



Flood Consequences Assessment

**27 Gnoll Park Road,
Neath,
SA11 3BT**

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1.Introduction

The following document is a Flood Consequences Assessment (FCA) carried out by Eco 360, and includes details of the site, vulnerability classification, flood linkages and an evaluation of risk.

1.1 Project Overview

The proposed development comprises the extension and reconfiguration of the existing care home at 27 Gnoll Park Road, Neath, SA11 3BT. The works include demolition of the existing conservatory, construction of a new single-storey rear extension and a first-floor extension above the existing north wing to provide 8 additional en-suite bedrooms and associated ancillary facilities.

Eco 360 has undertaken this Flood Consequences Assessment to support the planning application and to assess the potential risk of flooding to the site and the proposed development.

1.2 Purpose of Investigation

The objectives of the Flood Consequences Assessment (FCA) were to:

- Develop a detailed assessment of the site.
- Assess the acceptability of the proposed development in accordance with the justification requirements of Technical Advice Note 15 (TAN15).
- Identify potential flood sources, receptors and pathways at the site.
- Assess the level of potential flood risk.
- Determine the requirement or scope of further investigations or mitigation measures.

1.3 Scope of Work

- Introductory information has been provided to establish the context of the report, including the Introduction, Project Overview, Scope of Work and Limitations.
- To support a detailed assessment of potential flood consequences at the site and to consider the requirements of Technical Advice Note 15 (TAN15), desk based studies have been undertaken. These included a review of information obtained from Natural Resources Wales, the Local Planning Authority, national and local planning policy, Strategic Flood Consequences Assessments, and Digital Terrain Model (DTM) LiDAR topographic data.
- The information obtained has been used to identify potential flood sources, receptors and pathways, forming the basis of an initial Conceptual Site Model (CSM).
- The Conceptual Site Model has been used to assess the potential magnitude of flood consequences, including the likelihood of flood linkages, to enable an evaluation of the overall flood risk to the proposed development.
- Following the identification and assessment of flood linkages, an evaluation of flood consequences, potential mitigation measures, surface water management proposals, and safe access and egress arrangements has been undertaken, in order to determine whether the development can be considered acceptable in accordance with TAN15.
- Supporting appendices to this report include relevant site photographs, flood mapping, drawings and other technical plans.

1.4 Limitations

Eco 360 Ltd is previously and hereafter referred to as “Eco 360” or “the company”. Eco 360 has exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant when undertaking works of this nature. This report is only valid when used in its entirety and any information or advice contained within the report should not be relied upon until considered in the context of the whole report. Eco 360 disclaims any responsibility to the client, as named on the front of this report (“the client”), and others in respect of any matters outside the scope of this work. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate. This report has been prepared solely for the benefit of the client and any other party using or placing reliance upon any information contained in this report does so at their own risk. Eco 360 accepts no responsibility or liability for the contents of this report being used for any purpose or project for which it was not commissioned. Eco 360 accepts no liability whatsoever for any loss or damage arising from the interpretation or use of this report and in no event shall the company be liable for any punitive, exemplary or other special damages, or for any indirect, incidental or consequential damages, including with respect to the performance or non-performance of any services, whether arising under breach of contract, tort or any other legal theory, and regardless of whether the company has been advised of, knew of, or should have known of the possibility of such damages. Furthermore, Eco 360 does not accept any liability for the consequences of any legislative changes or the release of subsequent guidance documentation and following delivery of the report has no obligation to advise the client or any other party of such changes or their repercussions.

This report excludes consideration of potential hazards arising from any activities at the site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities. Eco 360 does not warrant or guarantee that the site is free of hazardous or potentially hazardous materials or conditions. It should be noted that this report has been produced for environmental purposes only.

2. Site

The following section provides a description of the site, location, proposed development and vulnerability classification, utilising information obtained from the client and publicly available sources.

2.1 Site Description and Location

The site is located at 27 Gnoll Park Road, Neath, SA11 3BT, within an established urban residential area forming part of the wider Neath settlement in the administrative area of Neath Port Talbot County Borough Council. The surrounding area is characterised predominantly by residential land uses, associated local road infrastructure, and urban surface water drainage networks.

The application site comprises an existing care home building and its associated curtilage, situated within a developed urban block. Surrounding land uses include residential properties to the north, south, east and west, with Gnoll Park Road providing connectivity to the wider Neath town area.

Review of the topographical survey referenced to Ordnance Datum (mAOD) indicates that ground levels across the site range from approximately 12.5 mAOD to 13.0 mAOD, with an average elevation of approximately 12.8 mAOD. The general land gradient across the site is shallow, reflecting typical urban topographic conditions, with local variations influenced by surrounding built development and infrastructure.

A review of available LiDAR-derived Digital Terrain Model (DTM) data (1 m resolution) indicates comparable ground level values and confirms the overall shallow gradient and local topographic characteristics identified in the topographical survey.

National Grid Reference: SS 75659 97554

Easting / Northing: 275659 / 197554

2.2 Proposed Development

The proposed development comprises the extension of the existing care home at 27 Gnoll Park Road, Neath. The works involve the demolition of the existing conservatory and its replacement with a new single-storey rear extension, together with the construction of a first-floor extension above the existing north wing.

The extensions will provide a total of 8 additional en-suite bedrooms together with associated ancillary care facilities. The proposed gross internal floor areas comprise approximately 112 m² at ground floor level and 141 m² at first floor level, resulting in a combined extension area of approximately 253 m².

The development will retain the majority of the existing building footprint and overall structural form, with alterations limited to the defined extension areas and associated internal reconfiguration required to support the continued operation of the site as a residential care facility.

The proposal therefore represents an extension to the operational capacity of the existing care home through the provision of additional resident accommodation. The development includes highly vulnerable occupants; therefore flood consequences have been assessed in accordance with TAN15 tolerable conditions requirements.

3. Planning Policy Context

Development proposals in Wales must be assessed in accordance with national planning policy relating to flood risk and coastal erosion. The principal policy and guidance documents relevant to this Flood Consequences Assessment include:

- Planning Policy Wales (PPW) (Edition 11)
- Future Wales – The National Plan 2040
- Technical Advice Note 15 (TAN15): Development, Flooding and Coastal Erosion (2025)
- Natural Resources Wales Flood Map for Planning
- Natural Resources Wales Flood Consequence Assessment Climate Change Allowances guidance

TAN15 provides the primary framework for managing flood risk through the planning system by

directing new development away from areas at highest flood risk where possible. Where development is proposed within areas at risk of flooding, it must be demonstrated that flood consequences can be acceptably managed over the lifetime of the development.

Flood risk is spatially defined through the Flood Map for Planning, which identifies flood zones based on the probability of flooding from rivers, the sea, surface water and small watercourses, including allowances for climate change.

3.1 Vulnerability Classification

Note 15 (TAN15) (2025), the proposed development is classified as Highly Vulnerable Development, as it relates to the provision of residential care accommodation for occupants requiring assistance and supervision.

The proposal comprises the extension of an existing operational care home facility and therefore represents an expansion of an established use rather than the introduction of a new development type. In such circumstances, TAN15 recognises that proposals involving the extension or alteration of existing highly vulnerable uses may be considered where it can be demonstrated through a Flood Consequences Assessment that the risks and consequences of flooding can be acceptably managed over the lifetime of the development.

4. Flood Risk Overview and Flood Map Review

The NRW flood map represents the primary planning tool used to establish flood zone classification under Technical Advice Note 15 (TAN15), and has been used to define the strategic flood risk context for the site.

In accordance with Technical Advice Note 15 (TAN15), a site specific Flood Consequences Assessment is therefore required to demonstrate that:

- Flood consequences are acceptable
- The development will not increase flood risk elsewhere
- Appropriate surface water management is incorporated

4.1 Flood Risk from Rivers and the Sea

Flood zone classification has been determined using the NRW dataset Wales Fluvial Flooding.

In accordance with Technical Advice Note 15 (TAN15), flood zones are defined as:

- Zone 1 – areas at low risk of flooding
- Zone 2 – areas at medium risk of flooding
- Zone 3 – areas at high risk of flooding
- TAN15 Defended Zone – areas benefiting from formal flood defence infrastructure providing a defined standard of protection.

Flood risk from rivers and the sea has been reviewed using the Natural Resources Wales (NRW) Flood Map for Planning together with confirmation obtained directly from NRW hydraulic modelling datasets.

The NRW Flood Map for Planning indicates that the application site at 27 Gnoll Park Road lies outside Flood Zones 2 and 3 in relation to fluvial and tidal flooding. This position has been confirmed through correspondence with NRW Data Distribution, who have advised that the site falls outside their fluvial and tidal flood outlines and that no hydraulic model data exists for the site.

Accordingly, the proposed development is considered to be located within Flood Zone 1 with respect to flooding from rivers and the sea, indicating a low probability of flooding from these sources over the lifetime of the development.

4.2 Surface Water and Small Watercourses

Flood risk from surface water and small watercourses has been reviewed using the Natural Resources Wales Flood Map for Planning (Surface Water and Small Watercourses layer).

The mapping indicates that the application site do not encroach upon the building footprint or

proposed extension areas. Accordingly, the site is considered to be at low risk of flooding from surface water sources.

4.3 Flood Risk from Reservoirs

Flood risk from reservoirs has been reviewed using the Natural Resources Wales Flood Map for Planning .

The mapping confirms that the application site is not located within any mapped reservoir inundation extent. Accordingly, the site is considered to be at negligible risk of flooding arising from reservoir failure.

4.4 Other Sources of Flooding

No historical flooding incidents affecting the site have been identified based on available local authority records and consultation responses. These sources are therefore considered to represent a low-probability residual flood risk. Accordingly, these sources are considered to pose a low probability residual risk and do not materially influence the flood risk appraisal presented in this assessment.

4.5 Conceptual Site Model of Flooding

A conceptual understanding of flood risk at the site has been developed to identify the principal flood mechanisms, flow pathways and receptors relevant to the proposed development.

Source of flooding	Risk present	Description
River (fluvial)	No	Site located within Flood Zone 1. No fluvial flood mechanism affecting site.
Sea	No	Site located outside tidal flood extents.
Surface Water and Small Water Courses	No	No mapped surface water flood extents affecting site.
Reservoirs	No	Site outside reservoir inundation extent.
Other Sources (groundwater, sewer, artificial)	No	No evidence of significant flood mechanism affecting site.

5. Hydraulic Modelling Data

Enquiries were made with Natural Resources Wales (NRW) Data Distribution to confirm the availability of hydraulic modelling datasets for the application site at 27 Gnoll Park Road, Neath.

NRW confirmed that the site lies outside the fluvial and tidal flood outlines represented within their hydraulic modelling datasets and that no modelled flood level, depth or hazard data are available for the site.

This position is consistent with the NRW Flood Map for Planning, which indicates that the site is located within Flood Zone 1 with respect to flooding from rivers and the sea.

Accordingly, a detailed hydraulic modelling assessment is not required for the purposes of this Flood Consequences Assessment.

5.1 Flood Resilience

Although the site is located within Flood Zone 1 and is not affected by fluvial, tidal or surface water flooding, a precautionary approach to residual flood risk has been adopted.

The existing building and proposed extensions are set approximately 150 mm above adjacent street level, providing inherent resilience to minor surface water ponding and localised runoff. The proposed rear extension will maintain this level difference and will be accessed via a compliant ramp, ensuring both flood resilience and accessibility.

Accordingly, finished floor levels will be retained at existing levels as part of the development. Where new ground floor construction is proposed, finished floor levels will be set at or above existing levels where practicable. These levels exceed the immediate surrounding ground levels, thereby reducing the potential for internal flooding during localised extreme rainfall events.

Additional resilience measures may include:

- Use of water-resilient construction materials at ground floor level
- Raised electrical installations and service entry points
- Flood-resistant internal finishes
- Site drainage designed in accordance with SuDS principles

These measures ensure that the development remains resilient to potential residual flood risks over its lifetime in accordance with Technical Advice Note 15.

5.2 Safe Access and Egress

Safe pedestrian and vehicular access to the care home will remain unchanged as part of the proposed development.

The principal access from Gnoll Park Road is retained and is not identified as being at risk from fluvial, tidal or surface water flooding based on review of NRW Flood Map for Planning and Flood Risk Assessment Wales mapping.

The development comprises an extension to an existing operational care facility, where established evacuation procedures are already in place.

Accordingly, safe access and egress can be maintained during extreme rainfall events and emergency scenarios over the lifetime of the development.

5.3 Flood Risk Elsewhere

The proposed development comprises extensions to an existing care home within an established urban plot. The proposals do not introduce significant alterations to site levels, floodplain storage or overland flow pathways.

Surface water runoff will be managed in accordance with Sustainable Drainage Systems (SuDS) requirements to ensure that post-development runoff rates do not exceed existing conditions.

Accordingly, the proposed development is not expected to increase flood risk to adjacent land, property or the wider catchment.

5.4 Surface Water Management

Surface water arising from the proposed development will be managed in accordance with Technical Advice Note 15, Planning Policy Wales and the Welsh Government Statutory SuDS Standards under Schedule 3 of the Flood and Water Management Act 2010.

The proposal comprises extensions to an existing building within an established urban plot and is not expected to result in a significant increase in impermeable area. Notwithstanding this, sustainable drainage measures will be incorporated to ensure that post-development runoff rates do not exceed existing conditions.

Approval of the detailed surface water drainage design will be sought from the relevant SuDS Approving Body (SAB) prior to commencement of development.

6 Conclusion

This Flood Consequences Assessment has been undertaken in accordance with Planning Policy Wales and Technical Advice Note 15 (TAN15, 2025).

Review of Natural Resources Wales flood mapping and site-specific conditions indicates that:

- The existing building footprint lies outside areas at risk of fluvial flooding
- The existing building footprint lies outside areas localised surface water risk
- No historical flooding affecting the site has been recorded
- Finished floor levels are set above surrounding ground levels
- Sustainable drainage and green infrastructure measures are incorporated
- Safe access and egress can be maintained
- The development will not increase flood risk elsewhere

Taking account of the limited scale of the proposal, the introduction of sustainable drainage measures, and the absence of significant flood risk constraints, it is concluded that flood consequences can be acceptably managed over the lifetime of the development.

Accordingly, the proposed development is considered acceptable in flood risk terms and compliant with the requirements of Technical Advice Note 15.

7 References

Welsh Government (2021).

Planning Policy Wales (Edition 11).

Available online: <https://www.gov.wales/planning-policy-wales>

Welsh Government (2025).

Technical Advice Note 15: Development, Flooding and Coastal Erosion.

Available online: <https://www.gov.wales/technical-advice-note-15-development-flooding-and-coastal-erosion>

Welsh Government (2025).

Guidance on the Town and Country Planning (Flood Risk Area Development) Notification (Wales) Direction.

Available online: <https://www.gov.wales>

Natural Resources Wales (2024).

Flood Map for Planning.

Available online: <https://flood-map-for-planning.naturalresources.wales>

Natural Resources Wales (2024).

Flood Consequence Assessment Climate Change Allowances.

Available online: <https://naturalresources.wales>

Natural Resources Wales (2024).

Reservoir Flood Mapping.

Available online: <https://naturalresources.wales>

Ordnance Survey (2026).

Ordnance Survey Mapping Data.

Available online: <https://www.ordnancesurvey.co.uk>

Eco 360 Ltd.

Available online: <https://www.oakshireenvironmental.co.uk>



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Appendix A - Site Maps & Plans

Description

Site location plan

Sources

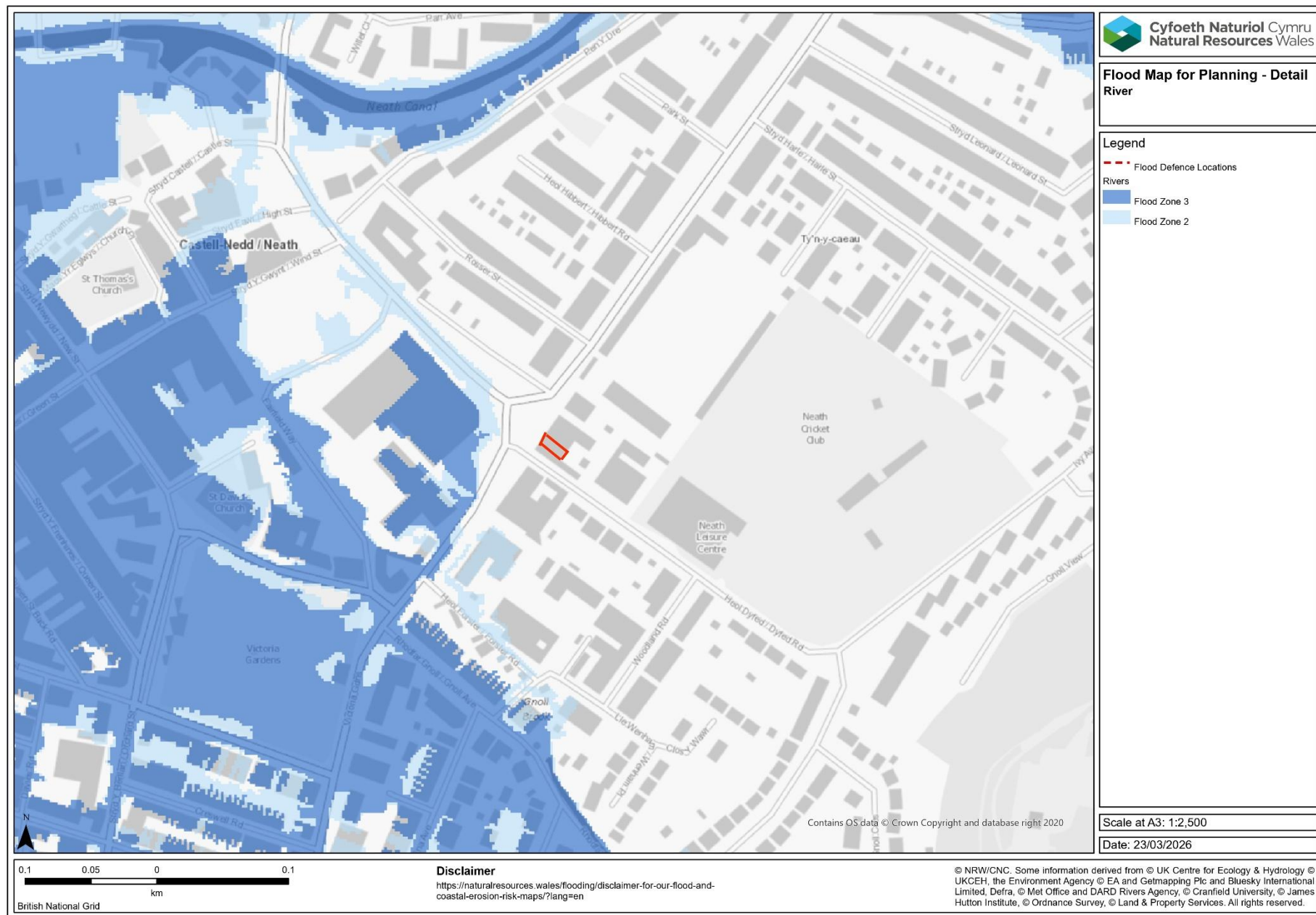
Noma architects

Key

Site boundary

North

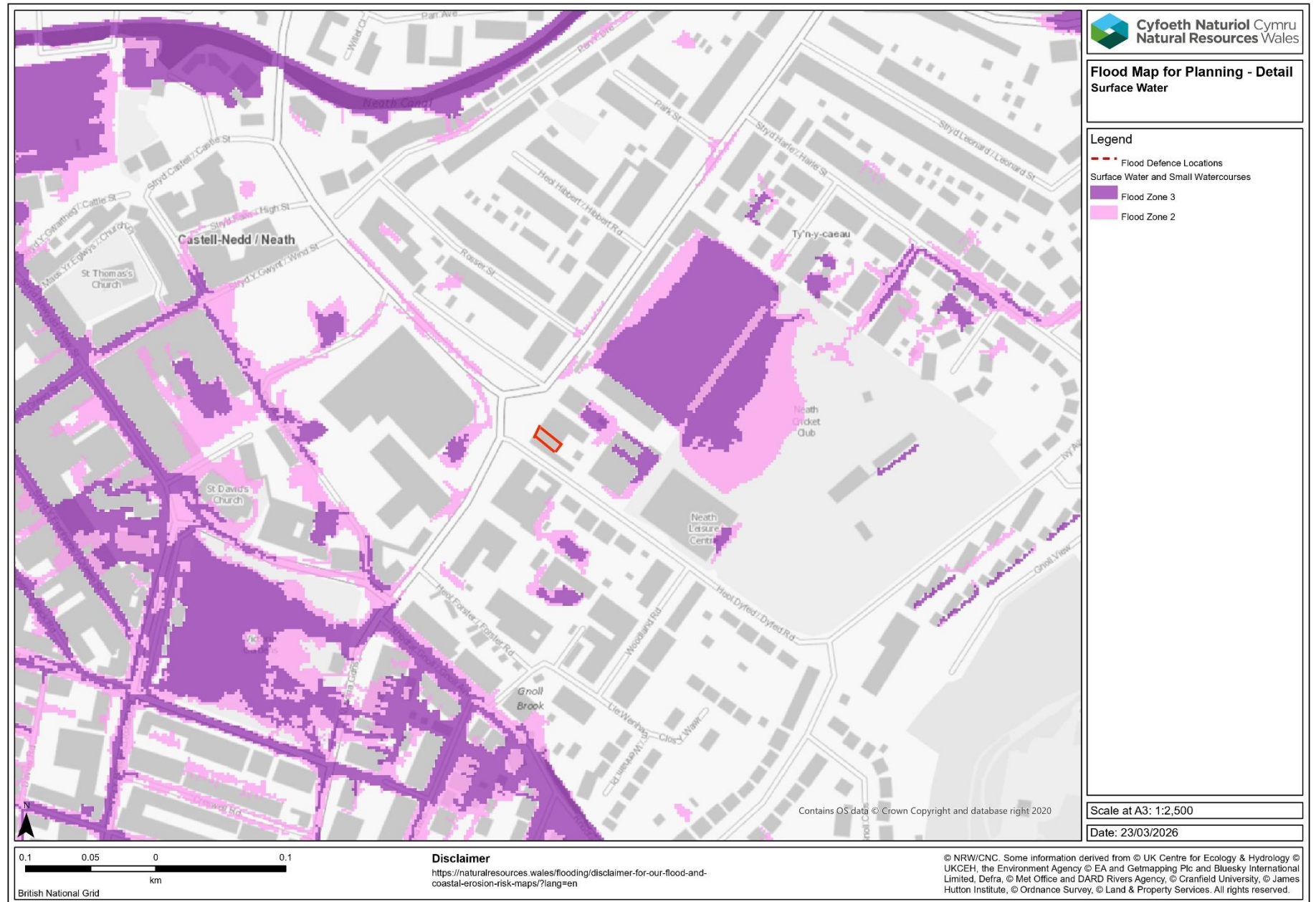
Appendix B Flood Map for Planning Rivers



Appendix C Flood Map for Planning Sea



Appendix D Flood Map for Planning Surface Water



Appendix E NRW confirmation- No hydraulic modelling data for site

23/03/2026, 09:09

Gmail - ATI-29716a P5&6, 27 Gnoll Park Rd, Neath, SA11 3BT



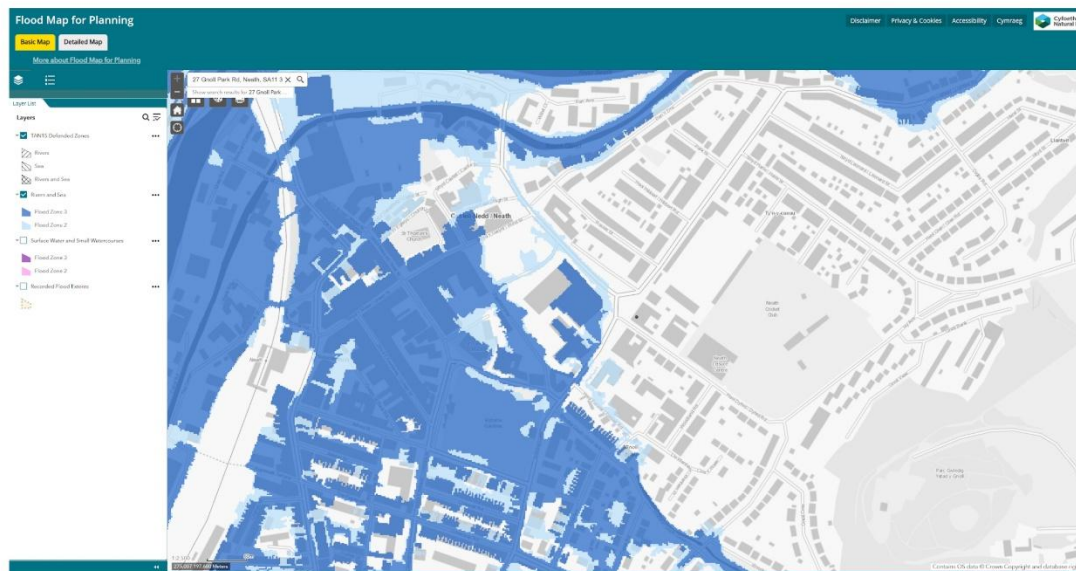
ATI-29716a P5&6, 27 Gnoll Park Rd, Neath, SA11 3BT

Data Distribution <datadistribution@cyfoethnaturiolcymru.gov.uk>

20 March 202

Dear [REDACTED]

Further to your recent email please note that this property/site lies outside of our fluvial and tidal flood outlines within NRW's flood map, therefore we have no data for this site. However, would still like the data associated with the model that is located closest to the site, it can be supplied.



Yn gywir/ Yours sincerely
Enw / Name **Michelle Lewis**
Teitl swydd / Job title Data Licensing Officer
Adran / Department Customer, Communications and Commercial
Rhif ffôn / Phone number 07917243096
Dyddiau gweithio (os yn berthnasol) / Working days Mon-Fri
Yn Ardystiedig o ran Llythrennedd Carbon/Certified Carbon Literate

Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi.
Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.



From: Data Distribution

Subject: RE: Request for Local Hydraulic Model Data – FCA - 27 Gnoll Park Rd, Neath, SA11 3BT

Dear [REDACTED]

Appendix F Existing Floor Plan (Noma architects)



Architectural floor plan of a residential building, showing two levels. The plan includes numerous rooms, corridors, and service areas, with detailed annotations for materials, fixtures, and construction notes.

Level 1 (Top):

- Bedrooms 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 81

Appendix H Topographical Survey (Source: Noma architects)

