated and controlled by a Permit Authoriser and there is adequate supervision and monitoring of the system to make sure that the specified procedures are being followed.

Site visits may be carried out by the Permit Authoriser and/or the Terminal/Location Responsible Person to check whether the conditions of the permit are being complied with at the start and towards completion of the task, with interim checks depending on hazard, complexity and duration of task. Managers or supervisors should not rely solely on scrutinising forms to see whether they have been completed properly but should carry out additional checks of issuer's forms on a sample basis.

Where the potential for harm is considered to be particularly high, the permit should be seen by a second authorised person before issue, ie the authorisation procedure should be more rigorous. In any case, a person should not issue a permit to themselves.

Permit Training

Clydeport Harbour Authority, terminal and engineering managers are to attend the Professional Diving Academy – Diving Projects Awareness Workshop. Internal training for the issue of Permissions and Permits is also undertaken.

Permits and Permissions

Dive Permission - Permissions are given for commercial diving operations contracted by third parties within the harbour area. They are issued by the Harbour Authority and countersigned by the LPS operator and terminal manager before the operation can take place.

Dive Permit - Permits to dive are used when the Harbour Authority, Peel Ports terminal managers or engineering manager wish to contract a commercial dive company and are therefore considered the Client.

Third Party Terminals, jetty, berth owners and Marinas within the Clydeport Statutory Harbour Limits are required to issue their own Dive Permit but still require Clydeport Dive Permission prior to any Dive operation on their berth/Terminal. Other Statutory Harbour Authorities within Clydeport's Statutory Harbour limits will issue their own Dive Permit in accordance with their Policies and Procedures.

Monitoring and Auditing

The Harbour Authority is responsible for monitoring the effectiveness of the Clydeport Dive Policy and shall review periodically.

Group Marine shall audit the policy and its effectiveness annually and 3 yearly by the DP.

Dive Companies operating within the Clydeport Jurisdiction will be subject to audit prior to being placed on a list of Approved Dive Companies for the Clyde. Audits aimed to be repeated no longer than every 3 years after

initial audit. None compliant Dive Companies will not be permitted to operate within the Clydeport Harbour Authority district.

Emergency Support Arrangements

Emergency support arrangements should be part of the dive project plan and this information exchanged before permit authorisation.



CLYDEPORT DIVE PROCEDURES



Issue Instructions

Dive Permission - Permissions are given for commercial diving operations contracted by third parties within the harbour area. They are issued by the Harbour Authority and countersigned by the LPS operator and terminal manager before the operation can take place. For example;

Scenario 1 - a vessel arrives on a berth with a suspected rope or wire around a prop. The Agent would book a dive contractor to dive on the ship to investigate and rectify the issue.

The ship in this case is the Client. The dive contractor under the Clydeport Dive Policy will require a permission. To obtain a permission to dive, the contractor must supply their completed permission form, Dive Project Plan and RAMS to the Harbour Authority.

The Harbour Authority must ensure that the diving contractor;

- is aware of known hazards within the diving area (sluices, intakes, ship movements, underwater obstructions, currents and tides etc.);
- requires records of meetings with the diving contractor to be kept (copies of the dive permission and associated documentation is to be kept for 3 years);
- that dive operations take place in accordance with the Diving at Work Regulations 1997 ACOP L104/2014 and all subsequent amendments.

Dive Permit - Permits to dive are used when the Harbour Authority, terminal managers or engineering manager wish to contract a commercial dive company and are therefore considered the Client. In this case, the following should be ensured;

- That they appoint a diving contractor who is competent to undertake the duties;
- ensure that the site is safe to use;
- identify known hazards to the diving contractor, such as tides, currents, location of sluices and other underwater obstructions and contaminated water; and
- support the diving supervisor and diving contractor in the event of an emergency.

The responsibilities have been achieved through the Clydeport Dive policy and by appointing a contractor who has been through the Control of Contractors process, a group-wide controlled document and procedure.

Permits to Dive are issued initially by the Harbour Authority and responsibility handed over to the Terminal Managers or if outside the terminal area, by the Harbour Authority. **It should be noted that there are many scenarios and therefore the system should be flexible enough to meet that. Involvement in the issuing, authorisation and area control might be the one person or a department.**

Scenario 2 – A fender falls from the quay wall at GOT into the water and sinks to the seabed. Tidal flow over the next day or two sees the fender move and settle some distance off the quay.

In this case the terminal and therefore Clydeport is the Client. A permit to dive must be raised.

The approved dive contractor must submit a dive request form to the Harbour Authority and provide a dive project plan and associated RAMS. The Harbour Authority will issue a numbered dive permit to the terminal/engineering manager who becomes the Permit Authoriser and responsible for the permit. It must be countersigned by the

Harbour Authority and the LPS in line with the requirements of the Peel Ports Clydeport Dive policy. When the dive operation is completed or suspended and or the permit duration time is reached, all permits are to be returned to the Harbour Authority

Third Party Terminals, jetties, berth owners/operators and Marinas are to issue their own Dive Permit in accordance with their own procedures, but the Dive Contractor will still have to submit a Dive Request form for a Clydeport Dive Permission. Other Statutory Harbour Authorities within Clydeport's Statutory Harbour limits will issue their own Dive Permit in accordance with their Policies and Procedures.

See Aid Memoire Dive Request and Procedure Flow Diagram.

User Instructions

Communication – Communications across numerous stakeholders, dive contractors, terminals, port users and the Harbour Authority is a major part of a successful and incident-free dive operation.

Parties are to work closely together to clearly define the hazards and mitigation measures.

Permit copy locations – Copies of issued dive permits or permissions should be in the following locations;

1. At the Dive site with the Dive Supervisor;
2. With the Permit Authority (third party, terminal/engineering manager or harbour authority)
3. Clydeport LPS Operators Desk

Closure Instructions

Task duration – A Dive permit is valid for the time period specified to safely complete the dive operation and shall in any event not exceed 24hrs. Permits are to be cancelled on completion of the dive operation¹. Where a dive operation's duration exceeds the time issued or if work is carried over to another shift, eg the job takes longer than expected, then a shift handover procedure should take place. The initial permit expires 24 hours from the time it was signed. Where the operation exceeds 24hrs, a new permit must be issued for a further 24hrs to continue a dive operation.

Dive Permit Suspensions

A dive permit can be suspended during the validation of the permit. This may occur for several reasons and could include, but not be limited to:

- a diving incident;
- a deviation from the expected dive plan;
- discovery of an unknown hazard;

¹. The dive project is not necessarily complete once the last diver has returned to atmospheric pressure. Many decompression procedures require the diver to remain in the close vicinity of a compression chamber for a specified time in case there is a need for treatment of symptoms of decompression illness. The diving project is only completed once that time period has expired

- discovery that an isolation has not been completed correctly or has been compromised;
- shore or shipping movement which may cause a hazard to divers in the water.

In any event, where the Diving Supervisor, the Terminal/Location Responsible Person, the Clydeport Engineer, the LPS Operator, Permit User or the Permit Authoriser discovers an anomaly or unforeseen risk to the divers in the water, then the dive supervisor will recover the divers to the surface and the dive operation should be immediately suspended and annotated on the permit. The dive site/project should then be re-assessed and made safe before the suspension is lifted and the permit re-validated. See Aid Memoire Dive Permit Suspension Process.

If a permit is suspended, the suspended permits should be kept on the permit recording file. In addition, the condition in which any plant, system or infrastructure has been left and the consequences for other activities should be specified. The work should not be restarted until the Permit Authoriser has verified that it is safe to do so, and has revalidated the permit or issued a new permit. If work is left under a suspended permit, integrity of safety systems or the security of any isolation that has been made is important, and should not be assumed to be safe for normal or other use.

Handover Procedure

This should ensure that the oncoming shift is aware of any outstanding permits, the status of those works/dive operations, and the status of the plant, system or infrastructure. Work-in-progress should be left in a condition that can be reliably communicated to, and understood by the oncoming shift. A permit log/file or display board shall show a record of ongoing permits. It is essential that there is good communication between incoming and outgoing performing authorities and it is recommended that incoming LPS operators sign the log/file to evidence continuity within the dive operation.

Hand-back Procedure

Where equipment, system, plant or infrastructure has been isolated to facilitate safe dive operations, a formalised hand-back procedure is to be followed. The performing authority, (ie the person to whom the permit was issued) shall confirm that the work has been completed, the equipment, system, plant or infrastructure has been returned to a safe condition and in particular if isolations have or have not been removed. The Permit Authoriser must sign to acknowledge that status and is responsible for ensuring the equipment, system, plant or infrastructure owner is aware and content to take back responsibility.

Emergency Support Arrangements

Emergency support arrangements should be part of the dive project plan and this information exchanged before permit authorisation.

Issuing Authorities are to ensure that action in the event of a dive emergency is clear to both the issuing and performing authorities and the following information is available to the Dive Supervisor;

- Additional first aid equipment and its location
- Local information including directions and access to the dive site for emergency services

- Primary and secondary compression chamber locations (primary should be dedicated to the dive project if decompression is planned or likely)
- Nearest Accident and Emergency
- Local transportation (taxi services).

The Aid Memoire flow diagram, in the event of a Diving Incident, should be used as Guidance.

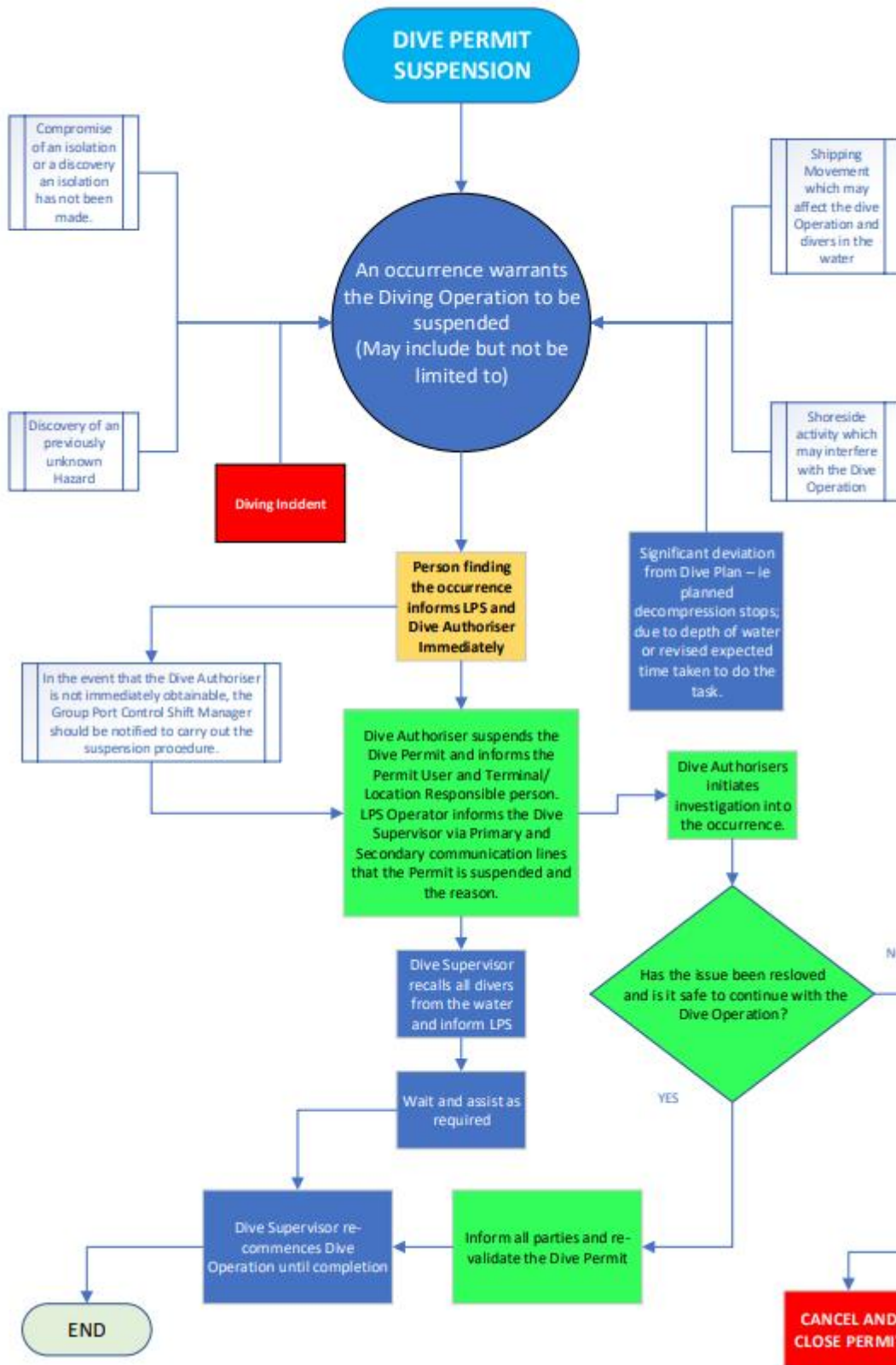
AID MEMOIRE – DIVE REQUEST AND PROCEDURE FLOW DIAGRAM



AID MEMOIRE – ACTIONS IN THE EVENT OF A DIVING INCIDENT



AID MEMOIRE – DIVE PERMIT SUSPENSION PROCESS



CLYDEPORT HAZARD DATA SHEETS

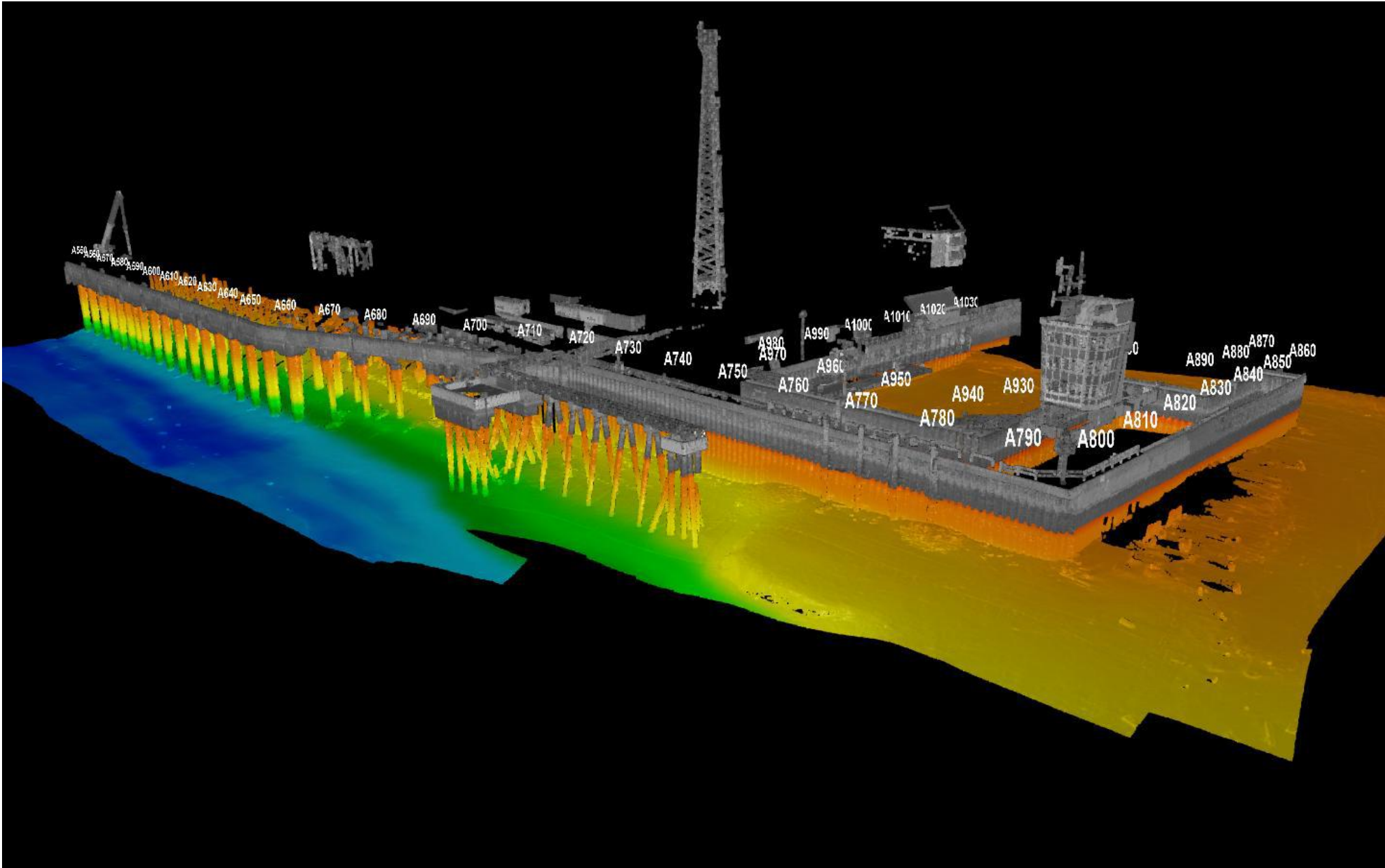
The following data has been collated to ensure dive contractors carrying out work in the terminals of Clydeport are aware of known hazards.

The following terminals are covered;

1. Greenock Ocean Terminal (GOT)
2. Great Harbour – Inchgreen Repair Quay
3. Rothesay Dock (RD)
4. King George V Dock (KGV)
5. Hunterston

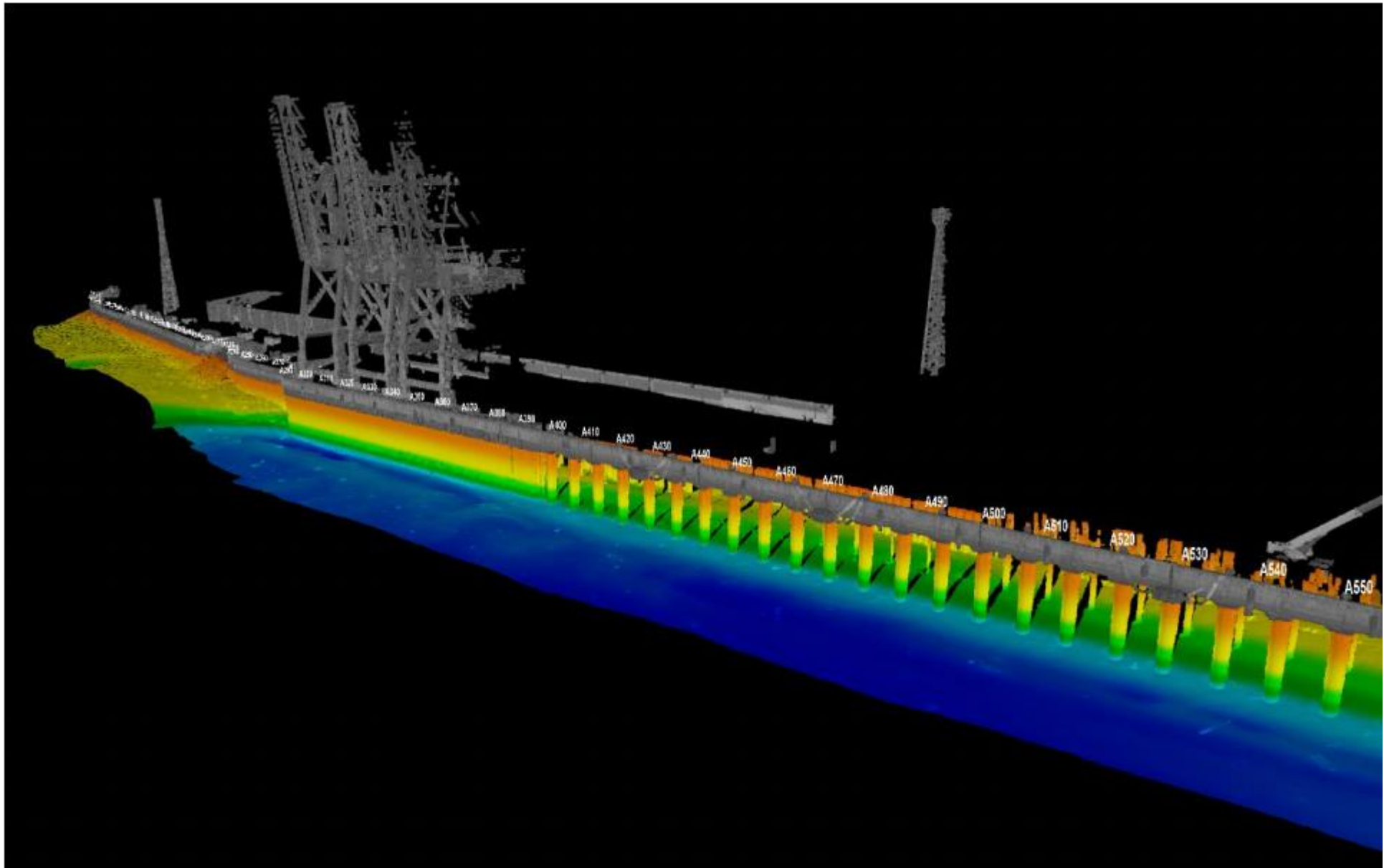
For diving operations outside these areas, dive contractors should consult with the Terminal Operator or Owner for specific hazards associated with the area they intend to dive.

GOT WEST - *Overview of underwater structures and seabed topography*





GOT EAST - Overview of underwater structures and seabed topography



200ft
100m



GOT EAST

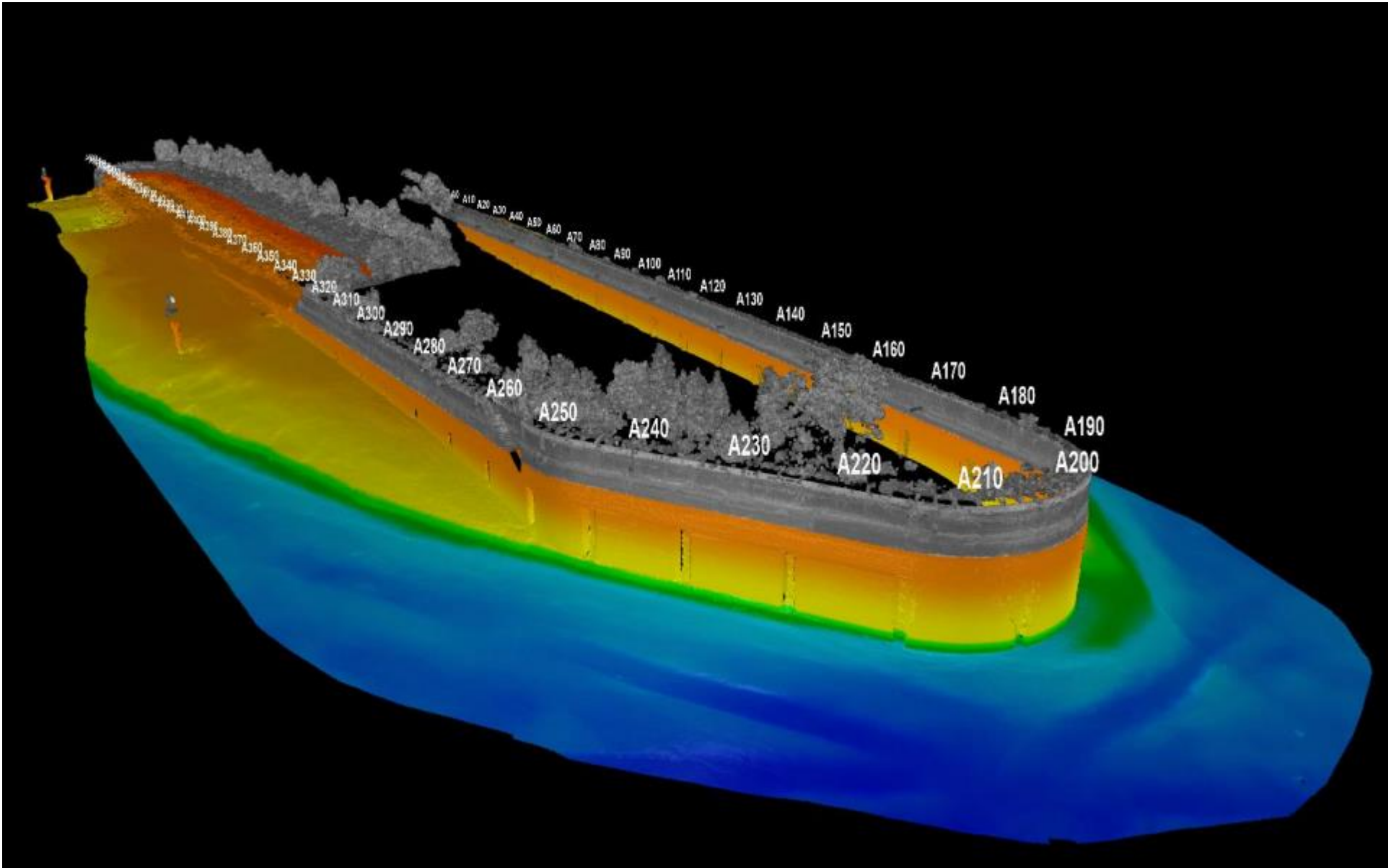
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200ft
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INCH GREEN REPAIR QUAY AND DRY DOCK ENTRANCE

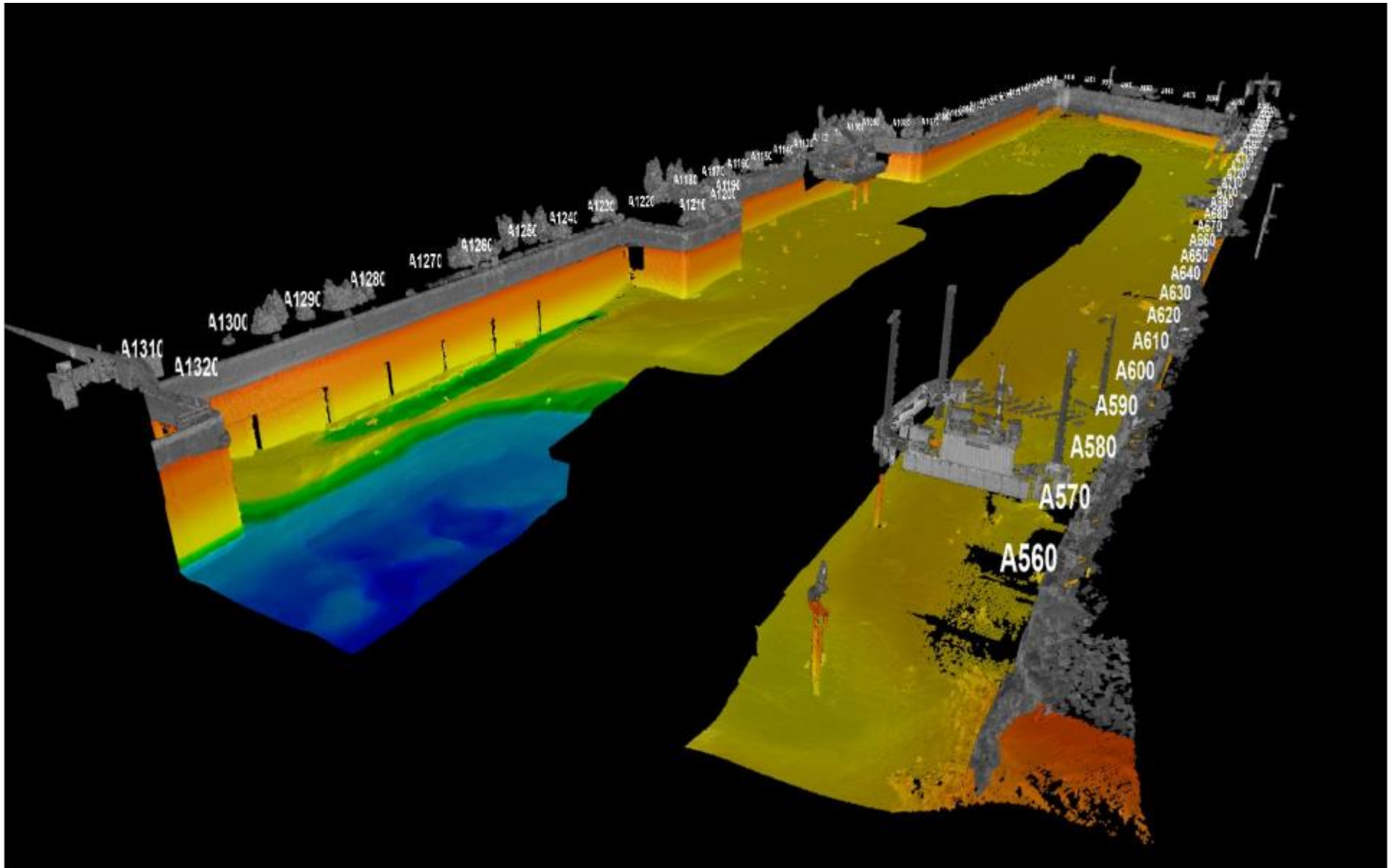
ROTHESAY DOCK ENTRANCE – EAST KNUCKLE - *Overview of underwater structures and seabed topography*





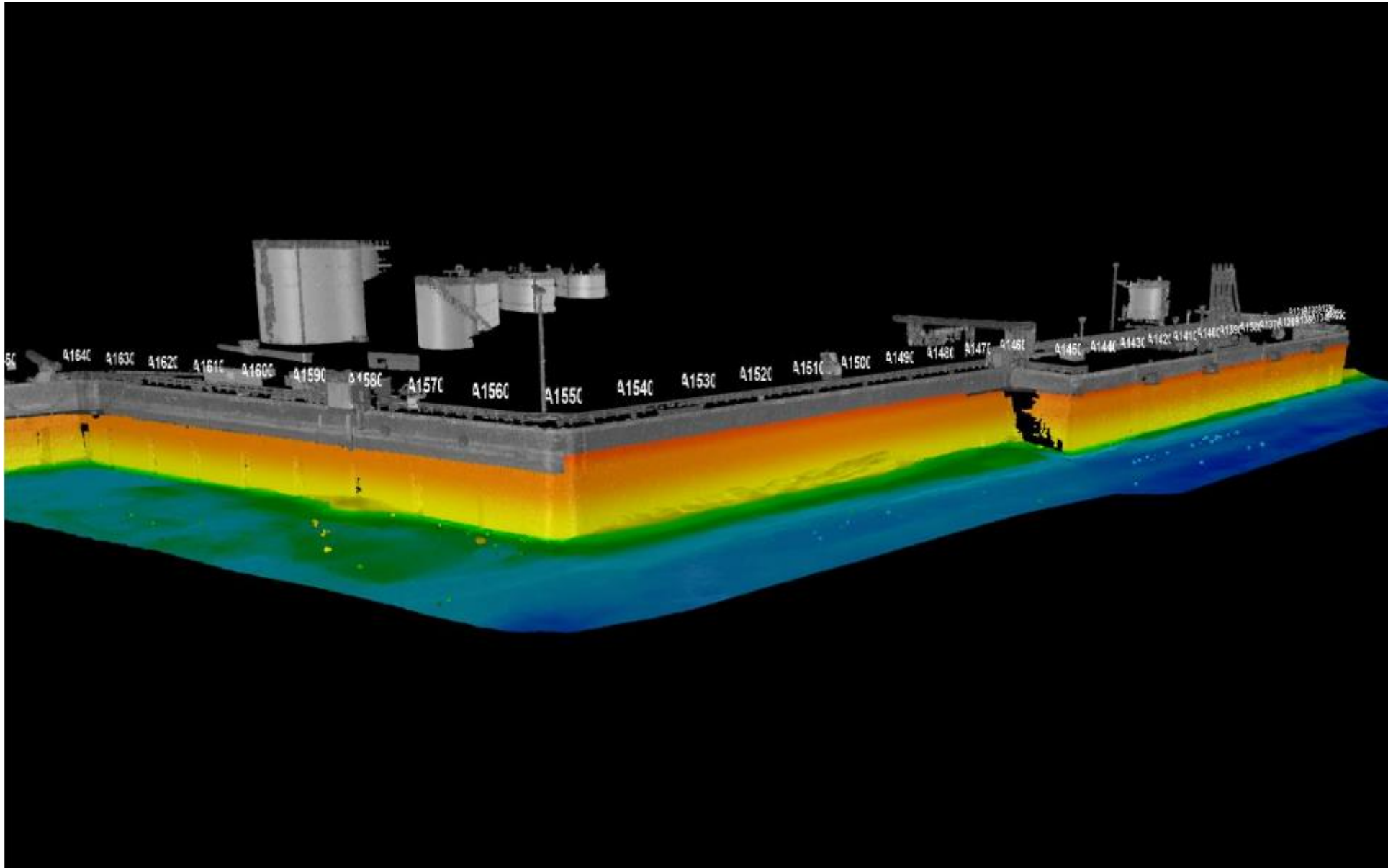
ROTHESAY DOCK ENTRANCE

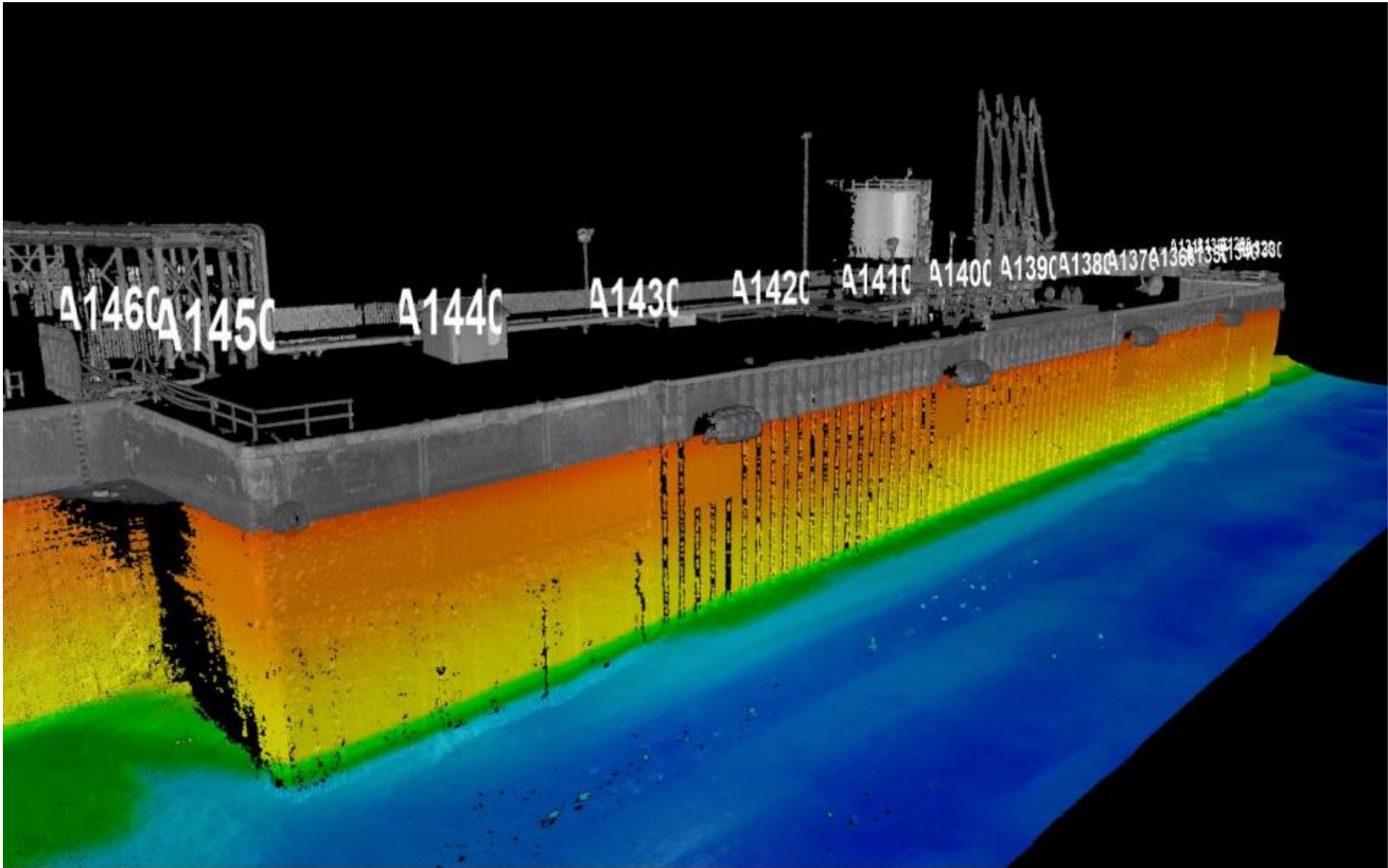
ROTHESAY DOCK – EAST END BOAT YARD - Overview of underwater structures and seabed topography

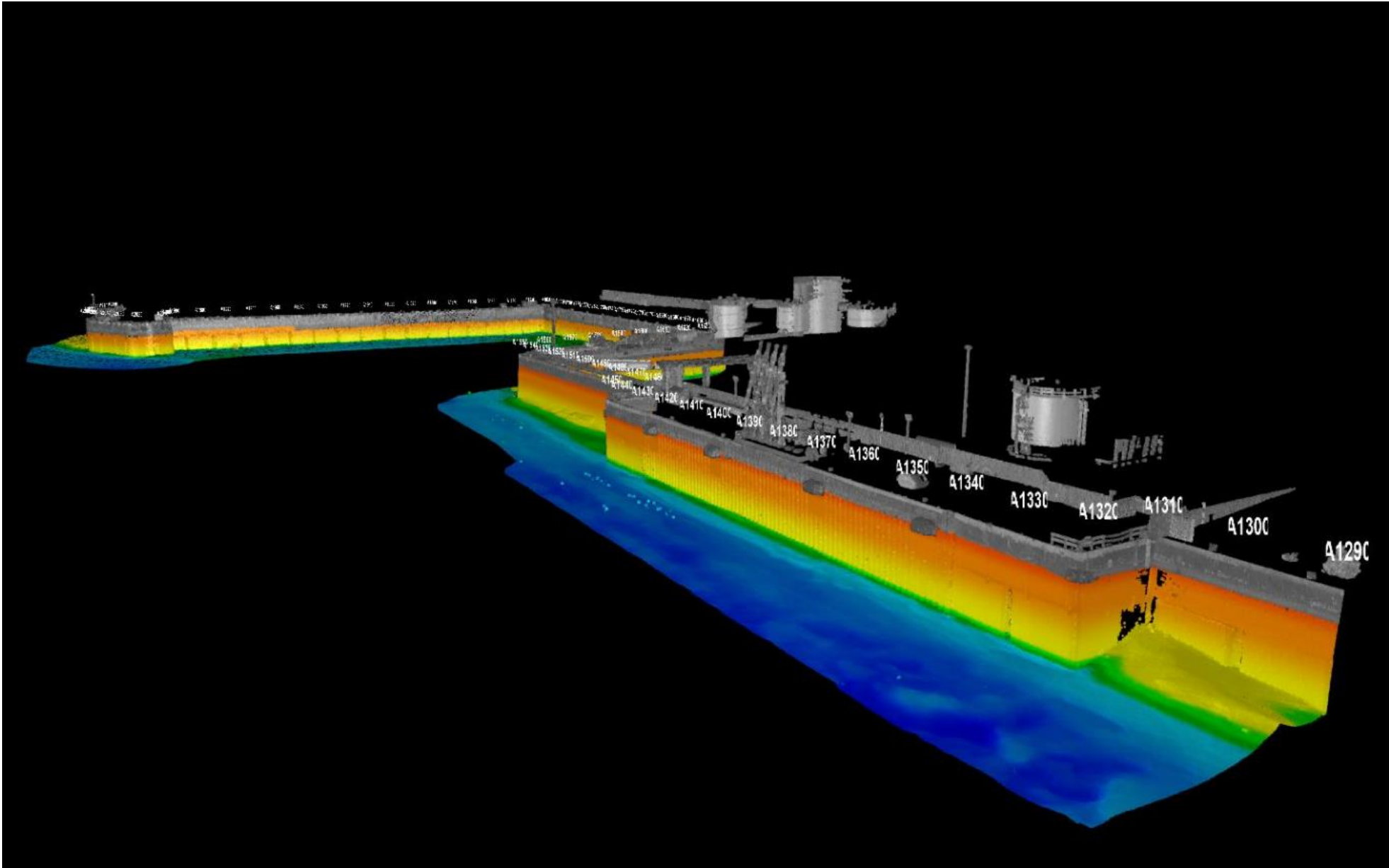




ROTHESAY DOCK FUEL TERMINAL - *Overview of underwater structures and seabed topography*

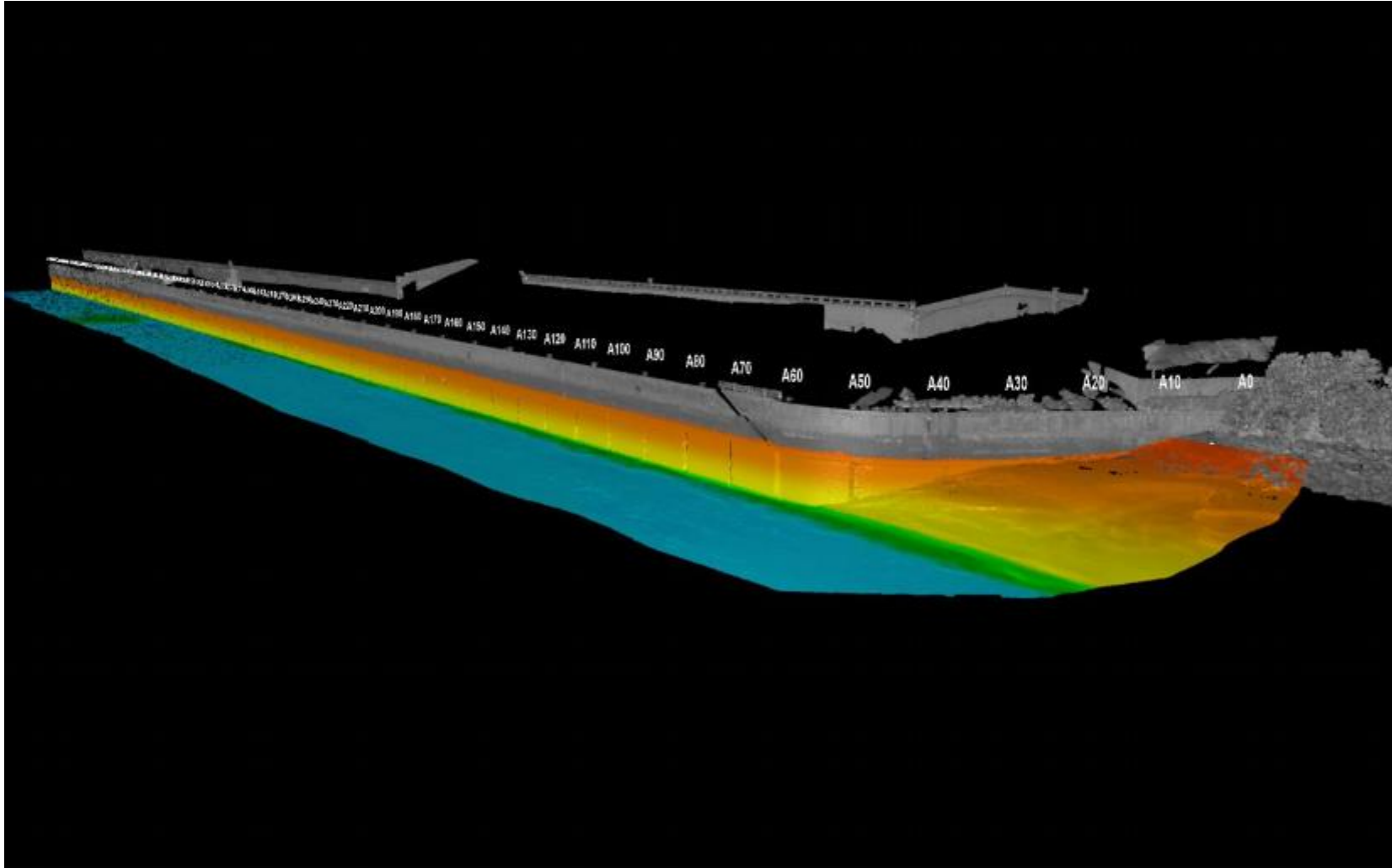






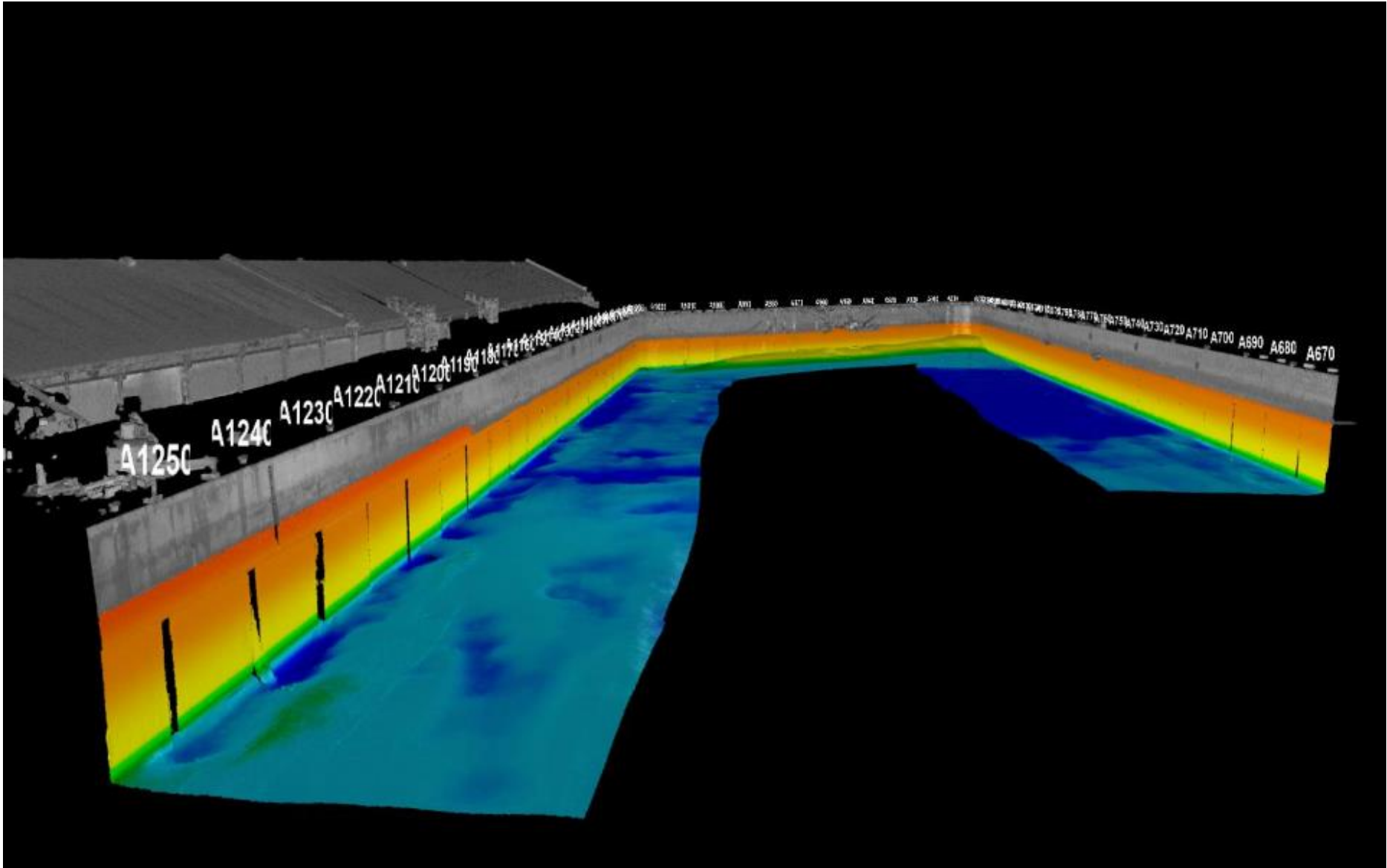


KGV BASIN WEST SIDE - Overview of underwater structures and seabed topography





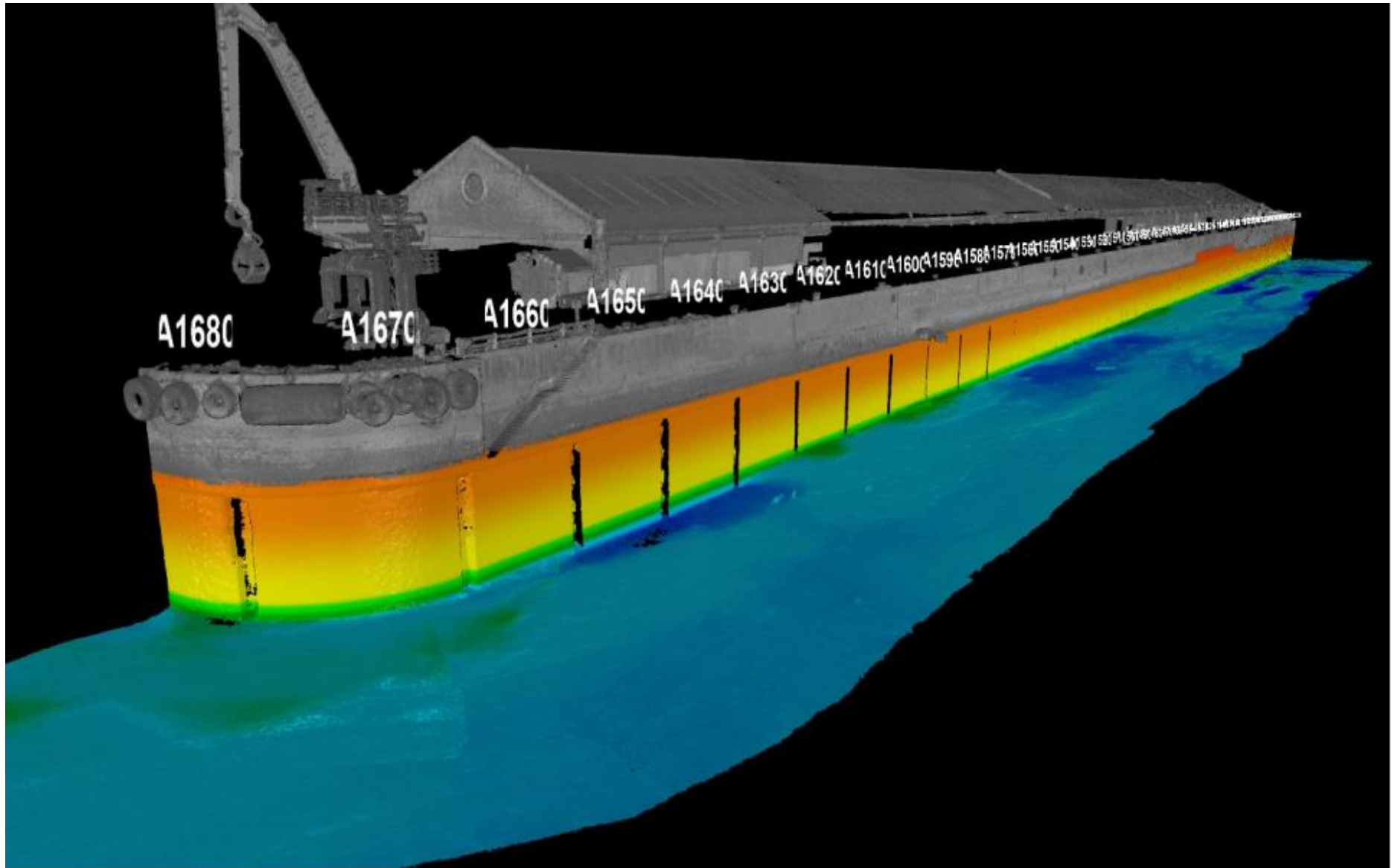
KGV BASIN SOUTHERN END - *Overview of underwater structures and seabed topography*





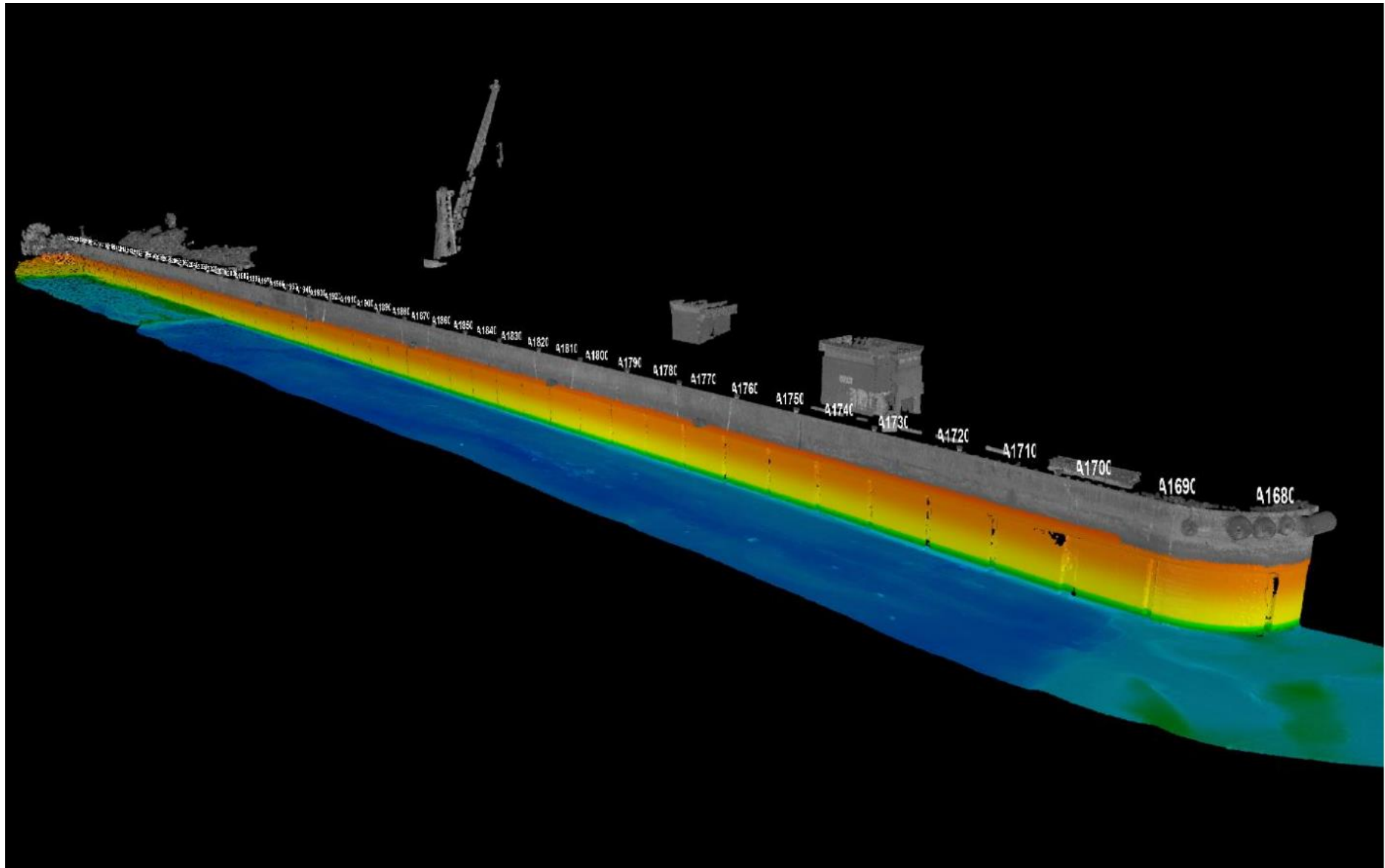
KGV BASIN SOUTHERN END

KGV BASIN EAST SIDE - Overview of underwater structures and seabed topography





KGV RIVERSIDE – SHIELDHALL AND ADAMS - Overview of underwater structures and seabed topography

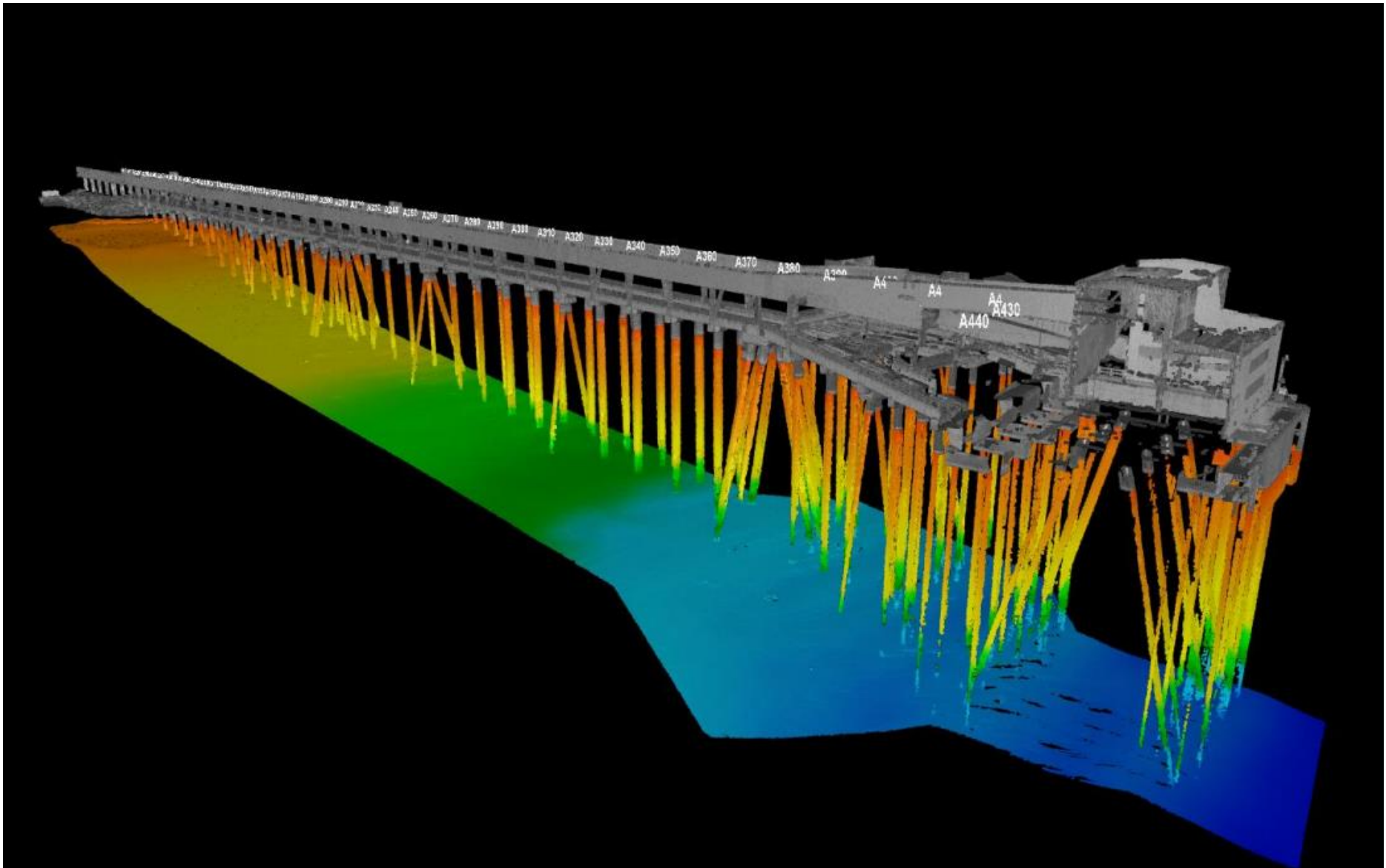


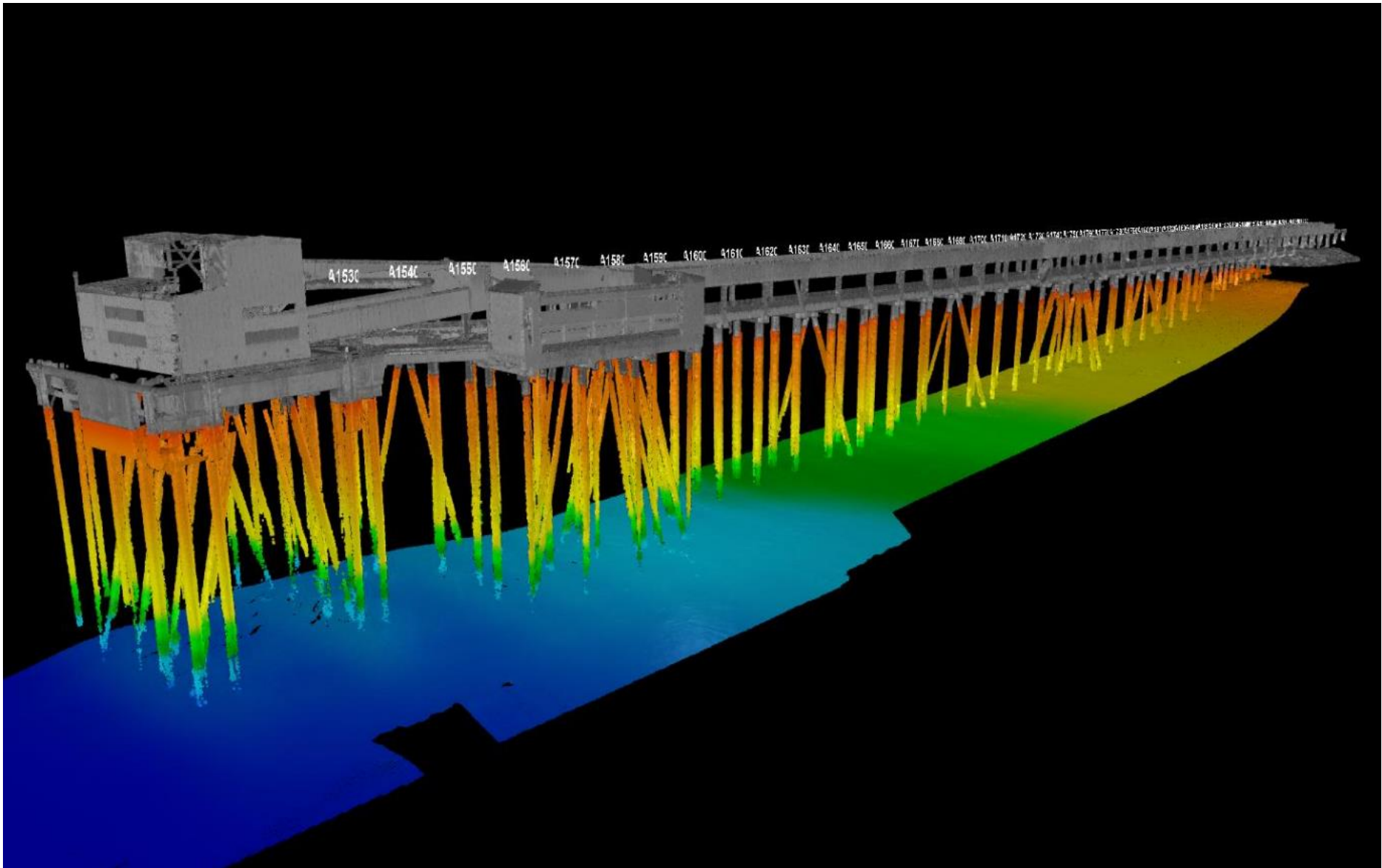
200ft
100m



KGV RIVERSIDE – SHIELDHALL AND ADAMS

HUNTERSTON PARC – JETTY APPROACH - Overview of underwater structures and seabed topography



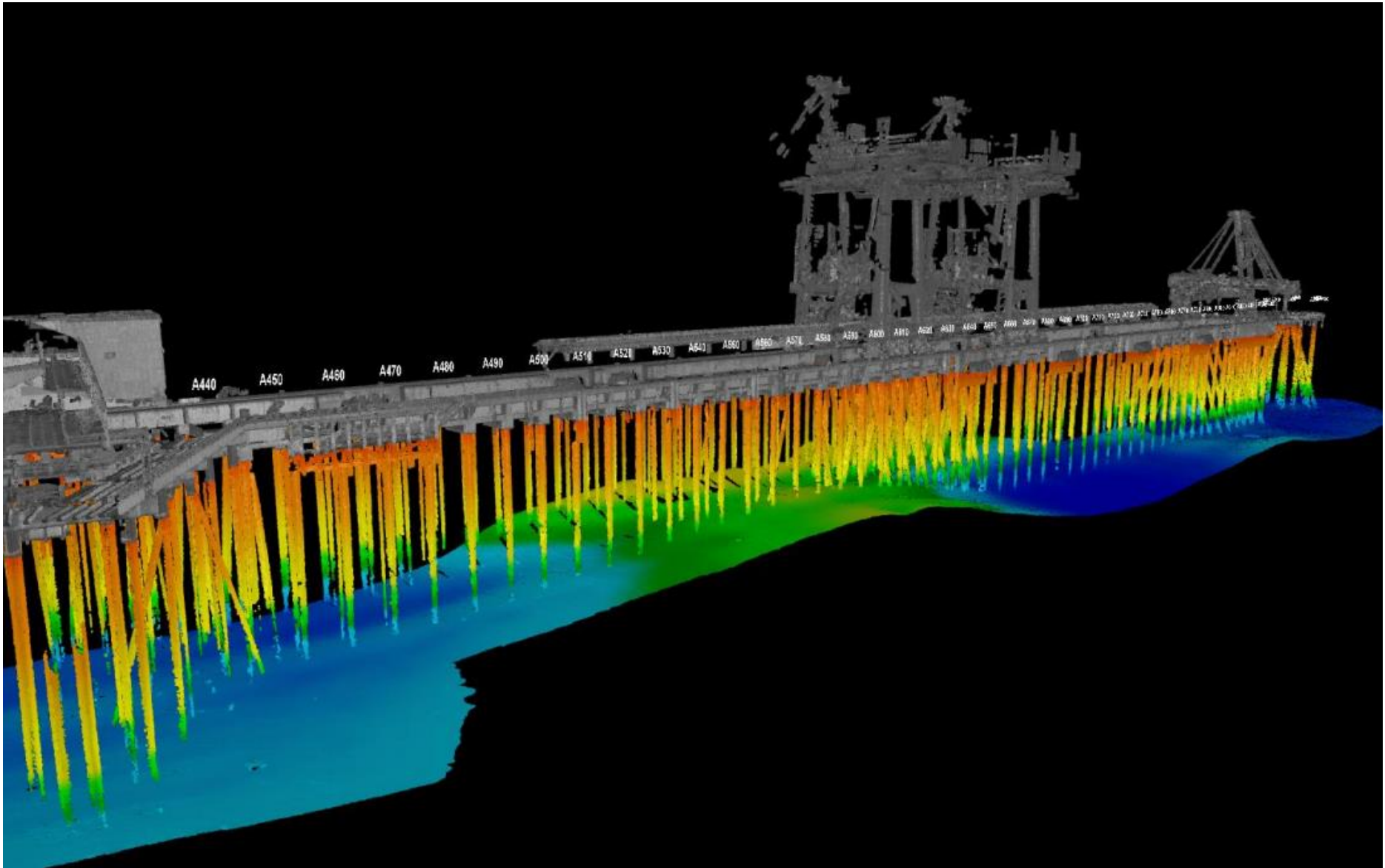


200ft
100m

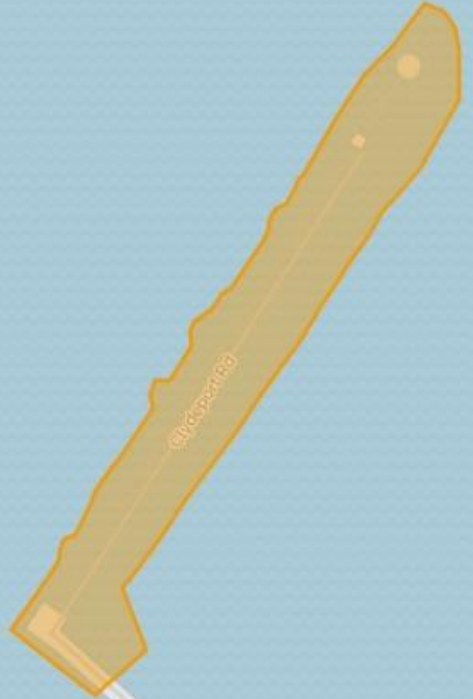


Glydeport Rd

HUNTERSTON PARC – JETTY INNER BERTH - *Overview of underwater structures and seabed topography*



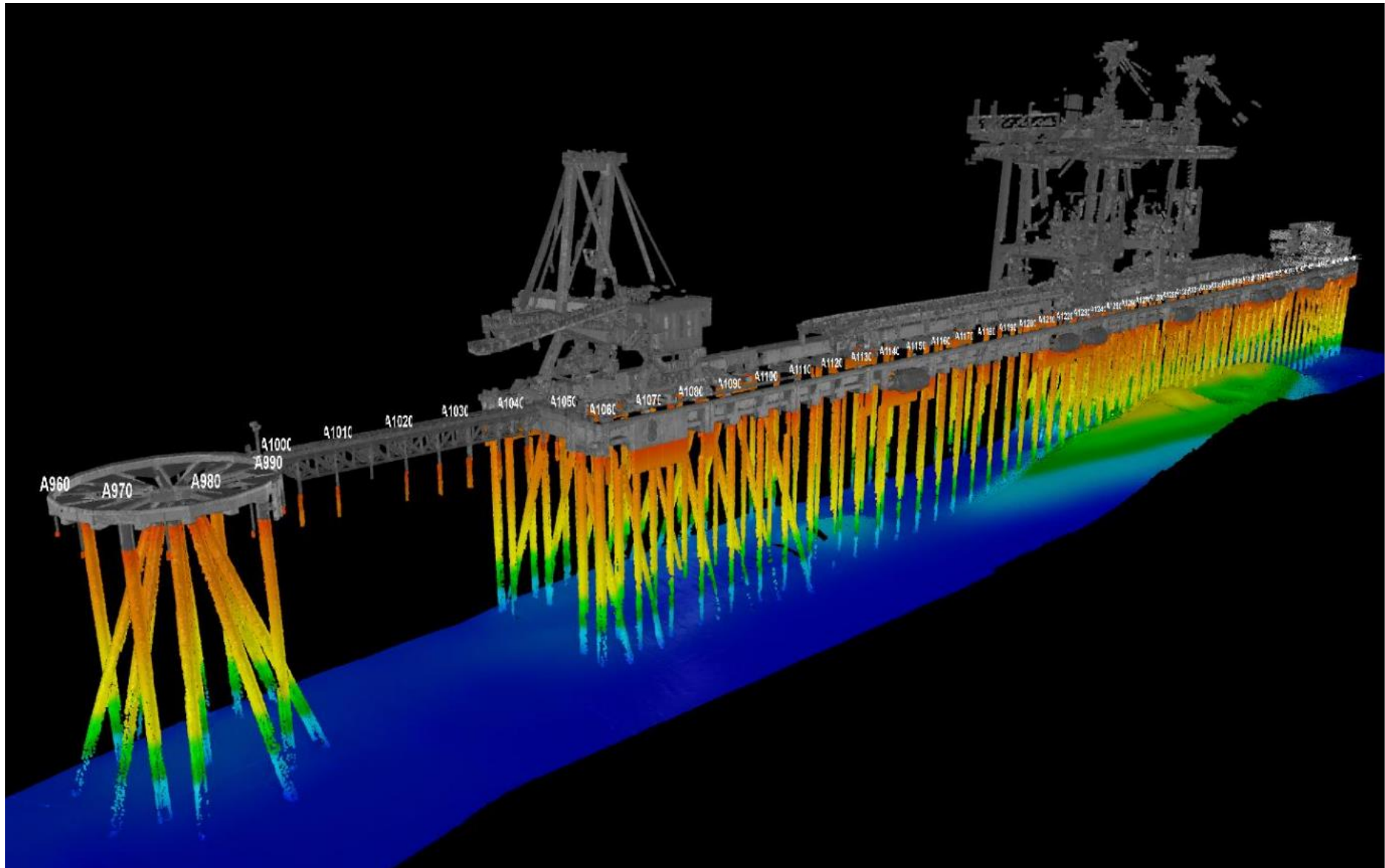
500ft
200m



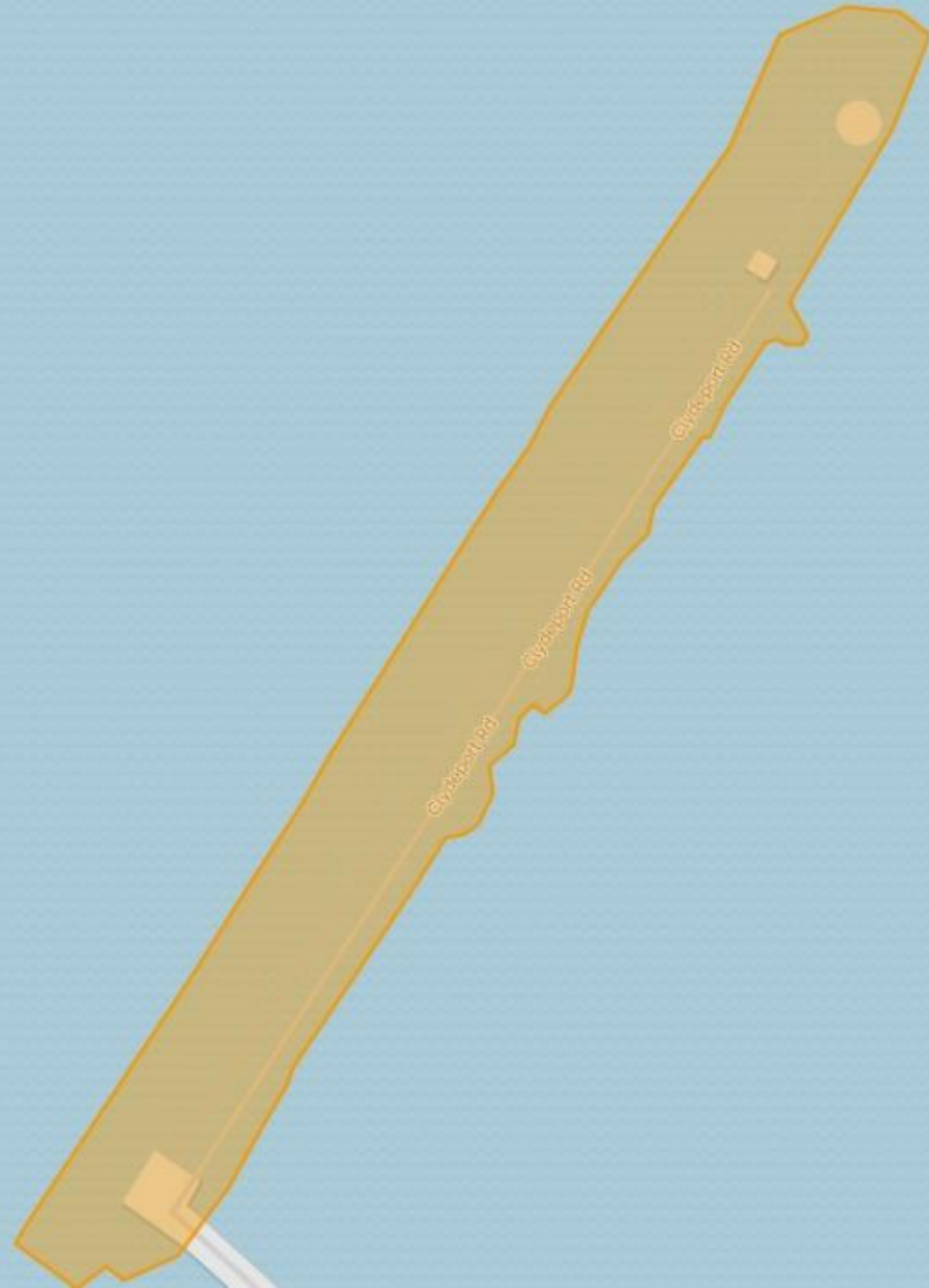
Glydeport Rd

Glydeport Rd

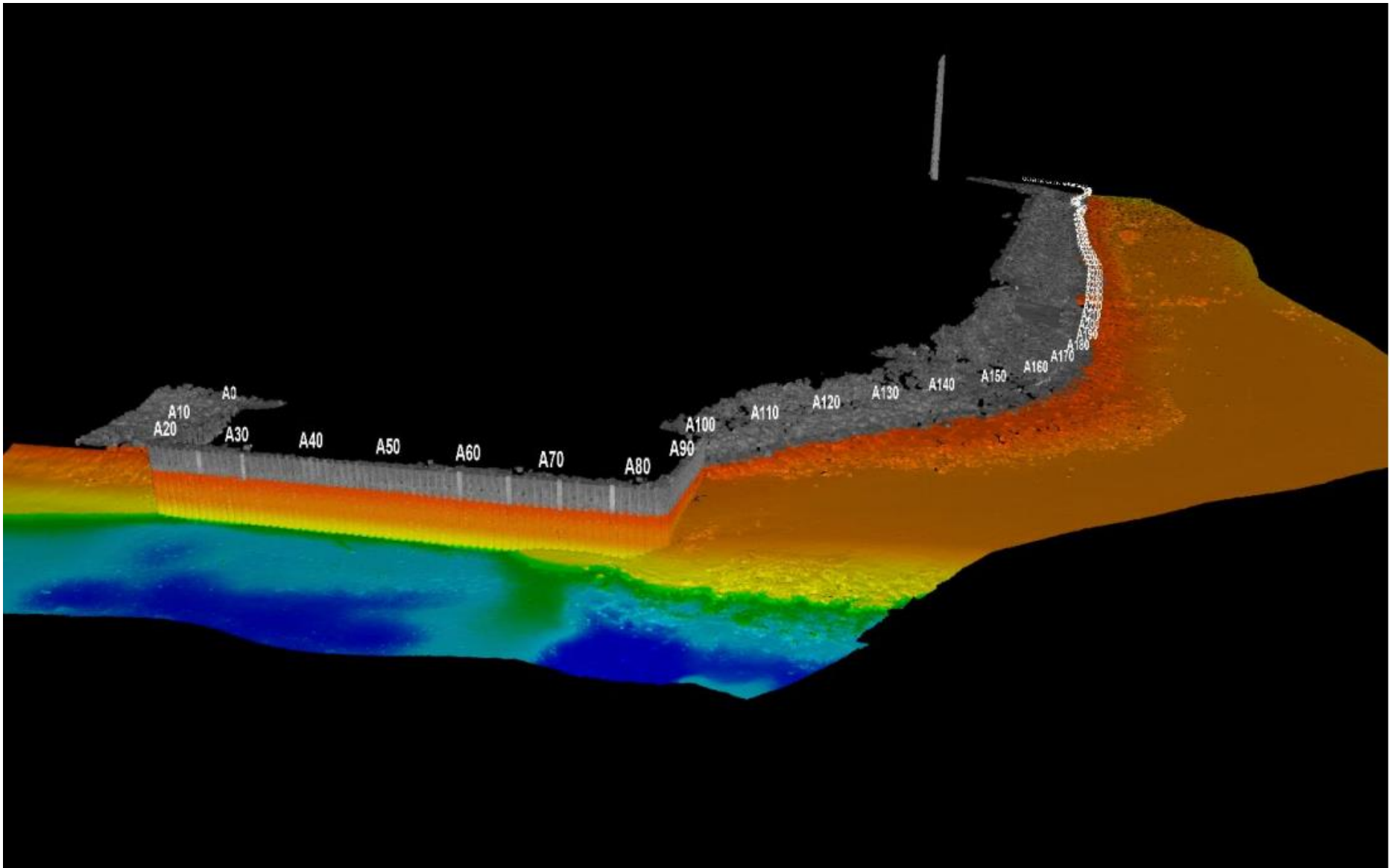
HUNTERSTON PARC – JETTY OUTER BERTH - *Overview of underwater structures and seabed topography*



200ft
100m



HUNTERSTON PARC – MARINE YARD CONSTRUCTION - *Overview of underwater structures and seabed topography*



200ft
100m

