

Section 1. General Information

The parish of Old Felixstowe is located to the East of the town.

The estimated population¹ of Felixstowe in 2017 was 24,500; since that time there has been considerable increases in housing, which is planned to continue well into the future.

There are two Churches within the Parish of Old Felixstowe (the other being St Andrews) together with a Chapel (St Nicholas – situated at Felixstowe Ferry).

The average congregation size at the 9.30 a.m. principal Sunday service (prior to national restrictions) is around 100. This service alternated between St Andrews and St Peter & St Paul. A weekly 8 a.m. service of BCP Holy Communion at St Peter & Paul has a regular congregation of around 20.

An evening service is held each week, in the warmer months this is held at St Nicholas Chapel; this service attracts an ecumenical congregation of 20 to 40 people. In the colder months this service is held in The Link (part of St Peter & Paul) with the congregation being around 15 to 20.

Relationships between the members of the different congregations are warm and supportive.

The current pattern of worship is arranged on a monthly cycle, services at St Peter & Paul are currently:

- 8am BCP Holy Communion – each week
- 10am service on 1st 3rd and 5th Sundays in a month.
- 6:30pm Evening Service – each week during winter months. Held in 'The Link' during winter months, otherwise this service is in St Nicholas.

We have a good and developing relationship with Two Primary Schools. Both are in easy walking distance of the church. We have no church hall, this was gifted to the civil parish some years ago and is now a community centre (for which the church has exclusive use on Sundays if it chooses). The 'Link' is relatively recent extension to the church, used for a variety of meetings and local groups.

The last Quinquennial Inspection Review (QIR) was in 2019 and we actively proceed with the priorities highlighted by this as funds become available. We also apply for grants for the larger pieces of restoration and renovation.

¹ Source: [People in Felixstowe \(eastsuffolk.gov.uk\)](http://eastsuffolk.gov.uk)



Section 2. The need

Recent discussions within the PCC have identified St Peter & Paul as being geographically ideally positioned to serve a large part of Felixstowe in a more distinctive way. Being a peninsula, Old Felixstowe is bounded by water for much of its perimeter. St Peter & Paul, together with St Nicholas are the only churches at the centre of a 2-mile diameter area.

The vision of the PCC is to develop a consistent weekly service pattern at each building. St Peter & Paul would be the location for at least one, possibly two morning services each Sunday. Part of this process noted that our existing sound system was now far from fit for purpose for contemporary approaches and is proving less reliable.

During the pandemic of 2020 we were able to swiftly move to a mode of broadcasting weekly services via social media channels (YouTube and Facebook etc) observing a significant growth in those viewing. It became clear that many members of the congregation, some with mobility difficulties, but also for other reasons, appreciated the online provision.

All our services are currently broadcast from homes, as St Peter & Paul has no internet connection. With the outdated sound system, we need a completely new approach to broadcasting services as we emerge from restrictions. This approach would be to broadcast high-quality, mixed camera / sound sources, so the broadcast is attractive and accessible. The need in this respect is to provide much more than a simple single static camera view of someone leading a service; this approach necessitates a combination of image and sound sources, mixed in a way more like a live television broadcast.

As a church we feel we need to reach out to our locality in new ways, through social media channels. This would include the ability to support school interaction and also the ability to provide those seeking faith to access courses in ways more suited to their lifestyle and choices. In addition, there is a need to be able to introduce material into services that can only be shared using projected media (such as videos / PowerPoint etc).

The new facilities need to be operable by one person if necessary; with more complex service styles this could increase to three people to control sound, image projection, and video streaming.

Section 3. The proposal

Our proposal is to introduce necessary infrastructure to the building for viewing digital media; also, to be able to live-stream any service or event in the building. Some of this work, specifically to introduce an Internet connection and upgrade the sound system is being arranged through List A / List processes.

In summary this project would, in addition to the above, involve:

- Viewing of digital media by the congregation
- Provide multiple video camera sources (including remote speakers / presenters).
- Install controlling equipment at an appropriate location in the building.



Viewing digital material

This would be through use of a digital projector, mounted on the upper surface of the forward roof beam in the nave. In this way the projector will have minimal visual impact, with cables being laid along the beam and utilising routes for existing sound system cabling.



1 Impression of projection screen in use

A motorised two-stage screen would be mounted on the rear of the chancel arch. When not in use the unit would only be visible from within the chancel. In operation the first stage will lower the screen unit on wire cables. Once lowered the screen would be unrolled for viewing.

Viewing digital material from the transepts also requires attention. While in the South transept it is felt (due to position of the worship band) the congregation there will be able to view the main screen. In the North transept it will be necessary to use a 42" portable television screen. This would be on a portable stand, available as a resource around the church as necessary.



2 Impression of 42" screen at estimated height of portable support.

Video Camera Sources

A key factor in producing good images is having the source level with the subject. If cameras are placed too high, the image appears distorted and serves only to highlight a person's head / hairstyle. The problem is that ideally cameras will be placed at just above standing head height, being mounted on a wall.

While video streaming devices are relatively compact, they are still very visible, particularly devices that Pan / Tilt and Zoom (PTZ cameras) which by necessity are larger in overall size.



The ideal position for the two (PTZ) cameras would be at the corners of the North and South transepts, facing toward the chancel. The model shown are mounted on wall brackets, to stand away from the wall. The ideal camera type is approximately 100mm diameter and 130mm tall. The proposed camera type is white & black – see Appendix 4 for image of proposed device.



3 Impression of wall mounted PTZ camera in South Transept

This type of camera is powered by a single (CAT5) network cable. This cable type is approximately 5mm diameter and will be discretely attached to the wall above each of the cameras to follow the lines of existing sound system cabling.

A fixed (zoomable) camera will be placed on the forward roof beam, adjacent to the projector, this will provide an overall view of the dais.

Any other camera sources would be temporary static / tripod mounted – these may be used depending on the circumstances.

Projector

This would be mounted on the upper surface of the East most roof beam (projector shown in green for clarity only).



4 Impression of both PTZ cameras mounted at the corners of the North and South Transepts, together with projector mounted on forward beam in nave. Fixed camera is shown adjacent to projector, but barely visible at this distance.

The mounting mechanism would be a manufacturer specific metal mount, of similar dimensions to the projector. The mount provides secure attachment to the beam with provision to tilt the projector for alignment with the screen.

Control console area

An important aspect of controlling sound and visual components for streaming is the ability to view the live area being streamed. Good practice is to place this at the rear of the venue (otherwise it obstructs viewing by the congregation). The ability to view above the heads of the congregation, particularly when they are standing is a key factor.



5 Existing (three) pews at proposed location of control area

The proposal is to create an enclosed / raised area in the North-West corner of the Nave, near the tower; this will house the control equipment such as sound / vision mixers, along with computers to process streaming. The preferred location for this area is the North corner at the rear of the church; at present this contains three pews, which would need to be removed and disposed (there is no space in the building to suitably re-site these). It is thought that the pews will be of financial value and the proceeds would be designated to assist in achieving the project.



6 Pews adjacent to proposed control area.

The pews throughout the nave were installed 1890 after the building was restored. The significance of these is low, identical style pews on the South side (opposite the proposed new area) are shown here.

The raised control area would be constructed with a wooden frame. The exterior face would be oak panelled to match existing wall panelling. A formal plan for the construction of the control area is included at Appendix 1.



7 Impression of raised control area

Ducting for power and network would be placed within the control area, as constructed; this will be located above and below the desk surfaces as well as along the existing North Wall just touching the top of the existing Dado rail.

Existing fire extinguishers would be relocated.

Within the area, two rows of power/network ducting would be provided (above and below desk surfaces). The top edge of the area is shown with a surface tilting away from the area – this is to avoid objects being placed and falling onto the equipment.



Entry to the area would be as indicated to facilitate two desk areas. While only an impression of the intended area, the chairs and people indicated are to scale, showing how three people would operate effectively.

Power and Network Cable Routes

The proposed system uses network communication, requiring only standard CAT6 network cables for all video and sound. There are existing cable routes for instruments and sound system, these will need to be re-directed to the proposed control desk area.

Cables for lighting and heat follow a clearly defined horizontal wooden beam, with four cross beams in the nave.

Existing radio microphone receivers would be re-located to the South

Transept in the area occupied by the music group.

Power for the projector would take a common path along the roof beams and line of the heating system cables (shown as a red line in Diagram 8).

A vertical cable duct would be required from the North-West corner of the control area, to connect with the rear roof beam (vertical line shown in blue); this would be painted to match with the existing wall.

A discrete route for all cables in the nave would then be in place.

A complete diagram of all proposed cable routes is provided in Appendix 2.



8 View of nave with proposed location of projector and new cable route.



Section 4. Why do you need it and why do you need it now?

The pandemic of 2020 has shown the need for new approaches to worship services; our vision is to develop online / broadcast services further, but our current infrastructure does not facilitate such approaches.

At this time St Peter & Paul is not being used for 'in person' services, giving potential opportunity to tackle physical work in a way that is safe (in terms of national restrictions).

Being able to actively start broadcasts from the church building after Easter 2021 would be of significant benefit in terms of continuity of presence on social media. If this is not achieved, we would need to reconsider how services were broadcast in the transition period.

Section 5. Justification.

Approaches to worship and accessibility to those with restricted mobility have changed significantly over the past year; as a Diocese there is new support to explore and develop radically new ways to engage in mission, particularly through social media.

While the control area does limit the view of the font mounted in the Tower, the church routinely uses a portable font for baptism; as such with pews adjacent to the control area there is still the same access to the stone font should it be needed.

This proposal will establish the ability to make services accessible in ways not previously possible. It will also make the church building more attractive for public events that could be broadcast in similar ways – providing potential revenue streams to maintain the technical infrastructure.

The ability to stream funerals and weddings has also proven to be of considerable interest and benefit, providing another potential source of revenue.



Appendix 1 – Construction of Control Area

- Base platform made from 47 * 125 C24 treated timber, with 18mm flooring chipboard on top.
- The main enclosure sides made from 38 * 68 C16 CLS timber, inside finished using 6mm MDF and the exterior finished with 9mm solid oak TGV, finished above with solid oak bevelled Dado rail (to match existing).
- Fit 2 * Formica worktops with supports.
- Internal / top MDF finished in an off-white silk paint.
- All solid oak to be stained and varnished to match existing.



Appendix 2 – Cables

Existing Cables

The existing sound system utilises a multi-core cable to a sound desk by the South door; this cable is routed under the floorboards of the nave. The route is from the South Door to the Chancel arch, it then turns North and terminates behind the lectern.

In the past, musicians were usually located in the South Transept, but when the dais was installed it was decided to locate musicians in the North Transept, and the multi core was routed accordingly.

The plan is to move musicians to the South Transept again; and utilise part of the existing underfloor cable route.



Existing cable route (shown as dotted red line above) has been confirmed with location of cable trap by the corner of the nave and the South Transept.



Appendix 2 - continued Proposed Cable Routes – Nave and Transepts



New cable routes for connections are shown as Red.

Existing wireless receivers to be re-located with the music group – in the South Transept. This will provide better line of communication with transmitters / receivers. Audio will then be via network.

At the corners of the transepts only network (CAT6) cables are required. On the North side, there is an existing duct on the cable which can be utilised.

On the South side the network cable, together with control for the projection screen, will continue to floor level. These will then follow the existing (below floorboard) route.

A new vertical duct will be used at the North-West corner of the nave, to route all cables from the roof beam level to the control area.

Appendix 2 - continued Proposed Cable Routes and Wall Fixing– Chancel



The power supply ducting to existing lighting is visible above and on the arch.

The projection screen will require a fused spur for power (shown in Blue above) together with a control cable that will follow an identical route.

The new cables will be installed to follow existing routes in keeping with those above.

The main power supply and switch area is located by the organ in the chancel; this will allow good access if a completely new power feed is required.

The screen system is 4m wide (171mm square in profile) and weighs nearly 100Kg in total. Quotes vary in approach but favour the use of Unistrut (shown in Orange above), one piece either side of the arch, each of minimum length 400mm, each bolted to the arch with four 12mm wall plugs and coach bolts. The screen then be bolted to the Unistrut as a way of spreading the load on the wall and ensuring solid fixings.

Appendix 3 – Projection Screen



Image of the chancel arch, showing the roof line. The lamps on each side will be relocated when the new screen is in place.

The screen is depicted above in its raised position, which will be close to the top of the stone arch. The arch is approximately 0.5m deep and will ensure the screen unit is not visible from the nave while not in use.

The two motor units (shown in orange) will control the rise / fall of the screen unit, the whole unit will be attached to Unistrut (as described in Appendix 2). Once lowered the screen unit will unroll the projection screen.

Appendix 4 – PTZ Camera

The image is approximately full size when printed on A4 paper.



Appendix 5 – Digital Projector

The device is approximately 520mm square and 180 mm high.

It will be fitted within a mounting unit, of similar dimensions, to ensure it cannot move/fall.

