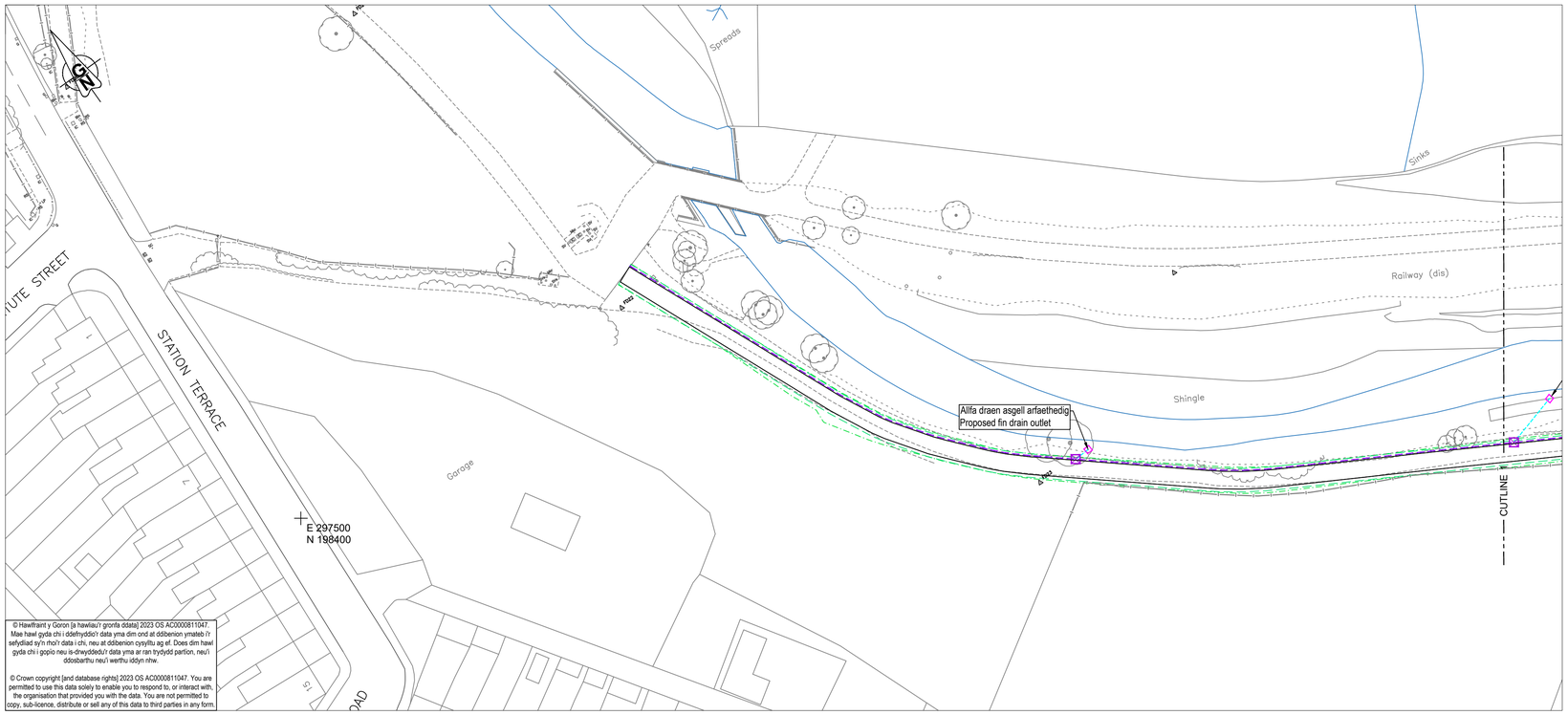

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Allwedd
Key

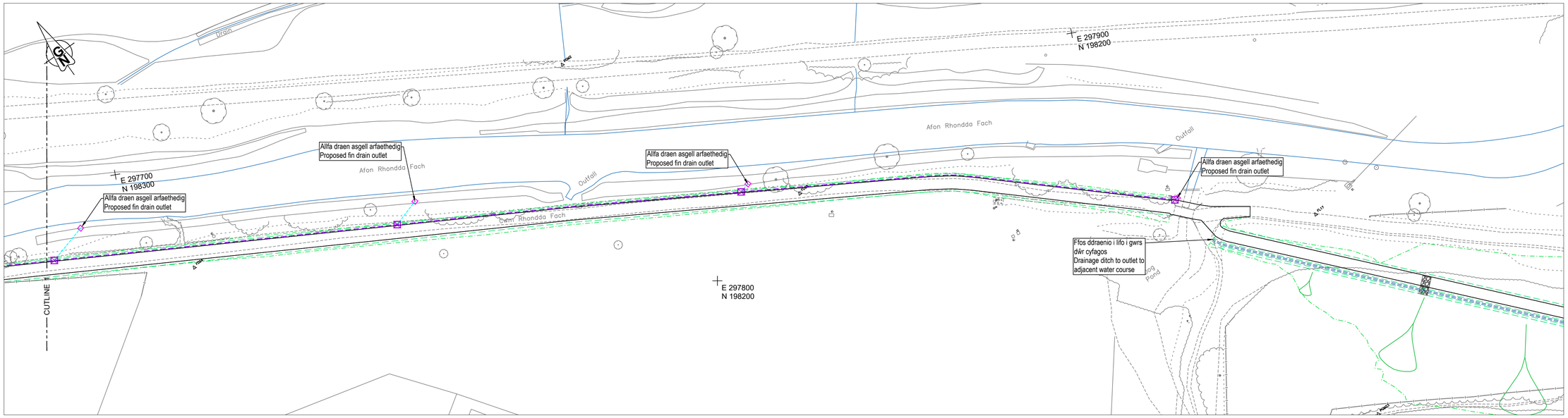
Draen asgell (fin drain) 100mmØ arfaethedig		Proposed 100mmØ fin drain
Pibell allfa 100mmØ arfaethedig - cyfeiriwch at nodyn 2		Proposed 100mmØ outlet pipe - refer to note 2
Cysylltiadau ffosydd draenio arfaethedig		Proposed drainage ditch connections
Wal ben allfa arfaethedig - cyfeiriwch at nodyn 2		Proposed outlet headwall - refer to note 2
Siambr archwilio \ twll archwilio arfaethedig		Proposed inspection chamber \ manhole
Cronfa ddŵr arfaethedig - cyfeiriwch at luniad P187-S3-71-08 am fanylion		Proposed reservoir - refer to drawing P187-S3-71-08 for details
Ffos ddraenio arfaethedig		Proposed drainage ditch

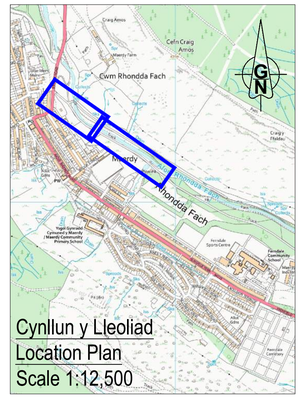
Nodiadau
1. Rhaid darllen y lluniad ar y cyd â lluniadau P187-S3-71-02 a 03 Trefniadau Cyffredinol, ac Adroddiad Ymchwiliad Tir - GC3569-RED-74-ATR-RP-D-0004 P01 RFATR P3,4 a 5 GIR.
2. Bydd union leoliad a lefelau'r siambrau, allfeydd draeniau a waliau blaen yn cael eu pennu unwaith y bydd y gwaith clirio llystyfiant wedi'i gwblhau a'r topograffi presennol wedi'i asesu.
3. Rhaid i orchuddion a fframiau siambr fod yn y dosbarth D400 yn y rhwydwaith priffyrdd ac yn y B125 mewn ardaloedd i gerddwyr, ymylon a thirwedd.
4. Bydd cronfeydd dŵr yn cael ei lleoli tua bob 50m a/neu ar waelod y llethrau i gynyddu'r cyfle ymdreiddio ac atal cronni ar waelod y rhan o'r llwybr sydd ar lethr. Byddant hefyd yn cael eu defnyddio i gludo llif o'r ffosydd draenio arfaethedig i'r argloddiau cyfagos, lle bydd llifoedd yn cael eu rhyng-gipio gan lystyfiant, gan leihau'n sylweddol gyflymder a maint y dŵr ffo o'r safle. Cyfeiriwch at y Strategaeth Ddraenio a luniad P187-S3-71-08 am fanylion.

Notes
1. Drawing shall be read in conjunction with drawings P187-S3-71-02 and 03 General Arrangement, and Ground Investigation Report - GC3569-RED-74-ATR-RP-D-0004 P01 RFATR P3,4&5 GIR.
2. The exact location and levels of chambers, drain outlets and headwalls shall be determined once vegetation clearance has been completed and existing topography assessed.
3. Chamber covers and frames shall be D400 loading in highway network and B125 loading in pedestrian,verge and landscape areas.
4. Reservoirs will be located at approximately 50m intervals and/or at bottom of slopes to increase infiltration opportunity and prevent ponding at the bottom of the sloped section of the route. They'll also be used to transport flows from the proposed drainage ditches to the adjacent embankments, where flows will be intercepted by vegetation, significantly reducing the speed and quantity of runoff from the site. Refer to the Drainage Strategy and drawing P187-S3-71-08 for details.

Strategaeth Ddraenio - Cam 3
Cynigir defnyddio wyneb asffalt hydraidd ledled y safle gan ganiatáu i'r cynnig terfynol ddynwared dŵr ffo naturiol presennol y safle.
Bydd dyluniad yr asffalt hydraidd yn amrywio yn dibynnu a yw ar ran wastad y llwybr neu ar ran lethrog y llwybr.
Rhan lethrog
Er mwyn sicrhau bod yr arwyneb hydraidd yn perfformio ar y rhan lethrog, bydd ffosydd llwybr mawr 2m o hyd, y cyfeirir atyn nhw fel 'cronfeydd dŵr', gyda choffor fertigol drwy'r haenau agregau tua gwaelod y llethr yn cael eu hadeiladu i gynyddu'r cyfle ymdreiddio ac atal pyllau ar waelod y llethr.
Pan fo gan yr arwyneb hydraidd gyfradd ymdreiddiad uwch na'r tir presennol gwaelodol, bydd angen i'r arwyneb hydraidd gael ei amddiffyn rhag difrod a chynnal diogelwch gweithredol yn ystod amodau rhewllyd. Ar hyd y rhan lethrog, lle mae'r llwybr yn y rhan llenwi, bydd unrhyw orlenwad yn mynd i'r argloddiau cyfagos.
Lle mae'r llwybr yn y rhan torri, bydd ffos fas ar ochr isel y llwybr yn dal unrhyw orlenwad. Bydd y ffosydd wedyn yn gollwng yn ôl i'r system ymdreiddio pan na fyddan nhw bellach yn y rhan torri. Cyfeiriwch at luniad P187-S3-71-08 am fanylion cynllun yr arwyneb hydraidd ar hyd y rhan lethrog.
Rhan wastad
Pan fo gan yr arwyneb hydraidd gyfradd ymdreiddiad uwch na'r tir presennol gwaelodol, bydd yr arwyneb hydraidd yn cael ei amddiffyn rhag difrod a chynnal diogelwch gweithredol yn ystod amodau rhewllyd trwy gynnwys draen asgell gul i'r ffurfiant is-syfaen. Cyfeiriwch at lun P187-S3-71-06 am fanylion y dyluniad arwyneb hydraidd ar hyd y rhan wastad.

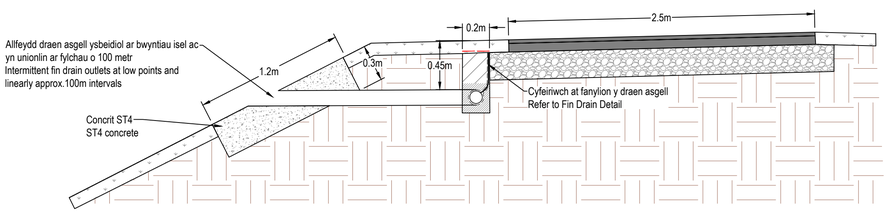
Drainage Strategy Phase 3
Permeable asphalt surfacing is proposed across the entire site allowing the final proposal to mimic the sites current natural runoff.
The design of the permeable asphalt will differ depending on whether it is on the flat section of the route or on the sloped section of the route.
Sloped Section
To ensure the permeable surfacing performs on the sloped section, large 2m long, width of route trenches, referred to as 'reservoirs', with a vertical stank through the aggregate layers on the down slope side will be constructed to increase infiltration opportunity and prevent ponding at the bottom of the slope.
Where the permeable surfacing has a higher infiltration rate than the underlying existing ground, the permeable surfacing will need to be protected from damage and maintain operational safety during freezing conditions. Along the sloped section, where the route is in in fill, any surcharge will discharge to adjacent embankments.
Where the route is in cut, a shallow ditch on the low side of the route will capture any surcharge. The ditches will then discharge back into the infiltration system when no longer in cut. Refer to drawing P187-S3-71-08 for details of the permeable surfacing design along the sloped section.
Flat Section
Where the permeable surfacing has a higher infiltration rate than the underlying existing ground, the permeable surfacing will be protected from damage and maintain operational safety during freezing conditions by the inclusion of a narrow fin drain to the sub-base formation. Refer to drawing P187-S3-71-06 for details of the permeable surfacing design along the flat section.





Adeiladwaith Palmant Hydraidd Nodweddiadol
Arwyneb 30mm
Rhwymwr 60mm
Cwrs malurion 50mm
200mm Is-sylfaen Math 3 Agored Wedi'i Raddoli
(Yn rhagdybio 5% yn ôl y CBR)
Cyfanswm Dyfnder 340mm

Typical Permeable Pavement Construction
30mm Surfacing
60mm Binder
50mm Crush course
200mm Type 3 Sub Base Open Graded
(Assumes 5% CBR)
Total Depth 340mm

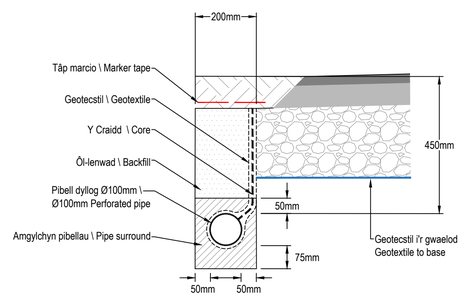


Manylion yr arwyneb hydraidd ar hyd rhan wastad y llwybr \ Permeable Surfacing Detail Along Flat Section of the Route

Nodiadau
1. Rhaid adeiladu'r ddraen gydag un wyneb geotecstil mewn cysylltiad ag ochr y cloddiad. Rhaid i'r ochr sydd â'r athreiddedd mwyaf fod yn wynebu adeiladwaith y palmant ac mewn cysylltiad â'r adeiladwaith hwnnw lle bo'n briodol.
2. Darperir draen asgell a allffeydd ar ochr isel y palmant i ddraenio palmant hydraidd mewn sefyllfaoedd lle mae'r tir gwaelodol presennol yn ddirlawn yn hydrolig / llai o hydreiddedd.
3. Llygaid rhodio i fyny'r afon i'w darparu ar ddraen asgell ar fylchau o tua 25 metr.

Notes
1. The drain shall be constructed with one geotextile face in contact with the side of the excavation. The side having the greater permeability shall be facing towards and be in contact with the pavement construction where appropriate.
2. Fin drain and outlets provided at low side of pavement to drain permeable paving in situations where existing underlying ground becomes hydraulically saturated / reduced permeability.
3. Upstream rodding eyes to be provided on fin drain at approx. 25m intervals.

Manylion Draen Cul
Fin Drain Detail



Manylion Adolygiad/Revision Details	Gan/By	Dyddiad/Date	Adolygiad/ Revision

Prosiect/ Project
Llwybr Teithio Llesol Rhondda Fach
Lluniadau Cynllunio Cam 3

Rhondda Fach Active Travel Route
Phase 3 Planning Drawings

Teitl y Llun/ Dwg Title
Strategaeth Ddraenio
(Taflen 1 o 2)

Drainage Strategy
(Sheet 1 of 2)

Rhif y Prosiect/ Project No.	Graddfa/ Scale @ A1	Dyddiad/ Date
P187	1:500	01/24

Rhif y Llun/ Dwg No.	Adolygiad/ Revision
P187-S3-71-06	P00

Paratowyd gan/ Prepared by:	Gwiriwyd gan/ Checked by:	Cymeradwywyd gan/Approved by:
JS	RG	NM

RHONDDA CYNON TAF

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PRIFFYRDD, GOFAL Y STRYDOEDD
A THRAFNIDIAETH

RHONDDA CYNON TAF
HIGHWAYS, STREETCARE AND
TRANSPORTATION

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