

- FEASIBILITY BROCHURE -
March 2025



- CONTENTS -

INTRODUCTION	1
ABOUT LFEC	3
CHURCH VISION	6
THE IMPORTANCE OF PROCESS	8
TIMELINE	10
STAKEHOLDER MAPPING	11
CHURCH CONSULTATION 01	13
PUBLIC CONSULTATION 01	15
DATA BOOKLET	17
CHURCH CONSULTATION 02	19
PUBLIC CONSULTATION 02	21
OUR APPROACH	23
POST CONSULTATION FINDINGS	24
SITE ANALYSIS	28
MACRO ANALYSIS	29
KEVIN LYNCH DIAGRAM	30
PLANNING CONTEXT	31
SURROUNDING CONTEXT	37
SITE CONSTRAINTS AND OPPORTUNITIES	38
ACCESS ROUTES	39
STRUCTURAL REPORT	47
DESIGN	56
APPROACH	57
VALUE MATRIX	59
PROCESS	68
SITE LAYOUT	69
PROGRAMME	71
DESIGN PROCESS	72
A PHASED APPROACH	73
AXONOMETRIC PROGRAMME	74
CHURCH LAYOUT	77
ATMOSPHERIC IMPRESSION	78
CLADDING OPTIONS	79
INTERIORS	80
STRUCTURAL DESIGN	81
COST REPORT	82

Design team:

BENHAM ARCHITECTS



On behalf of:



- INTRODUCTION FROM LFEC-

At Llanelli Free Evangelical Church (LFEC), we have outgrown our home at the corner of Queen Victoria Road and Erw Road, where we have been based for over 40 years. Originally the town's synagogue, this building has served us well, but as our congregation has grown—now averaging around 110 people on Sundays—we have found ourselves in need of more space. Even before COVID-19, we were meeting in a local school to accommodate the extra numbers. Recognizing this need, we began looking for a larger home, and when the local police station became available for purchase, we submitted a bid. With great blessing from our Lord, we completed the purchase of the former police station on Old Castle Road, Llanelli in February 2024.

Since then we have consulted with many builders and architects and prayed for God to lead us to a path for developing the property to our new church. In August 2024 we decided to work with Benham Architects to develop the site and build our new church. In the Lord's goodness, He directed us to Dan Benham, an architect from Cardiff who is currently President of the Royal Institute of British Architects in Wales. He has a great reputation in his field, and how the Lord has put us in touch with him is clearly a further expression of His blessing on this project.

The first stage was to undertake a feasibility study. This means we will be in line with the standard building industry approach for developments as large as ours and will allow us to approach planning considerations and funding applications correctly and with confidence.

A major part of the feasibility study is community consultation which will involve listening to our community as we work towards a final plan. This, of course, refers to the LFEC community itself; both our members and those who join with us to worship. Ultimately, it is we who will have the final say, always remembering that it is the Lord's will we are seeking to discern. However, this is also a process where listening to the needs and opportunities of the community around us is important, be that the community of Llanelli or indeed the wider Christian community that we may now be in a position to help. Within this process, there is the opportunity to look for possible connections between these communities and where we are as a church. It's not about compromise but about connection. We had a sense of what this looks like with the work we did with Ysgol Penrhos on the mural project, something that confirmed to those involved the significance of community connection.

As noted above, from the beginning of this journey with the Lord the issue of connecting with our community has been a regular theme, one that has been expressed by many as being of importance. The needs of Llanelli as a town are obvious and seemingly grow day by day. So we feel a strong sense of privilege and responsibility when we consider that the site might be developed into something that is positive both for us and the town. Ideally, we are seeking an outcome that meets our needs as a growing church, but one that bridges into some of the opportunities and needs in our town as well. Ultimately it is about developing these bridges for the good of the gospel and the Lord's work in Llanelli and beyond.





As LFEC our vision has always been about connecting the good news of Jesus to our community. We don't want to be a 'holy huddle' or be tucked away in an ivory tower. Instead, as followers of Jesus, we want to serve our community with the comfort and blessing of what we have found in Christ.

"Only 20 years away for me! The only thing that will make/or break this project is how faithful we are to what was God leads. He can make possible things that to us look impossible"



- ABOUT LFEC -

We are Llanelli Free Evangelical Church. Catchy eh? No? Ok, well we're also known as LFEC, which is perhaps a bit easier to remember and a lot easier to say. But what does it actually mean? Well, simply, 'Llanelli' means we are made up of people from the community of Llanelli and the surrounding area and our ministry is to the community of which we are part. 'Free' means that, like many of the newer churches in Wales, we are an independent church and not part of a large group or denomination. 'Evangelical' means we are all about the good news of Jesus, and 'Church' means we are people who believe the good news of Jesus and are working at living it out together.

As LFEC our vision has always been about connecting the good news of Jesus to our community. We don't want to be a 'holy huddle' or be tucked away in an ivory tower. Instead, as followers of Jesus, we want to serve our community with the comfort and blessing of what we have found in Christ.





The project will be mainly completed and will be widely used by the community for various activities. There will be further changes from the initial plans as the needs of the community become more apparent

- CHURCH VISION -



As a church we want to create a building that is welcoming, open, and easily accessible to all; one that provides a safe environment and 'home' for everyone. We want a quality space that will bring identity and ambition to this area of Llanelli, while also respecting individual sensitivities in its design. By adopting a friendly and open approach to the process of development we hope to demonstrate our faith, using the resources God has given us to open conversations with our friends and neighbours here in Llanelli as well as further afield. Everyone's opinion is not only welcome but also respected and valued. In short, we want a vision that matches our big God in Heaven.

01

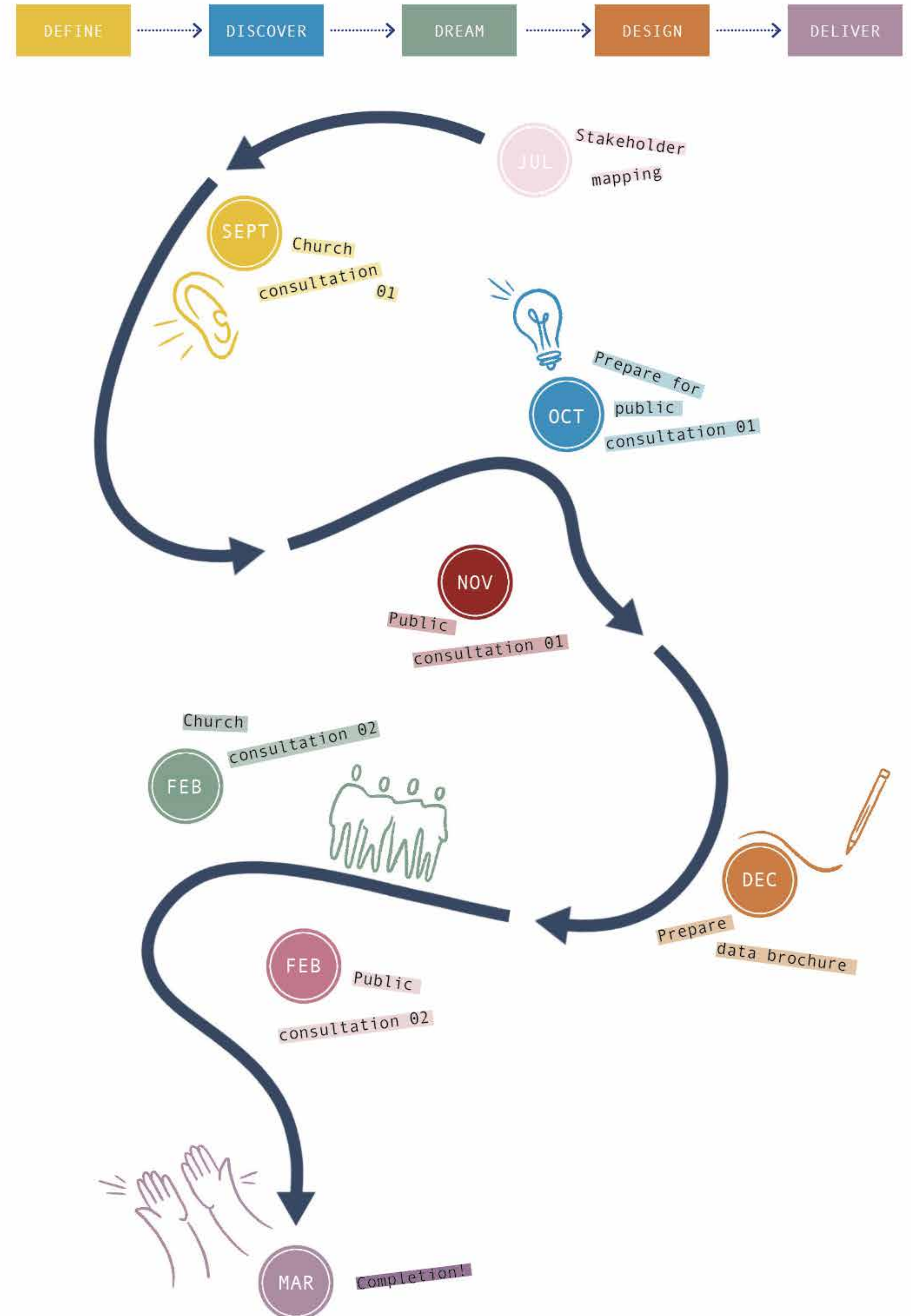
THE IMPORTANCE OF PROCESS

“The Lord lives! Praise be to my Rock! Exalted be my God,
the Rock, my Saviour!”

2 Samuel 22:47



- TIMELINE -



- PROCESS -

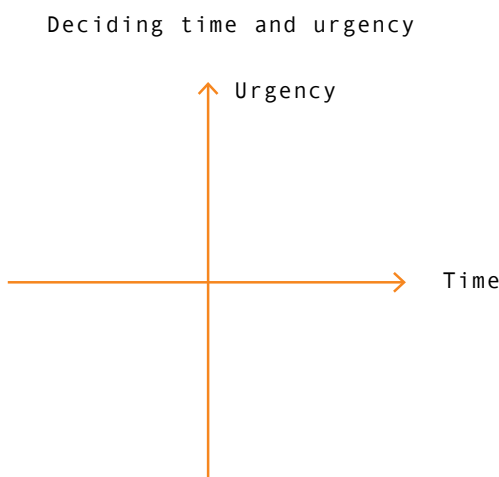
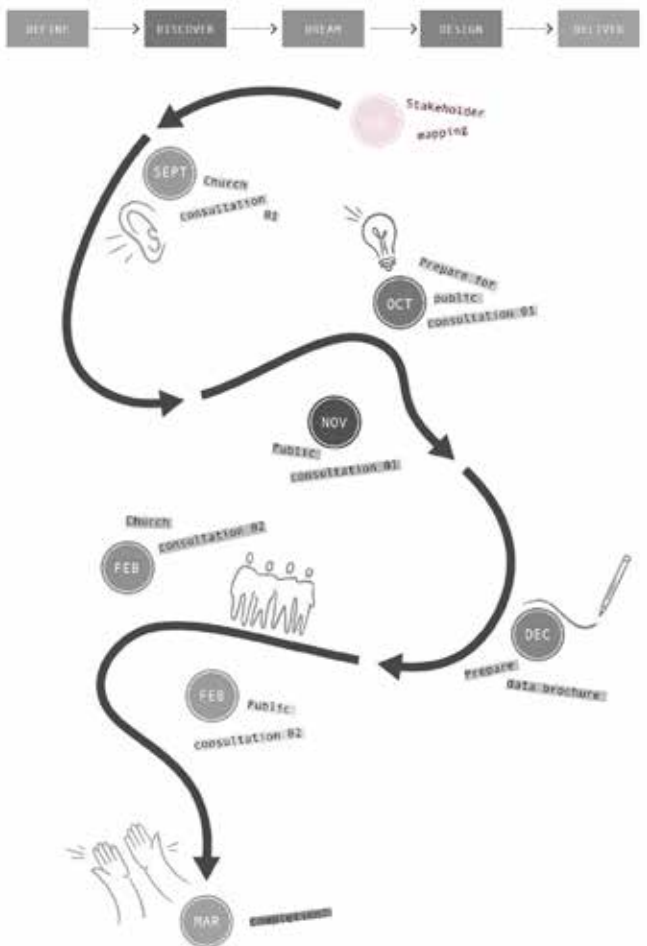
Stakeholder mapping



This first meeting let us introduce ourselves as a firm and get to know some of the key faces of the church and discuss their and our ambitions for the project

Activities included:

- Getting to know each other
- Discuss who will be involved in the project
- Deciding time and urgency
- What is church?
- Looking at church precedents



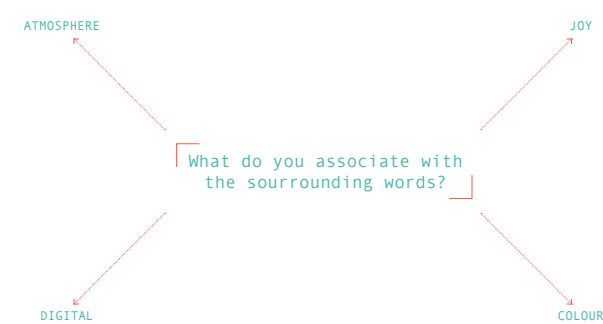
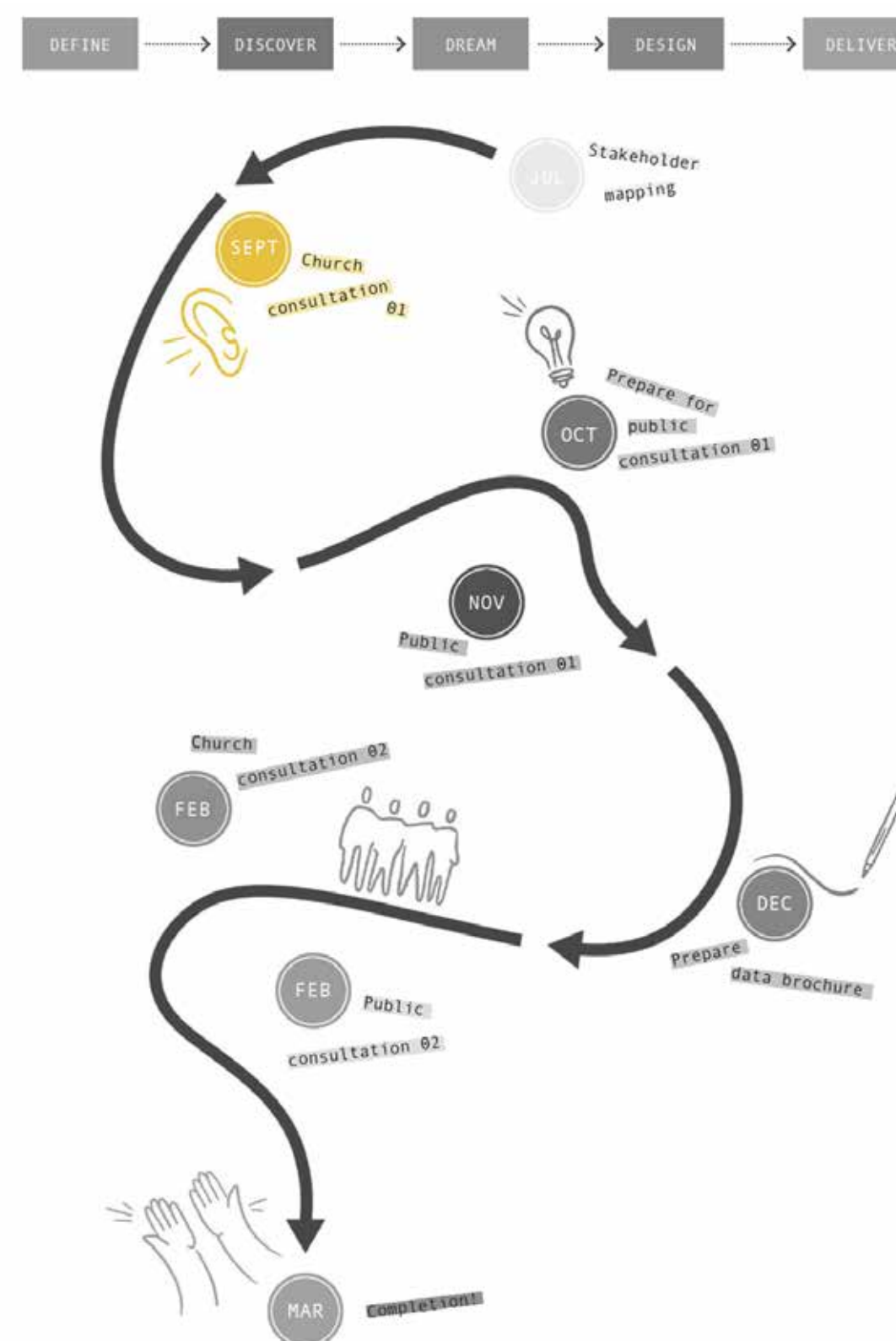
- PROCESS -

Church consultation 01

Our first consultation with the church as a whole helped us to further understand their wants and needs. This was done through a series of activities where questions were posed to the church as a whole, who then broke off into smaller groups to discuss

Activities included:

- What the church community as a whole might want and need from the new building
- Getting to know the church community
- Church community questions:
 - What is church?
 - What is community?
 - What activities would you like to see in the new building?
- Word association task:
 - Light, peace, order, texture, atmosphere, joy, digital, colour
- Responding to church precedents task
- Great energy and discussions about the project and what it will mean for community.
- Understanding that the project is bigger than just the church and it is about serving the wider people of Llanelli.



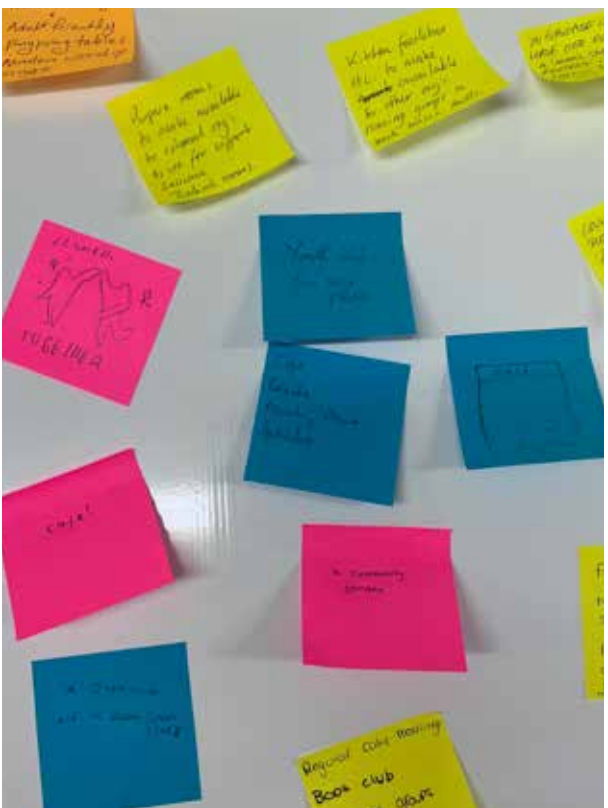
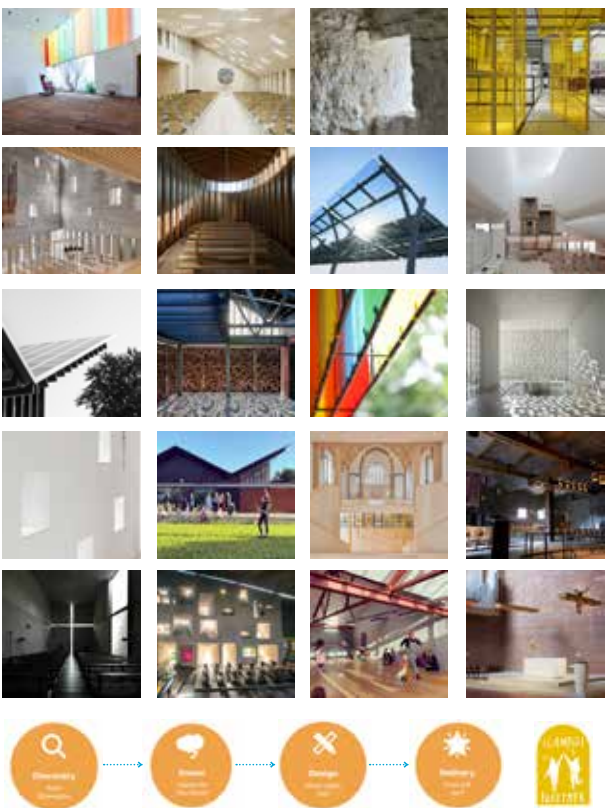
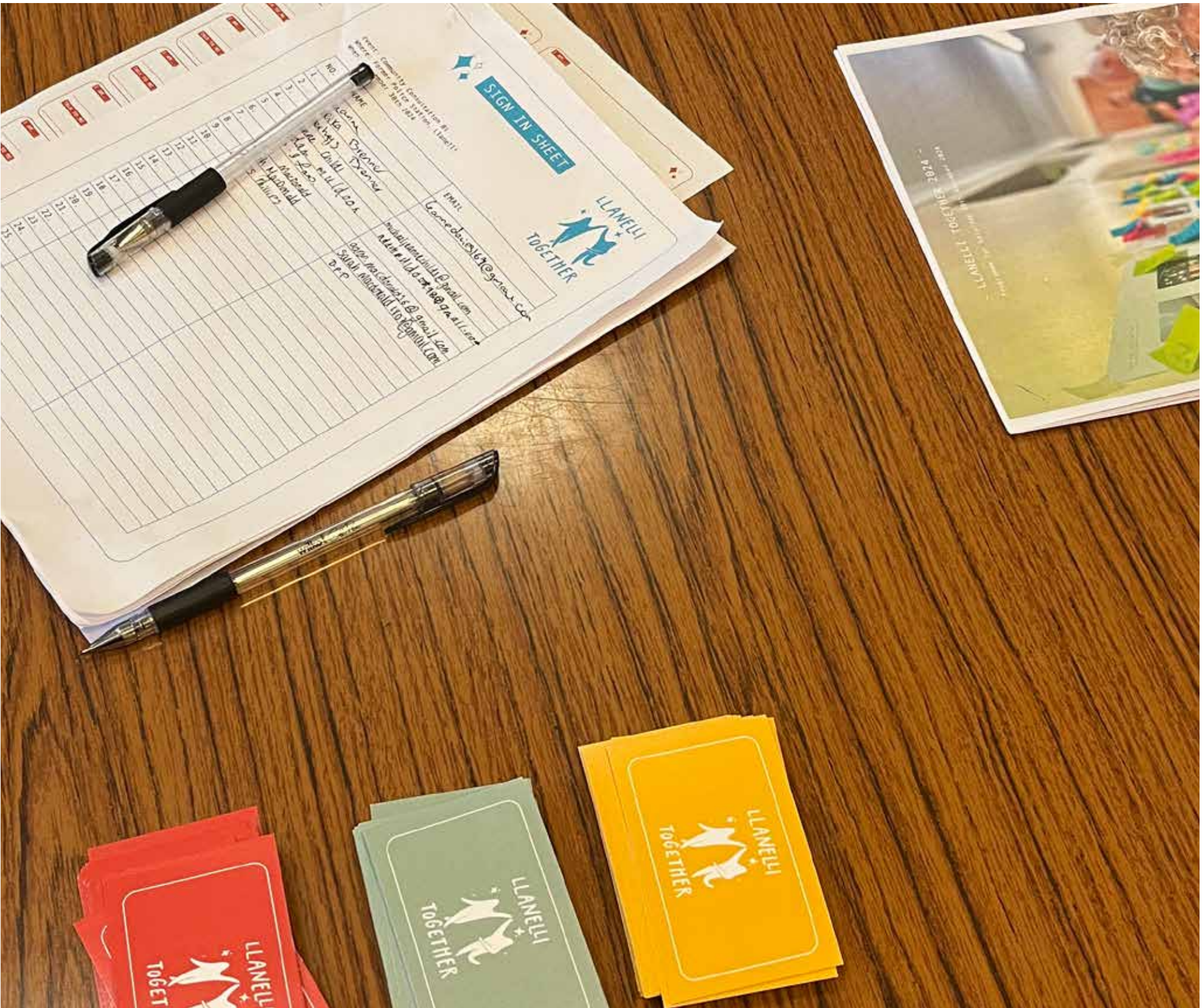
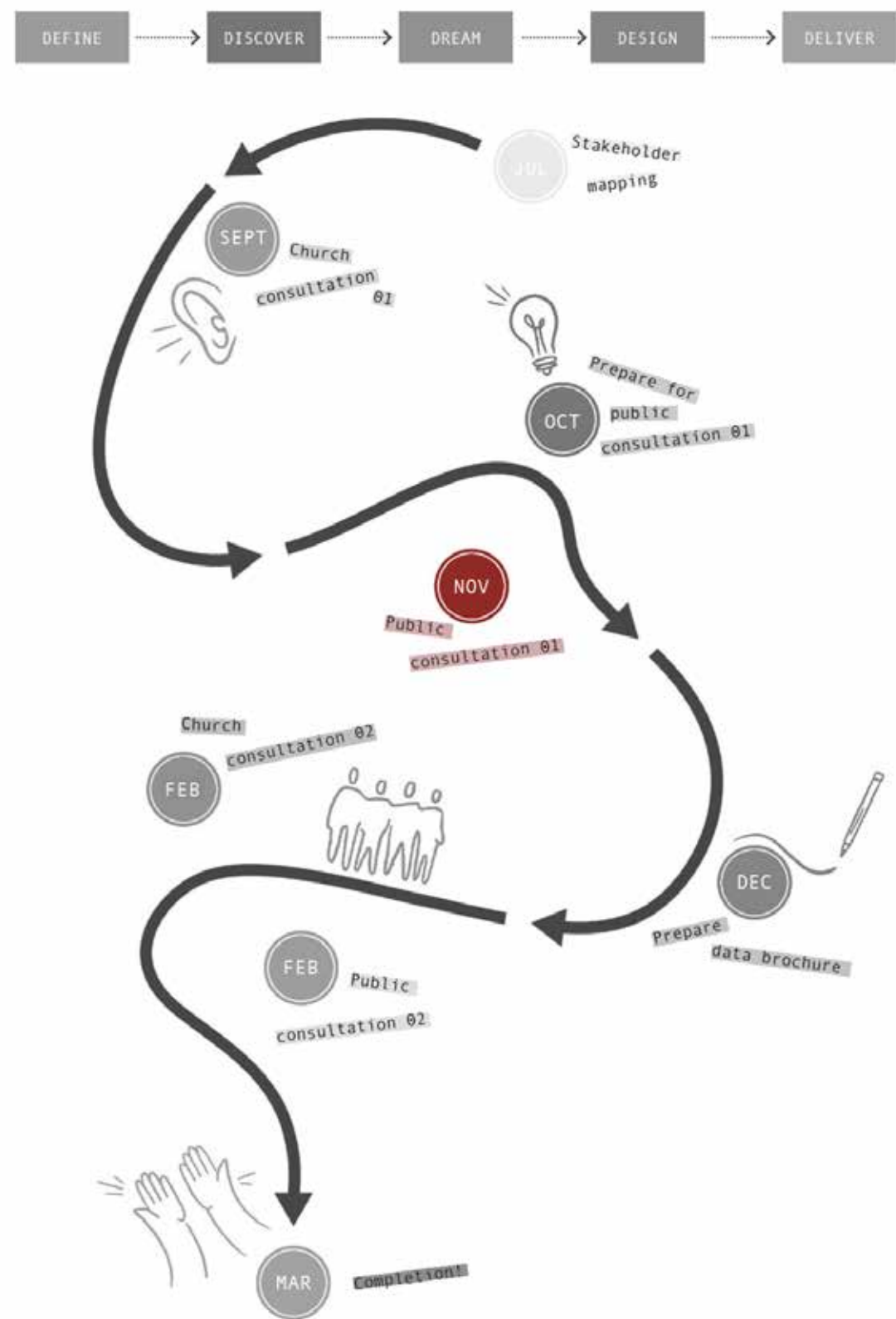
- PROCESS -

Public consultation 01

We organised a public consultation for not only the church, but the whole community of Llanelli to further understand their ambitions for the project, and what the wider community would want that is not related to the church related programme of the proposal

Activities included:

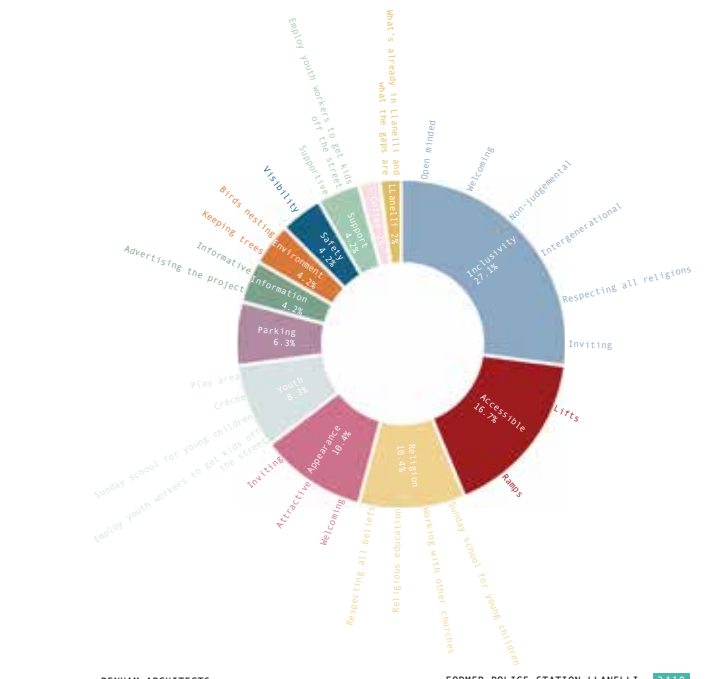
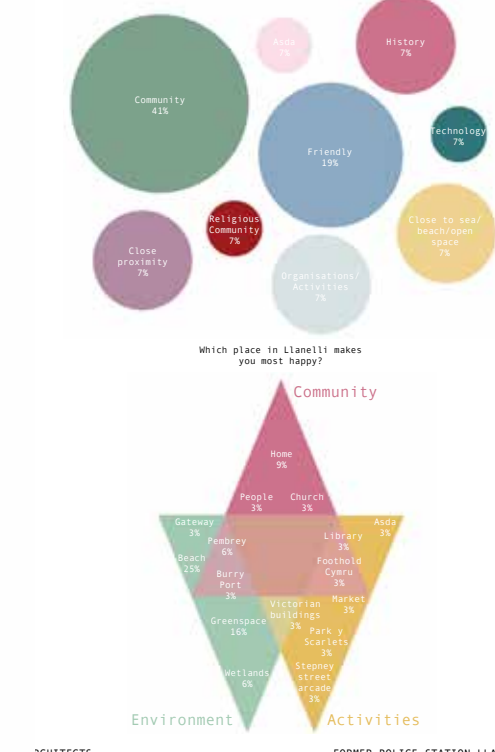
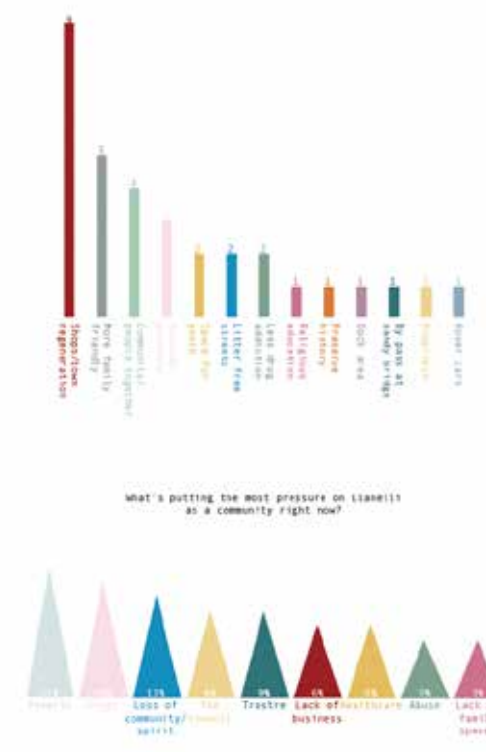
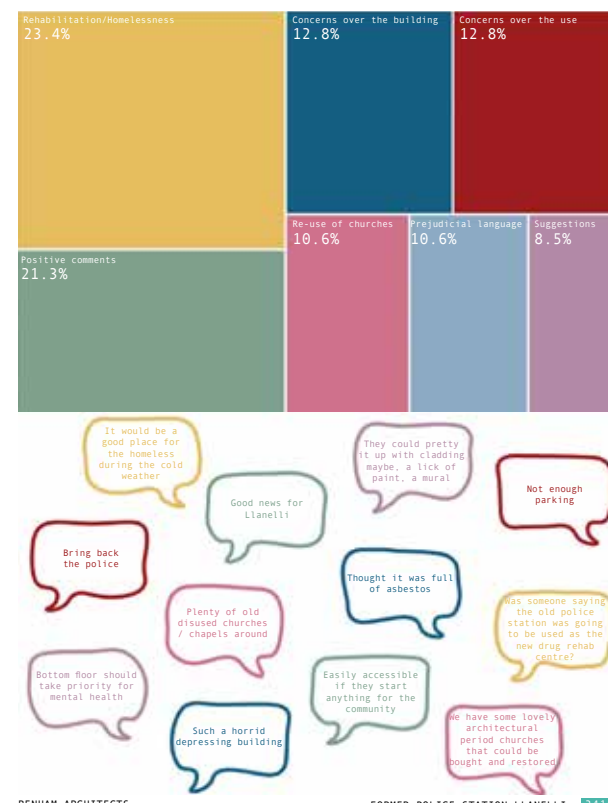
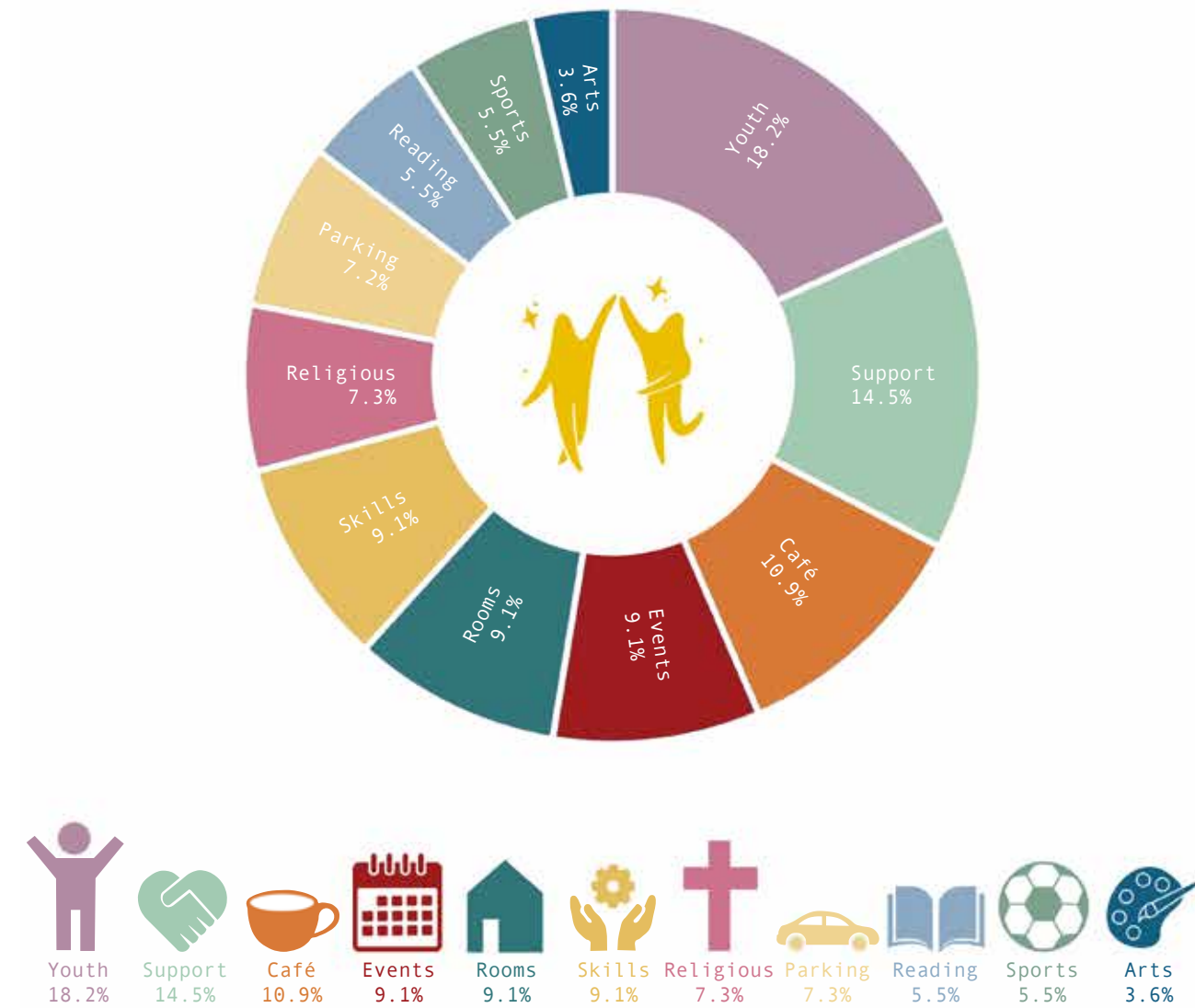
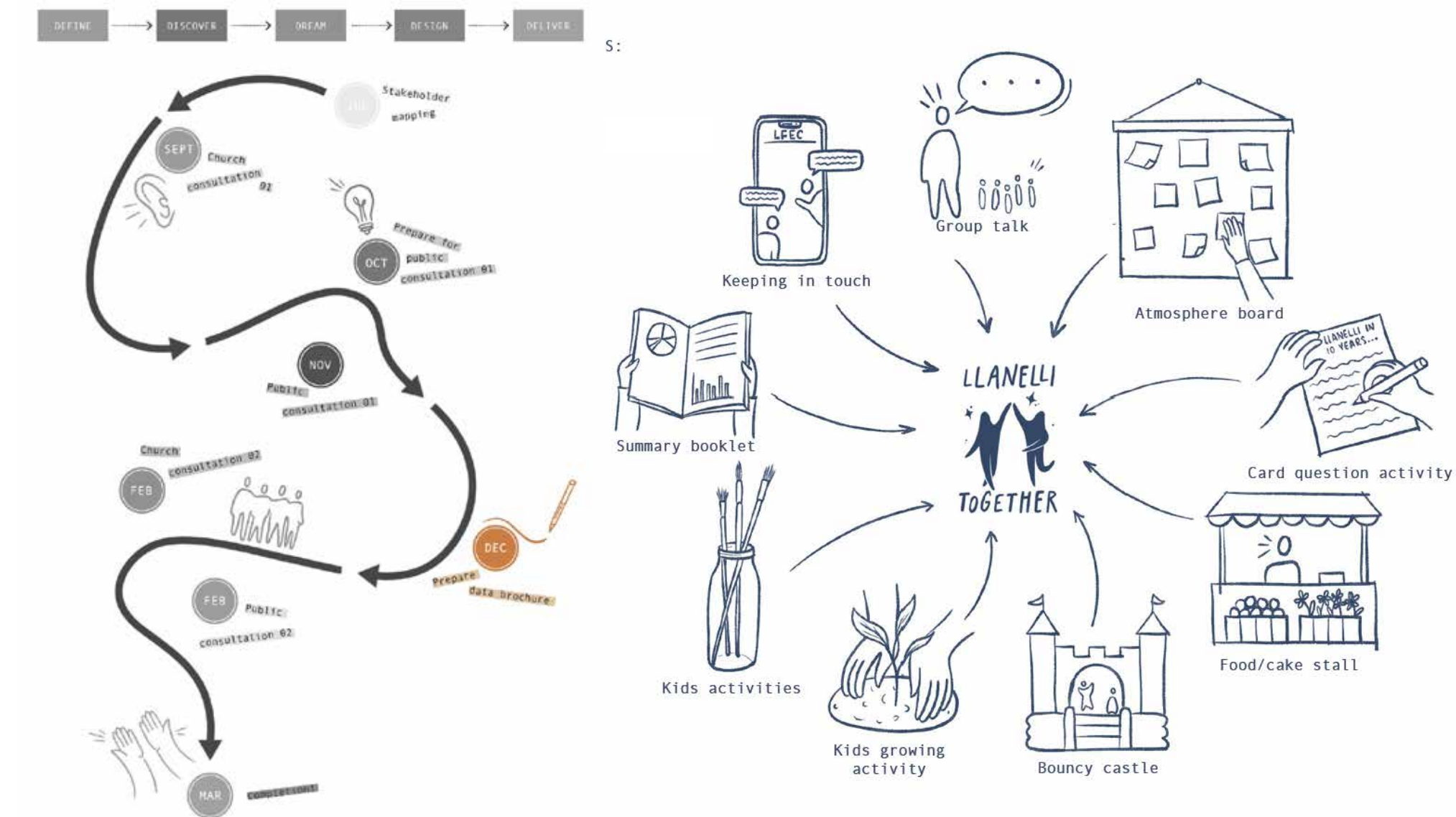
- Tours of the former police station
- Question boards:
 - What is church?
 - What is community?
 - What activities would you like to see in the new building?
- Kids activities books
- Feedback cards
 - With link to Facebook page to leave feedback
- Question cards:
 - Picture 10 years into the future how successful is the project? What does this look like? What will make this happen?
 - Imagine you are 90 years old and reflecting on the project which is thriving. What do you think made this project work so well? What has it achieved for the community? What issues might it have faced along the way?
- Cake and drinks stall



- PROCESS -

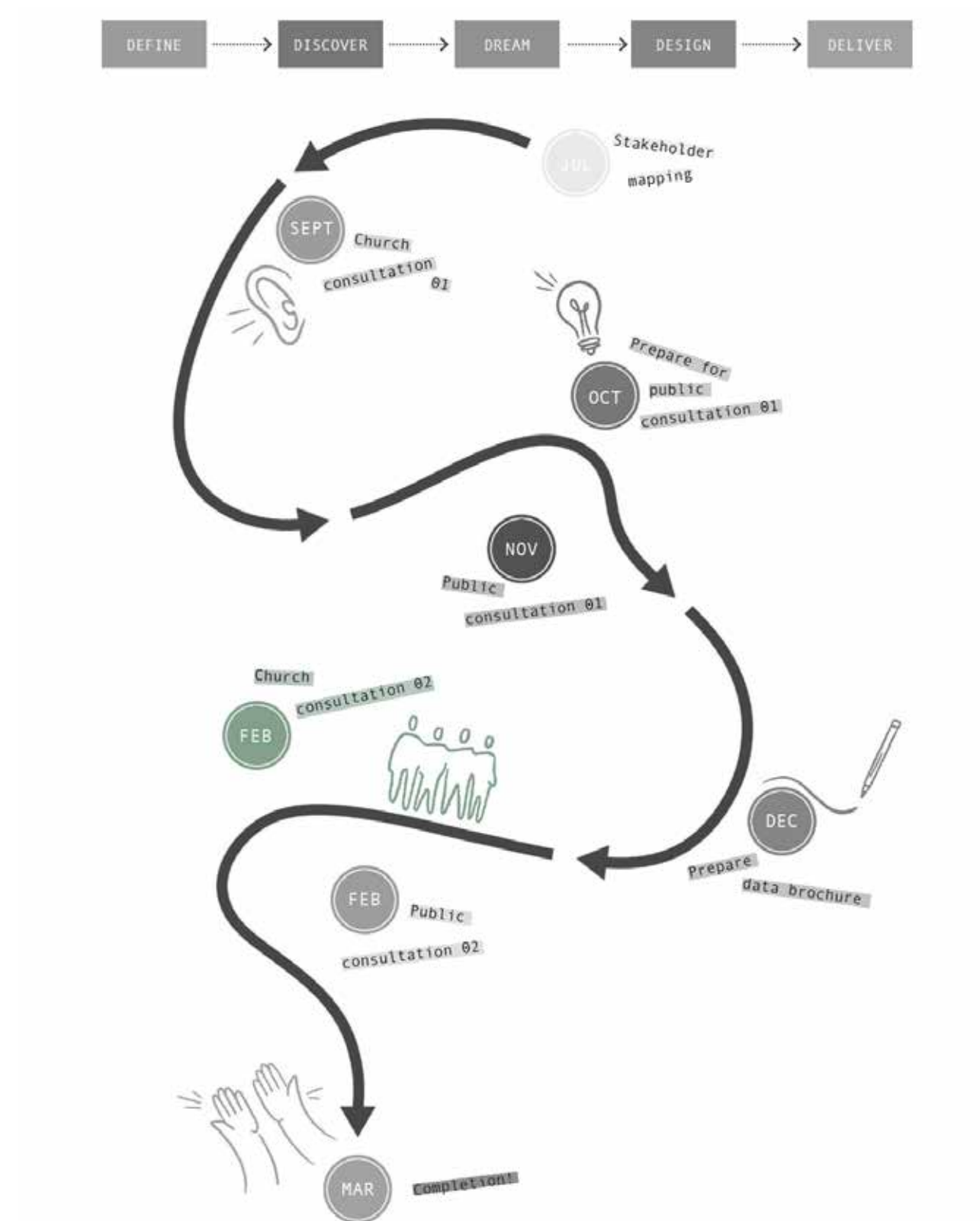
Data booklet

Following the public consultation, we compiled a data booklet from all of the responses we collected from the day, and also from other sources, such as comments on the Llanelli Star Facebook page, and a survey we published online to be circulated around to the people of the town



- PROCESS -

Church consultation 02



We held a second church consultation to present our design ideas to the church community alongside structural engineers Mann Williams and cost managers Rider Levett Bucknall

Activities included

- Physical model with design options
- Design presentation
- Structures presentation
- Costing presentation

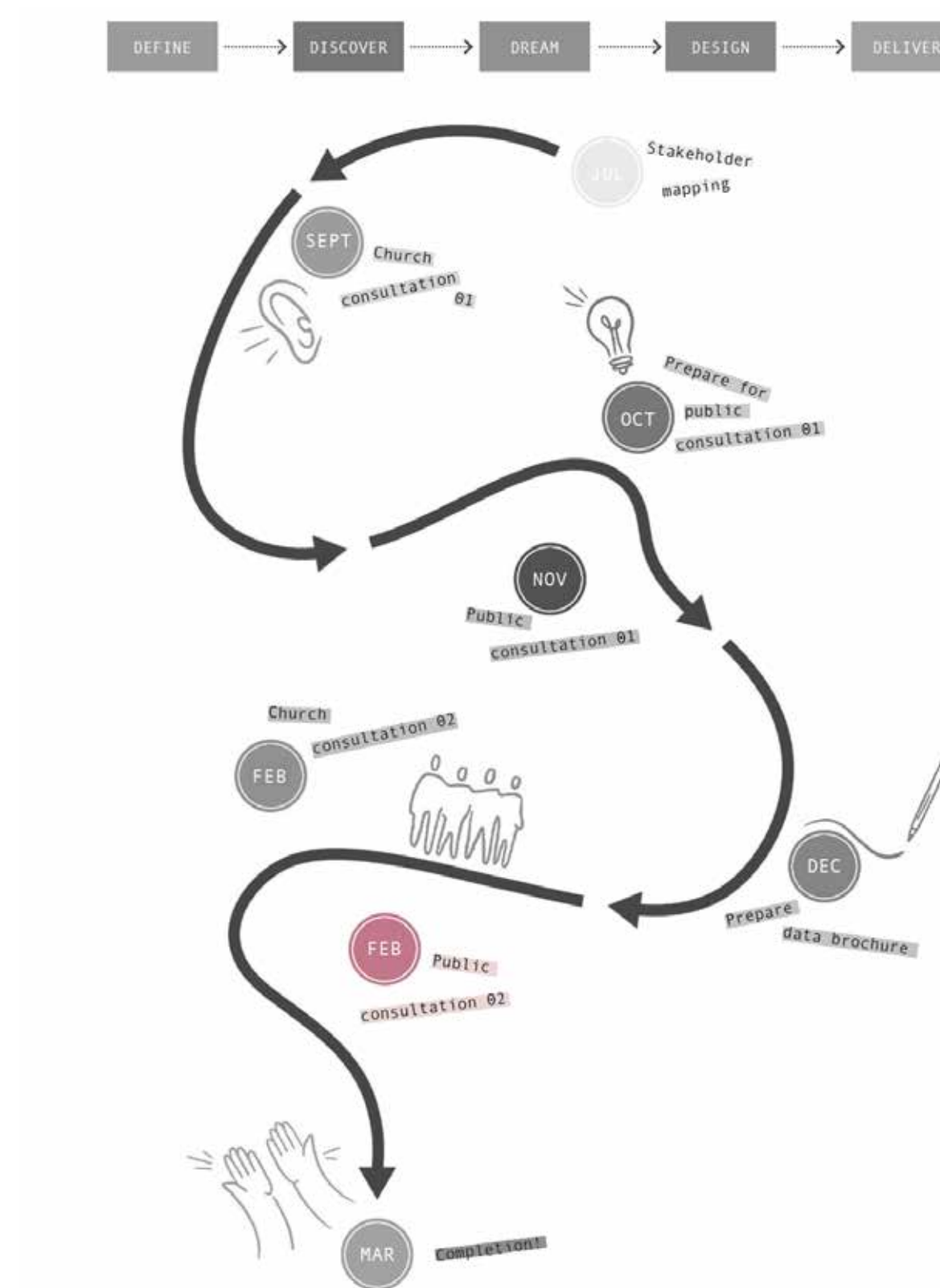


- PROCESS -



- PROCESS -

Public consultation 02



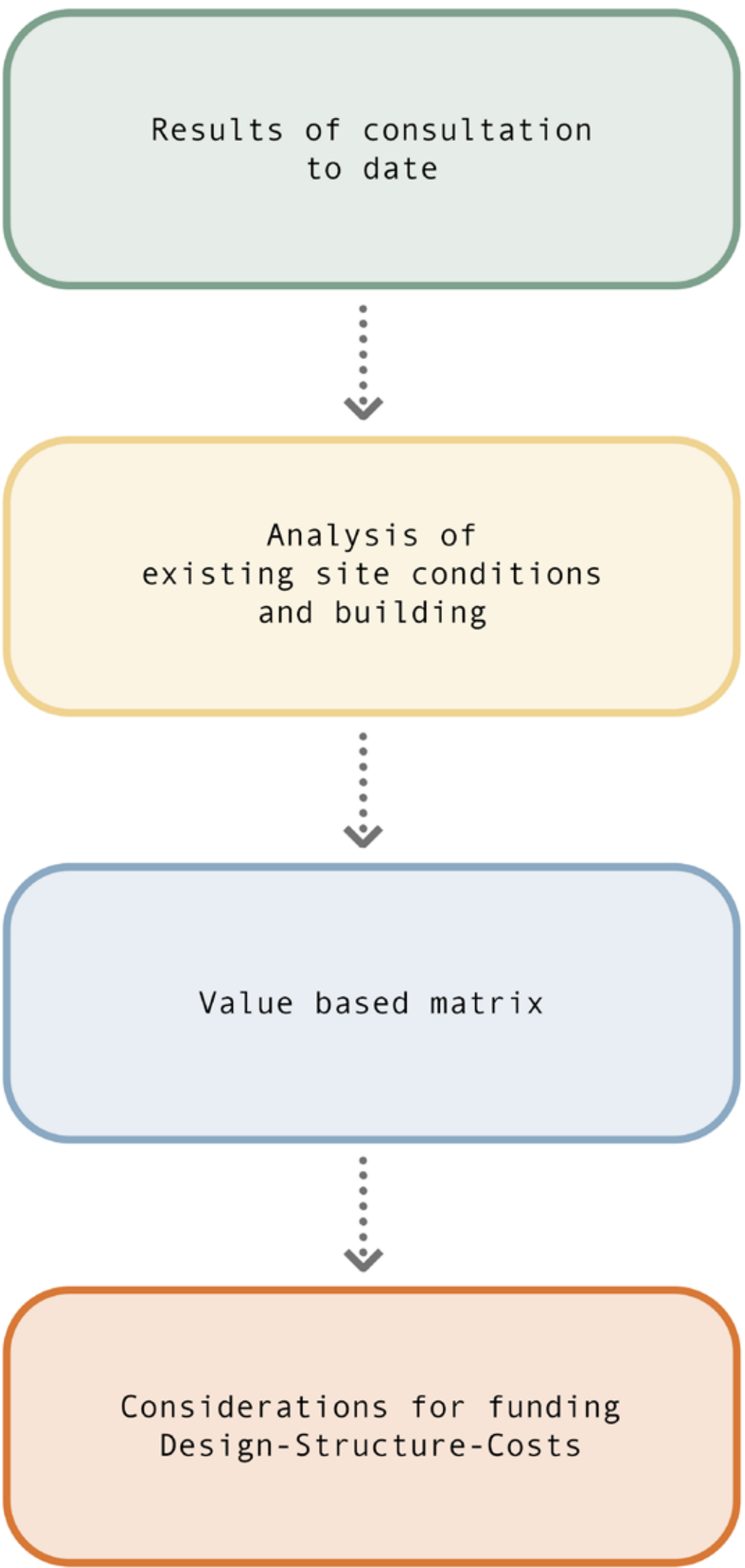
We held a second public consultation to show our design ideas to the wider community of Llanelli and more of the church community

Activities included

- Tours of the former police station
- VR headset with visuals of digital model of the proposal
- Physical model of the proposal
- Boards showing our ideas for the design
- Kids activities books
- Feedback cards
 - With link to Facebook page to leave feedback
- Question cards:
 - Picture 10 years into the future how successful is the project? What does this look like? What will make this happen?
 - Imagine you are 90 years old and reflecting on the project which is thriving. What do you think made this project work so well? What has it achieved for the community? What issues might it have faced along the way?
- Cake and drinks stall



- OUR APPROACH -



- POST CONSULTATION FINDINGS -

Church and community needs



Data booklet findings

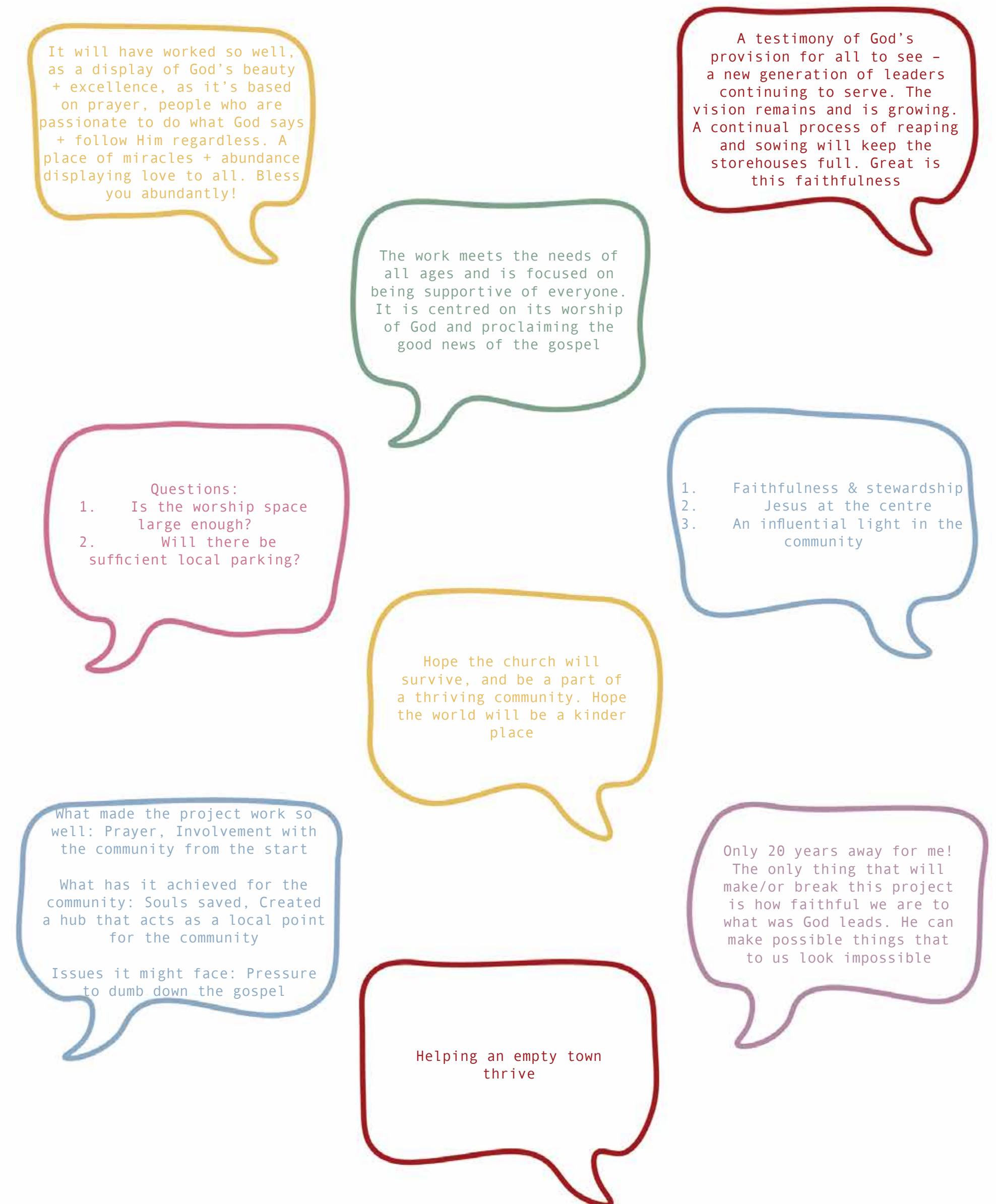
- POST CONSULTATION FINDINGS -

Picture 10 years into the future how successful is the project? What does this look like? What will make this happen?



- POST CONSULTATION FINDINGS -

Imagine you are 90 years old and reflecting on the project which is thriving. What do you think made this project work so well? What has it achieved for the community? What issues might have it have faced along the way?



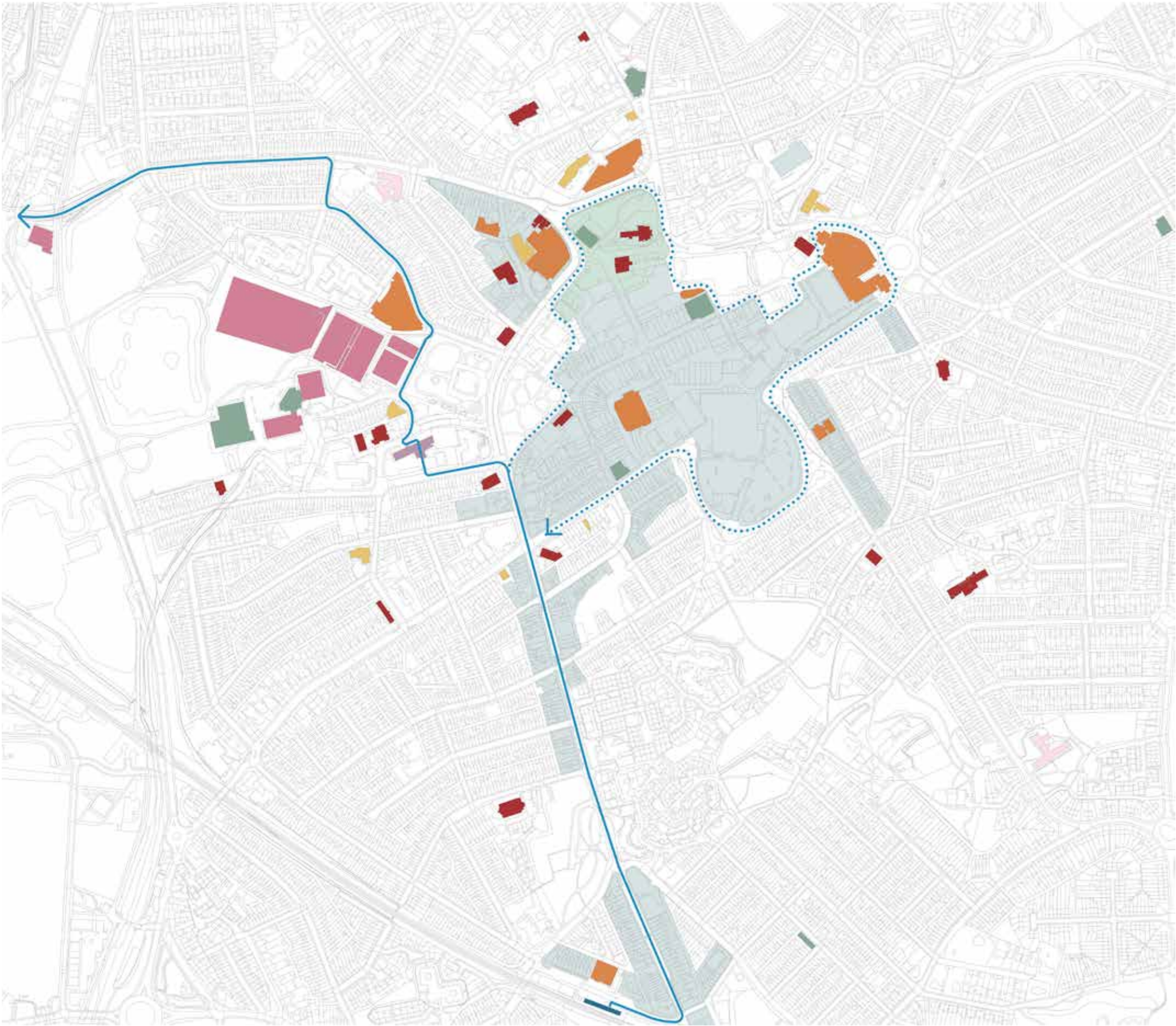
02

SITE ANALYSIS

“Therefore go and make disciples of all nations, baptising them
in the name of the Father and of the Son and of the Holy Spirit,”

Matthew 28:19

- MACRO ANALYSIS -



- KEVIN LYNCH DIAGRAM -

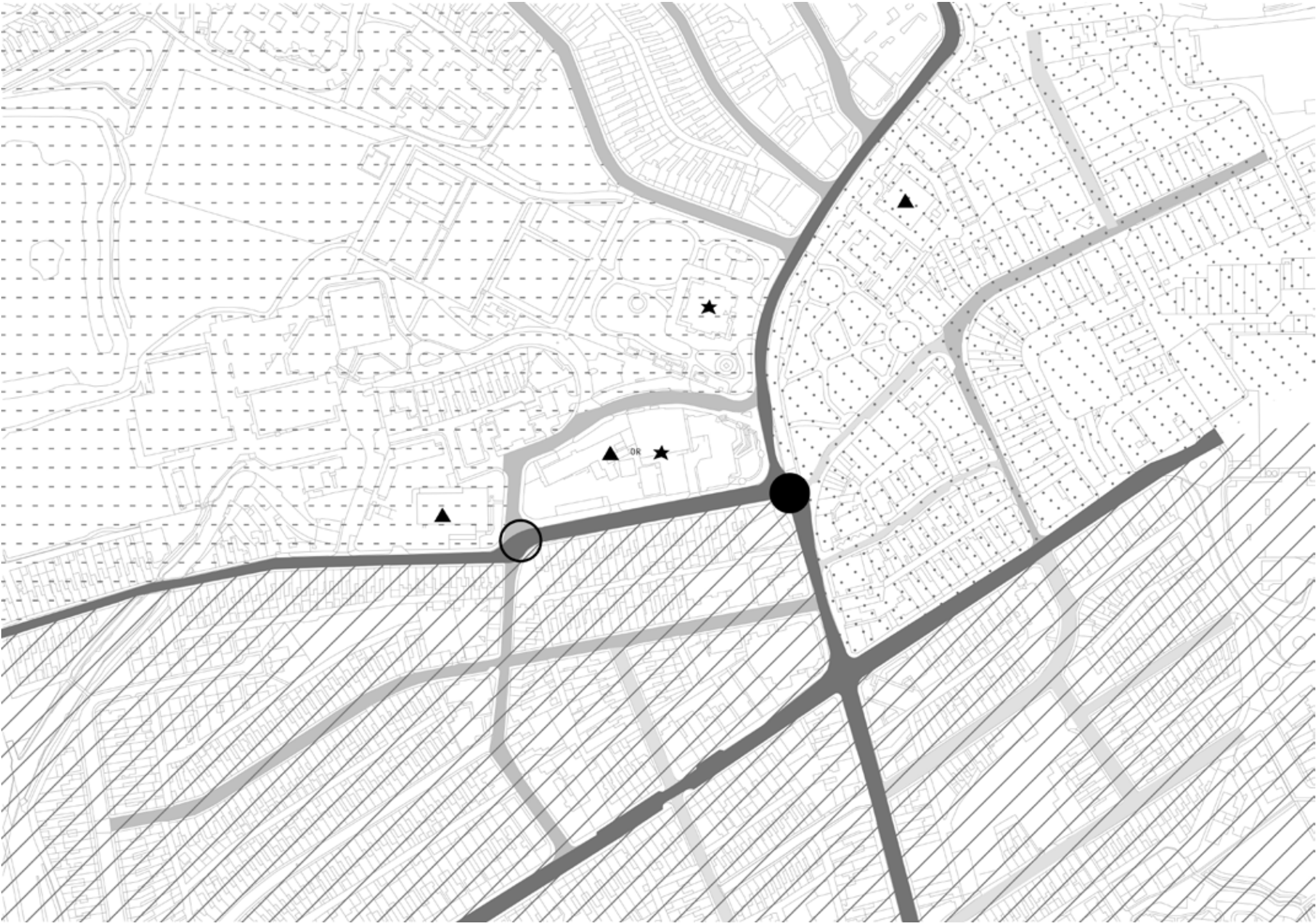
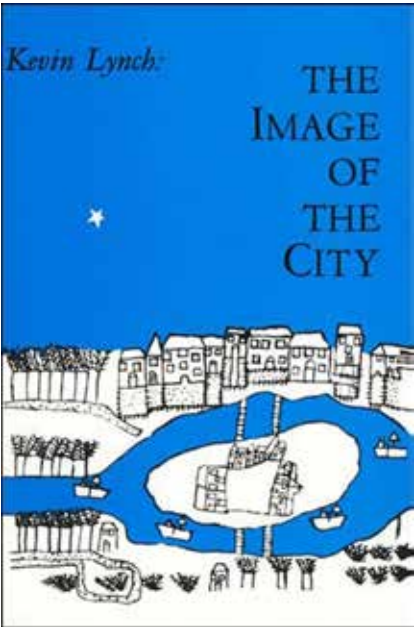
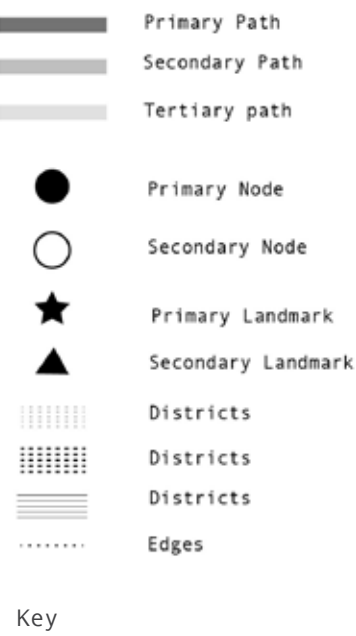


Image-ability Analysis of the Site after Kevin Lynch



Kevin Lynch's Analysis of Boston

AN OVERVIEW OF PLANNING POLICY AND LEGISLATION IN CONTEXT

Planning Policy in context for the determination of this Application is provided by National and Local Planning Policy and Guidance. National guidance is set out in the Well-Being for Future Generations as well as Planning Policy Wales along with the Technical Advice Notes and the Land-use planning policy. Local policy consists of the Carmarthenshire Revised Local Development Plan 2018-2033 and its Supplementary Planning Guidance Documents.

1. The Well-being of Future Generations (Wales) Act (2015) is about improving the social, economic and cultural well-being of Wales. The Act ensure that local authorities deliver sustainable development by considering long term effects as well as encouraging a more joined up approach. The Well-being of Future Generations Act put in place seven well-being goals to help ensure that public bodies are all working towards the same vision of a sustainable Wales.

2. The Planning (Wales) Act (2015) enables the creation of an efficient planning process that ensures the right development is located in the right place. This is done through adherence with the Well-being of future generations Acts to ensure that we plan and manage our resources in an engaged and sustainable way. There is greater emphasis on development engagement at the pre-application stage. This approach will help ensure issues such as design and amenity are considered at the earliest stage.

3. National Policy

Planning Policy Wales (Edition 10, December 2018) This document sets out the land-use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs). Procedural advice is given in circulars and policy clarification letters.

An overarching objective of PPW is the need for planning to take an active and positive role in placemaking. This approach is even to be taken at the householder scale, paragraph 2.7 states; Placemaking in development decisions happens at all levels.

4. Regional Policy

Carmarthenshire Local Development Plan 2018-2033

Supplementary Planning Guidance

WELL-BEING FOR FUTURE GENERATIONS ACT

The Well-being of Future Generations Act imposes a duty on public bodies to carry out sustainable development in accordance with the sustainable development principles, and to act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Its content is sought to be delivered through the planning system via the intertwining of the Act through PPW.



FUTURE WALES (2040) NATIONAL DEVELOPMENT PLAN

Future Wales is a spatial plan, which focusses on the direction of investment into infrastructure and development for the greater good of Wales and its people. It makes clear the importance of planning new infrastructure and development in such a way that they are complementary rather than competing priorities, ensuring opportunities are maximised and multiple benefits are achieved. The Future Wales national development plan is influenced by the Well-being for Future Generations Act. To maximise sustainable development each of the well-being goals are addressed.

A focus of Future Wales is to provide quality development in the right places for the right reasons. 11 Future Wales Outcomes are set out within the chapter, which collectively are a statement of where Wales wants to be in 20 years. Every part of Future Wales is concerned with achieving these outcomes.

Each outcome commences with the prefix 'A Wales where people live...' building on the statement to provide a vision of Wales in 2040. Of particular relevance to the proposal are the following outcomes, all following the same prefix:

- A Wales where people live:
- 1 '...and work in connected, inclusive and healthy places',
- 3 '...in distinctive regions that tackle health and social-economic inequality through sustainable growth',
- 5 '...and work in towns and cities which are a focus and springboard for sustainable growth',
- 7 '...in places where travel is sustainable',
- 9 '...in places that sustainably manage their natural resources and reduce pollution',
- 10 '...in places with biodiverse, resilient and connected ecosystems', and
- 11 '...in places which are de-carbonised and climate-resilient'.

PLANNING POLICY WALES

Planning Policy Wales (PPW) is the principal national planning policy document which sets out the land use policies of the Welsh Government (WG) against which development proposals should be assessed. The latest version is the eleventh edition, published in February 2021.

The main goal of PPW is to ensure that the planning system contributes towards sustainable development and improves the social, economic, environmental, and cultural well-being of Wales. Placemaking lies at the heart of PPW, with policy and development management decisions required to seek to deliver development that adheres to these principles.

PPW and the National Development Framework (published as Future Wales - the National Plan 2040) set out how the planning system at a national, regional and local level can assist in delivering these requirements through Strategic Development Plans (SDPs) and Local Development Plans (LDPs).

Placemaking Wales

Placemaking Wales is an initiative to support the implementation of placemaking in Wales. The project is being led by the Placemaking Wales Partnership - a multi-disciplinary group representing professions and organisations involved in shaping the built and natural environment in Wales.

As Part of the Placemaking Wales Charter our goal is to respond to the goals set by the Placemaking Wales Partnership through a holistic approach that takes into consideration the entire context rather than individual land uses,

Planning Policy Wales States that Placemaking is:

'a holistic approach to the planning and design of development and spaces, focused on positive outcomes. It draws upon an area's potential to create high quality development ... that promote people's prosperity, health, happiness and well-being in the widest sense.'



Existing prison cells - to be removed as part of the proposals - setting the 'community free'. A cell now replaced with a space for conversation and faith

LOCAL DEVELOPMENT POLICY

Carmarthenshire's LDP has 4 main themes as a part of its strategy in order to provide a coherent approach. These elements are:

- 1. Early Intervention – To make sure that people have the right help at the right time; as and when they need it.
- 2. Prosperous People and Places – To maximise opportunities for people and places in both urban and rural parts of our county.
- 3. Healthy Habits – People have a good quality of life, and make healthy choices about their lives and environment.
- 4. Strong Connections – Strongly connected people, places and organisations that are able to adapt to change.

Summary of Local Development Policies relevant to the scheme:

- SP2 Retail and Town Centres
- INF1 Planning Obligations
- INF2 Healthy Communities
- SP12 Placemaking and Sustainable Places
- PSD1 Effective Design Solutions: Sustainability and Placemaking
- PSD5 Development and the Circular Economy
- PSD6 Community Facilities
- PSD11 Noise Pollution
- PSD12 Light and Air Pollution
- SP14 Maintaining and Enhancing the Natural Environment
- SP15 Protection and Enhancement of the Build and Historic Environment
- BHE2 Landscape Character
- SP16 Climate Change
- CCH4 Water Quality and Protection of Water Resources
- CCH6 Renewable and Low Carbon Energy in New Developments
- CCH7 Climate Change: Forest, Woodland, an Tree Planting
- SP17 Transport and Accessibility
- TRA2 Active Travel
- SP19 Sustainable Waste Management
- WM1 Sustainable Waste Management and New Development

Strategic Policy – SP 2: Retail and Town Centres

Proposals for retail and other town centre use development will be considered in accordance with the following retail hierarchy and the provisions below:

... Mid Order Town Centres: Llanelli...

Proposals for retail and other appropriate town centre uses within the Carmarthen town centre boundary (including leisure, civic, cultural, education, business, health and residential (on upper floors)) which support the growth of Carmarthen as a sub-regional retail town centre will be permitted where they maintain and enhance the vitality, viability and attractiveness of Carmarthen Town Centre

- 1. Proposals for retail and other town centre uses within the town centre boundary will be supported which, where applicable: Promote and diversify the education, leisure, cultural facilities, and the night-time economy; Provide for the creation of quality public spaces and environmental improvements including the preservation and enhancement of the distinctive local character of the historic built and natural environment, and a commitment to high quality design

INF1: Planning Obligations

Where necessary, planning obligations will be sought to ensure that the effects of developments are fully addressed in order to make the development acceptable. Contributions will be required to deliver or fund improvements to infrastructure, community facilities and other services and facilities to address requirements or impacts arising from new developments.

Where applicable, contributions will also be sought towards the future and ongoing maintenance of such provision.

In instances where there is a dispute regarding matters relating to the financial viability of delivering the requirements, the applicant will be required to meet the Council's costs of securing an independent financial viability appraisal / assessment.

INF2: Healthy Communities

Proposals for development which provide for active travel, accessible usable green spaces, and infrastructure, and which seek to reduce health inequalities through encouraging healthy lifestyles, addressing the social determinants of health and providing accessible health care facilities will be supported.

Strategic Policy – SP 12: Placemaking and Sustainable Places

To facilitate sustainable development, new development must acknowledge local distinctiveness and sense of place, and be resilient to climate change and deliver net benefits for biodiversity. To achieve this, all development shall:

- 1. Contribute towards the creation of attractive, cohesive, safe places and public spaces, which enhance the health and well-being or quality of life of residents and communities, including safeguarding amenity, landscaping, the public realm and the provision of open space and recreation;
- 2. The design, layout, and orientation of proposed building(s), and the spaces between and around them, should create an attractive, legible, healthy, accessible, and safe environment;
- 3. Retain and enhance the network of multifunctional GBI and the area's biodiversity including incorporating new opportunities to provide net benefits for biodiversity, and improve ecological connectivity and resilience (including the incorporation of local features);
- 4. Be adaptable to climate change and maximise opportunities for sustainable construction techniques, resource efficiency and contribute towards reducing carbon emissions and maximising opportunities for renewable energy generation.
- 5. Utilise materials and resources appropriate to the area within which it is located;
- 6. Exhibit and demonstrate a clear understanding of the existing local landscape context, natural and built heritage, local character, and sense of place;
- 7. Contribute to, or create opportunities for Active Travel and access to public transport;
- 8. Consider and where appropriate incorporate new, and/or enhance existing connections to essential social infrastructure and community facilities;
- 9. Be accessible and integrated allowing permeability and ease of movement which promotes the interests of pedestrians, cyclists and public transport which ensures ease of access for all;
- 10. Have regard to the generation, treatment, and disposal of waste; and
- 11. Manage water sustainably, including incorporating sustainable urban drainage systems (SuDS).

PSD1: Effective Design Solutions: Sustainability and Placemaking

Development proposals shall demonstrate effective delivery of site-specific design and sustainability objectives. Development shall deliver quality design solutions which are appropriate to the specific site, local area, and nature of development.

Proposals shall clearly demonstrate:

Development proposals shall demonstrate effective delivery of site-specific design and sustainability objectives. Development shall deliver quality design solutions which are appropriate to the specific site, local area, and nature of development.

Proposals shall clearly demonstrate:

a) That the development reflects local context through consideration of landscape; built environment; and historic and cultural characteristics, including the:

- 1. layout and landscape design scheme;
- 2. form, scale, dimensions, materials and detailing of all built elements and surfaces.

To ensure that development proposals retain a connection to, and complement, the local 'sense of place'.

b) High-quality design solutions which deliver:

- 1. built form which effectively integrates sustainable building design principles to maximise opportunities for carbon reduction, energy efficiency and flexibility in use.
- 2. efficient use of site area, whilst maximising the retention, protection and integration of existing landscape and ecological elements and features, as Green and Blue Infrastructure assets.
- 3. effective, safe, and inclusive site layout which promotes the health, well-being and amenity of residents, users, and visitors.
- 4. positive contribution to an effective and attractive public realm through the integration of built form with adequate and clearly defined private and public amenity space

c) That the development will not result in significant adverse impacts to the amenity of adjacent land uses, properties, residents, or the community; and that any potential adverse impacts have been avoided, minimised, and mitigated.

d) Quality landscapes design solutions which:

- 1. maximise opportunities for; enhancement to the quality and extent of existing; and the creation of new, landscape and ecological elements and features, as Green and Blue Infrastructure assets.
- 2. enhance visual amenity and landscape character to establish a clear and legible sense of place and contribute to an attractive public realm
- 3. minimise, and mitigate against potential adverse landscape and visual impacts.

e) Effective design solutions which take account of existing ground conditions and utilise existing site topography to address ground stability; minimise excavation and filling; optimise delivery of Policy PSD5 (Development and the Circular Economy); and minimise landscape and visual impacts.

f) That the development delivers or contributes to:

- 1. safe and efficient connections to existing access networks including Active Travel and the public transport network;
- 2. appropriate access routes and surfaces which promote effective accessibility for all and ease of movement into and through the site;
- 3. provision of appropriate onsite highway standards including parking and servicing.

g) That the development delivers sustainable and resilient measures for the treatment and disposal of surface and foul water; which are fully integrated into the site layout and maximise opportunities for the provision of additional value through functions which deliver landscape, ecological and green and blue infrastructure policy objectives.

h) That design solutions are deliverable for the lifetime of the proposed development through effective maintenance and management proposals

i) It includes, where applicable, provision for the appropriate management and eradication of invasive species.

PSD5: Development and the Circular Economy

Development proposals will be required to demonstrate, via the submission of a natural materials management plan, how the generation of waste has been minimised and any waste generated managed in order to keep resources in use for as long as possible in:

- 1. the layout and design of the development;
- 2. any demolition and construction phase;
- 3. respect of any opportunities for utilising waste for re-use and recycling;
- 4. respect of any opportunities for utilising residual waste as a source of fuel.

PSD6: Community Facilities

Proposals for new and improved community facilities, including health and education facilities will be supported where it accords with the following:

- 1. It would be readily accessible to the local community it is intended to serve by public transport, walking and cycling;
- 2. It is within, or is directly related to a settlement identified in Policy SP3: Sustainable Distribution;
- 3. It would not unduly harm the amenities nearby residential properties;
- 4. It would not detract from the character and appearance of the area;
- 5. It will not lead to unacceptable parking or traffic problems;
- 6. It is designed with appropriate flexibility and adaptability to accommodate additional community uses without compromising its primary intended use.

PSD11: Noise Pollution

Proposals that will lead to a detrimental impact from noise pollution will be permitted where it can be demonstrated that appropriate mitigation measures will be implemented, and incorporated into the development to minimise the adverse effects.

PSD12: Light and Air Pollution

Proposals that will lead to a detrimental impact from light and/or air pollution will be permitted where it can be demonstrated that appropriate mitigation measures will be implemented, and incorporated into the development to minimise the adverse effects.

Strategic Policy – SP 14: Maintaining and Enhancing the Natural Environment

Development proposals must protect and enhance the County's natural environment.

Proposals must reflect the role that natural environment aspects and features and an ecologically connected environment have in protecting and enhancing biodiversity, defining the landscape, contributing to Well-being and the principles of the Sustainable Management of Natural Resources.

All development proposals must be considered in accordance with National Policy and legislative requirements where a proposal for development would result in a significant adverse effect on designated sites, including European sites, SSSIs, and priority habitats and species.

Any development proposal should contribute towards the overall aim of the South West Wales Area Statement (NRW, 2020) in building resilience of our ecosystems and enhancing the benefits they provide. Development that would result in unacceptable adverse environmental effects or that does not result in enhancement of biodiversity will not be permitted.

Development must not cause any significant loss of habitats or populations of species (locally and/or nationally) and must provide net benefits for biodiversity. Where biodiversity enhancement is not proposed as part of a proposal for development, significant weight will be given to its absence, and unless other significant material considerations indicate otherwise it will be necessary to refuse permission.

Strategic Policy – SP 15: Protection and Enhancement of the Built and Historic Environment

Development proposals should preserve or enhance the built and historic environment of the County, its cultural, townscape and landscape assets, and, where appropriate, their setting.

Proposals will be expected to promote high quality design that reinforces local character and respects and enhances the cultural and historic qualities of the plan area.

BHE2: Landscape Character

Development proposals should relate to the specific landscape and visual characteristics of the local area, ensuring that the overall integrity of landscape character is maintained by:

1. identifying, protecting and, where appropriate, enhancing the distinctive landscape and historical, cultural, ecological, and geological heritage, including natural and man-made elements associated with existing landscape character;
2. protecting international and national landscape designations including National Parks and Areas of Outstanding Natural Beauty (AONB) and their settings;
3. preserving local distinctiveness, sense of place and setting;
4. respecting and conserving specific landscape features, and integrating the principles of placemaking and Green and Blue Infrastructure;
5. protecting key landscape views and vistas.

Strategic Policy – SP 16: Climate Change

Development proposals will be supported if they respond, adapt, increase resilience, and minimise the causes and impacts of climate change. Proposals must:

1. Contribute to a reduction in carbon emissions by reflecting sustainable transport principles and minimising the need to travel, particularly by private motor car;
2. Avoid, or where appropriate, minimise the risk of flooding including the incorporation of measures (such as SuDS and flood resilient design);
3. Promote the energy hierarchy by reducing energy demand, promoting energy efficiency, and increasing the supply of renewable energy;
4. Incorporate appropriate climate responsive design solutions including orientation, layout, density, and low carbon solutions (including design and construction methods) and utilise sustainable construction methods where feasible; and/or
5. Contribute towards the protection and enhancement of GBI assets and resilient ecological networks as carbon sinks.

CCH4: Water Quality and Protection of Water Resources

Development proposals must make efficient use of water resources and, where appropriate, contribute towards improvements in water quality. Proposals will be permitted where they do not have an adverse effect upon water resources, water quality, fisheries, nature conservation, public access, or water related recreation use in the County.

Where appropriate, SuDS must be implemented with approval required through the Sustainable Drainage Approval Body (SAB).

Proposals will be supported if they promote the safeguarding of watercourses through ecological buffer zones or corridors, protecting aspects such as riparian habitats and species, water quality, and providing for flood plain capacity.

Development will only be permitted if it can be demonstrated that there is no adverse effect on the integrity of phosphorus sensitive riverine Special Areas of Conservation (SACs). In the hydrological catchment area designated for riverine SACs, development creating wastewater discharges will be required to demonstrate there is no increase in phosphorus levels in the SAC. This can be achieved through implementation of mitigation measures and associated supplementary planning guidance. Where evidence demonstrates that adverse effects on the integrity of river SAC can be avoided or offset using mitigation, these must be agreed with the Council on a case-by-case basis, in consultation with NRW.

CCH6: Renewable and Low Carbon Energy in New Developments

Development proposals that connect to existing sources of renewable energy, district heating networks, or use low carbon technology will be supported.

Development proposals that include: residential development of 100 or more homes; or development with a total floorspace of 1000sq m or more; will be required to submit an Energy Assessment to determine the feasibility of incorporating such a scheme, and where viable, would be required to implement the scheme.

Major developments that consume significant energy will be encouraged to facilitate the development of, and/or connection to proposed District Heating and Cooling Networks.

CCH7: Climate Change – Forest, Woodland, and Tree Planting

Support will be given to proposals which seek the creation and protection of new (or the enhancement of existing) woodland, forests, tree belts and corridors, and where they promote the delivery of the national and local decarbonisation targets.

Support will be given to proposals that will deliver the multiple benefits associated with well-designed and well managed trees, woodlands, and forests (e.g., carbon sequestration, flood alleviation, improvements in air and water quality, nutrient mitigation, biodiversity and nature recovery, landscape, health and well-being, and amenity value).

Proposals should consider potential adverse effects upon the environment, cultural heritage, communities, and landscape, and, where appropriate, follow the mitigation hierarchy.

Strategic Policy – SP 17: Transport and Accessibility

Sustainable and deliverable development requires an integrated, accessible, reliable, efficient, safe, and sustainable transport network to underpin delivery. The Plan therefore contributes to the delivery of a sustainable transport system and associated infrastructure through:

1. Reducing the need to travel, particularly by private motor car;
2. Addressing social inclusion through increased accessibility to employment, services, and facilities;
3. Supporting and, where applicable, enhancing alternatives to the motor car, such as public transport (including park and ride facilities and encouraging the adoption of travel plans) and active travel through cycling and walking;
4. Re-enforcing the function and role of settlements in accordance with the settlement framework;

5. Promoting the efficient use of the transport network;
6. Enhancing accessibility to places of employment, homes, services, facilities, and other significant trip generating proposals at locations with access to appropriate transport infrastructure;
7. The incorporation of design and access solutions within developments to promote accessibility;
8. Providing walking and cycling routes, linking in with active travel and green and blue infrastructure networks;
9. Providing for new technological solutions through Ultra Low Emission Vehicles Charging Points in new developments; and,
10. Adopting a sustainable approach to the design, function, and layout of new development, including providing appropriate levels of parking.

TRA2: Active Travel

Proposals which enhance walking and cycling access by incorporating the following within the site, and/or making financial contributions towards the delivery of off-site provision, will be supported:

1. Permeable, legible, direct, convenient, attractive and safe walking and cycling routes connecting the development to: surrounding settlements; public transport nodes; community facilities; commercial and employment areas; tourism facilities; and, leisure opportunities;
2. Improvements, connections, and/or extensions to: footpath network and existing PROWs (including bridleways); cycle network and routes; Safe Routes to School; and, routes forming part of the Green and Blue Infrastructure network; and
3. Facilities that encourage the uptake of walking and cycling, including: appropriate signage; secure and convenient cycle parking; and changing and associated facilities.

Proposals which have a significant adverse impact on PROW or existing routes identified through the Active Travel (Wales) Act 2013 will be expected to contribute to the delivery the Council's Active Travel Plan.

Strategic Policy – SP 19: Sustainable Waste Management

Provision will be made to facilitate the sustainable management of waste through:

1. The allocation of adequate, appropriate land to provide for an integrated network of waste management facilities;
2. Supporting proposals for waste management which involve the management of waste in accordance with the ranking set out within in the waste hierarchy;
3. Supporting proposals which have regard to the nearest appropriate installation concept and principles of proximity and self-sufficiency¹⁰⁹;
4. Supporting proposals for new in-building waste management facilities at existing and allocated industrial sites (B2 use) which are suitable for waste management facilities;
5. Acknowledging that certain types of waste facility may need to be located outside the development limits of settlements;
6. Ensuring that provision is made for the sustainable management of waste in all new development, including securing opportunities to minimise the production of waste.

Development proposals must ensure that:

1. There are no significant, adverse effects upon public health, the environment, local amenity and the local transport network;
2. The proposal is compatible with any neighbouring uses or activities.

WM1: Sustainable Waste Management and New Development

Development proposals must ensure that provision is made for the sustainable management of waste in all new development, including storage, recycling and by securing opportunities to minimise the production of waste.

- SURROUNDING CONTEXT -

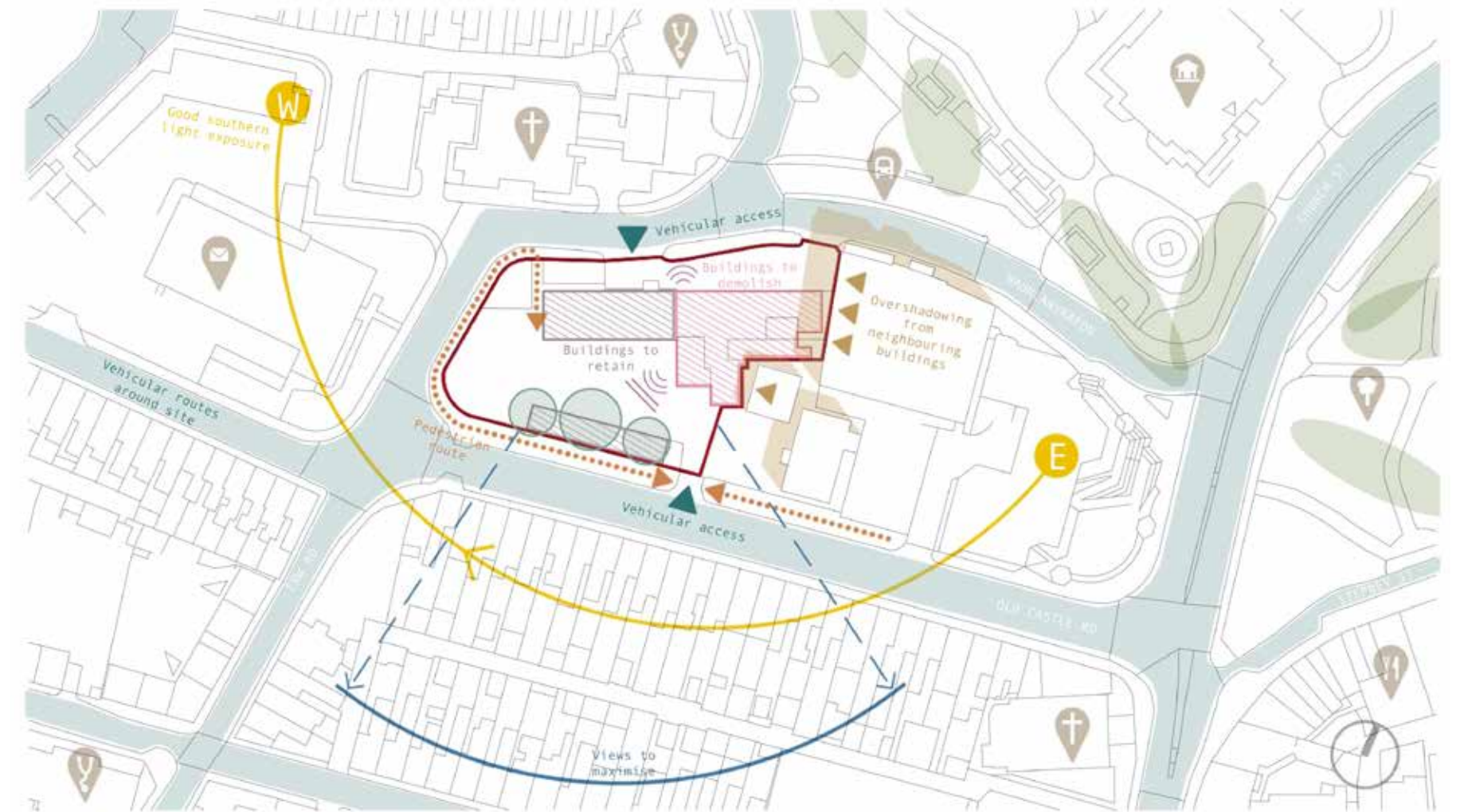
Close proximity to local services and facilities



Surrounding Land uses

- SITE CONSTRAINTS AND OPPORTUNITIES -

Compact site with good accessibility in mixed-use context



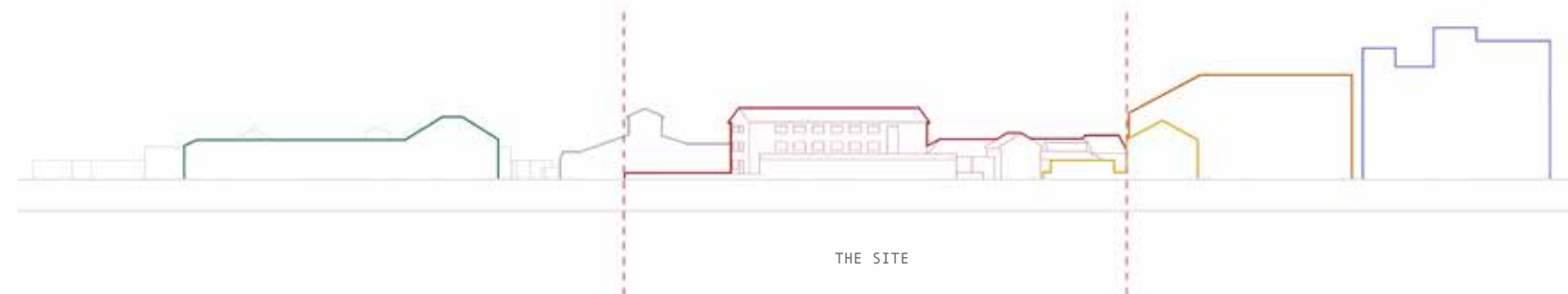
Constraints and Opportunities Plan

KEY OPPORTUNITIES

- North/South facing site
- Site as part of a wider urban strategy, to connect the town
- Existing buildings to utilise.
- Existing services on site
- Strong town presence possible
- Easy connection to wider community
- Good transport infrastructure
- Space for construction works to be stored
- Distances to surrounding buildings enable buffer from noise
- Opportunity for new 'urban square'
- Opportunity to have higher buildings, given height of surrounding context

KEY CONSTRAINTS

- Single storey building in poor condition
- Adjacent neighbours
- Party wall matters
- Existing infrastructure to be ensure is kept
- Pile foundations will be required, due to below ground conditions
- Any buildings kept will need to be thermally upgraded
- Sensitive off-site construction needed to minimise disturbance for neighbours
- Sensitive off-site construction needed to minimise disturbance for neighbours
- Building will need to be maintained regularly, as part of display to the community



Street Elevation 01



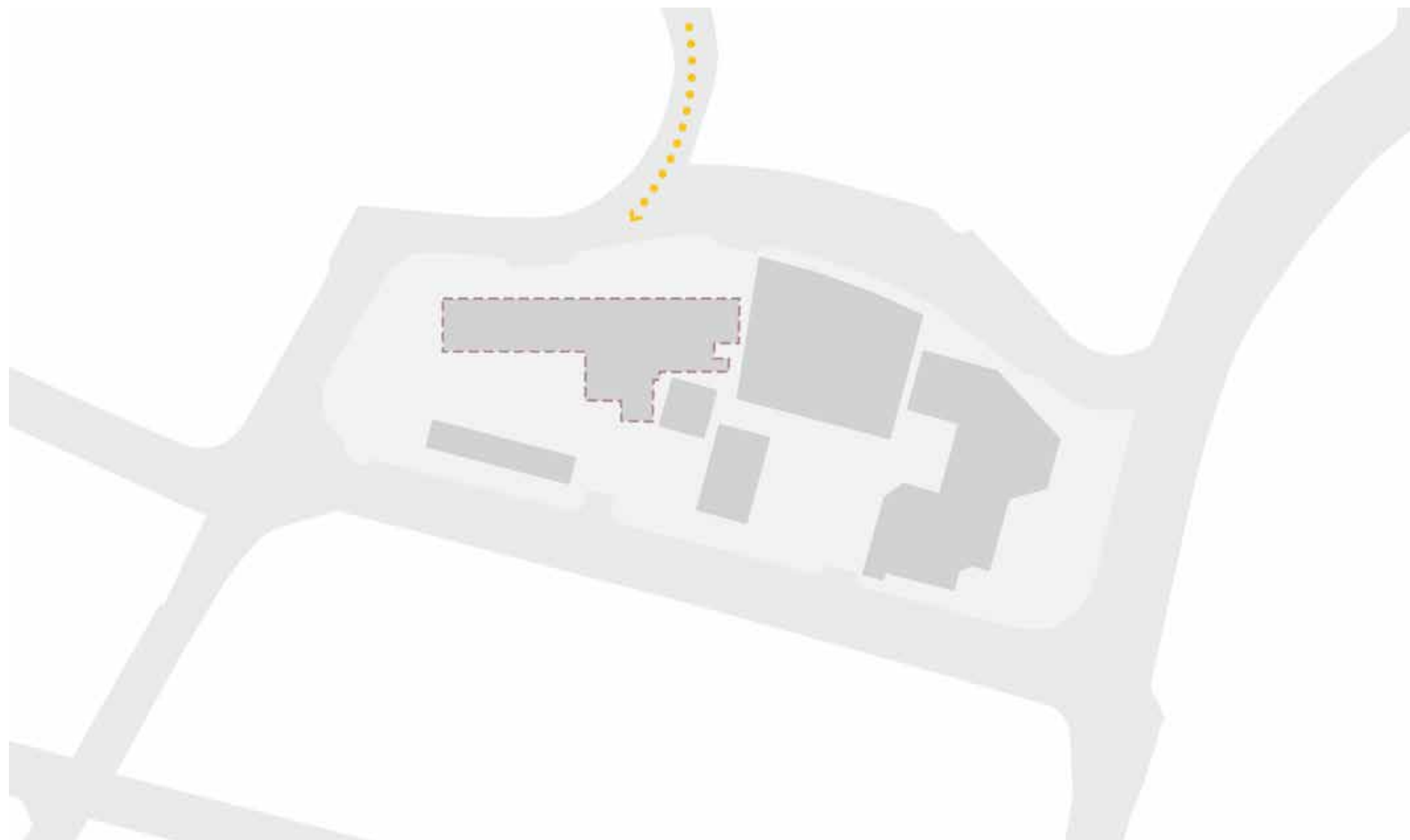
Street Elevation 02

- ACCESS ROUTES -

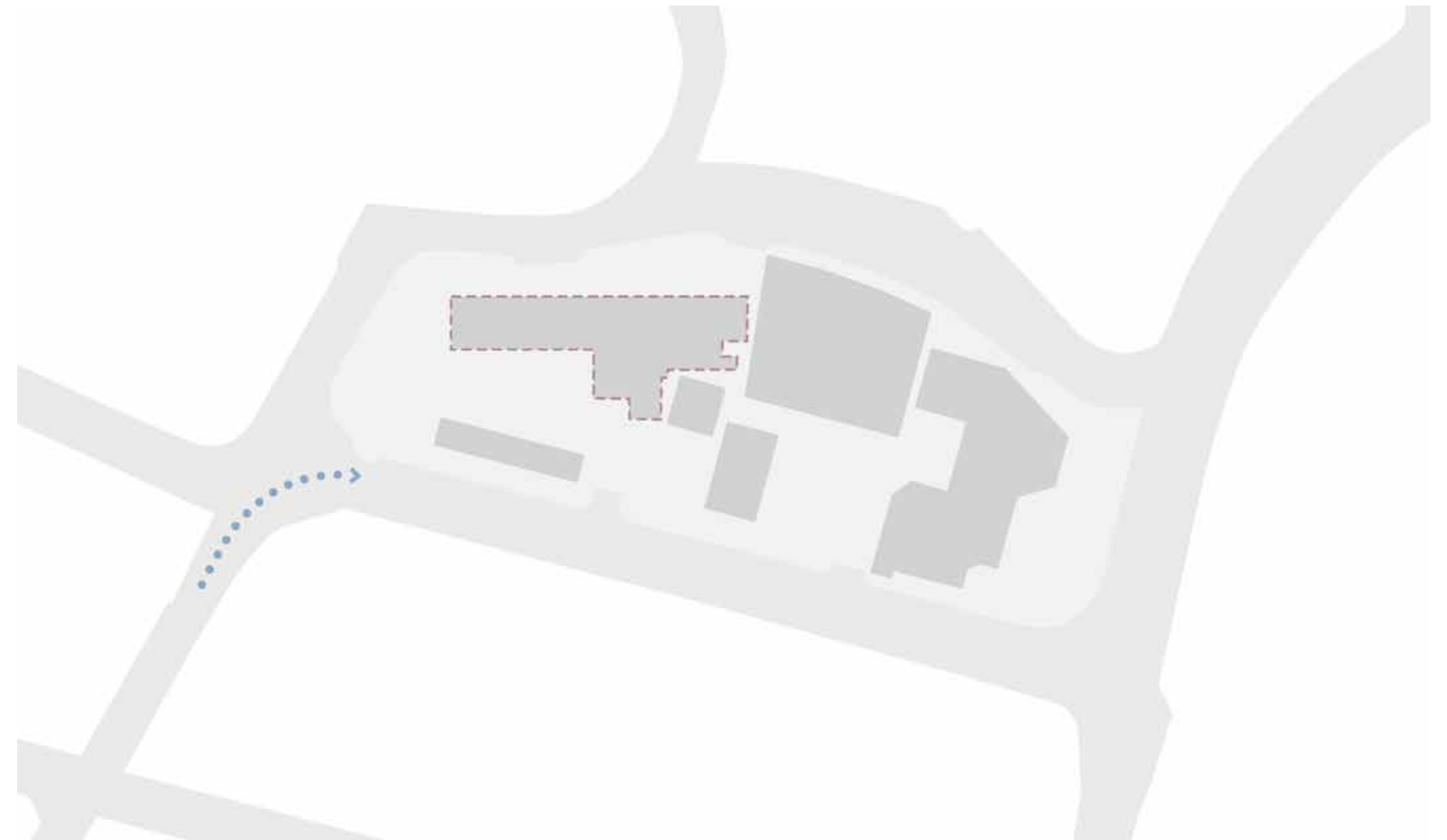
Route from Park Crescent



From the route to the site along Park Crescent, you can see the single-storey existing structure immediately, with more of the building revealing itself the further down the road you travel. This viewpoint acts as an opportunity to create a new landmark for the community, like a beacon, where people are drawn to meet and congregate.



Route from Erw Road

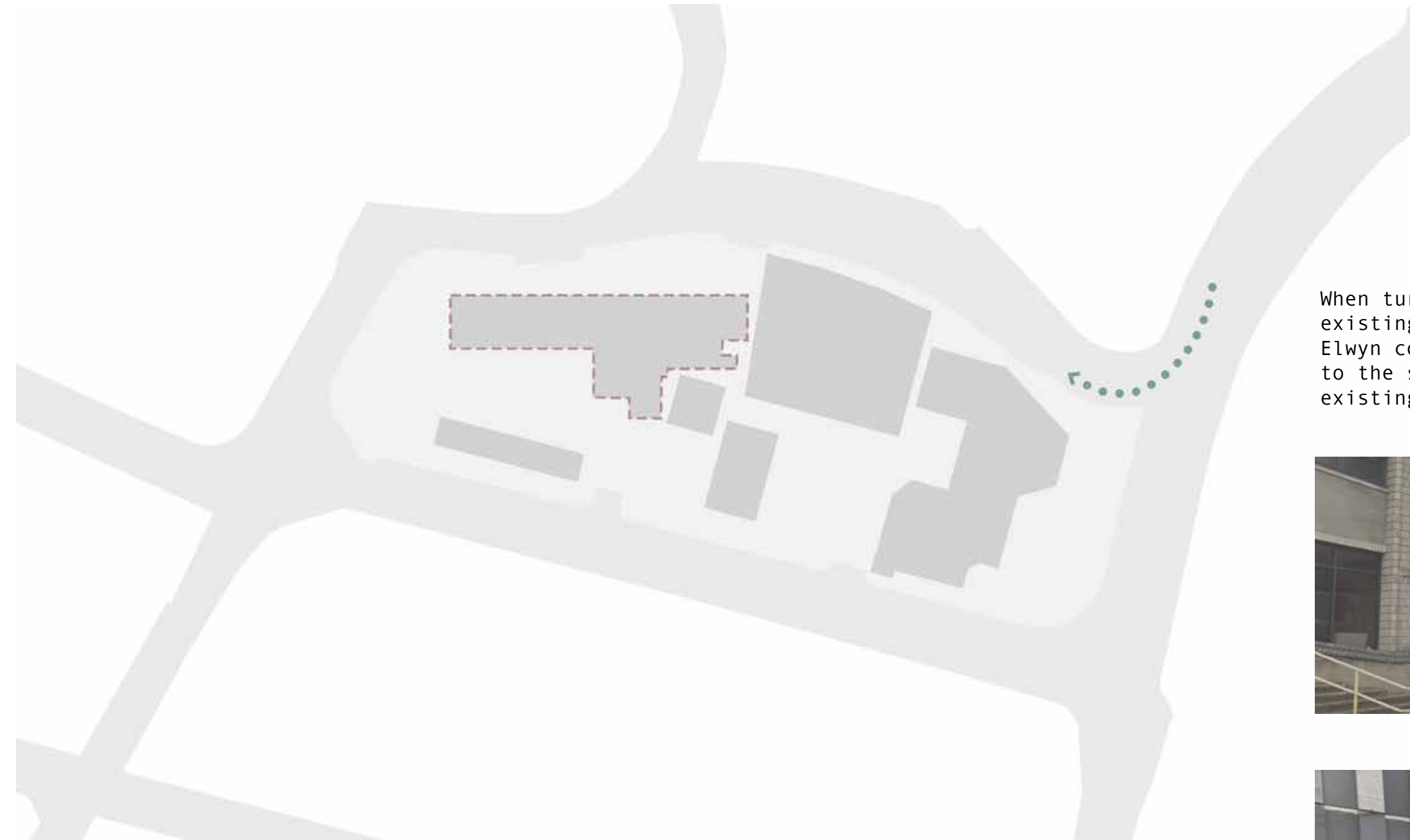


On approach from Erw Road, the three-storey side of the former police station is clearly visible. By keeping this structure intact and retaining its architectural language, this existing landmark will be kept intact as a familiar marker for the community in this area of Llanelli.

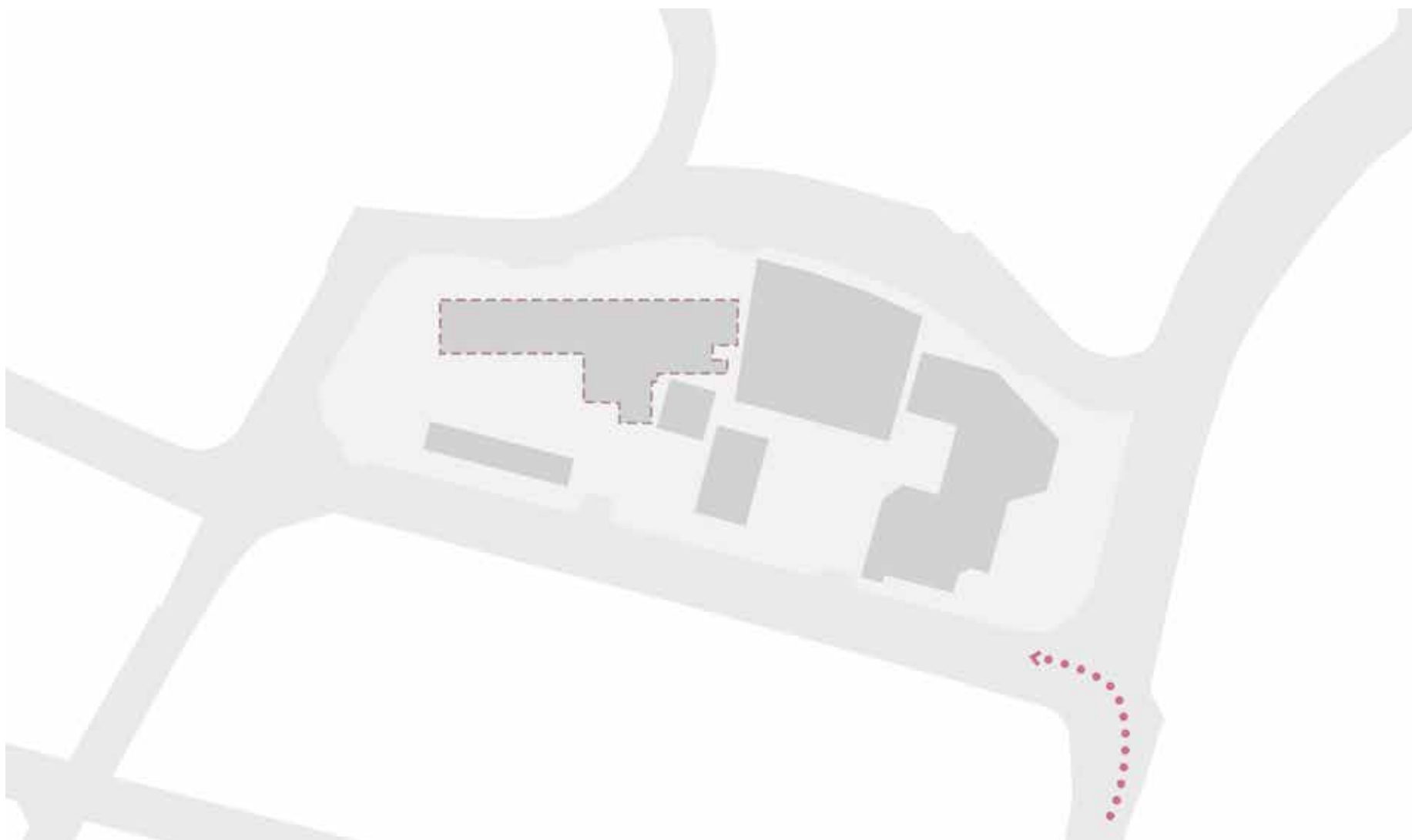


- ACCESS ROUTES -

Route from A4214



On approach from the A4214, the existing buildings on the site are obscured by council building Ty Elwyn, and the Dyfed Powys Police building.



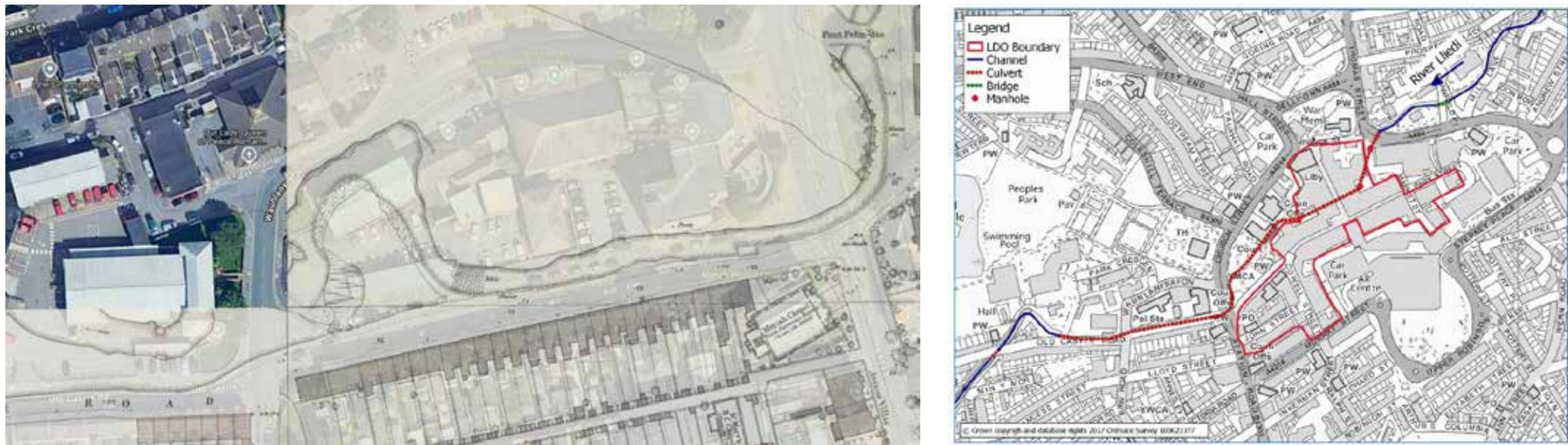
Route from Church Street

When turning off of Church Street to get to the site, the existing former police station structures are hidden by the Ty Elwyn council building, and a set of commercial buildings next to the site. Once you get past the commercial buildings, the existing buildings are fully visible.



- STRUCTURAL REPORT -

Desktop study



The geological mapping of the site suggests varying strata across the site is likely, with the possibility of varied bedrock as well as overlying superficial deposits.

As can be seen from the 1878 map the River Lleidi used to flow across the site, directly beneath the footprint of the buildings. At some point in the early 20th century the river appears to have been diverted into a culvert under the majority of the town centre, flowing beneath Old Castle Road directly adjacent to the site.

The presence of the River Lleidi meandering across the site prior to the construction of the buildings further points toward varied conditions, with potentially significant depths of poor material as a result of the deposition of fine material on the river banks.

The historic investigations in the areas surrounding the site confirm the presence of variable strata at shallow depths but generally suggest a consistent band of Sandy Gravel at around 5m depth overlying the mudstone bedrock at around 10m.

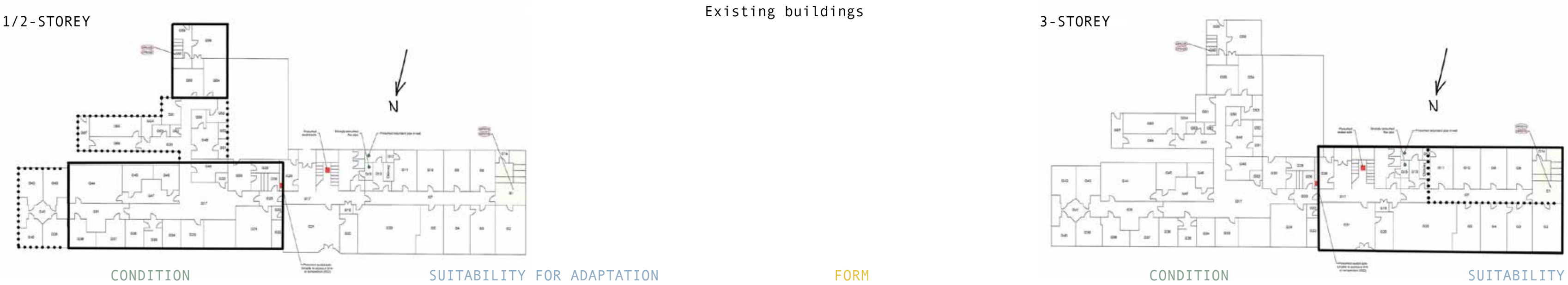
- Anticipated ground conditions:
- 0 - 1m Compacted Made Ground
 - 1 - 5m Variable strata including gravel, sand, clay and silt
 - 5 - 10m Sandy Gravel with Cobbles and Boulders
 - 10+m Mudstone Bedrock

Given the variability at shallow depths a detailed Site Investigation is likely to be required to inform economic foundation design.

Where proposed and existing structures interact founding in the Sands and Gravels below 5m depth is likely beneficial to minimise potential differential settlement in the varying strata above.



- STRUCTURAL REPORT -



FORM

The majority of the structure appears to be contemporary to the 3-storey RC frame, with consistent detailing of door and window openings across both structures, and bricks which appear to be of the same stock.

It is clear the single storey element has been extended over the years to suit the requirements of the police force, generally comprising additions to, and infill between, the original structures. This is evidenced by a change in brickwork and window detailing, as well as most notably the addition of a pitched roof.

The single storey structures of the original construction generally appear to be formed of load bearing masonry, with elements of reinforced concrete to form larger internal clear areas and a reinforced concrete roof slab.

The additional single storey structures also appear to be of load bearing masonry construction, however it is likely their roof structures are of timber construction, although this was not directly observed during the inspection.

CONDITION

Generally the structures appear to be in sound condition with no obvious evidence of global or systemic issues which pose a concern to building stability. There are however a number of local issues which would require addressing should the buildings be retained.

At the junction between the single storey infill and assumed older 2-storey construction there is evidence of differential settlement in the form of rotation and cracking of lintels over door openings.

A number of the concrete lintels associated with the original construction are showing signs of degradation in the form of cracking, spalling concrete, and exposed reinforcement. In some areas there is also evidence of previous remedial works to address similar issues.

The addition of the pitched roof possibly suggests historic water ingress issues associated with an original concrete flat roof, however there was no evidence of ongoing issues at the time of inspection.

SUITABILITY FOR ADAPTATION

As load bearing masonry structures the majority of the internal walls are structural elements and as such alteration to their form will require structural intervention. If this is relatively minor in nature (i.e. a new door opening) this is fairly straightforward, however large alterations (i.e. removing entire walls) will require greater intervention.

As there is evidence of existing issues with differential settlement it is unlikely the existing foundations would be suitable for additional load, such as the addition of a storey.

Given the foundation's lack of capacity for additional load and the challenges associated with altering the internal layout, unless a use can be found for the structures predominantly in their current arrangement their retention is unlikely to provide good value and demolition and replacement is likely to be more economic.

FORM

This 3-storey structure (with a partial basement) takes the form of a reinforced concrete frame set out on a regular grid.

The basement structure appears to be formed using brickwork permanent formwork for the walls and columns supporting an in-situ ground floor, the upper floors appear to comprise in-situ columns and down stand beams with one-way spanning pre-cast channels forming the slabs.

All of the structural members of the primary frame appear to be robust, with generous structural sizes. For example, historic product literature by Truscon Ltd. for a similarly sized pre-cast channel system spanning the same distance, 10', has a capacity of 80lb/sqft (3.8kN/m²). This is suitable for a wide variety of possible use cases. For reference; Residential = 1.5kN/m²; Dining Room, Lounge, Cafe, and Restaurant = 2.0kN/m²; Office = 2.5kN/m², Classroom = 3.0kN/m², Places of Worship (with tables) = 3.0kN/m², Places of Worship (without fixed seating) = 5.0kN/m²

The exterior of the structure is predominantly brick clad, there are no visible movement joints within the masonry.

The northern elevation features a reinforced concrete feature façade, which appears to contain elements of the structural frame.

The stability structure of the frame is not immediately obvious however it is likely the walls surrounding the stair cores at the east and western end of the building, as well as the external walls without windows on the end bays at the west are the primary elements. It should be noted the masonry is likely currently providing some additional support in this regard.

CONDITION

Generally, the structures appear to be in sound condition with no obvious evidence of global or systemic issues which pose a concern to building stability, and there was no evidence of foundation related movement within the superstructure.

There are however a number of local issues which would require addressing should the building be retained.

Significant water ingress was noted at the western end of the structure, likely associated with driven rain penetrating the masonry, resulting in blown plaster and efflorescence accumulating on the walls. Water ingress and efflorescence can be signs of degradation of concrete structures and as such further investigation in these areas would be warranted.

There is evidence of historic repair to the external elements of the RC frame. This is likely a positive sign as it means the structure has been maintained, however area of repair can also be susceptible to further degradation and as such further investigation of these areas is advised.

There are also a small number of areas where un-repaired degradation is evident.

On the southern elevation at the upper levels there is evidence of cracking around windows on the internal walls. It is likely this is a result of thermal expansion due to the lack of movement joints in the masonry and not a result of any underlying structural movements.

SUITABILITY FOR ADAPTATION

As the structure is framed its arrangement can be relatively flexible, the only constraint being the retention of the beams, columns and stability structure (including shear walls and floor diaphragm).

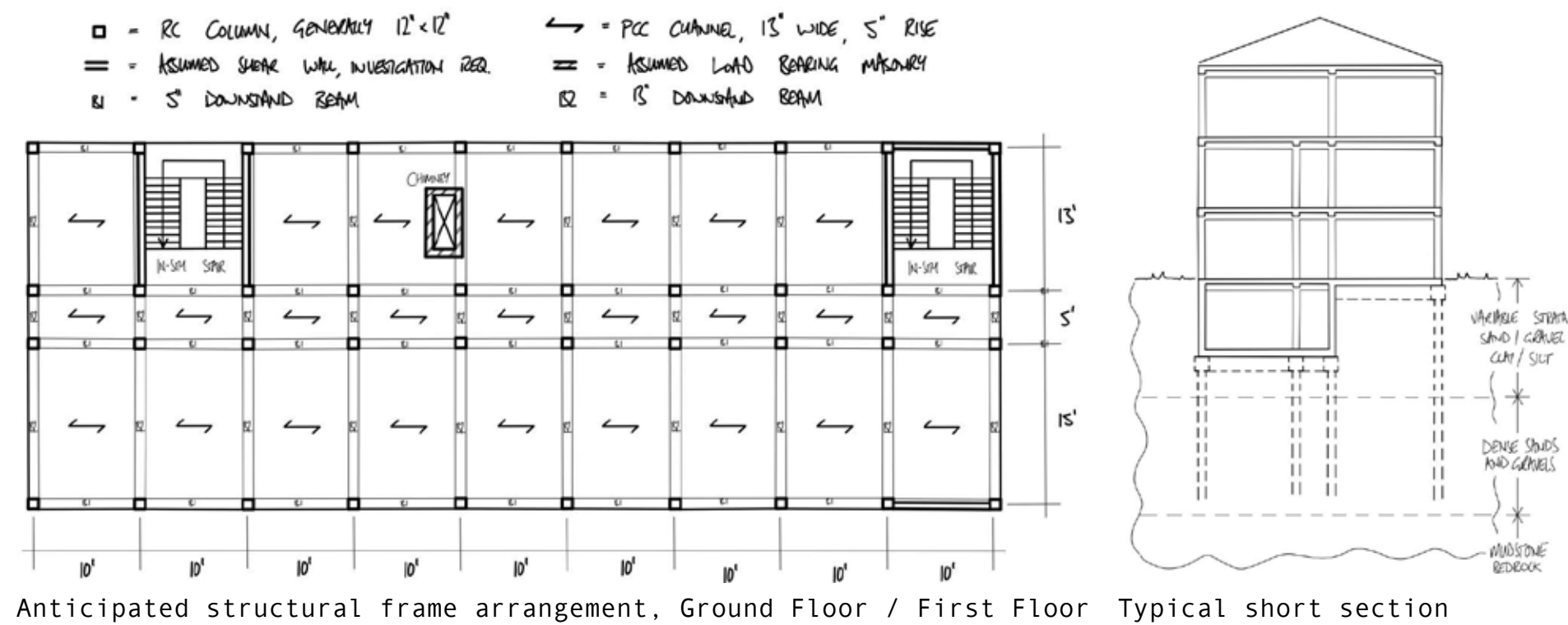
As the structural members are generously sized it is likely they will have ample capacity for a variety of uses, such as those required of a community centre or place of worship.

Given the generous structural sizing and the versatility of a framed structure for adaptation it is likely retention and repair of the structural frame offers good value, providing significant usable floor area in an economic manner.

- STRUCTURAL REPORT -

3-storey existing building adaptation considerations

ANTICIPATED STRUCTURAL ARRANGEMENT

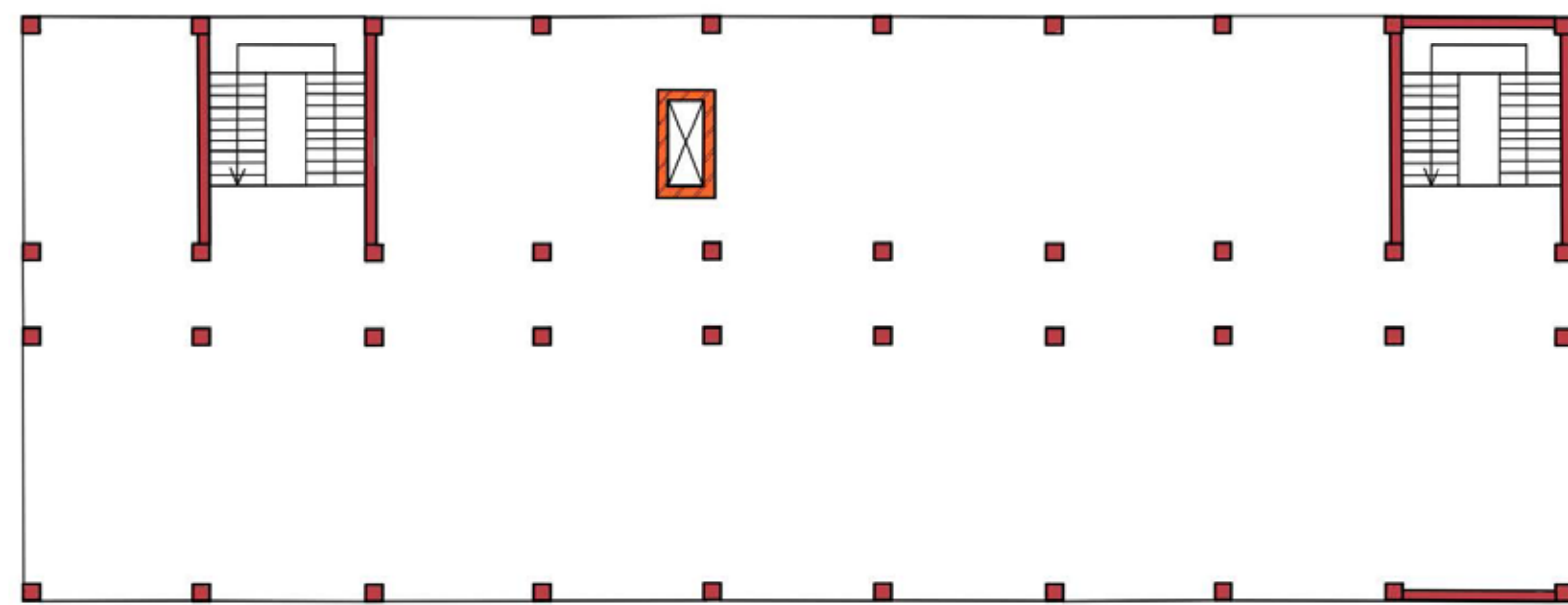


Given the depth to competent founding material and the significant mass of the structure, with no evidence of foundation movement, it is assumed the structure is supported on piled foundations bearing in the sands and gravels and/or mudstone bedrock.

Note the assumed location of shear walls is based on engineering judgment. Investigations are required to confirm positions and it is therefore possible there are sky structural elements which have not been identified at this juncture.

At the time of inspection access was not possible into the pitched roof and as such its structure is unknown. However, it is likely to be formed of timber overlying the concrete frame.

VERTICAL STRUCTURE ALTERATION



Alteration to the vertical structure shown in **RED** is possible however will require significant structural interventions. As such alterations to these areas do not represent good value unless they can provide significant benefits.

Alteration to the vertical structure shown **ORANGE** can be made with relatively straightforward structural intervention, e.g. with trimming beams beneath the slab.

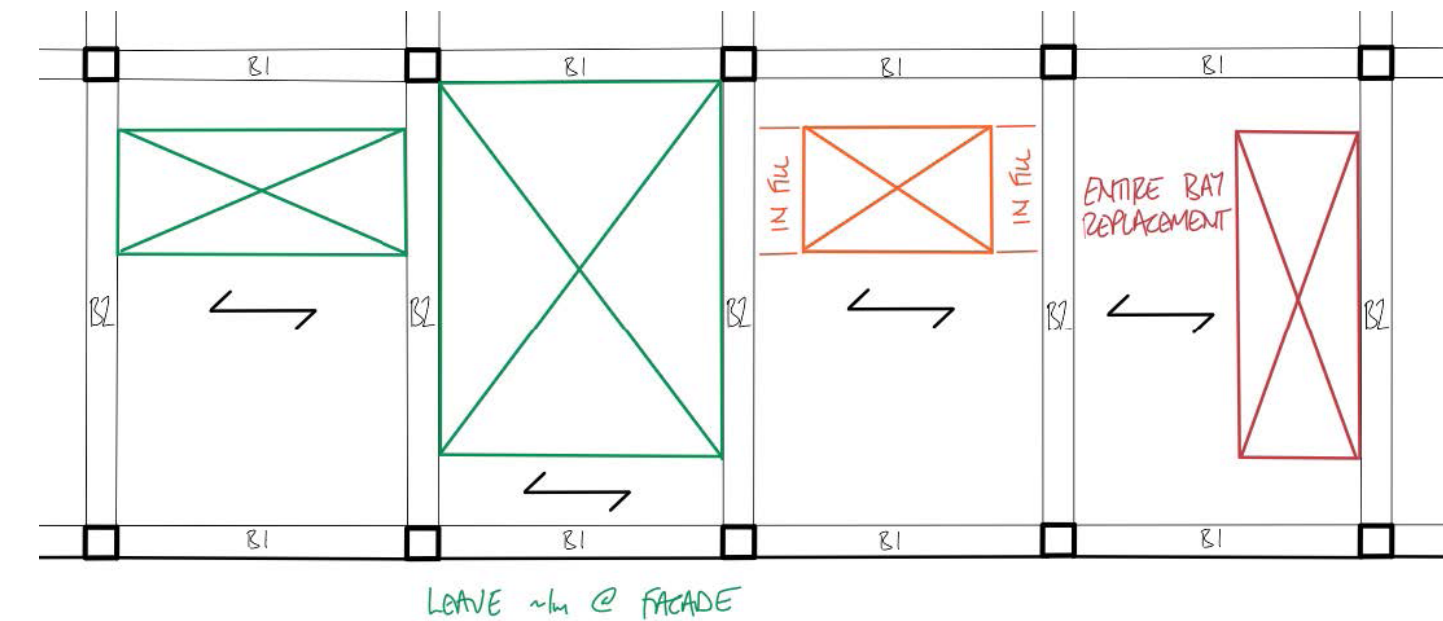
Walls not indicated on the drawing are unlikely to be load bearing and as such alteration should be able to be made with little to no structural intervention.

- STRUCTURAL REPORT -

3-storey existing building adaptation considerations

HORIZONTAL STRUCTURE ALTERATION

As the slabs are 1-way spanning this dictates the shape of opening which is easy to form and that which is not. Openings with their long dimensions in the span direction will be relatively straightforward to form, whereas openings with their long direction across the span will be significantly more challenging, likely requiring replacement of the entire bay instead.



GREEN = remove PCC channels and consolidate edges

ORANGE = remove PCC channels for full span and infill with new floor structure

RED = remove entire bay of floor structure and replace with new structure

It will generally be more straightforward to remove floor slabs from bearing to bearing in the span direction (i.e. beam to beam) rather than offset from beams. If it is necessary to retain a section of floor offset from the beam it is likely more straightforward to remove the full span and re-construct the desired area.

A say 1m strip of floor should be left around the building perimeter to aid in diaphragm action and ensure adequate restraint to the façade.

As the diaphragm action of the floor is key for stability forming a row of openings which split the floor plate into separate sections should be avoided as significant works around such a void would be required to maintain structural stability.

ADDITIONAL STOREYS

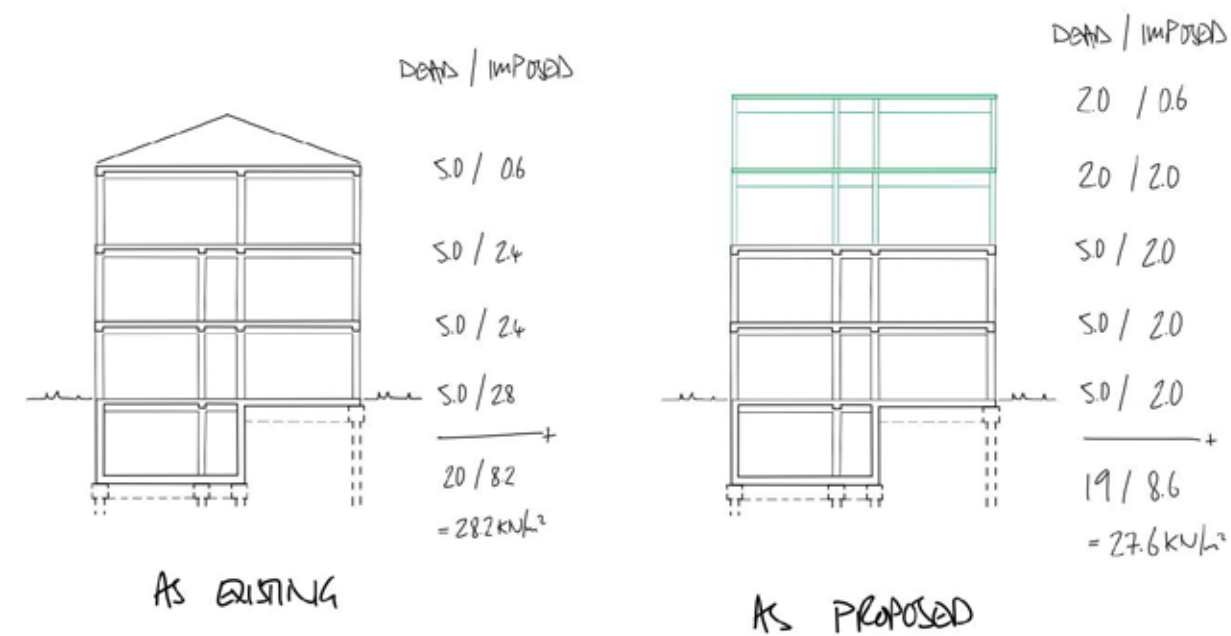
During the site inspection the possibility of adding additional storeys to the structure was discussed. As discussed the superstructure is relatively robust and should have ample capacity for additional load in the form of additional storeys. However, the foundations are unknown and as such an outline existing to proposed loading comparison has been undertaken to understand the magnitude of the likely impact on the foundations.

The loading comparison assumes:

- The structure was initially designed as an office, imposed loading in accordance with CP3
- The roof structure is removed and replaced with 2 No. lightweight storeys (e.g. timber / steel)
- The average imposed loading in the proposed arrangement is 2kN/m² (however individual floors could be more than this)

- STRUCTURAL REPORT -

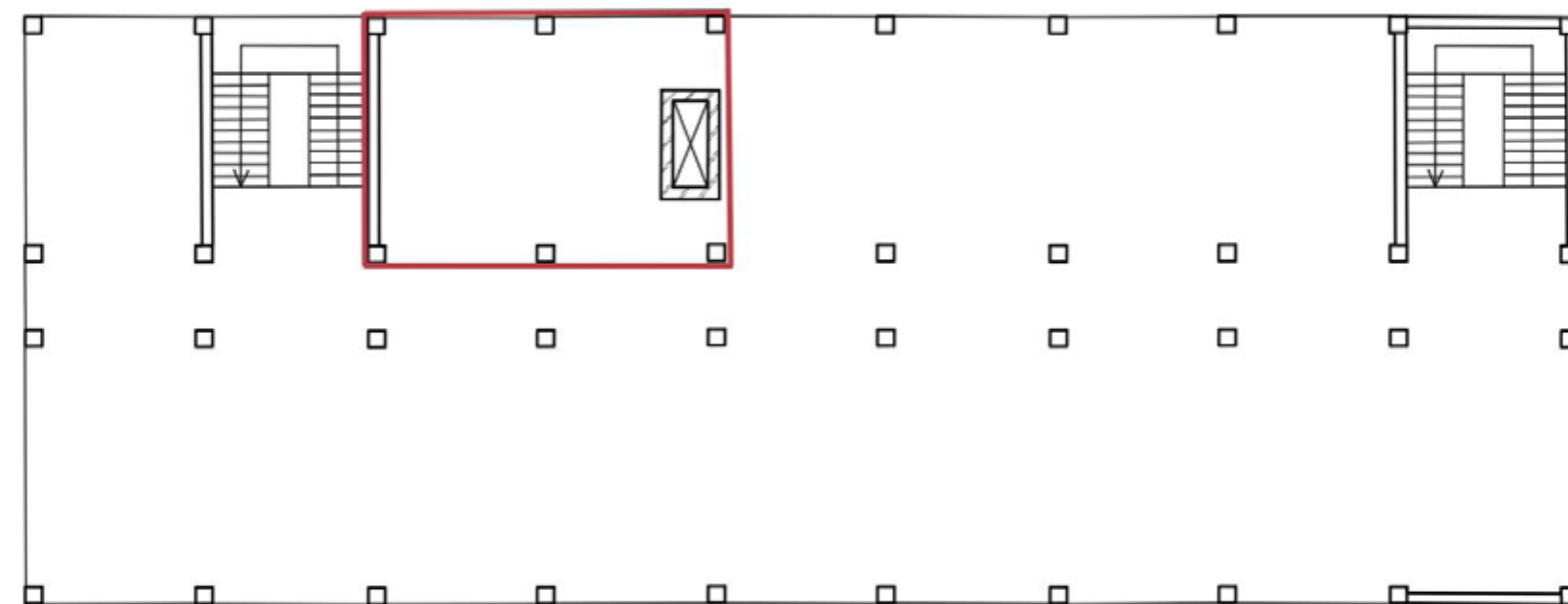
3-storey existing building adaptation considerations



As can be seen by the comparison by removing the relatively heavy roof structure and replacing it with 2 No. lightweight storeys the foundation loading is relatively unchanged showing this to be a feasible approach.

As the project progresses a more detailed analysis of anticipated loadings will be required.

SERVICE DISTRIBUTION



Plan indicating location of existing service distribution

In the current arrangement the two structural bays highlighted contain the toilet facilities on all levels. Maintaining facilities requiring drainage close to this area will reduce the amount of additional works required to form new service routes.

Additionally the chimney comprises an already formed void from basement to roof level which could be utilised as a service riser.

- STRUCTURAL REPORT -

Drainage

FOUL

Given the change of use on the site a review of the foul drainage network will be required, starting with a CCTV survey of the existing network to allow for assessment of its capacity, condition, and suitability for re-use.

Maintaining toilet provisions in a comparable location to the existing (i.e. next to the eastern stairs in the 3-storey building) will minimise the amount of drainage works required, see section 5.4.5 for location.

As there is an existing connection to the public sewer from the site it is likely this can be retained and re-used.

STORM

Given the scale of the development the proposal will require a sustainable drainage system (SuDS) including approval from the SuDS Approval Body (SAB), which is intended to run in parallel to the planning process.

The existing storm water drainage provisions on the site will not conform to SuDS standards and as such renewal will be required.

A SuDS scheme aims to mimic the water flow across the site in the greenfield condition by slowing down the flow of water, generally using vegetation and surface level water features, to deliver on the key principles of SuDS design: A reduction in water quantity leaving the site, an improvement in water quality leaving the site, biodiversity improvement, and amenity benefit.

Additionally Llanelli has more stringent requirements regarding SuDS, due to the local storm water network overflowing into the estuary, and as such making suitable allowances at the scheme stage is critical.

Allowance should be made within the landscape design for visible surface level features to be included in the SuDS scheme.



03

DESIGN

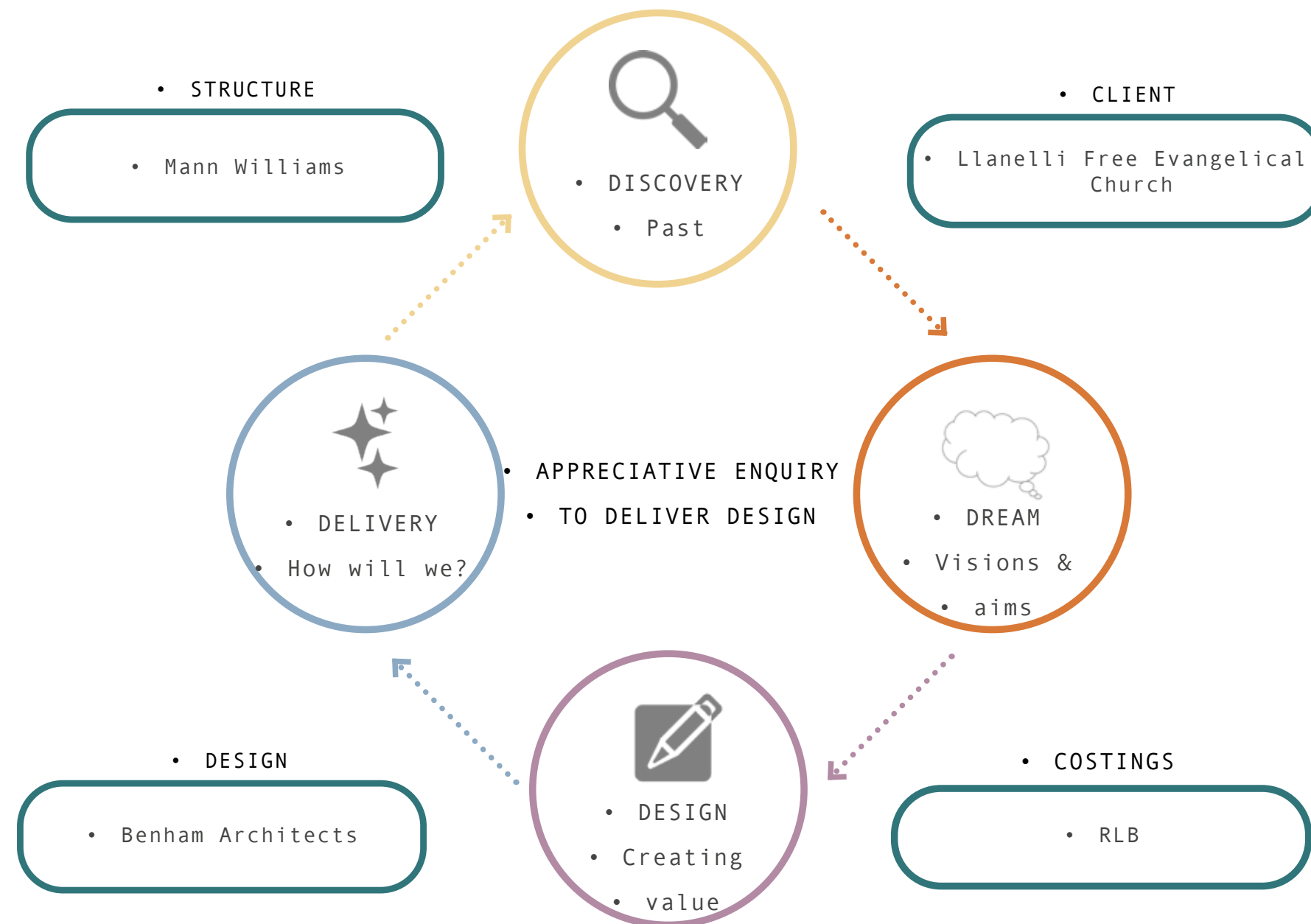
“He who testifies to these things says, “Yes, I am coming soon.”
Amen. Come, Lord Jesus.”

Revelation 22:20

- APPROACH -

Appreciative Enquiry

- We will follow a team approach to project. We want to diminish a pyramid structure, so that we create a safe space for people to express their desires, needs and wants. Also, this will make people positively accountable, through a united mindset.

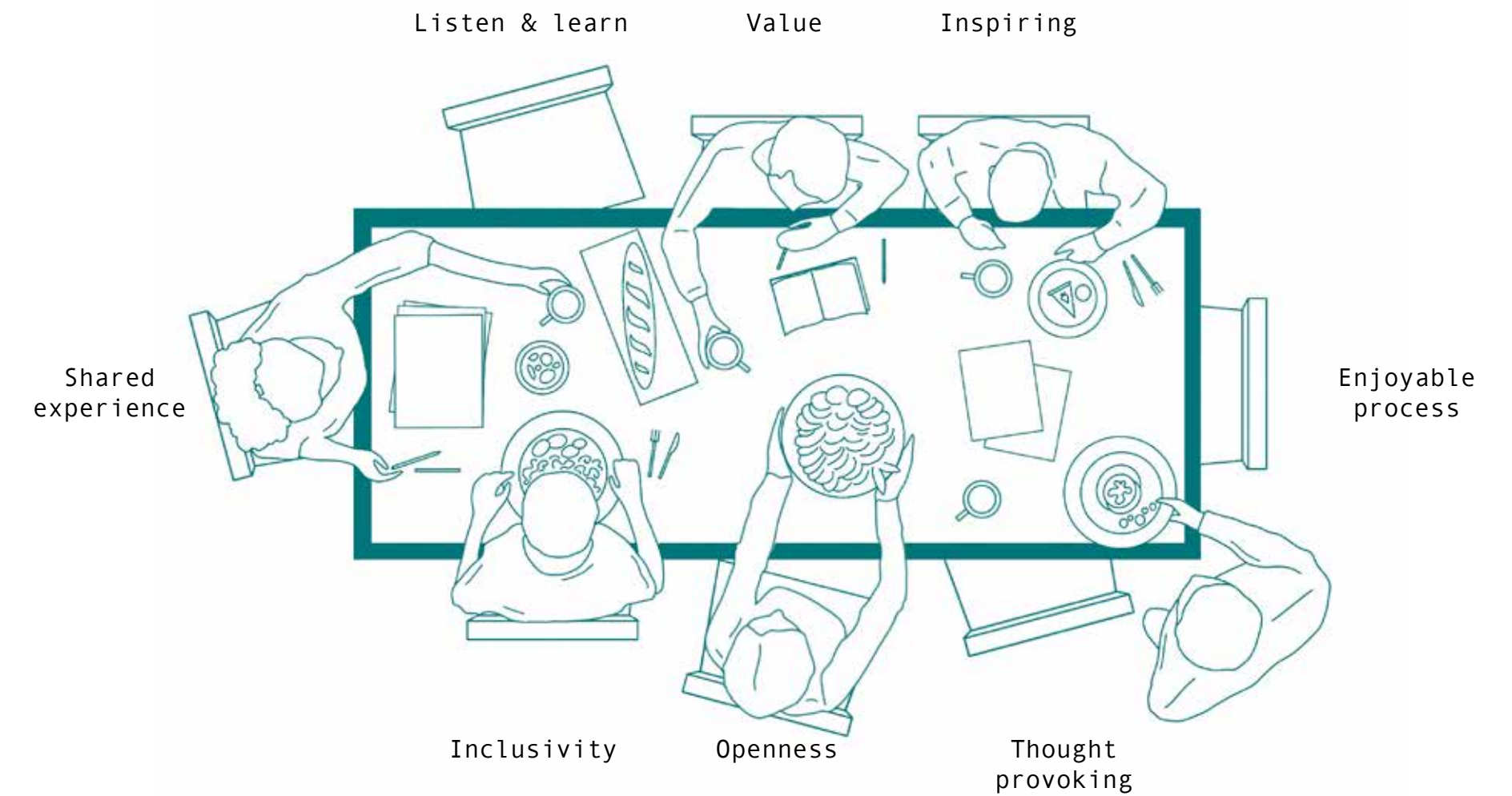


- The project and process is following the Royal Institute of British Architects, Plan of Work, which starts at stage 0 (inception) and finishes at stage 7 (in use). However, as this scheme is community and people orientated, a wonderful layer has been placed over this whole process. This is one of value. A journey has been followed in which we are looking to establish this factor at every stage. Value can be described as economic, social, spiritual and emotional.

- CREATING ENJOYMENT & JOY IN THE PROCESS:
- EVERYONE IS VALUED

- APPROACH -

Establishing a common vision, through sharing a 'meal'



OUR APPROACH

We believe in creating places that provide positive atmospheres and memorable experiences for the user. Our design approach involves extensive collaboration and puts people at the centre, who work alongside those who will enjoy our buildings, so that they will have a sense of ownership and trust. We believe architecture can create immense social value that incorporates culture, personality and well-being. Future generations can be part of a built environment that has a symbiosis with the place in which it was created.

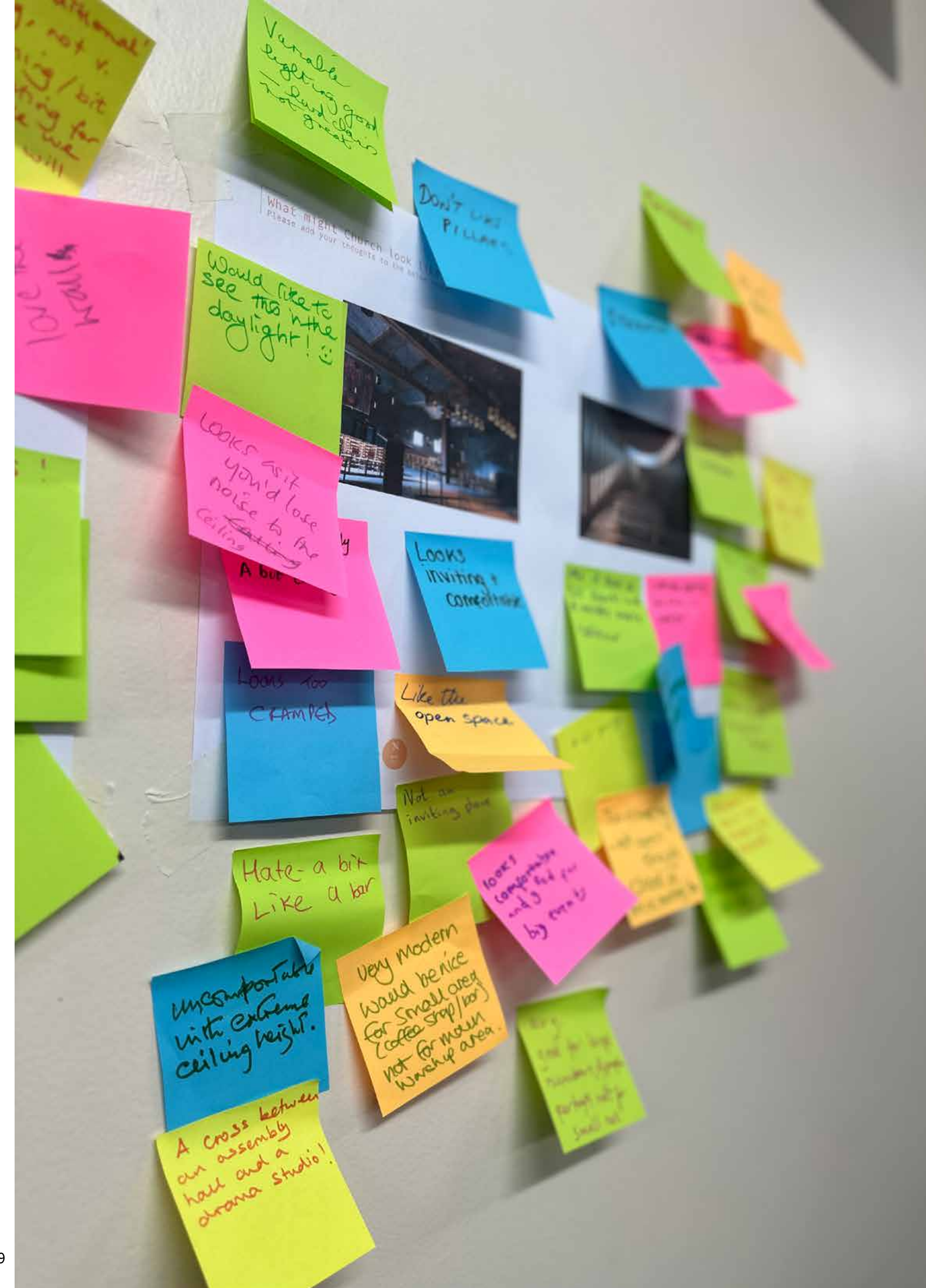
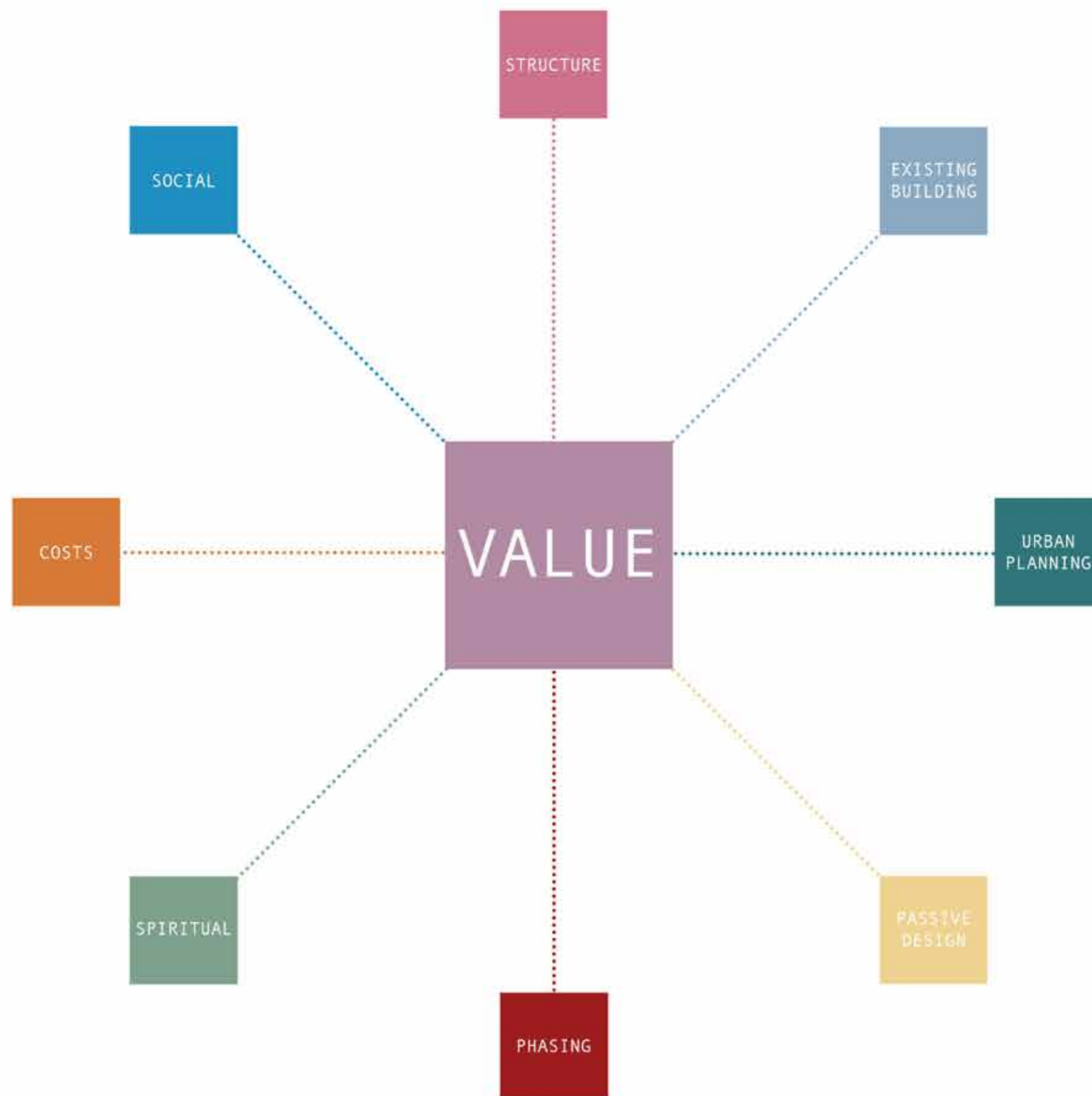
LISTEN

As a team we believe that in order to create value we need to listen. Through the scientific approach of Appreciative Enquiry, everyone's voice is valued. This is important to create a finished development that serves all and brings the site and programme to life. Through listening, there is empowerment and ensure long term success of all design decisions and not those imposed by a consultant team. We need to be the guardians of the dreams and desires of all those work and experience the facilities. This will be carried out in varies interactive and creative workshops, with deliverables celebrated at each stage and reflected upon.

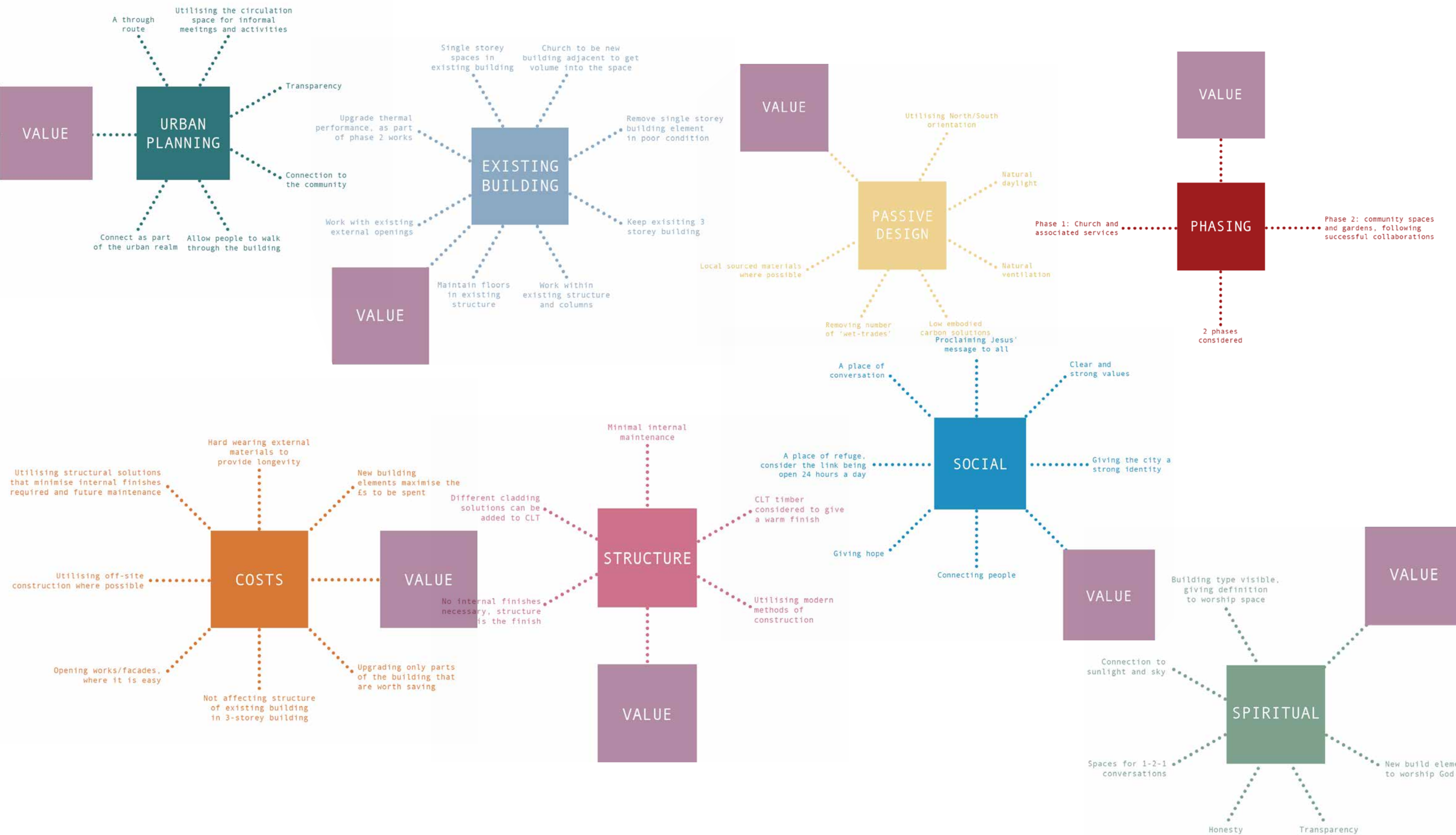
PROCESS > PRODUCT

Learning from Slovenian bee keeping, where the welfare of the bee is placed at a greater importance over the hone, as a team, we place all people who will interact in the process of creating the design, of greater value than the final piece of architecture. It is in following this guide that the final product or building will be better, as it will resonate with the positive energies that have been gained along the way. This includes making the planning department, local residents, Council, etc. all valued and beneficial to the final design solutions.

- VALUE MATRIX -



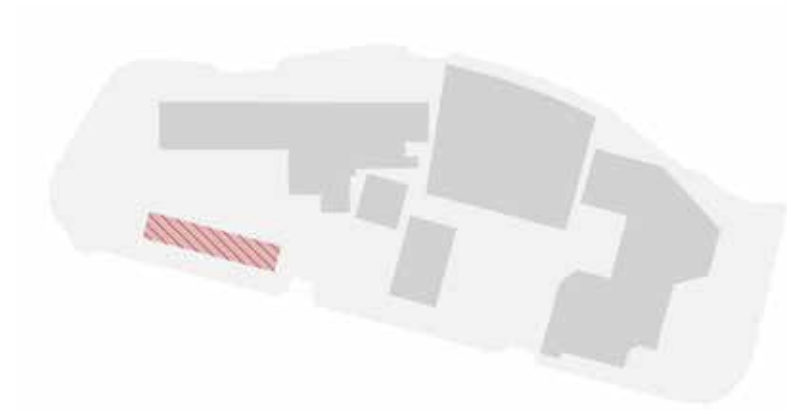
- VALUE MATRIX -





- SITE LAYOUT -

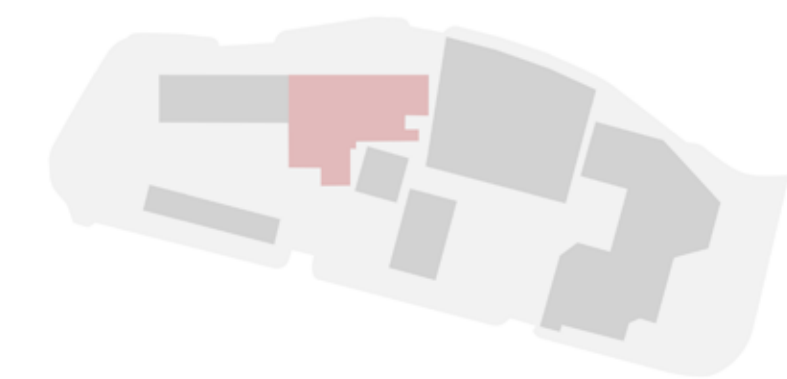
Testing site layout options



OPTION 1:

DEMOLISHING EXISTING GARAGE AND USING THIS SIDE OF THE SITE

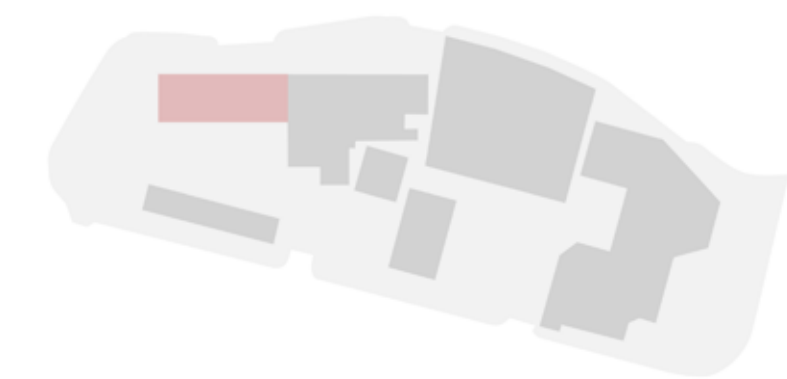
- Overshadowing from neighbouring buildings



OPTION 2:

USE EXISTING SINGLE STOREY BUILDING

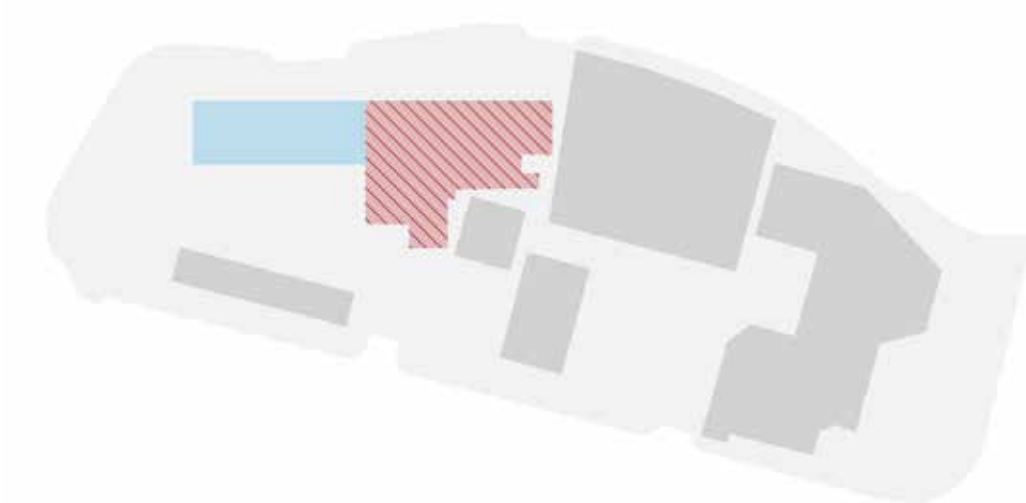
- Bad memories
- Limited height to create church/spiritual atmosphere



OPTION 3:

USE EXISTING MAIN BUILDING FOR CHURCH

- Rigid structure, not suitable for the atmosphere wanted for the church



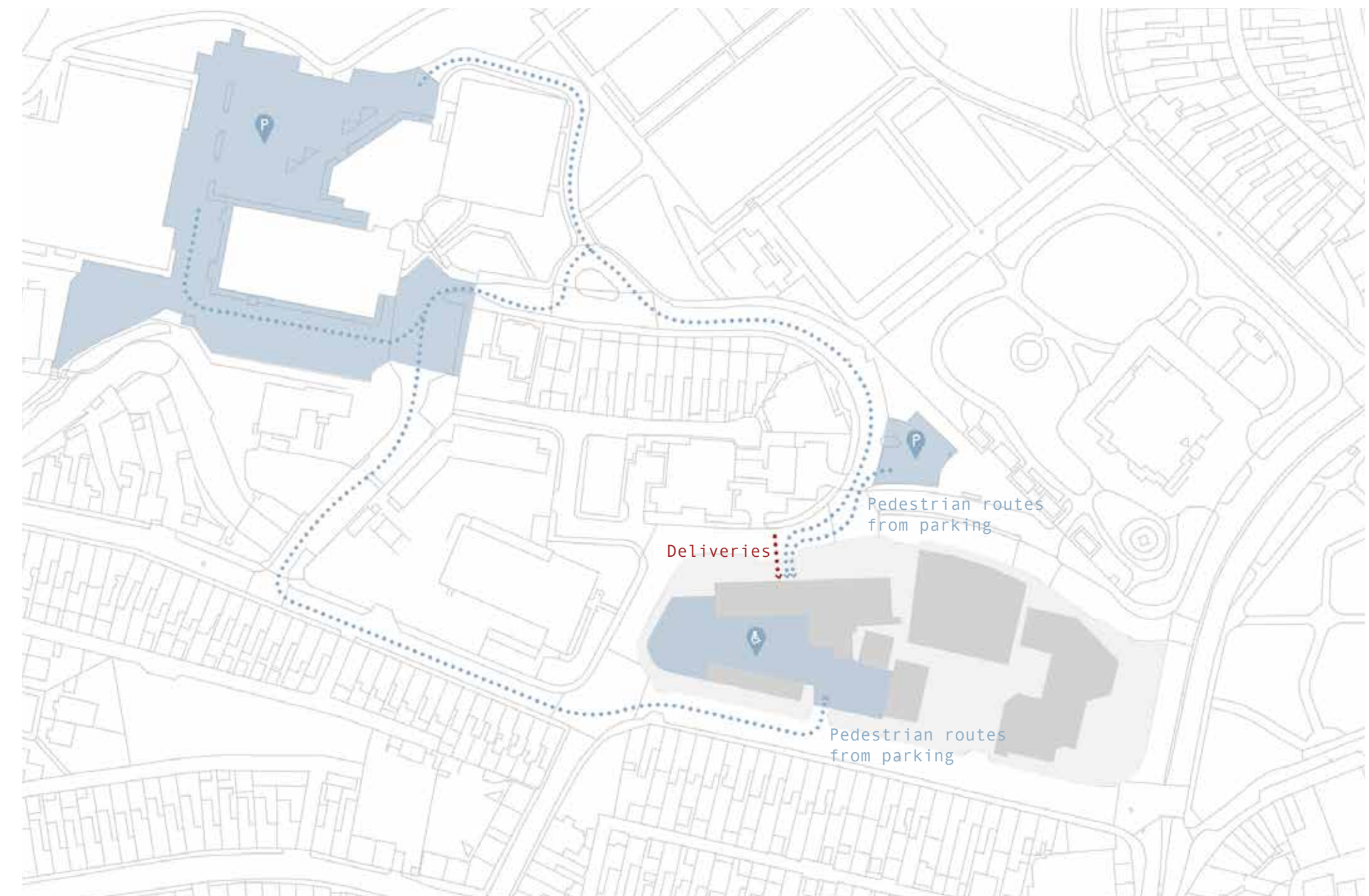
OPTION 4:

DEMOLISH EXISTING SINGLE STOREY BUILDING AND REUSE FOR CHURCH, USE EXISTING MAIN BUILDING FOR COMMUNITY

- Opportunity to create interesting structure for church with a spiritual atmosphere
- Large existing 3-storey structure in sound condition which is adaptable and flexible, for community to use

- SITE LAYOUT -

Site facilities and amenities

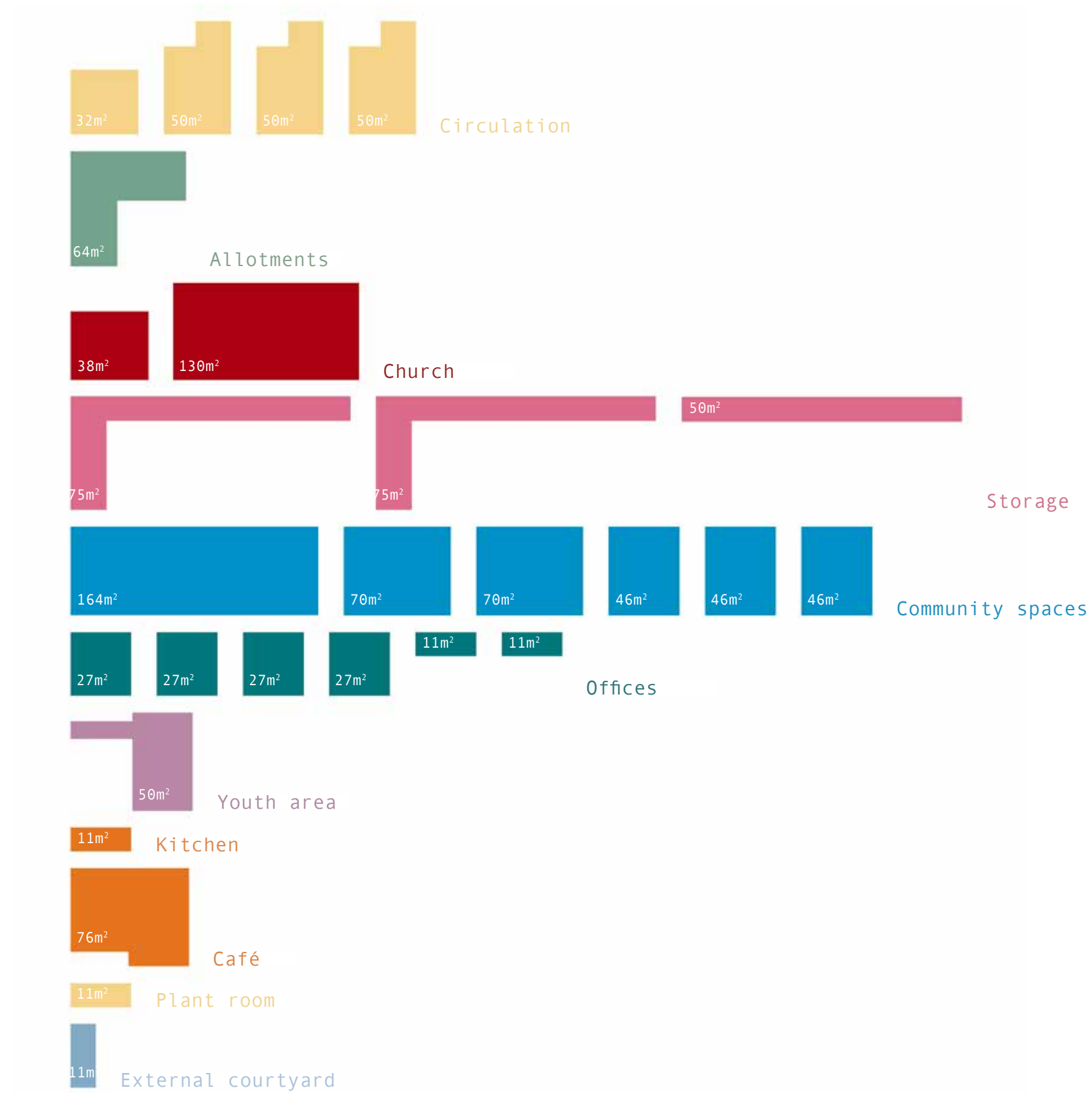


Site facilities plan

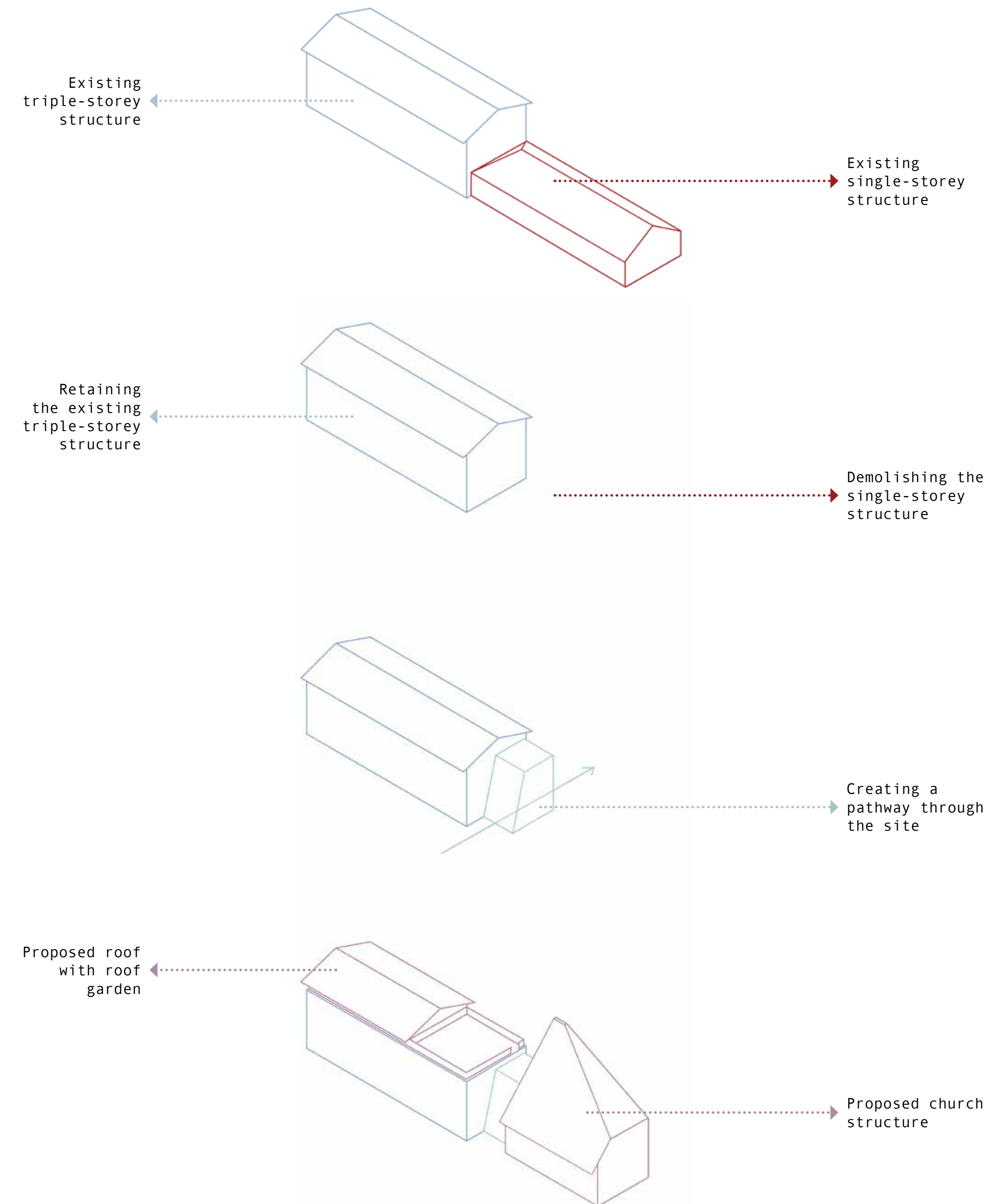
- On site disabled parking
- Parking to the north of the site by Waunlanyrafon bus stop
- Parking by Llanelli leisure centre
- Deliveries to use access off of Waunlanyrafon to the north of the site
- Safety and natural public surveillance created.

- PROGRAMME -

Spatial areas of the programme

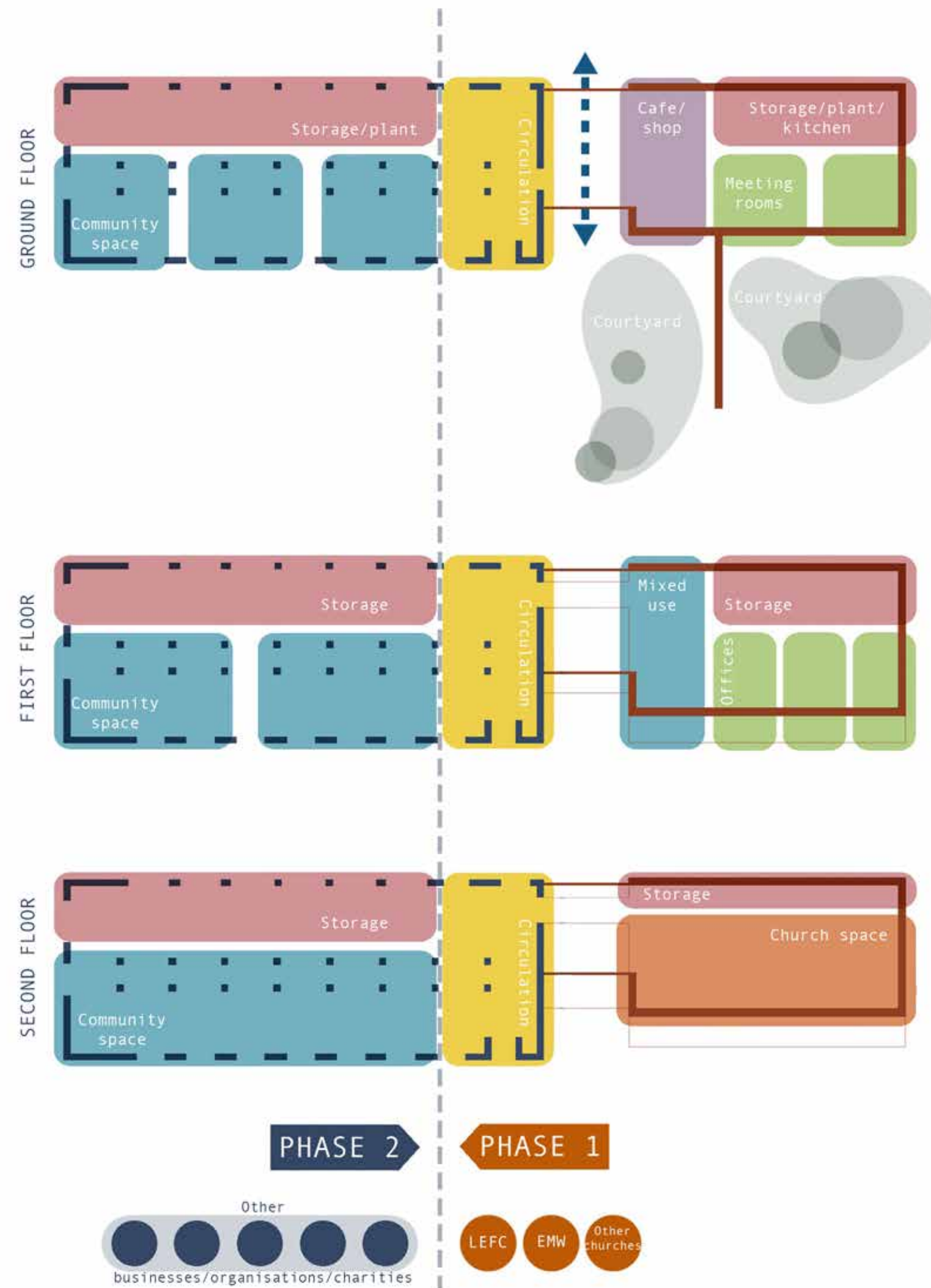


- DESIGN PROCESS -

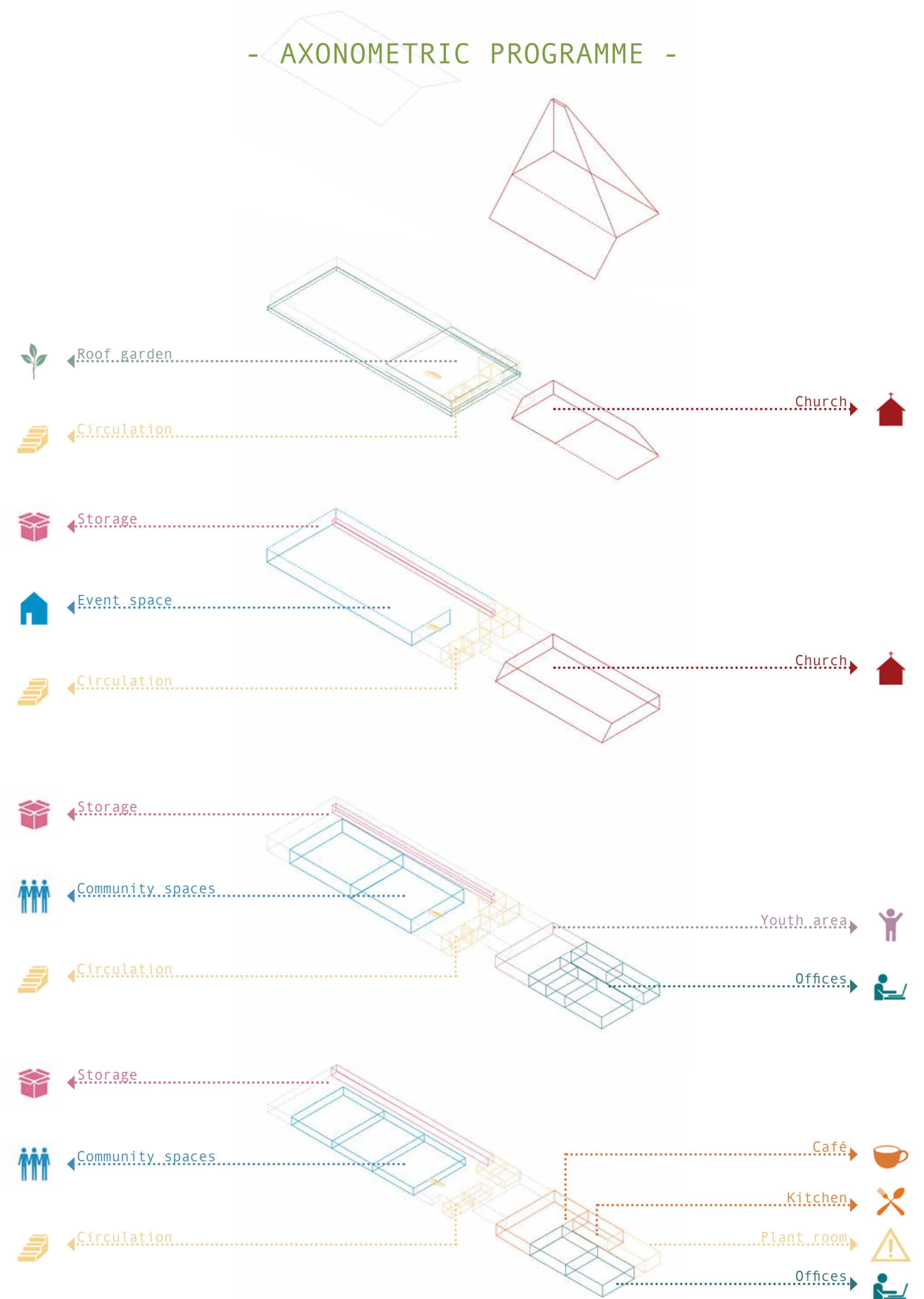


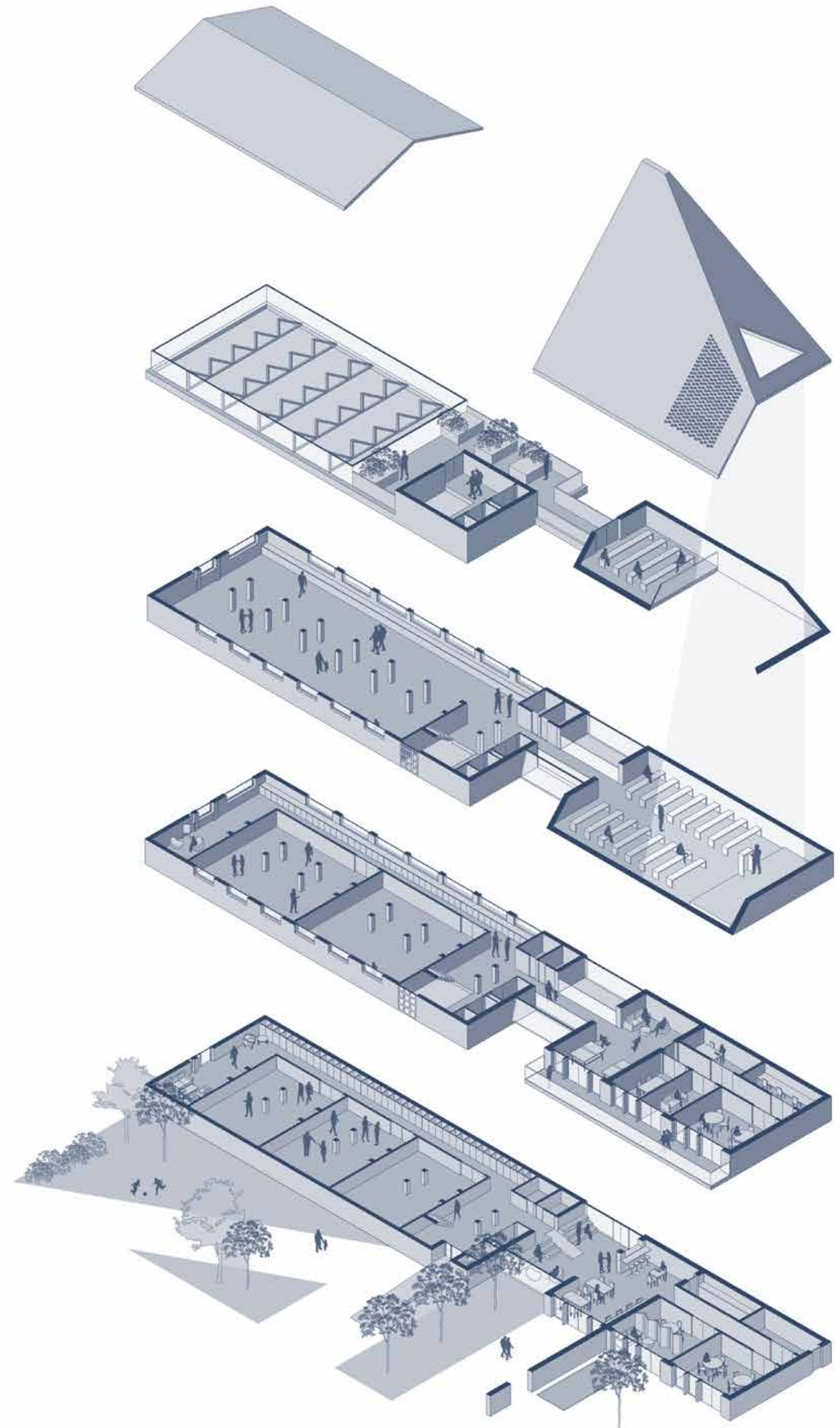
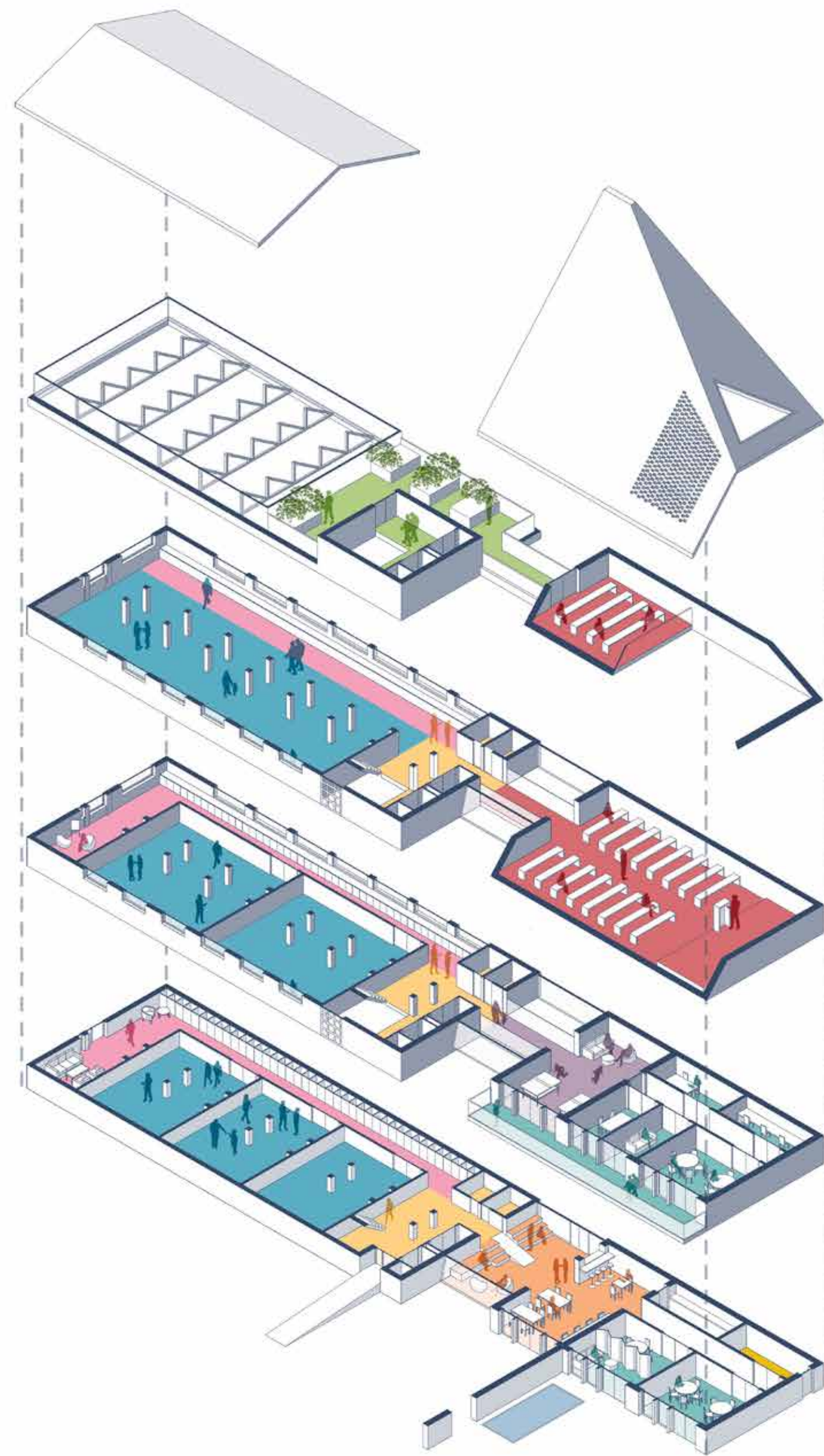
- A PHASED APPROACH -

Zoning plans



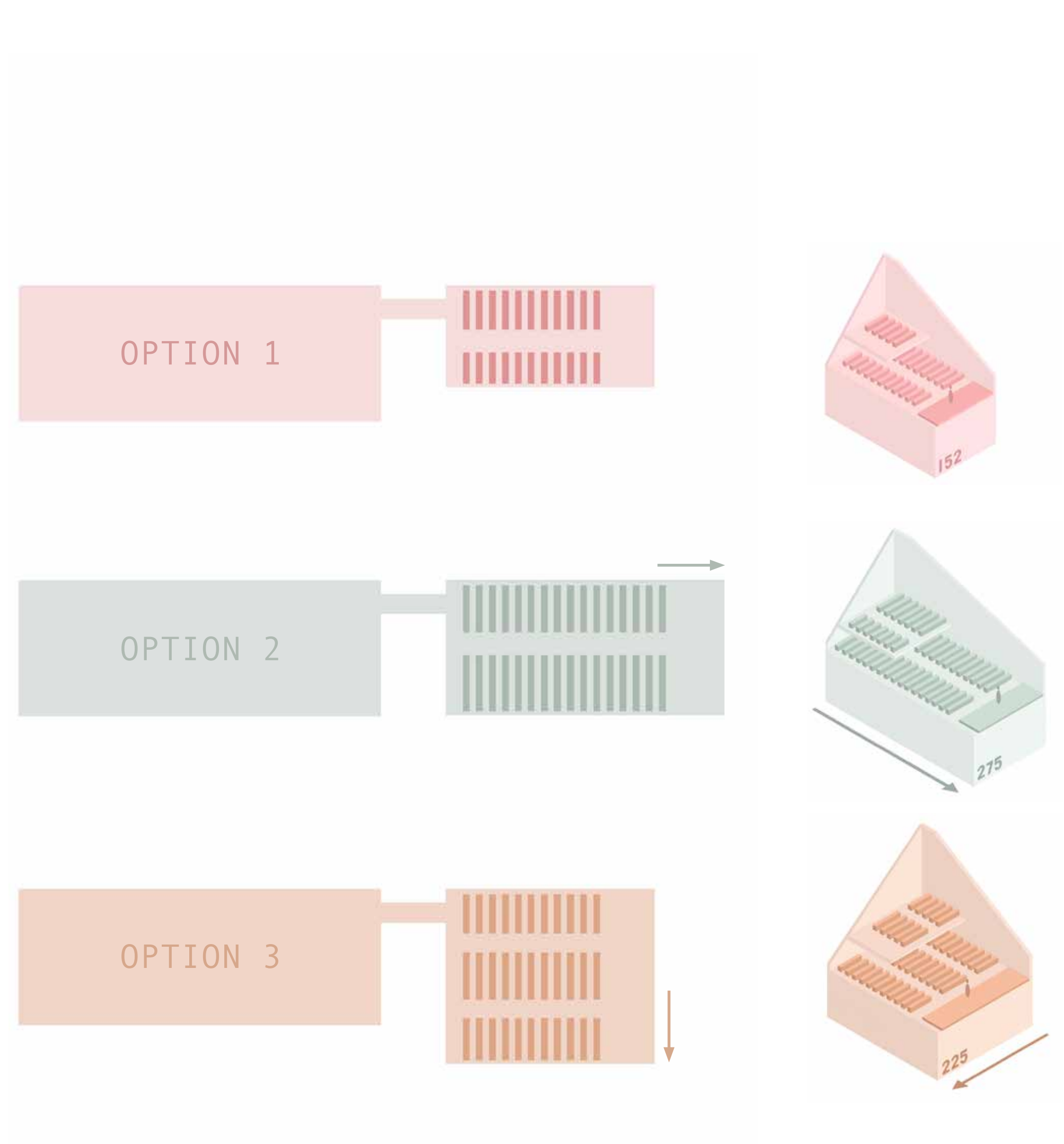
- AXONOMETRIC PROGRAMME -





- CHURCH LAYOUT -

Spacial options for the church



We are currently proposing option 1, but there is possibility to expand the capacity of the church

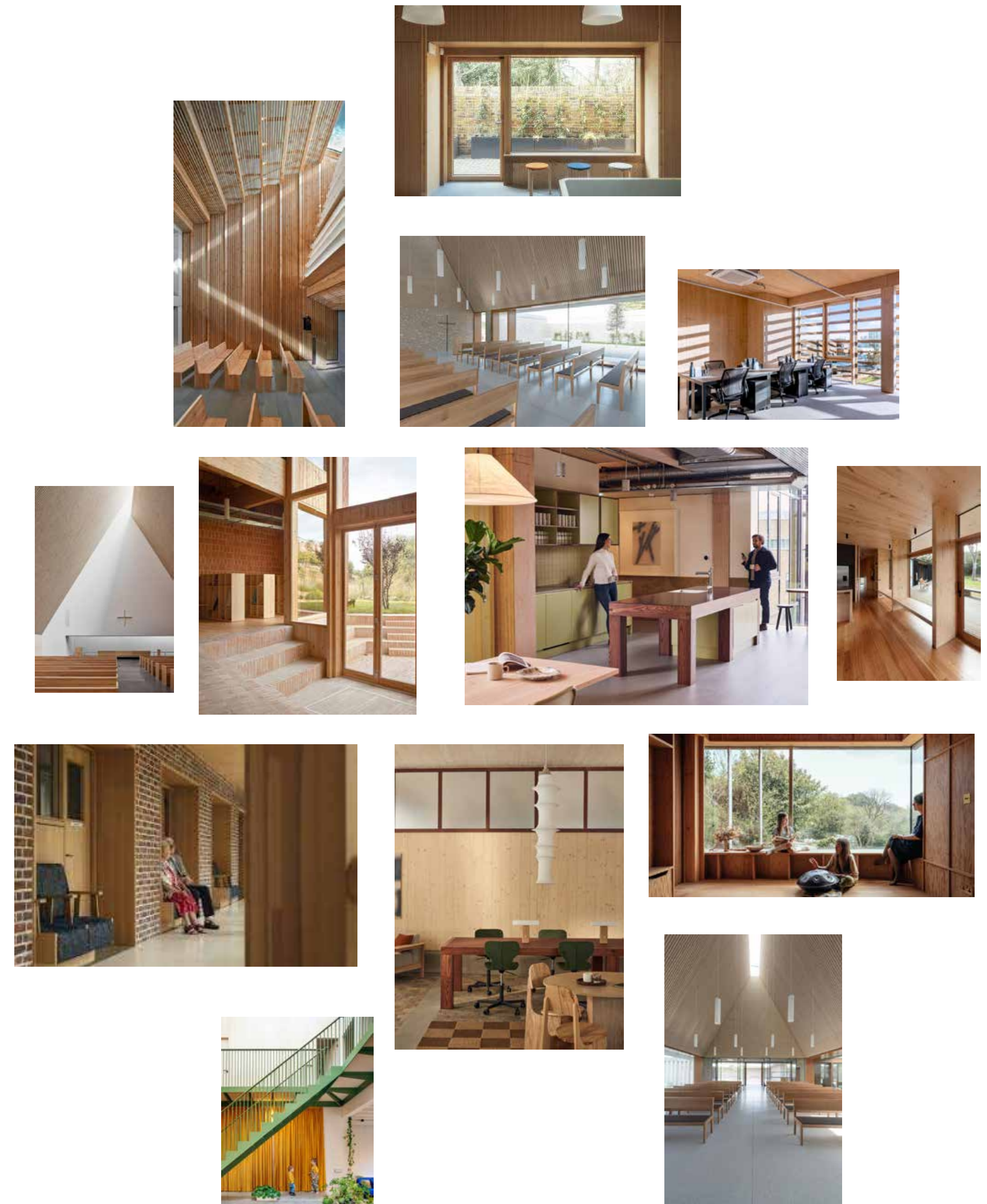
- ATMOSPHERIC IMPRESSION -



- CLADDING OPTIONS -



- INTERIORS -

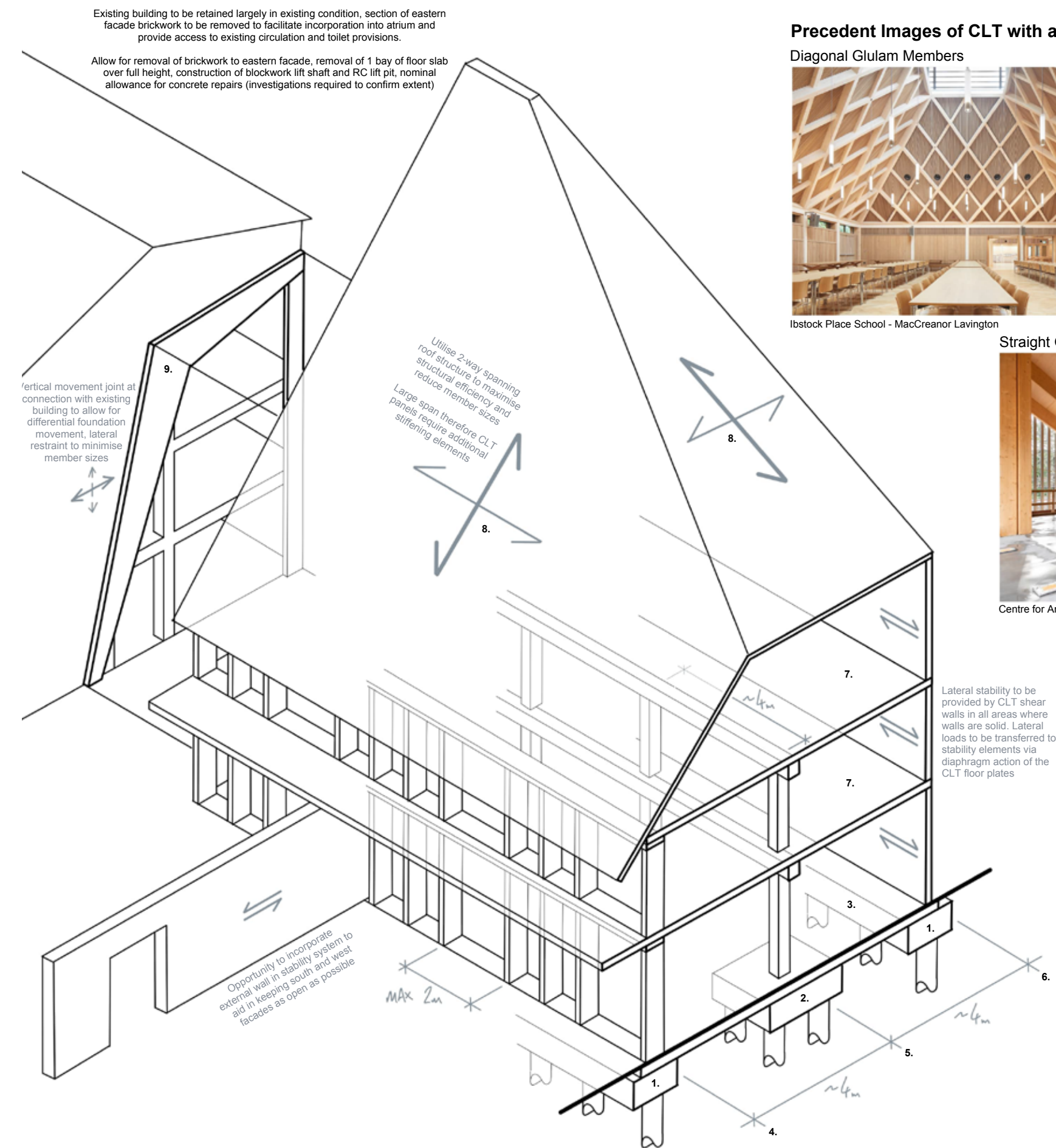


STRUCTURE



Information summarised from structural feasibility report provided by Mann Williams

- STRUCTURAL DESIGN -



Precedent Images of CLT with additional stiffening elements

Diagonal Glulam Members



Ibstock Place School - MacCreanor Lavington

Steel Trussing



Flyinge Ridhus - AIX

Straight Glulam Members

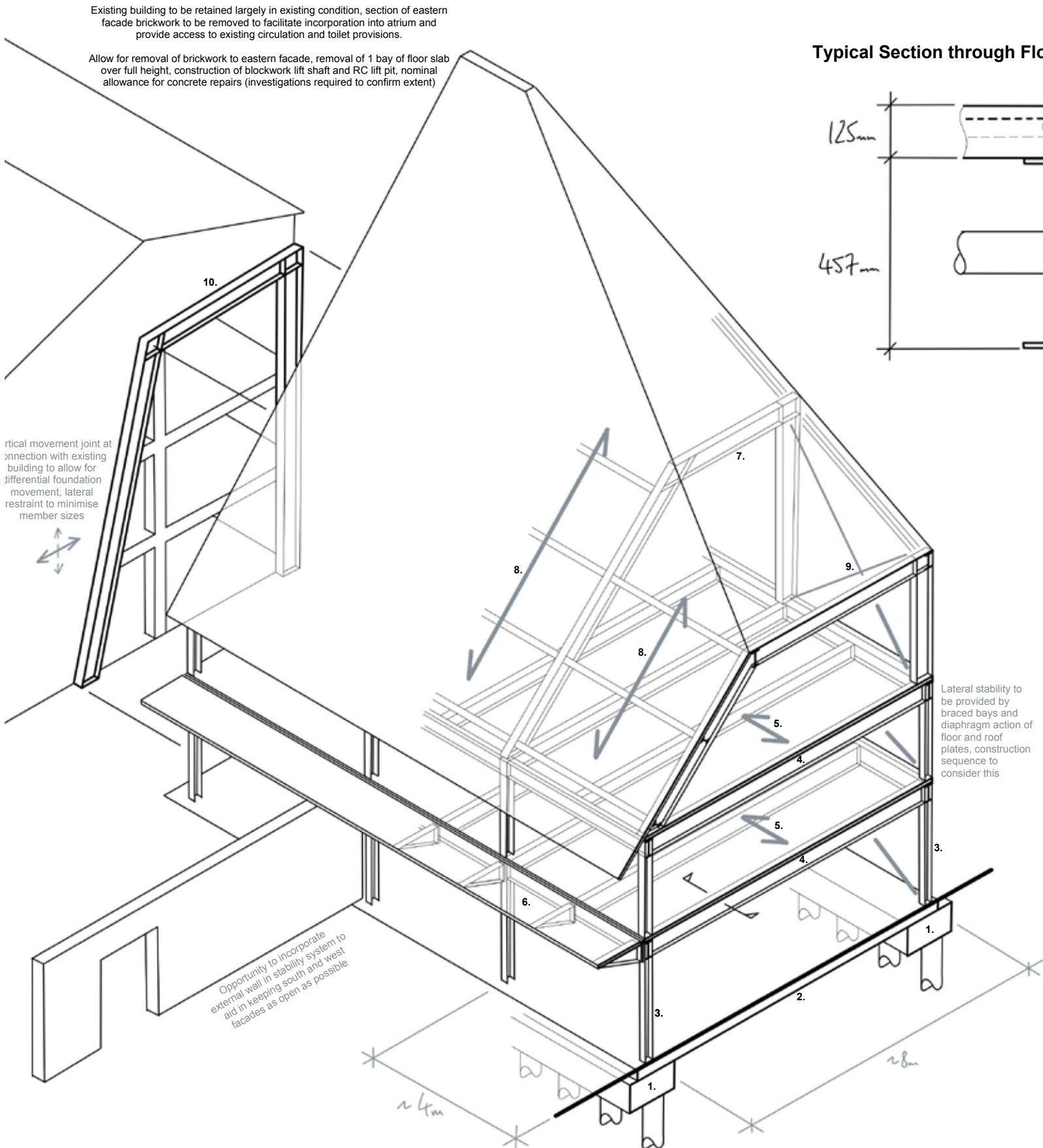


Centre for Arctic Studies, Bowdoin College - HGA

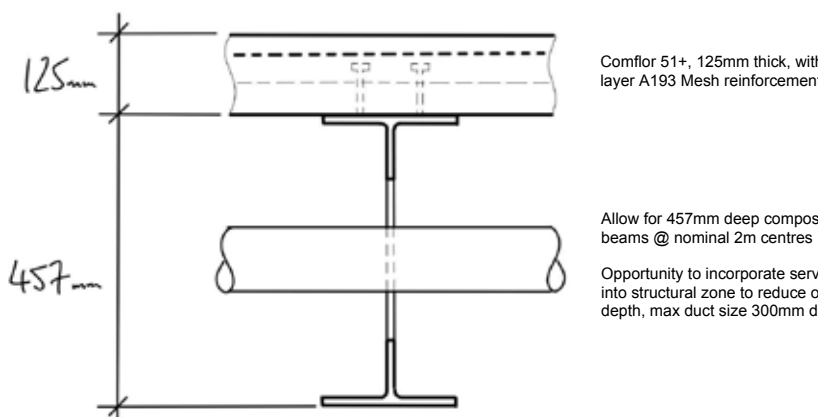
Proposed Structure

1. Allow for pile cap around full perimeter of proposed structure, nominally 1m x 0.75m with 300mm diam piles @ 2m centres, 10m long.
2. Allow for isolated 4-pile caps beneath proposed columns as 1.
3. Allow for 200mm thick ground bearing RC ground.
4. Southern facade to comprise feature CLT column window surrounds, allow for 100x500mm @ max centres.
5. Introduce a central row of columns to split ~8m into 2 spans for which CLT floor structures are considered more efficient. Allow for 300x300mm glulam column centres with a 300x300mm glulam beam over.
6. Where walls are solid allow for 150mm thick CLT.
7. For all floors allow for 200mm thick CLT panels.
8. Roof structure to be formed of nominally 2-way spanning panels, spanning between each other, a compressed around the apex skylight and the floor structure. If spans a single CLT panel would not be suitable, precedent images above of possible options to provide additional stiffening.
9. Atrium structure against existing building to be formed of glulam 3-pinned arch frame, allow for 150x500-1 frame members and 150x400mm members at no vertical centres spanning back to proposed structure.

Lateral stability to be provided by CLT shear walls in all areas where walls are solid. Lateral loads to be transferred to stability elements via diaphragm action of the CLT floor plates



Typical Section through Floor Plate



Proposed Structure

1. Allow for pile cap around full perimeter of proposed structure, nominally 1m x 0.75m with 300mm diam piles @ 1m centres, 10m long.
2. Allow for 200mm thick ground bearing RC ground.
3. Allow for 203 UC columns @ nominal 4m centres to north and south facades.
4. Allow for 457 UB primary beams spanning east/west between columns, approx. 4m span, and 457 UB secondary beams spanning north/south @ nominal centres, approx. 8m span.
5. Allow for Comflor 51+, 125mm thick with single layer mesh.
6. Allow for forming balcony with fabricated steel members, centres to match secondary beams, all balcony steel to be galvanised with a structural thermal break between balcony structure and the main steel frame.
7. Allow for 533 UB moment frames to form roof structure centres to match columns.
8. Roof to be formed with profiled metal deck such as D100, supported on 203 UBs @ nominal 2m centres.
9. Stability to be formed with braced bays, allow for 2 hidden bays formed with flat steel plate and 2 No. 1 bays formed with proprietary tension rod system such as Halfen / Ancon / Macalloy.
10. Atrium structure against existing building to be formed of 533 UB moment frame, with 203 UBs spanning back to proposed structure @ nominal 2m vertical centres.

Lateral stability to be provided by braced bays and diaphragm action of floor and roof plates, construction sequence to consider this

COST

- COST REPORT -

The following report has been completed to provide an estimated cost of reinstatement for the Former Police Station in Llanelli. The report includes costs for phase 1 of the works and phase 2 works are being undertaken separately. Phase 1 consists of the demolition of the existing buildings on the site and construction of the new and link building and extension. Phase 1 also consists of refurbishment of the east bay of the existing three storey building. Phase 2 consists of the refurbishment of the remaining areas of the existing three storey building.

	Timber frame		Steel frame	
Phase 1:	2,172,965	3,364	2,222,746	3,441
Preliminaries & OHP	443,285	686	525,124	813
Contingency	392,438	607	412,180	638
Inflation	30,989	48	32,549	50
Total Project Cost (excl. VAT)	£3,039,677	£4,705	£3,192,598	£4,942
External Wall Cost Option A: Brickslips	72,687	113	74,634	116
Roof Covering Option B: Zinc Standing Seam	15,108	23	15,512	24
External Wall Cost Option C: Terracotta Tiles	-10,384	-16	-10,662	-17

SUMMARY OF COSTS

	GIA m²	GIA ft²
Existing Building	162	1,744
Link Building and Extension	484	5,210
Former Police Station Phase 1 Total	646	6,953
Total GIA m²	646	
Total GIA ft²		6,953
Gross Site Area m²	960	
Gross Site Area ft²		10,333

SCHEDULE OF AREAS

- COST REPORT -

Summary of costs

Description	Timber frame option			Steel Frame Option		
	%	Cost/m2	Total Cost GBP	%	Cost/m2	Total Cost
Facilitating Works & Building Works						
Facilitation works	10%	452	£291,800	10%	452	£291,800
Substructure	6%	273	£176,580	6%	273	£176,580
Superstructure	26%	1,228	£793,583	26%	1,152	£7 44,243
Internal finishes	2%	104	£67,278	2%	258	£166,398
Fittings, furnishings and equipment	2%	79	£51,000	2%	79	£51,000
Services	20%	956	£617,725	20%	956	£617,725
Complete building and building works	N/A	N/A	N/A	N/A	N/A	N/A
Works to existing buildings	N/A	N/A	N/A	N/A	N/A	N/A
Sub-total: Facilitating Works & Building Works	66%	3,093	£1,997,965	66%	3,170	£2,047,746
External works	6%	271	£175,000	6%	271	£175,000
Sub-total: Facilitating Works, Building Works & External Works	71%	3,364	£2,172,965	71%	3,441	£2,222,746
Main contractor's preliminaries	12%	404	£260,756	15%	516	£333,412
Sub-total: Facilitating Works & Building Works (including Main Contractor's Preliminaries)	80%	3,767	£2,433,721	80%	3,957	£2,556,158
Main contractor's overheads and profit	7.5%	283	£182,529	7.5%	297	£191,712
Total: Works Cost Estimate	86%	4,050	£2,616,250	86%	4,254	£2,747,869
Contingency	15.0%	607	£392,438	15.0%	6 38	£412,180
Total: Base Cost Estimate	99%	4,657	£3,008,688	99%	4,892	£3,160,050
Inflation	1.0%	48	£30,989	1.0%	50	£32,549
Total: Cost Limit	100%	4,705	£3,039,677	100%	4,942	£3,192,598

