



RIBA Stage 3 Report Union Street Central

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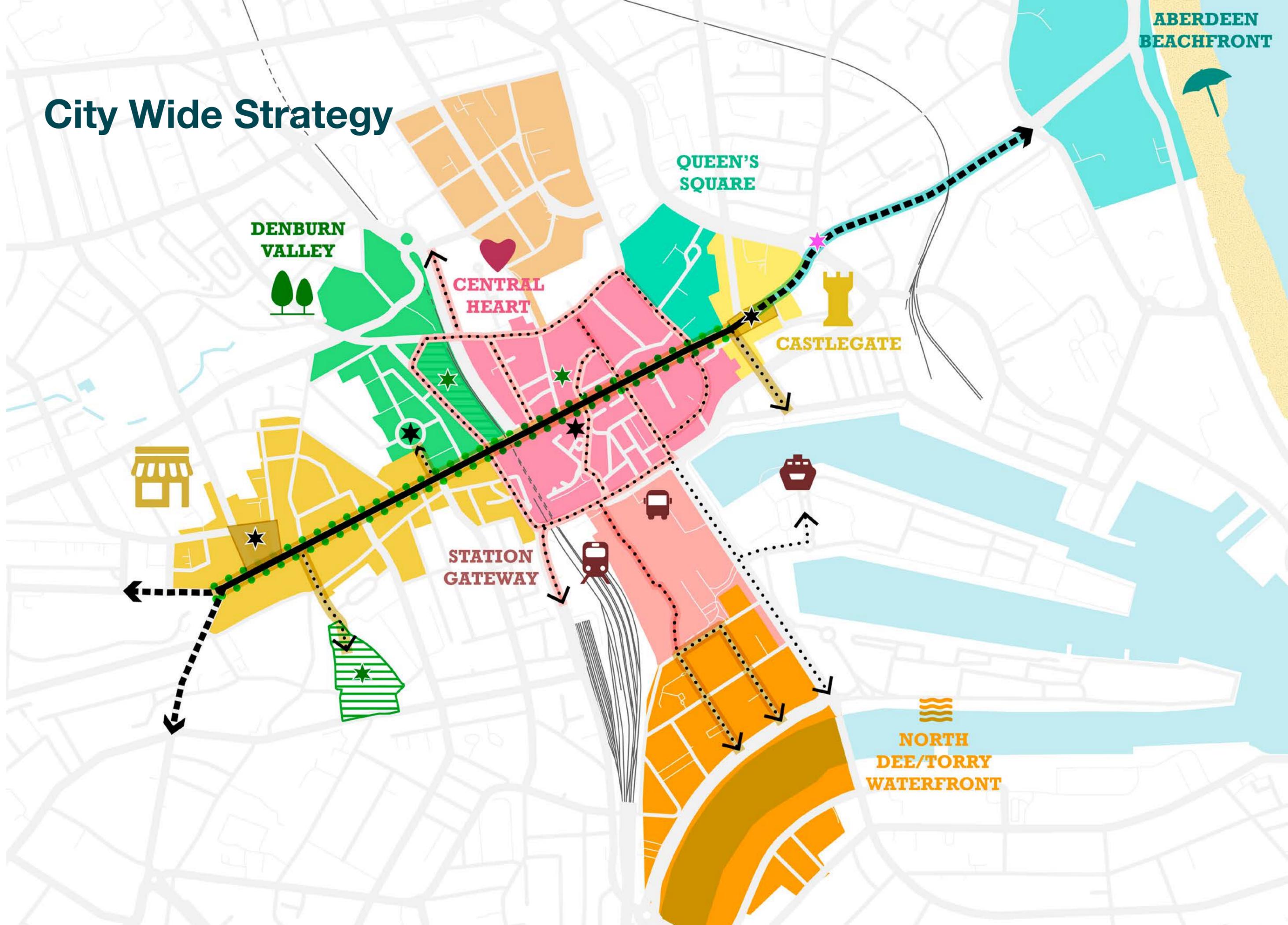
Chris Mitchell
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4.1.3	Minimising perceived conflicts between users			* Detail drawings 8153-LDA-01-XX-DR-L-5000 series

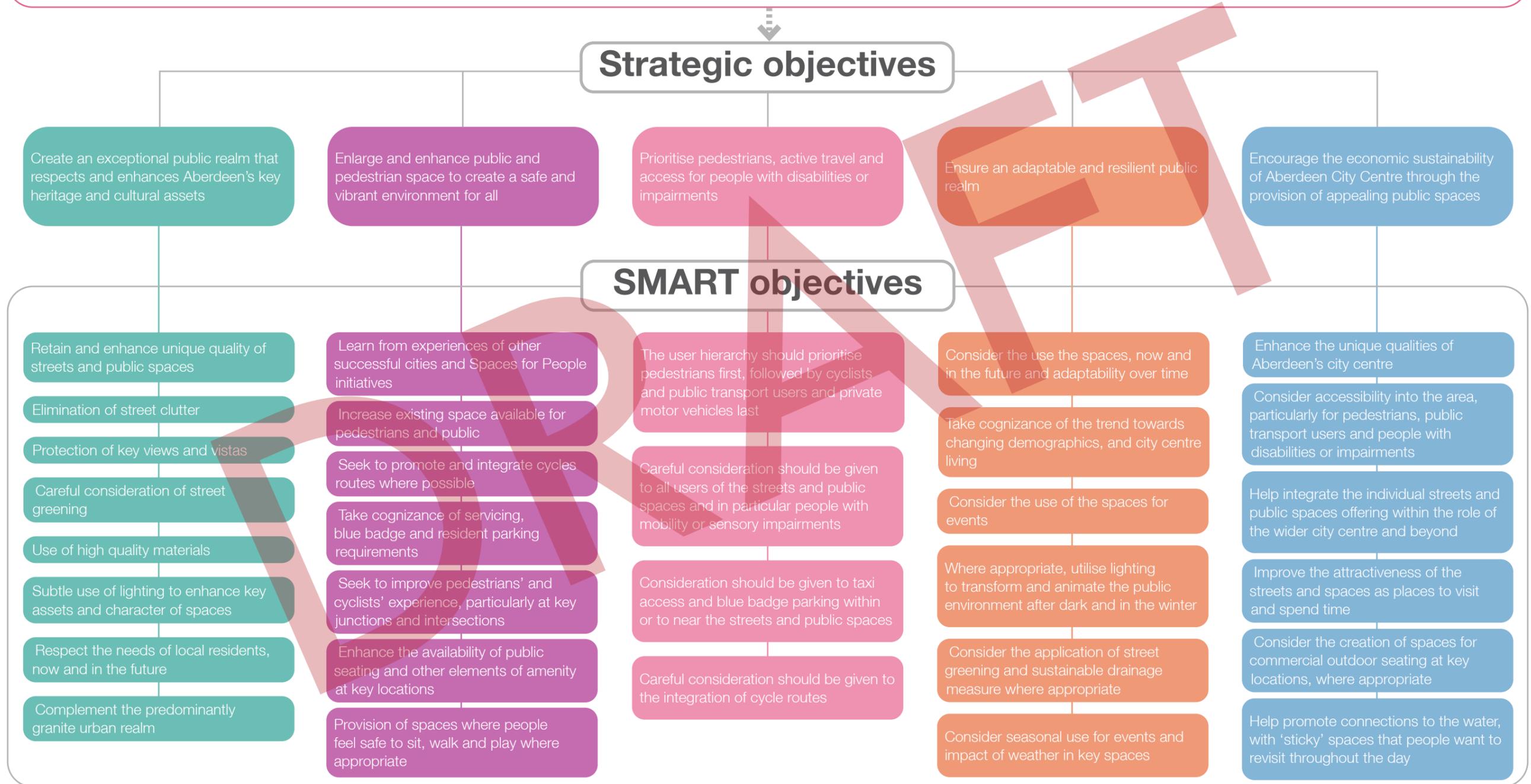
1.0 Context / Site Analysis

City Wide Strategy



The Vision

“The creation of a world class City Centre that puts people at its heart, with a vibrant street environment that respects and enhances Aberdeen’s unique qualities and characteristics.”



As part of the understanding process, we have reviewed the desired objectives and outcomes from a range of initiatives and have attempted to distil these down to a single Vision, underpinned with Strategic Objectives and underpinned by SMART measures of success. We are keen to review these with Aberdeen City Council and key stakeholders to ensure we are all aligned in our understanding of the ambition for this exciting project.

For full city wide strategy refer to the following documents - August Committee ACV-RYD-00-XX-RP-A-0002-S2-P1-Aberdeen City Centre Streetscape Report and Appendices November Committee: Appendix D_Streetscape Interventions_Aberdeen City Centre Streetscape Report

VISION AND OBJECTIVES ARE CURRENTLY UNDER REVIEW AS PART OF THE WIDER STRATEGY FOR THE CITY CENTRE AND BEACHFRONT PROJECTS, TO BE FURTHER DISCUSSED AND REVIEWED WITH ABERDEEN CITY COUNCIL AND KEY STAKEHOLDERS

Heritage & History

Aberdeen City Centre - 1615

Predating the laying out of Union Street (Union Street overlaid for comparison)

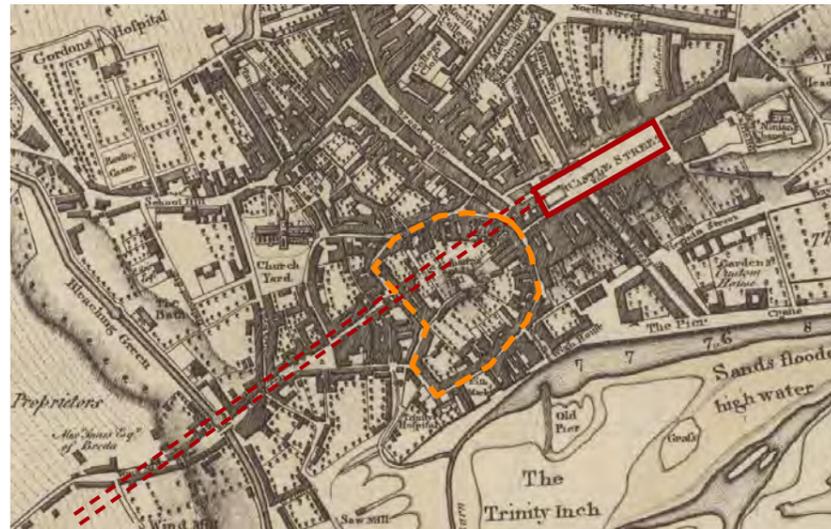
Prior to the construction of Union Street, Aberdeen City developed organically over the preceding centuries. The layout of its streets was dictated primarily by the constraints of topography and other geomorphic features such as the Denburn Valley to the west and the river Dee to the south.



Aberdeen City Centre - 1773

Predating the laying out of Union Street (Union Street overlaid for comparison).

Although present in many other Scottish Towns, Aberdeen was bereft of a High Street and as such Castle Street formed the principal civic heart within the City.



-  Medieval layout
-  Castle Street
-  Union Street overlay

Aberdeen City Centre - 1810

The construction of Union Street bridged the Denburn Valley allowing for the generous expansion of the City to the west.

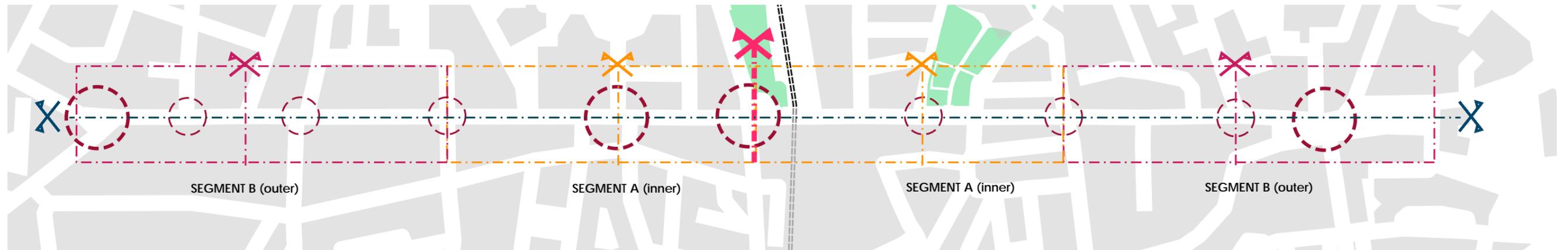
The formal planned nature of Union Street, with its grandeur and symmetry contrasted sublimely with the medieval streets below, whilst affording a framework and rigor to the subsequent development of the city.

Although the east-west connections across the city were improved greatly with the introduction of Union Street, the clarity of the historic north-south connections across the city were somewhat diluted given the multi-level nature of the city.



-  Medieval layout
-  Castle Street
-  Union Street

Existing Symmetry



Analysis

Abstract rhythms informed by retained medieval street patterns:

- Segment A - explicit rhythm and symmetry
- Segment B - variations to symmetry caused by integration of junctions and Castlegate

Symmetry along Union Street gives clarity of movement east and west.

Key Moves

- Retention of symmetry and long views along street
- Opportunity to improve north/south connections

Legend

- Central axis of symmetry longitudinal (south west / north east)
- Central axis of symmetry (cross, north west / south east)
- Axis within inner street segments (A) (more explicit central symmetry)
- Axis within outer street segments (B) (less explicit central symmetry)
- Junctions

Historical look



1889- Union Terrace to Market Street



1910 (Online Copy Protection © The Francis Frith Collection)



1950s

2.0 Key Overarching Objectives

The proposals for Union Street Central are focused around some key aspects:

- Flexibility of the streetscape (to ensure adaptability to current and future needs of the City of Aberdeen),
- Rationalised reappropriation of the space (general traffic and buses are removed from the central section of Union Street creating a piazza or new civic square at the very heart of Aberdeen),
- Introduction of seating and spill-out spaces, the creation of an enriched Public Realm through maximising the opportunities for the inclusion of elements of play art and feature lighting
- Elements of street greening have been carefully incorporated with the proposals to enhance the seasonality and biodiversity within the area, softening the space generally and afford a degree of shade and shelter.

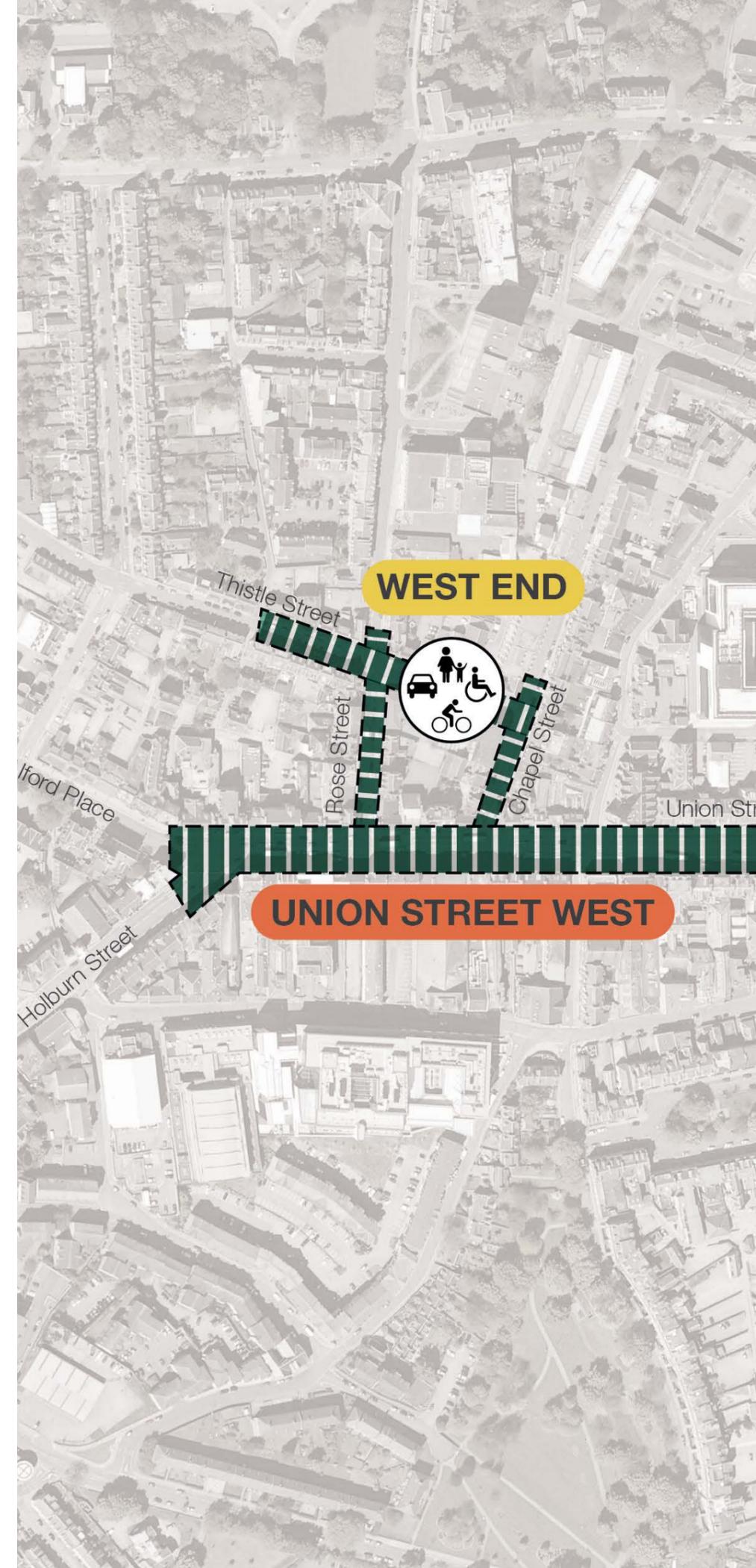
In terms of materiality, proven simple, elegant and robust materials are selected for use within the public realm in accordance with the ACC Urban Realm Manual and to tonally and visually reflect to streetscape works associated with the Union Terrace Gardens project, adjacent to Union Street Central.

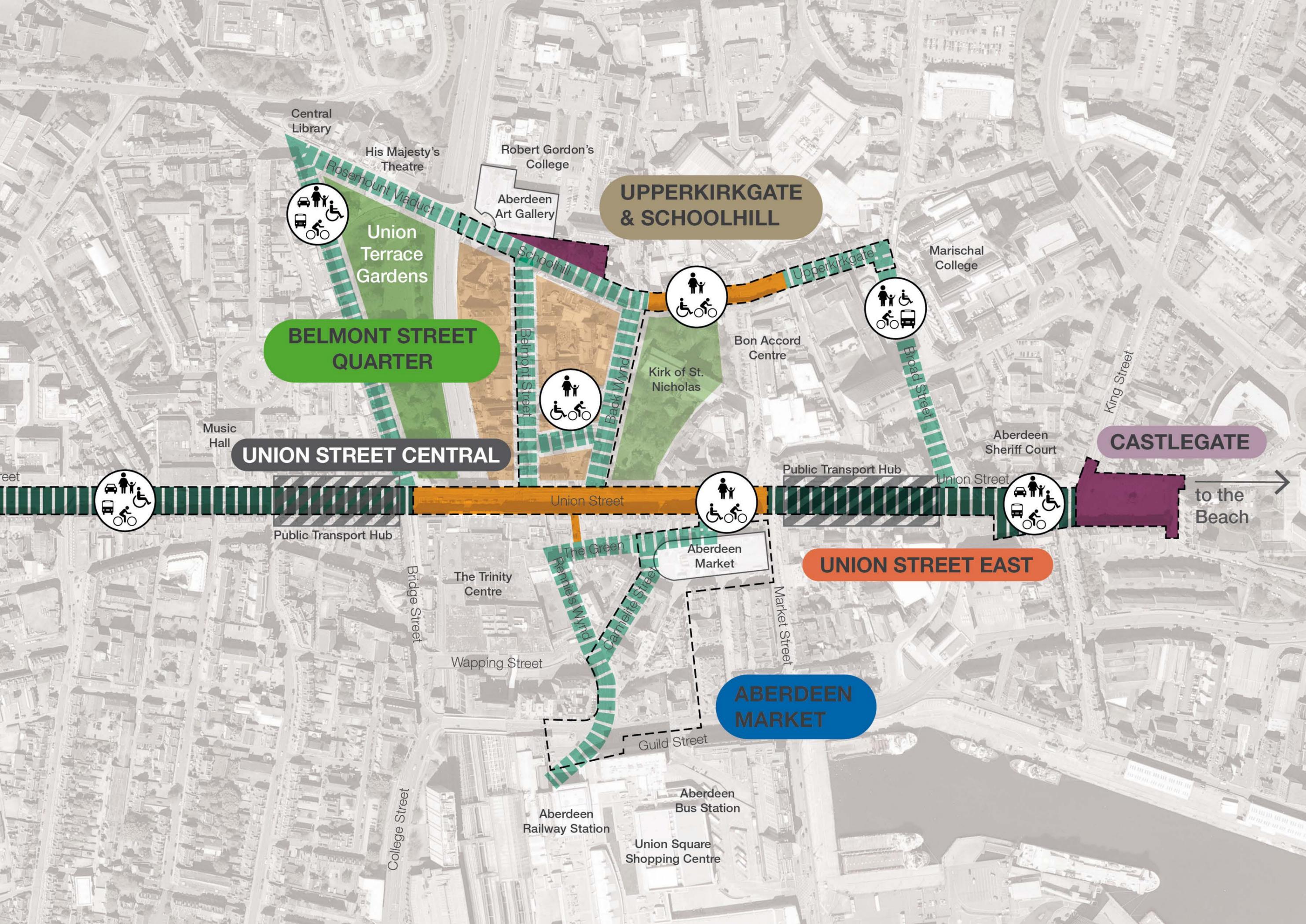
Strategic Moves

Legend

	Fully pedestrianised streets With cycle and restricted loading access*		Key civic green space		Pedestrians and cycles only With restricted loading access*
	Pedestrian priority streets		Cafe culture quarter Area for on-street bars and cafés		Pedestrian, cycle and bus With restricted loading access*
	People and public transport priority street		Public transport hub		Pedestrian, cycle and car With restricted loading access*
	Key civic space				Pedestrian, cycle, car and bus With restricted loading access*

*Further access & restrictions subject to detailed design





Central Library

His Majesty's Theatre

Robert Gordon's College

Aberdeen Art Gallery

UPPERKIRKGATE & SCHOOLHILL

Union Terrace Gardens

BELMONT STREET QUARTER

Marischal College

Bon Accord Centre

Kirk of St. Nicholas

Music Hall

UNION STREET CENTRAL

CASTLEGATE

Aberdeen Sheriff Court

Union Street

Public Transport Hub

Union Street

to the Beach

Public Transport Hub

The Green

Aberdeen Market

UNION STREET EAST

The Trinity Centre

ABERDEEN MARKET

Wapping Street

Aberdeen Railway Station

Aberdeen Bus Station

Union Square Shopping Centre

College Street

Bridge Street

Remnie's Wynd

Carmelite Street

Guild Street

Market Street

King Street

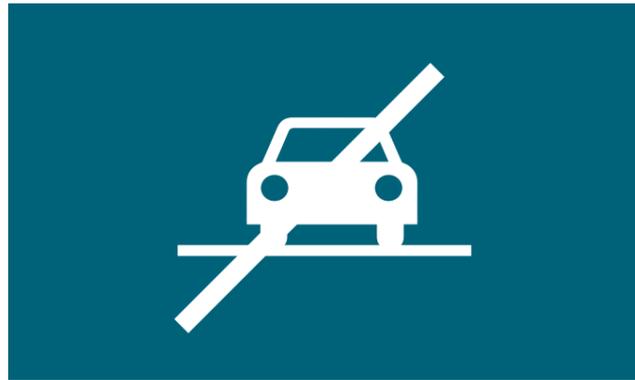
Broad Street

Belmont Street

Back Wynd

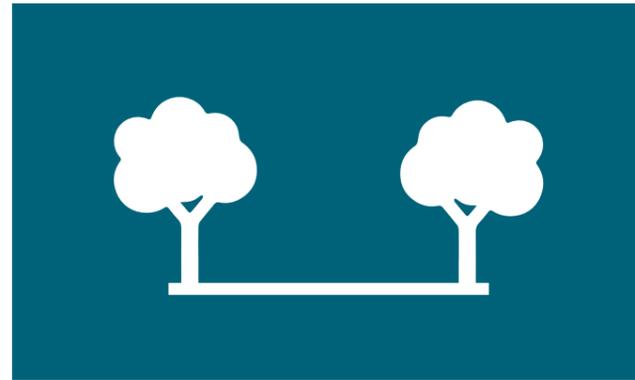
Upperkirkgate

Union Street Central - Key moves



Removal of traffic

The removal of general traffic is one of the key element of transformation for this section of Union Street Central into a pedestrian priority space, to deliver the creation of a destination within the City Centre.



Tree Lined Boulevard

Creation of a tree-lined boulevard, enhancing the grandeur of the street. Trees provide opportunities for appreciation of wonderful seasonality and help to create a more pleasant microclimate for street users, offering shelter, shade and wind protection.



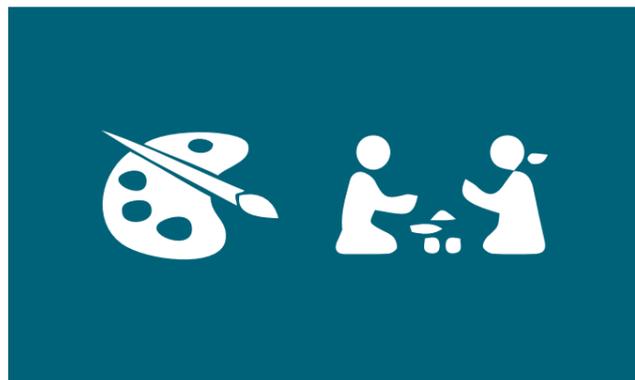
Street Greening

Incorporation of street greening to soften the space, create a more relatable human scale and offer shade and shelter. Introducing possibilities for seasonality and city/ area branding, ensuring that each area's individual character is respected and enhanced via appropriate planting selection.



Enhancing Character

Enhancing the character of the area, creating a welcoming and comfortable space to dwell for extended periods of time, recognising a destination of unique character within the city centre.



Enriched public realm

Incorporating play and public art to draw people of all ages into the space, and encourage them to linger.



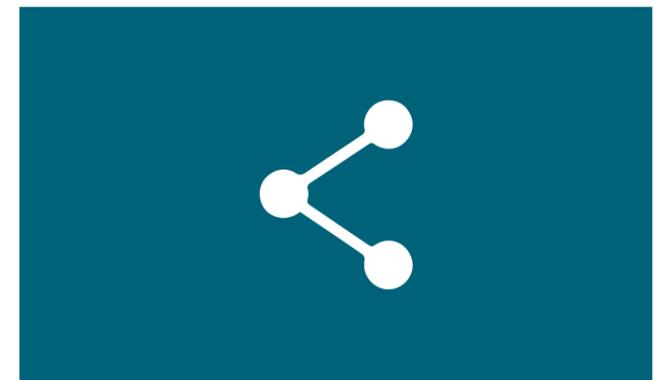
Activation

Increase footfall to Union Street Central by providing flexibility for events to increase activation of the public space throughout the year.



Stimulate the economy

Make the area more attractive to visitors, residents and businesses, stimulating the economy.



Connectivity

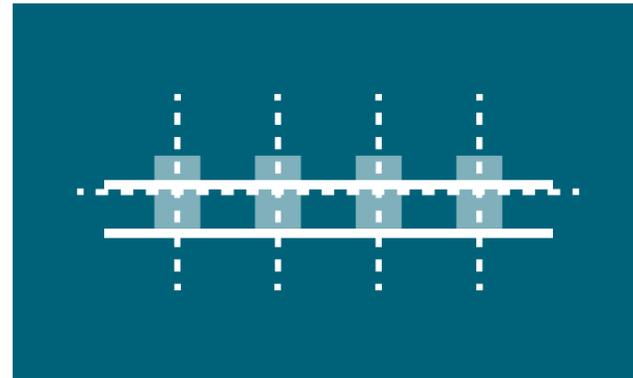
Improve pedestrian and other active travel connectivity between Aberdeen Market and surrounding streets and routes, particularly between the transport hubs and Union Street, including a robust wayfinding strategy for the area and improved pedestrian crossing opportunities.

Key spatial principles



Creation of a destination

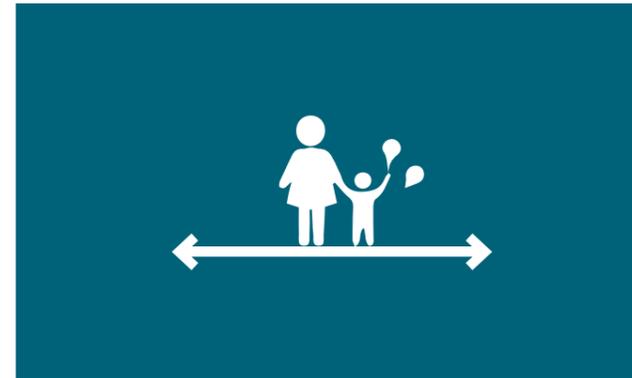
Create one overall unified, flexible, pedestrian priority space within the centre of Union Street.



Enhanced rhythm and symmetry

Clear and consistent approach to hierarchy of sub-spaces within the overall public space.

Key spatial configurations



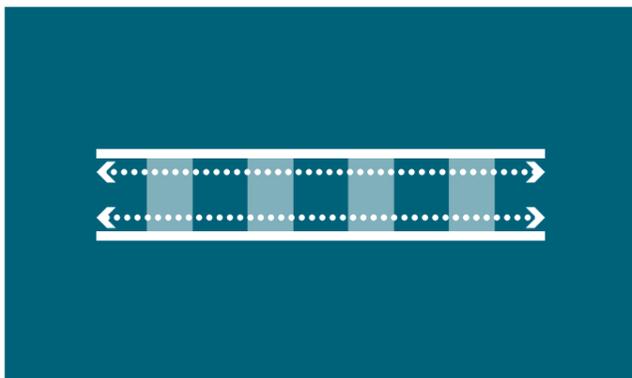
Widened Footpaths

Widened footpaths to allow greater, safer and more comfortable pedestrian footfall in this shopping area. Reduces frustration, increases enjoyment and reduces conflict with other street users e.g. stepping onto roadway. Highlights the increased focus on pedestrian experience.



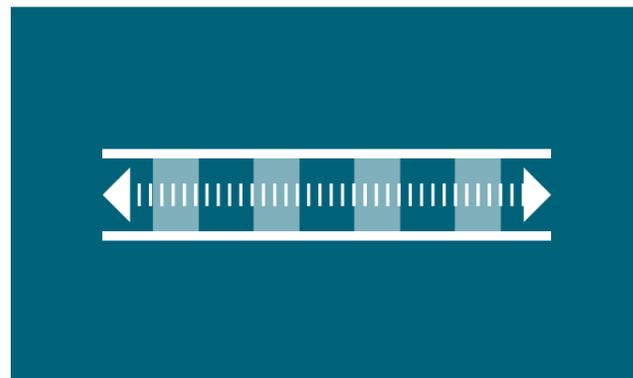
Plazas at Key Architectural Moments

Plazas frame key buildings along the street, creating focal points and pausing moments along its length and highlighting the city's treasures.



Primary pedestrian movements

Widened clear, unobstructed footways, clearly delineated to allow safe pedestrian movements within the pedestrian priority space, with further delineation of the footways by means of fixed elements of planting and seating, are one of the key spatial principles to deliver the pedestrian priority space



Defined central corridor

Clearly defined central route that accommodates cycling generally and servicing within the service window and cycling through its spine.



Activity Zones

The activity zones are key areas located by the footways (easily accessible) to help activate the public space (cafe' spill out seating, spaces for informal play and art) while also supporting more functional aspects of everyday life (bike parking for example).



Seating and spill out space

Increasing on-street activity to animate the space and encourage business. Increased public seating offering welcoming amenity to all, and opportunities for rest for the less able, encouraging a wide range of visitors to the city centre.

3.0 Design Proposals

One of the key aims of the design proposals is the creation of a destination within Aberdeen City Centre - a public space to represent an 'agora' or 'piazza' in the centre of Union Street.

- The literal meaning of '**agora**' is gathering space that serves as a meeting ground for various activities of the Citizens (centre of the athletic, artistic, business, social, spiritual and political life in the city), a place for congregation and gathering.
- The literal definition of '**piazza**' is public square, a public open place, predominantly hard surfaced, where there is no traffic.
- The literal definition of '**traffic**' is vehicles moving on a public highway.

The design proposals aim to transform Union Street Central into a primarily 'pedestrian priority space' with a well defined cycle route through the central zone that will accommodate service vehicles during defined times of the day. In order to achieve that, general traffic is removed in its entirety from this space and it no longer functions as a vehicular thoroughfare.

To understand the scale of the ambition of this transformation it is important to consider Union Street Central in the context of the wider strategic streetscape improvement and within the other areas of intervention.

Throughout the development of these proposals, engagement has been undertaken with stakeholders, such as children and young people and the DEP (Disability Equity Partnership). This engagement has informed the emerging proposals and will continue as the project progresses.

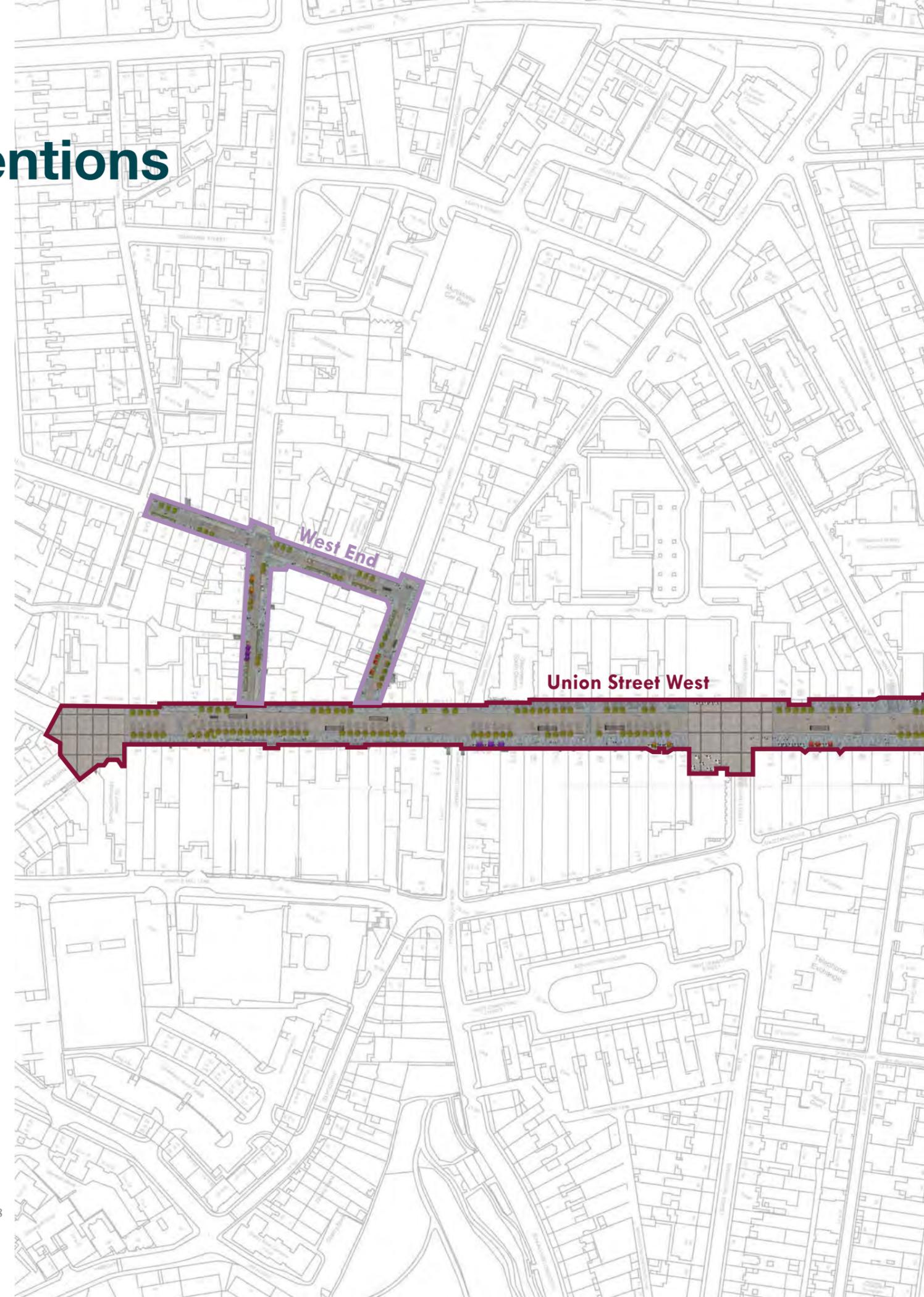
City Centre Streetscape Interventions

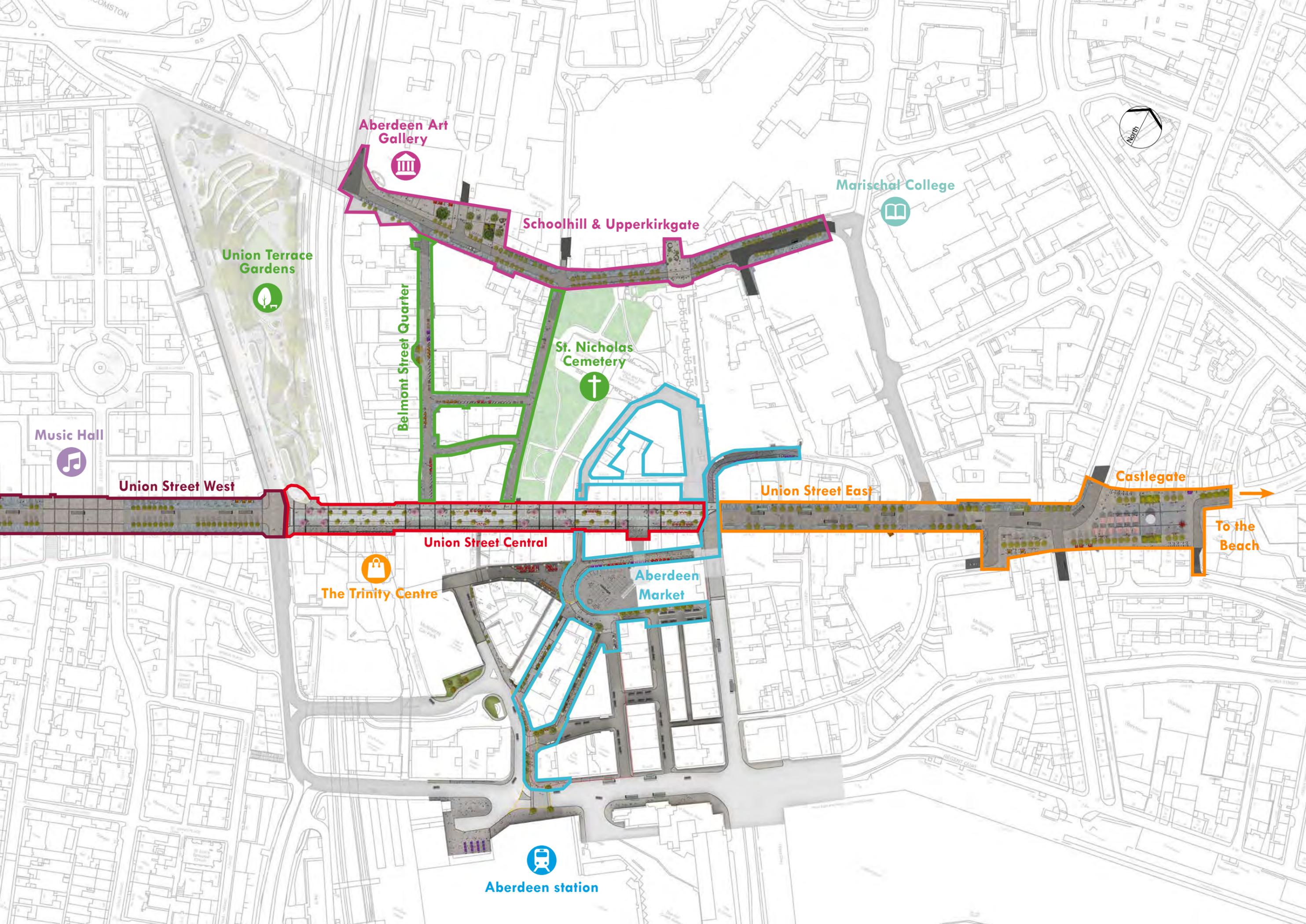
The diagram overleaf illustrates how Union Street Central is part of a wider strategic streetscape improvement for Aberdeen City Centre and needs to be considered in the context of the holistic review of the other seven Intervention Areas that have been identified.

These are as follows:

- Union Street West
- West End
- Union Street East
- Castlegate
- Aberdeen Market
- Belmont Street Quarter
- Schoolhill and Upperkirkgate

In the future, this will be supplemented by proposals for George Street.





Aberdeen Art Gallery



Marischal College



Schoolhill & Upperkirkgate

Union Terrace Gardens



Belmont Street Quarter

St. Nicholas Cemetery



Music Hall



Union Street West

Union Street East

Castlegate

To the Beach

Union Street Central

The Trinity Centre



Aberdeen Market

Aberdeen station



Union Street - Pre-pandemic, Present, and Proposed



**Union Street Central
(pre-pandemic / Spaces for People Interventions)**

- traffic dominated with up to 4 lanes of traffic
- large vehicle dominated junctions at either side of the area
- bus lanes on either side of road
- large number of bus stops along road corridor
- significant amount of street clutter along footways
- no public seating
- no safe routes for cyclists
- minimal active travel infrastructure - some existing cycle stands



**Union Street Central at Present (during Spaces
for People)**

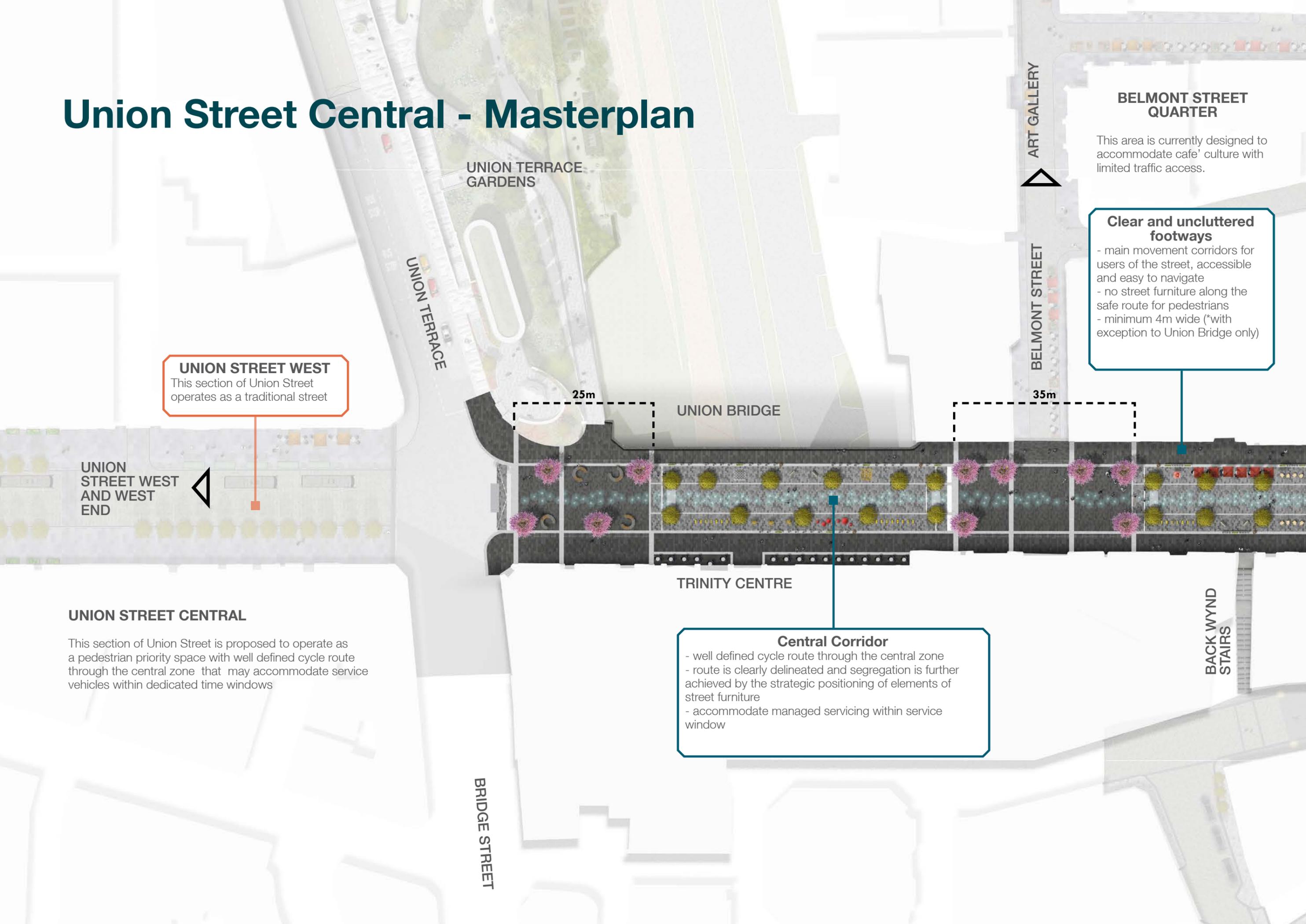
- Temporary measure
- Unclear route for cyclists and pedestrians
- No clear delineation / definition of different spaces
- Sporadic placement of street furniture.



Proposed Union Street Central

- Clear central corridor
- Clear delineation of the route to ensure all users are aware of one another
- Strategic positioning of street furniture further defines the central route
- Improved visual amenity provides more pleasant experience
- Variety of other activities are clearly contained within the Activity Zone in order to minimise potential areas of conflict between different users of the public space
- managed vehicular access, limited to service/emergency vehicles, during defined times of the day (within service window only).
- Opportunity to accommodate future ART (Aberdeen Rapid Transit) proposals.

Union Street Central - Masterplan



BELMONT STREET QUARTER

This area is currently designed to accommodate cafe' culture with limited traffic access.

Clear and uncluttered footways

- main movement corridors for users of the street, accessible and easy to navigate
- no street furniture along the safe route for pedestrians
- minimum 4m wide (*with exception to Union Bridge only)

UNION STREET WEST

This section of Union Street operates as a traditional street

UNION STREET WEST AND WEST END

25m

UNION BRIDGE

35m

TRINITY CENTRE

Central Corridor

- well defined cycle route through the central zone
- route is clearly delineated and segregation is further achieved by the strategic positioning of elements of street furniture
- accommodate managed servicing within service window

UNION STREET CENTRAL

This section of Union Street is proposed to operate as a pedestrian priority space with well defined cycle route through the central zone that may accommodate service vehicles within dedicated time windows

BACK WYND STAIRS

BRIDGE STREET

ART GALLERY

BELMONT STREET

UNION TERRACE

UNION TERRACE GARDENS



Kerbs

- finish: Scottish natural stone bullnosed kerb
- size: 60mm upstand between pavement and activity zone, 20mm upstand between pavement and plazas, 400mm wide
- colour: white/pale grey to contrast footways
- Scottish natural stone kassel kerbs to bus stops

Activity zone

- adjacent to footways
- location of variety of activities such as informal play, spaces for art, cafe' spill outs, etc
- augment outdoor dining at certain times of the day
- key area that helps activate the public space through furniture, colour etc...

Junctions

- geometry of the junctions to be further developed with SYSTRA and Fairhurst as part of the wider Traffic Management Plan

UNION STREET EAST
This section of Union Street operates as a traditional street

UNION STREET EAST AND CASTLEGATE

St Nicholas Square
This area operates as pedestrian zone except for loading (6pm - 11am)

BACK WYND

SMITH'S SCREEN

(CORRECTION WYND)

45m

35m

ABERDEEN MARKET

Plazas at key moments

- 'pedestrian priority' zone
- located at key points along Union Street Central area
- clutter free spaces, celebrating heritage
- pausing moments, breaking up the linearity of the space
- preferred crossing areas to facilitate easy pedestrian movement north/south
- areas with limited street furniture to facilitate movement
- feature seating and planting
- potential for space for service vehicles to pull-in and load/unload away from the main service route at dedicated times
- flexible zones that may accommodate key events and activities

MARKET

This area is currently being designed to create a key link between the station and Union Street Central



Footways	4+m	
Activity Zone	3.25m	
Central Corridor	5.50m	Central zone 12.40m
Activity Zone	3.25m	
Footways	4+m	

4.0 Response to Key Objectives

The following section illustrates the Design Team response to the key Strategic Objectives for Union Street Central.

These are as follows:

- **Objective 01:** Create a pedestrian friendly focal point at the heart of the City Centre, between Bridge Street and Market Street, that represents the best of Aberdeen.
- **Objective 02:** Create a safe and welcoming connection between Union Terrace Gardens and the Aberdeen Market and adjacent areas.
- **Objective 03:** Prioritise people movement within the space whilst accommodating servicing requirements.
- **Objective 04:** Ensure that any proposals are flexible and adaptable in terms of event planning and the future needs of the city.
- **Objective 05:** Increase seating and spill-out spaces to help animate the space.
- **Objective 06:** Enrich the public realm through play, public art and lighting.
- **Objective 07:** Incorporate street planting to soften the space, adding shade and shelter.
- **Objective 08:** Incorporate Sustainable Drainage Systems (SuDS) where possible.

Objective 01: Pedestrian friendly focal point

‘Create a pedestrian friendly focal point at the heart of the City Centre, between Bridge Street and Market Street, that represents the best of Aberdeen.’

Clear and uncluttered footways

The tone for the footways is dark and delineated by light grey/ near white kerbs, in order to complement and contrast with the granite grey buildings of Aberdeen’s historic heart and provide a strong visual definition to the kerb.

Central Corridor

The colour for the central zone is a mixed batch of three tones of grey, to define the zone from the primary pedestrian priority spaces of the footways and plazas.

The difference in colour to the footways clearly defines zoning between the pedestrian and central street zone where the bi-directional cycle route is located.

UNION STREET WEST AND WEST END

Key considerations and paving parameters

- Tonal palette as per Aberdeen City Council’s Urban Design Manual
- Colour and paving parameters selected in order to ensure the street relates to the wider network context
- Tone and paving parameters reinforce the hierarchy of spaces, defining:
 - areas where different users may interact (pedestrians, cyclists and occasional vehicles)
 - paving size and build-up
 - the service route and all areas likely to be trafficked (including for events)
 - activity zones adjacent to footways
- Zones within the overall space are defined by a combination of subtle use of different paving mixes and trim delineations, as well as careful placement of street furniture.

UNION TERRACE

UNION TERRACE GARDENS

ART GALLERY



BELMONT STREET

TRINITY CENTRE

BRIDGE STREET

BACK WYND

Activity zone

The colour for the Activity Zones is also a mixed batch of three tones of grey, to define the zone from the primary pedestrian priority spaces and to ensure flexibility in use of the space, whilst reading as part of the clearly defined central zone.

SMITH'S SCREEN

(CORRECTION WYND)

ST NICHOLAS STREET

UNION STREET EAST AND CASTLEGATE

BACK WYND STAIRS

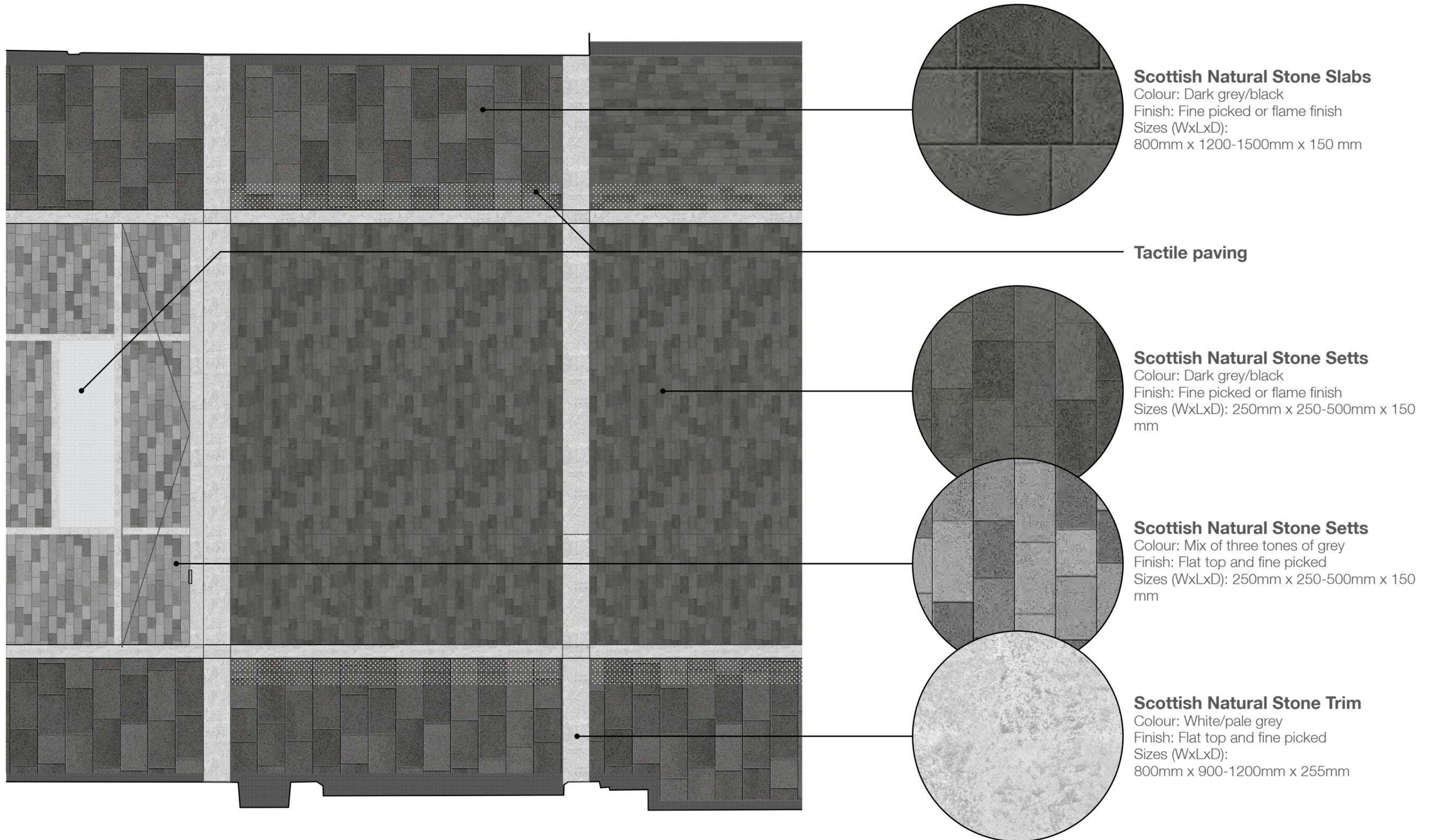
ABERDEEN MARKET

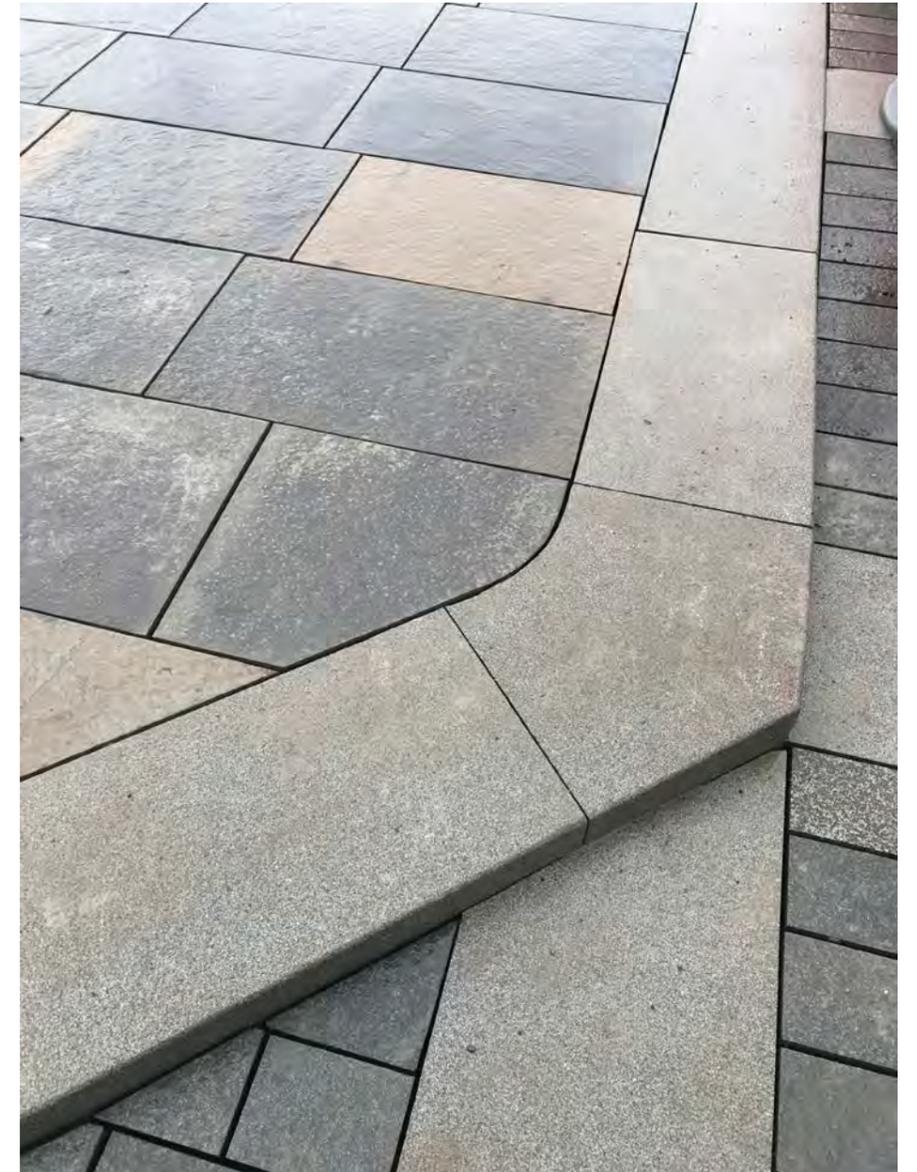
Plazas

The material tone of the footways extends into the Plaza to subtly demarcate these as pedestrian priority spaces and preferred crossing points.

MARKET STREET

Typical paving patterns and paver sizes:





Enhancement opportunities

Potential for inclusion of features such as inscriptions and horizontal wayfinding to key locations.

Clear delineation

The hierarchy of different zones within the public space are delineated via timeless and elegant paving selection, able to support the flexibility of the space, adaptable to the changing needs of the City Centre. Delineation is also achieved through kerbs, explained more on following pages.

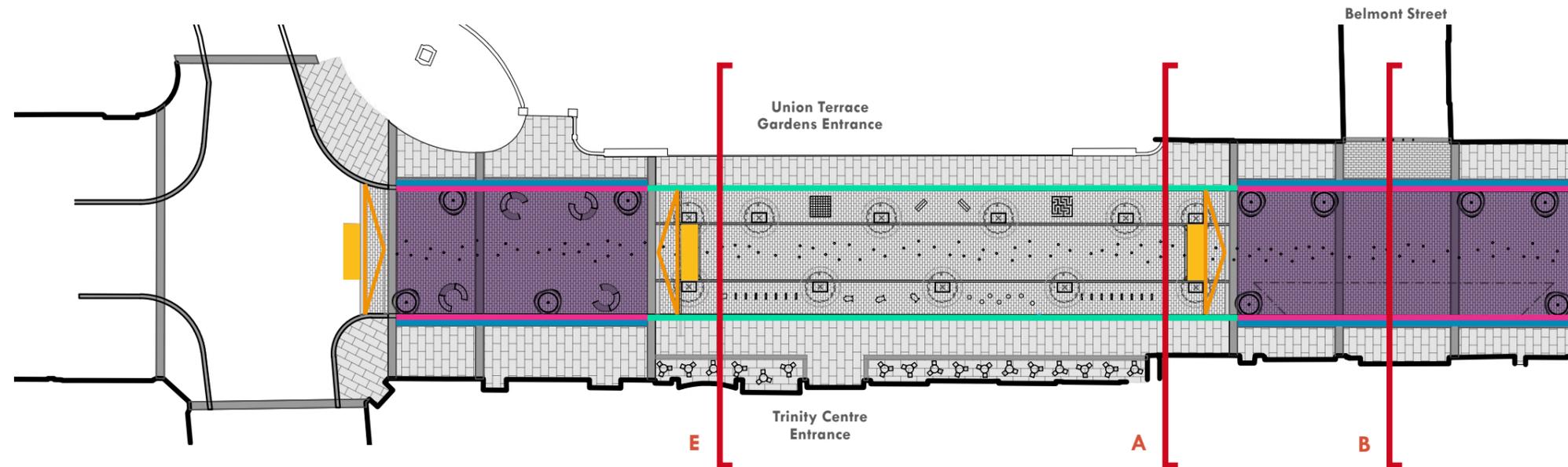
Kerb Upstands

The edge of the footway is also delineated by kerb upstands or tactile paving which is explained further on the following pages.

Minimising perceived conflicts between users

The ambitious proposals aim to create an iconic and innovative space in the centre of Union Street. To achieve this, the proposals evolve from the traditional design of a street, to a space which is specifically focused on minimising the perceived conflicts between users, through smart and intuitive design.

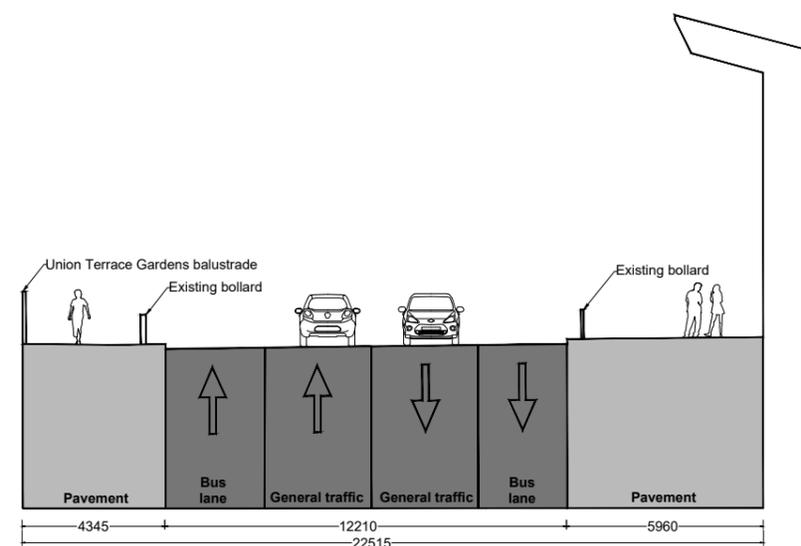
The diagram and sections overleaf illustrate the vertical configuration of the different areas, as well as the subtle wayfinding measures proposed.

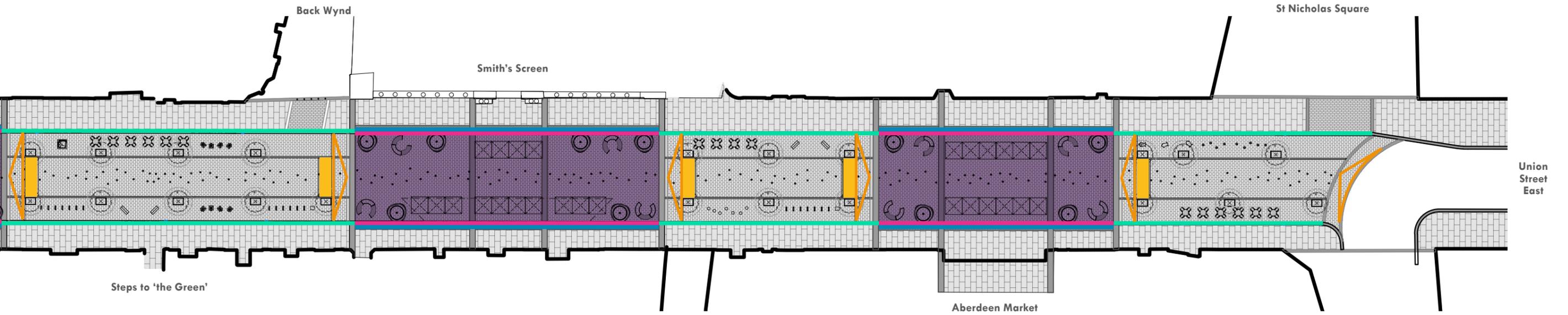


Key comments:

- Designed to move away from a more traditional street layout
- Space to read less like a traditional street and thoroughfare, beginning to function as an overall space.
- Shift towards a perceptual and operational change.
- Plazas: proposed on raised tables, acting as preferred crossing points - tactile placed as a warning to identify the 'pedestrian priority' nature of this space.
- Vehicles to feel like 'visitors' within the plazas by the placement of raised tables, tactile paving and careful placement of street furniture.
- Cyclists are warned of the potential interaction with pedestrians crossing through the plazas by the placement of appropriate hazard warning paving as well as a gentle slope up, which imply a reduction of speed to avoid conflicts.
- Space to operate as a pedestrian priority space, with well defined cycle route through the central zone that may accommodate service vehicles during defined times of the day.
- Zones are defined by a combination of upstand kerbs which and the subtle use different paving mixes and trims, as well as careful placement of street furniture elements
- Upstand kerbs create segregation and delineation between the pavement and the central zones, enhanced with tactile paving to ensure safety for all users.

Section – E (existing)

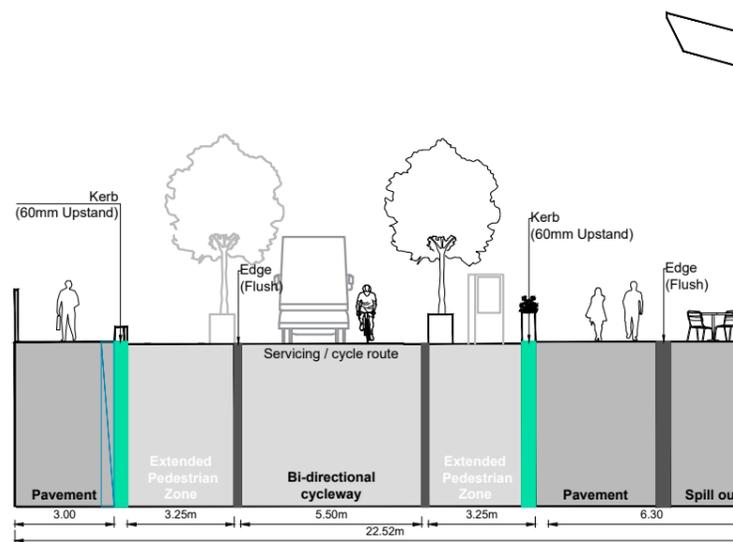




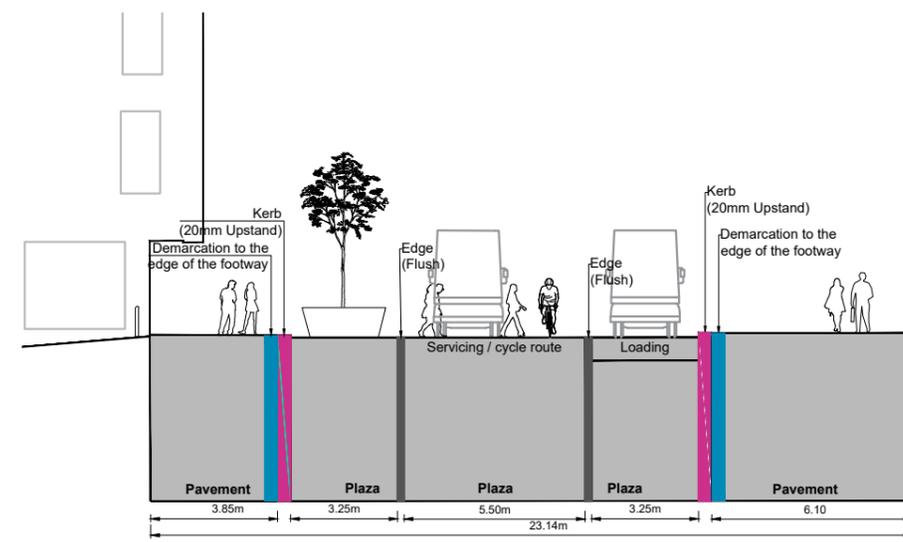
Legend

- Raised table
- Tactile paving adjacent to footpath
- 20 mm upstand
- Gentle grade to raised table
- Tactile paving to cycleway
- 60 mm upstand

Section A (typical street)



Section B (typical plaza)



Objective 02: Create a safe and welcoming connection

‘Create a safe and welcoming connection between Union Terrace Gardens and the Aberdeen Market and adjacent areas.’

An ambitious transformation

The removal of general traffic from Union Street Central is the key move associated with the transformation of the central section into a pedestrian priority space. A key priority of the overall design is to enhance the pedestrian experience and create better links from Union Street Central to adjacent key civic areas such as Union Terrace Gardens, the Aberdeen Market, the Art Gallery, Broad Street and links to the stations.

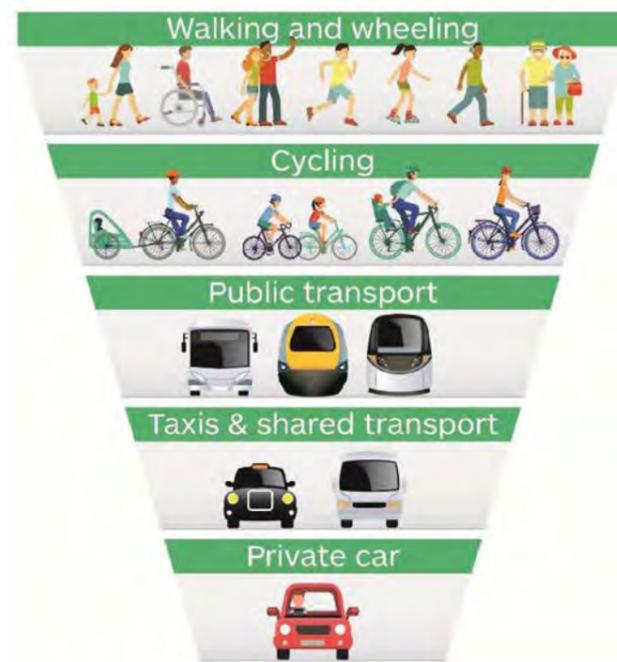
The priority established by the widely recognised ‘Sustainable Transport Hierarchy’ is respected: walking and wheeling first, followed by cycling. Service vehicles would only be permitted during the service window (6pm - 10am) and would be required to carefully share the central corridor with cyclists.

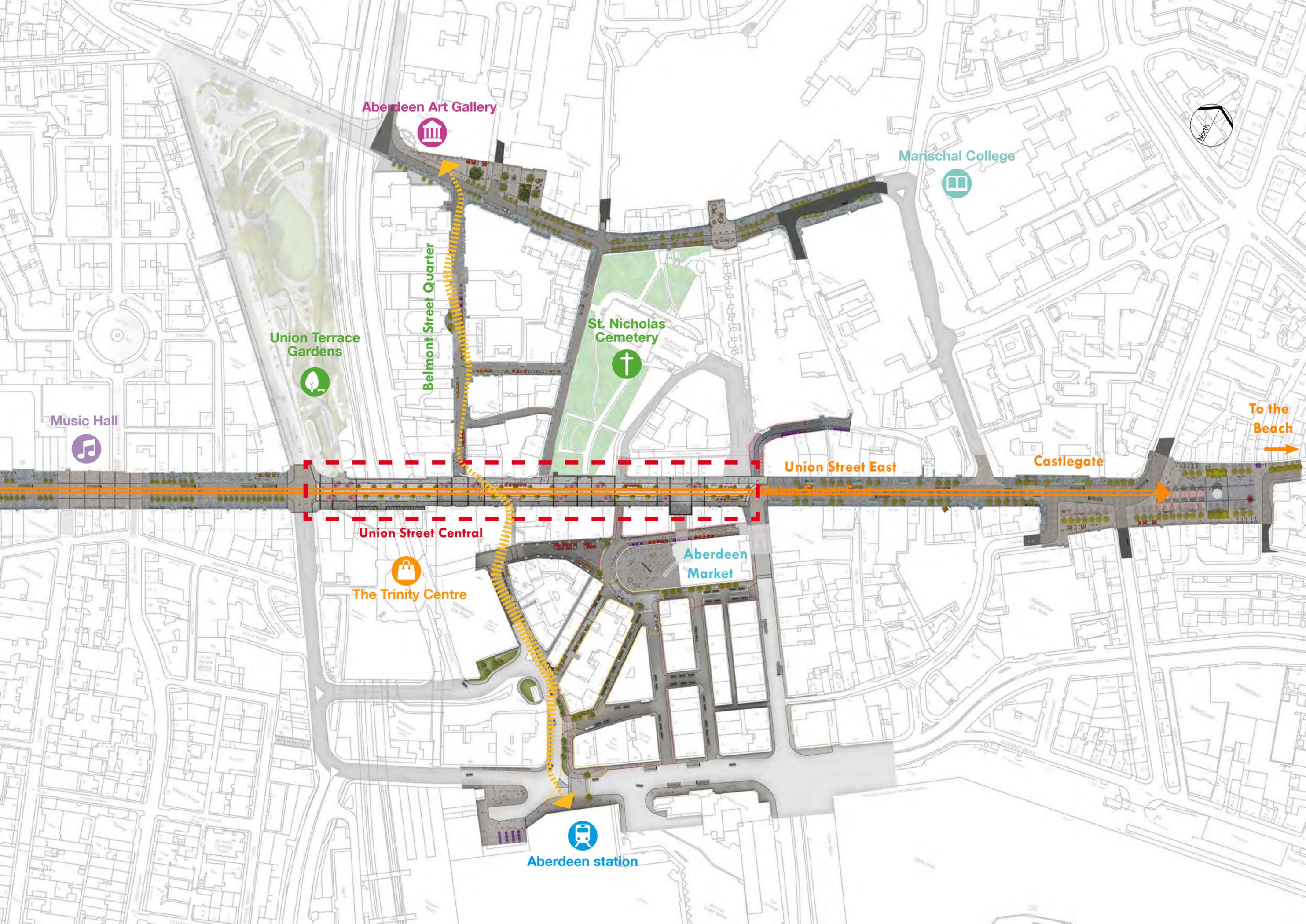
The majority of conflicts associated with the interaction of different users are removed from the space, and the remainder mitigated through:

- operational management (restricted service access during limited time windows)
- design decisions (tested through consultation).

The proposals have been developed in close collaboration with the Transport consultants, SYSTRA, appointed by ACC to work on the wider Traffic Management Plan for the whole of the City Centre, and to assess the wider implications of traffic restrictions proposed for the pedestrianisation of the central section of Union Street.

Prioritising Sustainable Transport





Aberdeen Art Gallery



Marischal College



Union Terrace Gardens



Belmont Street Quarter

St. Nicholas Cemetery



Music Hall



Union Street East

Castlegate

To the Beach

Union Street Central



The Trinity Centre

Aberdeen Market

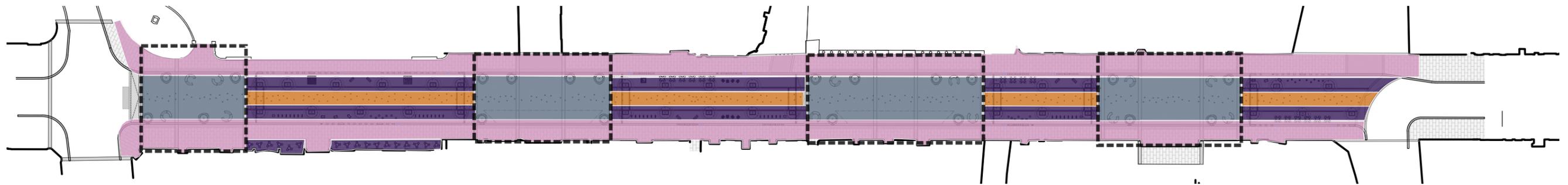


Aberdeen station

Objective 03: Prioritise people movement

‘Prioritise people movement within the space whilst accommodating servicing requirements ‘

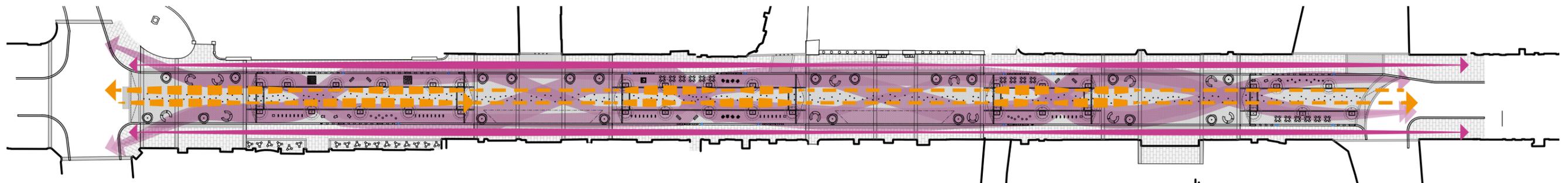
Zoning



Legend

-  Pedestrian footways
-  Pedestrian footways
-  Plazas at key moments
-  Cycleway (two-way)

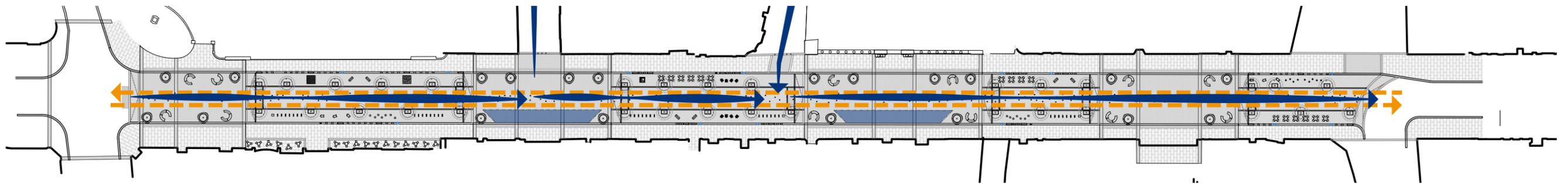
Pedestrian movement and cycling



Legend

-  Cycleway (two-way)
-  General pedestrian flow
-  Main pedestrian movement

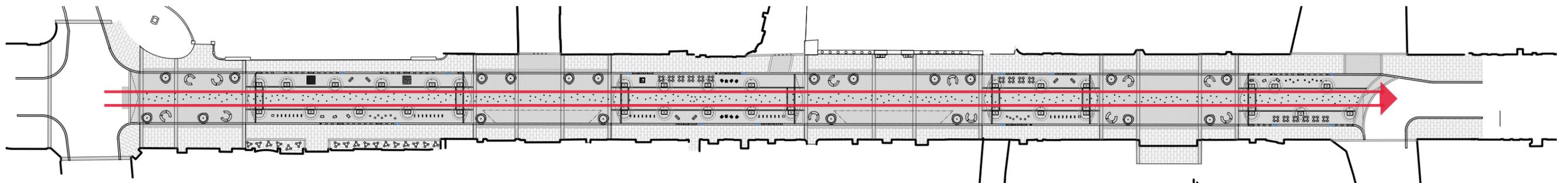
Servicing and emergency vehicle route



Legend

-  Servicing route (one-way eastbound)
-  Cycleway (two-way)
-  Servicing bays

Emergency bus route and future-proofed corridor for Aberdeen Rapid Transit (ART)



Legend

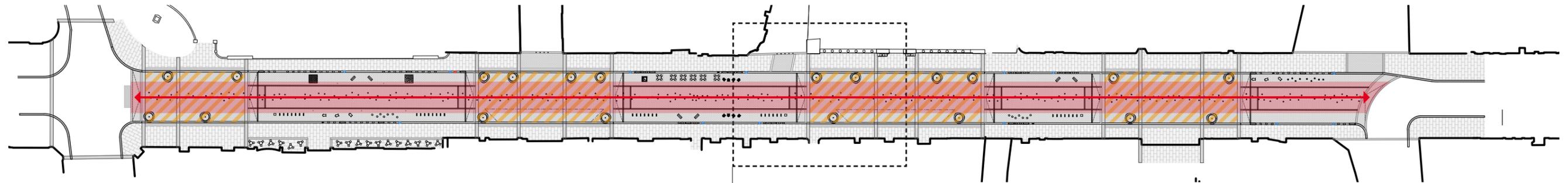
-  Indicative diversion route for bus services in case of emergency or breakdown
(4m wide corridor, one way, subject to vehicular tracking)

This route could also be used by potential Aberdeen Rapid Transit (ART) initiatives in the future.

Objective 04: Flexible and adaptable

‘Ensure that any proposals are flexible and adaptable in terms of event planning and the future needs of the city.’

Big events strategy



Legend

Event location

General pedestrian flow

8 m central corridor

A Flexible Design

The proposals for Union Street Central allows for an enhanced degree of flexibility within the streetscape to ensure that the public space is adaptable to current and future needs of the City of Aberdeen.

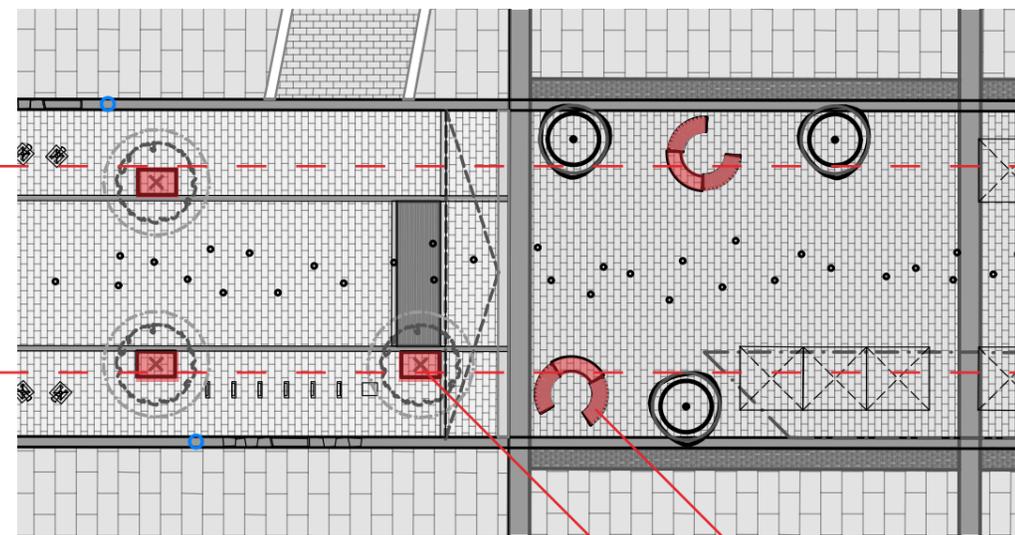
As such, fixed elements of furniture are minimised allowing the space to be potentially reconfigured for larger events such as the Tour of Britain cycling event, or the temporary provision of bus routes within

this section of Union Street should this be required.

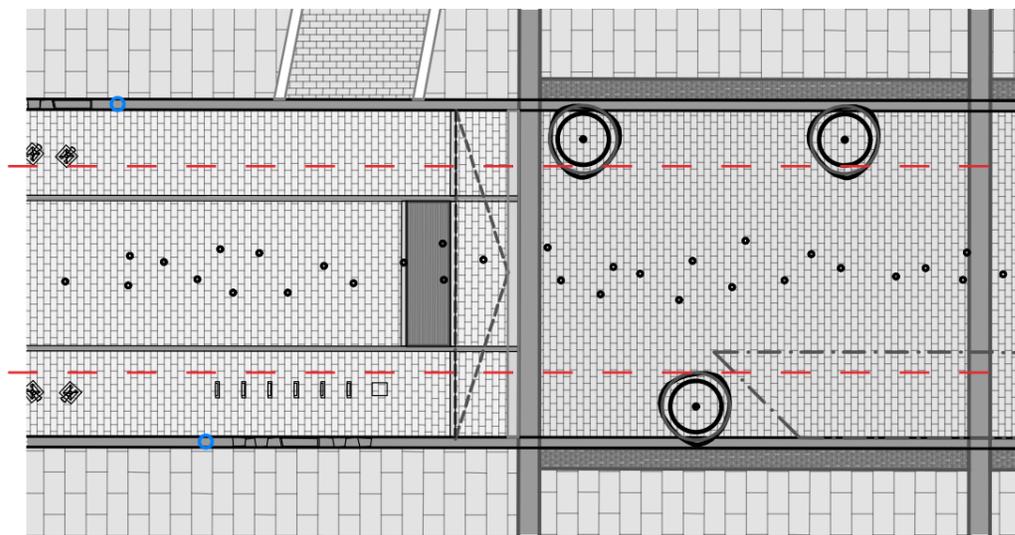
The moveable planters and seating may be relocated away from the central zone in order to create an 8 meter wide unobstructed corridor for large events to take place.

Further consultation will take place with relevant departments within ACC to refine the final events strategy.

Relocating furniture diagram



Day to day layout



Events layout

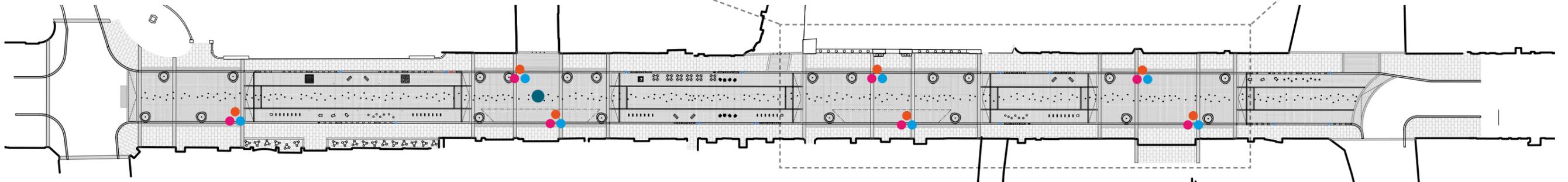
Movable elements inside corridor

Central corridor is completely free for large scale events, parades and various activities.

Potential street market location



Event infrastructure location



Legend

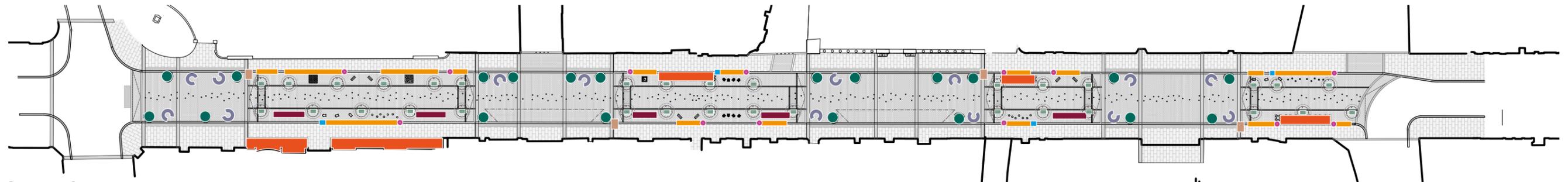
-  Power outlets (recessed)*
-  Water outlets (recessed)*
-  Drainage inlet (recessed)*

* Location of components is indicative and subject to change and review following coordination with wider utility strategy

Objective 05: Seating and spill-out space

‘Increase seating and spill-out spaces to help animate the space.’

Street Furniture



Legend

- | | | |
|---|---|--|
|  Opportunities for external dining |  Wayfinding totem |  Planter (movable) |
|  Linear seating with planters |  Drinking fountain |  Planter (stationary) |
|  Flexible seating elements (movable) |  Litter bin |  Cycle stands & service station |

Street Furniture Strategy

The diagram above illustrates the current proposals for street furniture within Union Street Central.

The overall placement of the street furniture is carefully considered to ensure the even distribution of different types of furniture across the length of the space.

The activity zones, outwith the plazas, are proposed to provide comfortable and flexible spaces which contain, amongst others, sensory planting, space to exhibit art and informal elements of play, cafe' spill out spaces, creating opportunities for people of all ages and abilities to interact with the space and aiming to encourage longer dwell times.

Commercial and non-commercial seating provide a mix of benefits for both pedestrians and businesses.

Public seating

There is currently no public seating available in Union Street Central: the introduction of seating areas at regular intervals is a substantial enhancement associated with the current design proposal.

The introduction of restful public seating areas is significant, and distributed evenly, at regular intervals, for people of all ages and abilities, creating spaces of non-commercial seating where people can sit, rest, relax and linger, to wait while others shop for example, or to take time away from work or meet with friends.

Particular consideration is given to those unable to attempt the walk along the pedestrianised section of Union Street Central without rest will help increase footfall to the street.

Hostile vehicle mitigation

The integration of street furniture within the proposals, particularly large tree planters and stone seating, at regular intervals improves safety of users by reducing the ability for hostile vehicles to enter onto pavements and other spaces where pedestrians may be gathered in significant numbers.

Site furniture examples



Steel planter
Powdercoated bronze, 1500x750x900mm,
freestanding



Art exhibition boards
Finish ties in with the Scottish natural stone paving



Wayfinding totem
Powdercoated bronze,
2040x400x83mm



Cycle service station
Powdercoated, 1560x575x490mm



3/4 circular seat
Two timbertops, 2750 ϕ x 450mm (h)
Finish ties in with the Scottish natural stone paving



Litter bin
Powdercoated steel and timber



Drinking fountain
Cast iron, 1290x420x1070mm

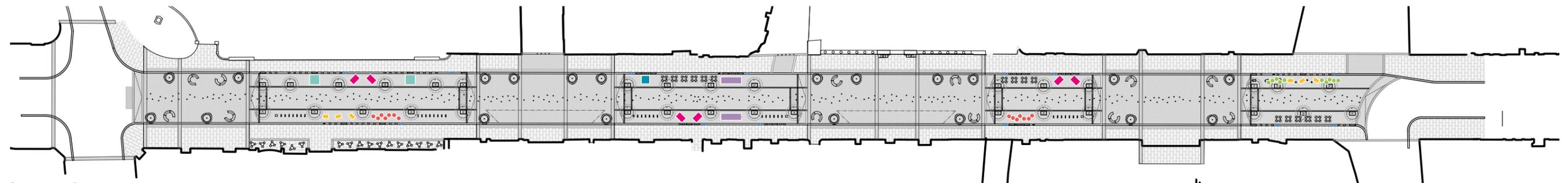


Cycle stand
Powdercoated bronze

Objective 06: Play, Public Art & Lighting

‘Enrich the public realm through play, public art and lighting.’

Play & art strategy



Legend

- | | | | |
|--|---|--|--|
|  Interactive art panels |  Singing stones |  Metal play poles |  Bestiary play elements |
|  Board games painted on surface |  Talking tubes |  Play spheres | |

Play Strategy

The diagram above illustrates the current proposals for informal play and art within Union Street Central: this is for illustrative purposes only.

The overarching aim is to distribute different activities across the length of the area and providing fun and varied opportunities for play that are both exciting and challenging for different ages.

The final proposals will be developed during RIBA Stage 4 following wider Client and relevant stakeholders engagement, including children and young people.

Play & art examples

© AntoninFourneau, Quentin Chevrier/ DigitalArti Artlab



Interactive play

Water light graffiti, poitiers (LED lights that light up when in contact with water)



Street play

Ground patterns and designs for active games or a board-game type experience



Safe play

Spherical rubberised play element for running, jumping and climbing



Informal play

Talking tubes



Art installations

Temporary pavilions, stands and structures by local and renown artists, collaborative work with communities



Active play

Small scale trampolines, swings and rockers for a more dynamic playscape



Linear play

Elements of play combined into a linear feature to be explored by all age groups

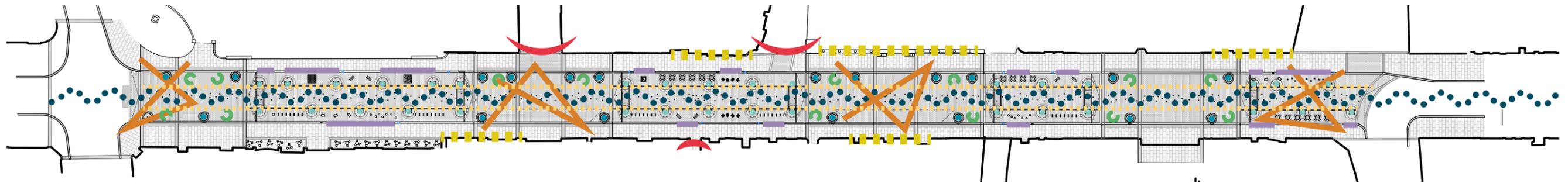


Sculptural play

Aberdeen bestiary-themed play elements

© Morag Myerscough, Love at First Sight, Aberdeen

Feature lighting strategy



Legend

 Accent Lighting (to key buildings, structures and monuments)	 Supplementary Feature Lighting (to street furniture)	 Sentinel Lighting at Key Nodes (street entrances and steps)	 Tree uplighters in movable planters
 In Ground Constellation Lighting (to cycleway)	 Iconic Feature Lighting (at plazas)	 In ground wayfinding light to cycle route (alternate modules)	 Tree uplighters in stationary planters

The proposed lighting strategy is focused on illustrating the overall concept for feature lighting within Union Street Central: this is for illustrative purposes only.

The feature lighting strategy will be further developed during RIBA Stage 4, following wider Client and relevant stakeholders engagement,

Lighting examples



Feature light at plazas
Iconic feature lighting



In ground constellation
Wayfinding lighting to cycle route



In ground linear wayfinding
Lighting to cycle route, alternate modules



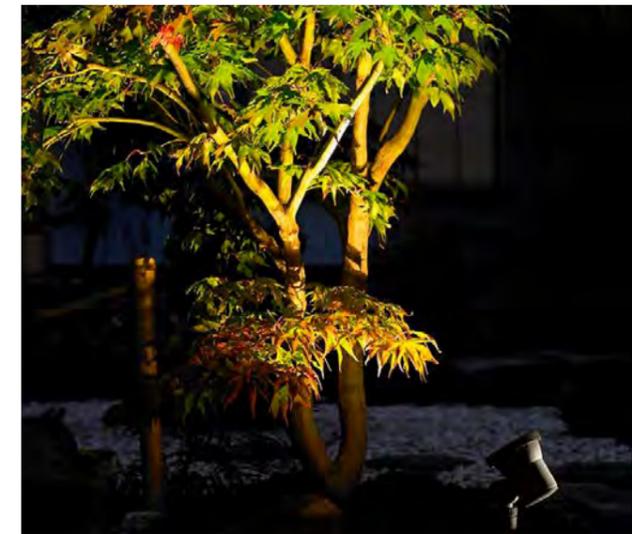
Street furniture light
Supplementary lighting of street furniture elements



Accent lighting
Lighting to key buildings structures and monuments



Sentinel lighting at key nodes
Street entrances and steps



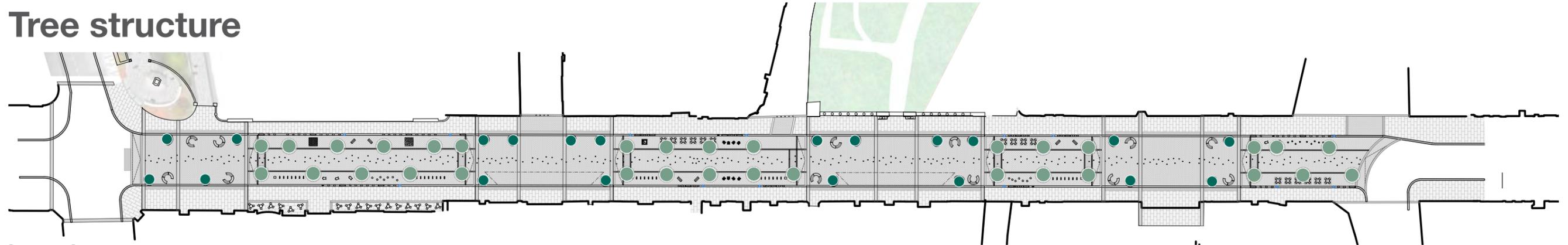
Tree uplighters
to trees in planters (options for connection moveable planters to be confirmed)

Objective 07: Street planting

‘Incorporate street planting to soften the space, adding shade and shelter.’

NOTE: Final placement of trees and planting will be further developed with Aberdeen City Council operations teams and other stakeholders, such as Police Scotland.

Tree structure



Legend

 Tree typology 1 - Proposed feature trees to plazas

 Tree typology 2 - Proposed umbrella from trees to frame central corridor

Street Planting Strategy

The strategic location of Union Street Central within the panorama of two of the most significant open spaces in the City Centre - Union Terrace Gardens and St Nicholas Cemetery - offer the opportunity to create a strategic synergy between these key areas: the proposals illustrates the potential for the soft landscape to Union Street Central to be really special - the creation of an ‘arboretum’ in the urban centre, as an extension as well as an invite to take a moment to pause and enjoy nature.

Feature trees are carefully placed in the plaza spaces to create a rhythm and focal points along the length of Union Street Central. Trees will be planted within large planters due to below ground constraints on Union Street Central.

The proposed species have been selected in order to provide year round interest, from early Spring to later in Autumn, and consideration is given to the sculptural presence of the trees during winter.

Understorey and perennial planting

In line with the tree strategy, the composition provides a combination of seasonal colours and all year round interest, from early Spring to later in Autumn, with the groundcover planting layer being further enhanced with herbaceous and seasonal bulb planting.

The matt forming trailing plants create a consistent cover while the upright perennials provide contrast in colour.

Species are also selected for their ability to attract pollinators.

The planting proposals aim to ensure the addition of meaningful street greening and appropriate species, sizes and shapes.

Tree planting

The tree species have been selected for continuity of form, to bring structure and consistency across the street. An open from branch structure is selected for presence and proportion, whilst maintaining good visibility.

Tree type 1

Amelanchier lamarkii
Snowy mespil



Acer ginnala
Amur maple



Malus ‘Rudolph’
Crab apple ‘Rudolph’



Tree type 2

Crataegus prunifolia
Broad-leaved cockspur thorn ‘Prunifolia’



Malus ‘Evereste’
Crab apple ‘Evereste’



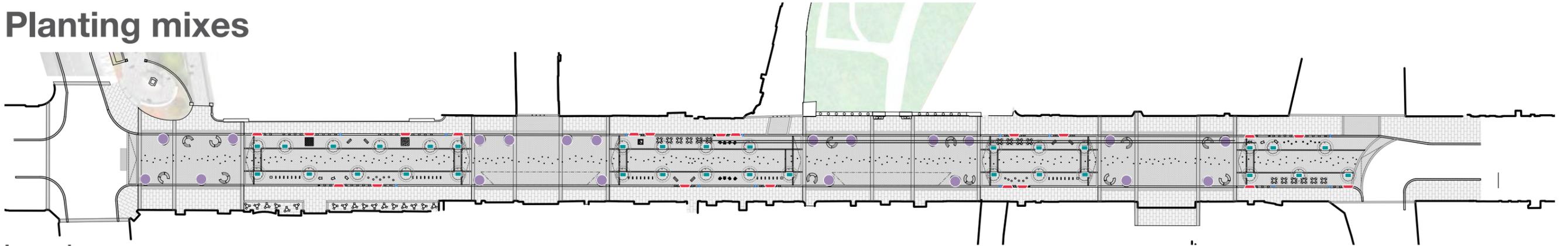
Euonymus hamiltonianus
Hamilton’s spindletree



Pinus sylvestris ‘Watereri’
Scots pine ‘Watereri’



Planting mixes



Legend



Plant mix 1 - trailing groundcover plant mix within circular planters to Plazas



Plant mix 2 - trailing groundcover plant mix within rectangular planters by central corridor



Plant mix 3 - seasonal planting within seating elements

Plant mix 1

Ceratostigma plumbaginoides
blue-flowered leadwort



Hedera helix
Common ivy



Plant mix 2

Campanula poscharskyana
Trailing bellflower



Cerastium tomentosum 'Silberteppich'
Snow-in-summer



Ceratostigma plumbaginoides
Hardy blue-flowered leadwort



Plant mix 3



Cimicifuga 'Chocoholic'
Black Snakeroot



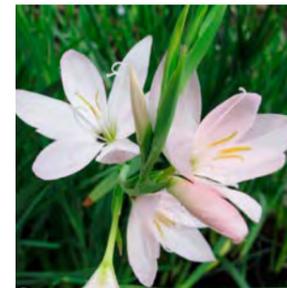
Echinacea
Purple coneflower



Liatris spicata
Gayfeather



Salvia nemorosa
Woodland sage



Schizostylis coccinea
River lily



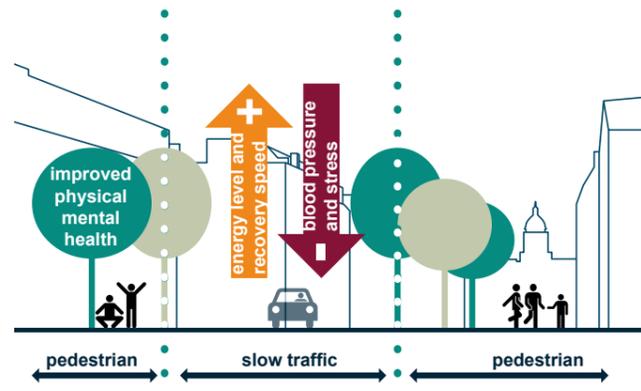
Sedum 'Matrona'
Tail stonecrop



Sedum 'Autumn Joy'
Tail stonecrop

Benefits of street greening and tree planting

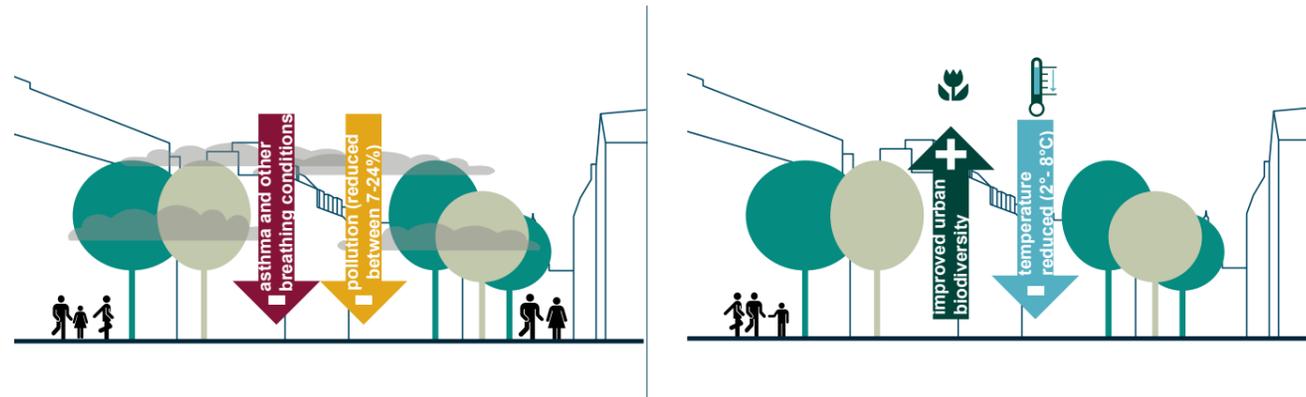
Good for People



Good for the Economy



Good for the Environment



Urban greening and tree planting for relaxation and enjoyment

Spending time near trees improves physical and mental health by increasing energy levels and speed of recovery, and lowers stress and blood pressure. It also aids recovery from illness, reducing healthcare costs.

Trees also increase safety: tree-lined streets create safer walking environments by clearly defining spaces available to traffic and pedestrians, and reduce driving speeds, by creating vertical elements that help drivers to better assess their speed.

Urban greening and tree planting grow local economies

Following a large-scale tree survey of London, a report (2014) estimated that trees provided at least £133m in benefits to London each year, mostly through air cleaning, carbon sequestration and storm water control.

London's street trees alone have been valued at £4.2bn, placing them on a par with other critical urban infrastructure (e.g. street lighting).

Urban greening and tree planting are good for local business

Commercial streets with trees show higher income streams than those without: customers spend more time and money in retail areas with trees. Employees with access to natural green space can be more productive, with greater job satisfaction.

Urban greening and tree planting increase property value

Streets with trees (both commercial and residential) show increased property value (8-20%) compared to those without.

Urban greening and tree planting cool the air naturally

Canopy shading from trees in cities can cool the air by 2°C to 8°C, reducing heat-related illness.

Trees around buildings can reduce air conditioning requirements by around 30%, and heating by 20%-50%.

Trees also provide habitat for beneficial insects and birds, contributing to urban biodiversity.

Urban greening and Tree Planting reduce pollution

Appropriately placed trees in cities reduces concentration of air pollutants, including fine particulates. The reduction in particulate matter near a tree is between 7 and 24%, and its reduction benefits particularly those with asthma and other breathing conditions.

Urban trees are excellent filters, absorbing CO₂ and producing O₂, sequestering carbon, and so contributing to the mitigation of climate change.

Proximity of trees to the point of pollution (city centre) is essential to efficient absorption. As they grow, young trees absorb more CO₂ than established trees do, making new tree planting even more important.

Urban greening and tree planting combat flooding

Trees reduce the impact of heavy rain and floods, making Sustainable Urban Drainage Systems more effective.

Trees regulate water flow, improve water quality and reduce urban water run-off.

In fact, the first 30% of most precipitation onto a tree never hits the ground, being absorbed by the leaves. Up to another 30% is absorbed through the root system and transpired back into the atmosphere, with none of this water therefore having to enter drains.

Examples of habitat enhancement and biodiversity



Wings birdhouse
Compensates for lack of natural nesting opportunities



Leaf insect hotel
Home for insects in the heart of the city



The edge
Easily integrable system that creates refuge areas for insects, allowing them to feed and thrive



Rocket box
Miniature nesting location for bat colonies

Objective 08: Sustainable Drainage System

‘Incorporate Sustainable Drainage Systems (SuDS), where possible.’

Given that the majority of Union Street Central is constructed above arches and voids, the opportunity to introduce sustainable urban drainage within this section is limited.

However, opportunities will be further investigated during RIBA Stage 4. Some of the SuDS systems which will be considered at the next stage are;

- Porous surfacing
- Green roofs to bus shelters adjacent to Union Street Central
- Rain water harvesting and capture for irrigation



5.0 Caveats

Whilst RIBA Stage 3 for Union Street Central has been progressed, there are a number of key considerations to be finalised, including but not limited to:

- * Junctions design (liaison with SYSTRA/ACC)
- * Crossing points locations (liaison with SYSTRA, further engagement with key stakeholders including DEP, NESS and Guide Dogs)
- * Final spatial configuration of Union Street Central
- * Technical surveys (yet to be undertaken)

There are also a number of elements that require further engagement with our ACC Client and relevant stakeholders in order to achieve a finalised design proposals. These elements will be further developed in the next phase of the design (RIBA Stage 4), as part of the wider Engagement Strategy.

Further Engagement

List of items that require further and more focused engagement – to be further investigated at RIBA Stage 4:

- * Accessibility: to be discussed further with focused stakeholder groups such as Guide Dogs Scotland, NESS, DEP
- * Art Strategy (liaison with ACC Cultural Team, potential for involvement local artists)
- * Events Strategy (liaison with ACC City Events Team)
- * Informal play (development of a bespoke play strategy in line with UNICEF Child Friendly Cities Initiative)
- * Street Furniture (proposals to be discussed with ACC)
- * Lighting strategy (liaison with ACC City Events Team and other relevant departments within ACC)
- * Finalised Material strategy (proposals currently based on the draft Urban Design Manual)
- * Soft landscape (proposals to be discussed with ACC and other relevant departments within ACC and Police Scotland)

6.1 Appendix 1

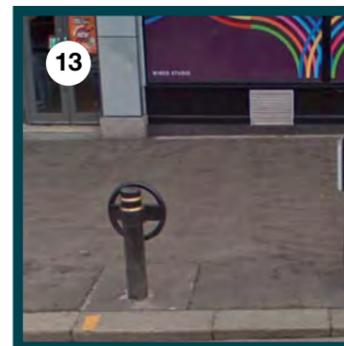
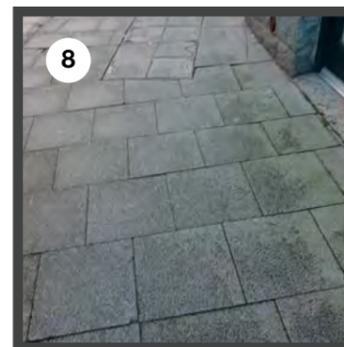
Existing Materials Context

Appendix 1: Existing materials context

City Centre Wide Assessment

The images and associated text highlight the materials, colours and paving parameters used across Aberdeen City centre.

From the images it is clear to see the current wide diversity of streetscape scenarios across the City Centre.



1 Dark grey Caithness flags, Union St/Belmont area pavements and Flourmill Ln plaza.

2 Mixed tone (grey, buff, pink) granite setts, Belmont area carriageway.

3 Light grey concrete flags, Union St West and Market St pavements

4 Mixed tone (grey, buff, pink) granite flags, Market area pavements

5 Traditional granite setts carriageway, Market area and lanes

6 Mixture of modern granite cubes and setts of varying colour, Carmelite street

7 Traditional granite cubes in bogen pattern, The Green.

8 Concrete/Exposed aggregate concrete flags, square proportions

9 Grey granite setts carriageways

10 Light grey and pink granite setts/cubes in a variety of radial patterns to Saint Nicholas plaza.

11 Traditional granite flags, uneven cut.

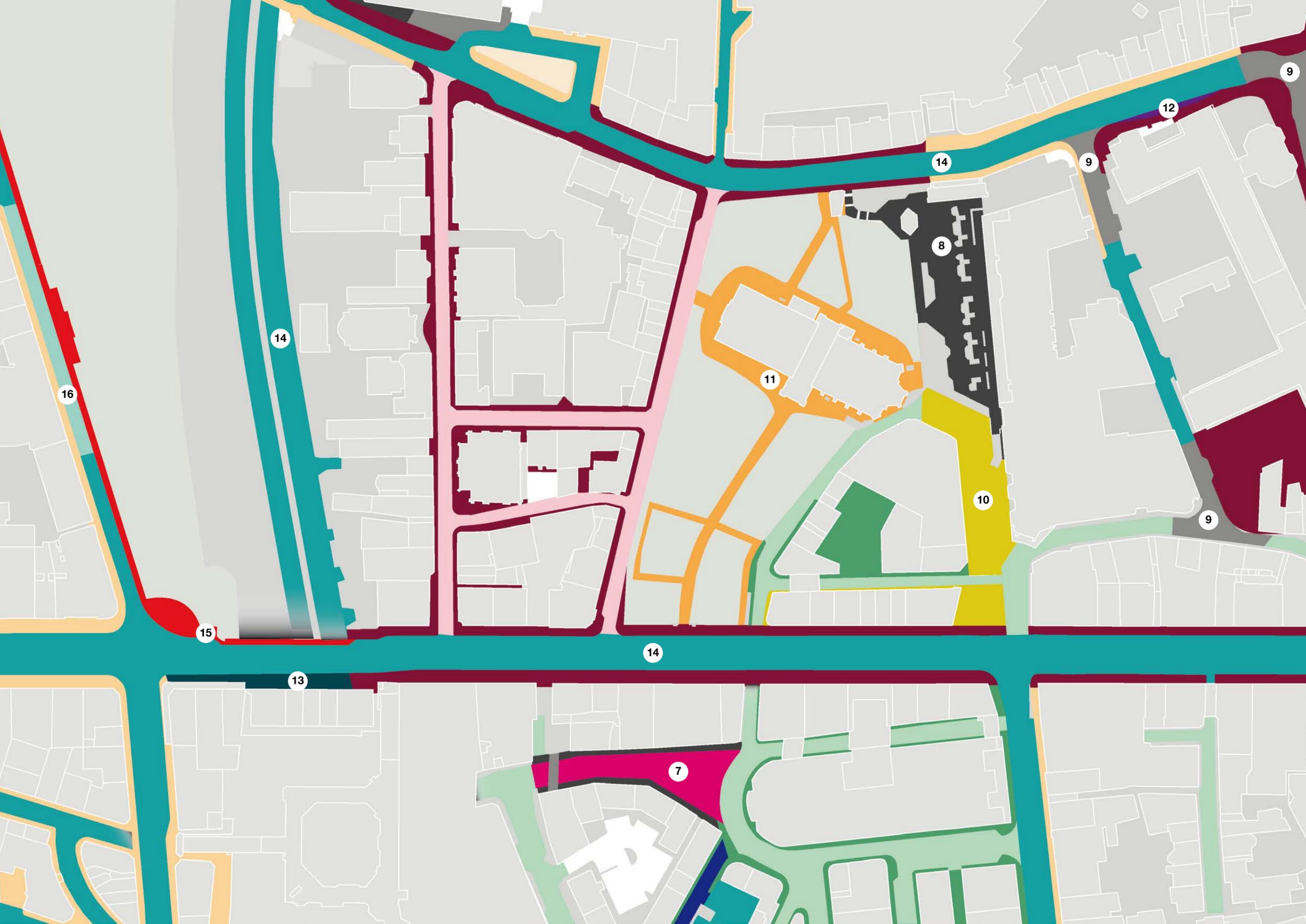
12 Decorative exposed aggregate concrete

13 Painted asphalt pavement (due to lack of depth on Union Bridge)

14 Asphalt carriageway

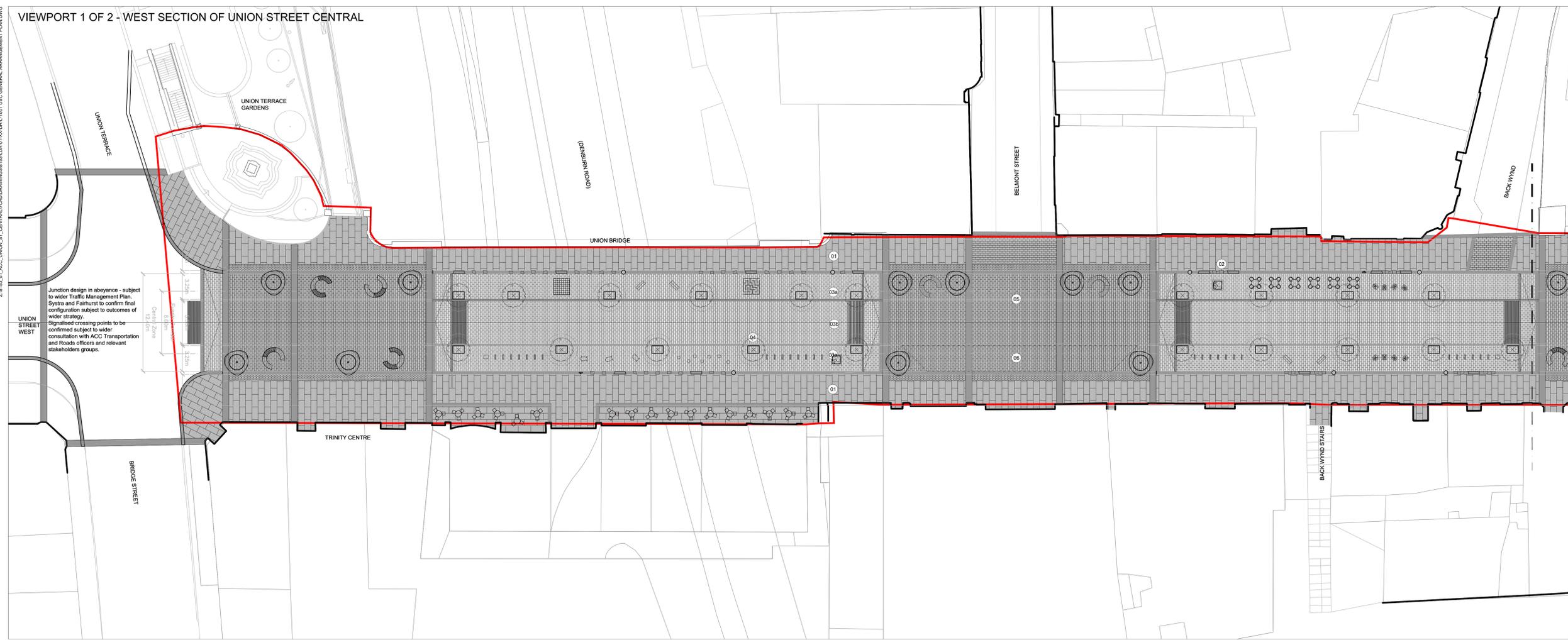
15 UTG high quality granite pavement flags, newly laid

16 UTG granite setts mix, Union Terrace carriageway, newly laid



6.2 Appendix 2 Stage 3 Drawings

VIEWPORT 1 OF 2 - WEST SECTION OF UNION STREET CENTRAL



- LEGEND**
- STREETSCAPE GENERAL ARRANGEMENT**
- Indicative extent of Union Street Central Intervention Area
 - 01 Widened clear/unobstructed footways adjacent to shopfronts (minimum 4m wide)
 - 02 Footways delineated by fixed elements of seating and planting
 - 03a Central section of street split into 3 zones
 - 3a) Activity zone adjacent to footways
 - 3b) Central corridor allowing for cycling
 - 3c) (bi-directional) and service vehicles (one-way eastbound, during certain times only)
 - 04 Clear delineation of the central corridor by series of trees in planters (minimising conflict between different users)
 - 05 Plaza Spaces at key locations with fixed and flexible elements such as play, seating, planting, cycle stands, filter trees, art, sculpture and feature lighting
 - 06 Areas identified as potential loading bays for service vehicles to pull-in and load/unload away from the main service route (at dedicated times)
 - 2.50m Typical width

The Activity Zone within the Central Zone allows for a wider variety of events to take place on a day-to-day basis, such as:

- * External dining
- * Markets
- * Small events
- * Play opportunities etc

maximizing the space given over to pedestrians.

Central section of street can be easily reconfigured as to allow for larger events and gatherings to take place within central zone of Union Street or to allow for temporary vehicular flows within space (i.e. buses) if required, particularly during the phased delivery of other sections of Union Street.

The central corridor allows for business servicing during service window and provide emergency access to the street on day-to-day basis.

NOTE:

Current design proposals is **INDICATIVE** only, subject to further consultation with ACC Client and wider engagement with relevant stakeholders.

Further details to be provided at RIBA Stage 4:

- Junction design (subject to liaison with SYSTRA for wider Traffic Management Plan)
- crossing points (subject to liaison with SYSTRA and engagement with relevant stakeholders)
- accessibility (proposals based on option 2 within Sketchbook 02)
- material strategy (proposals based on draft Urban Design Manual palette, to be discussed with ACC)

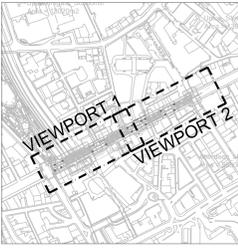
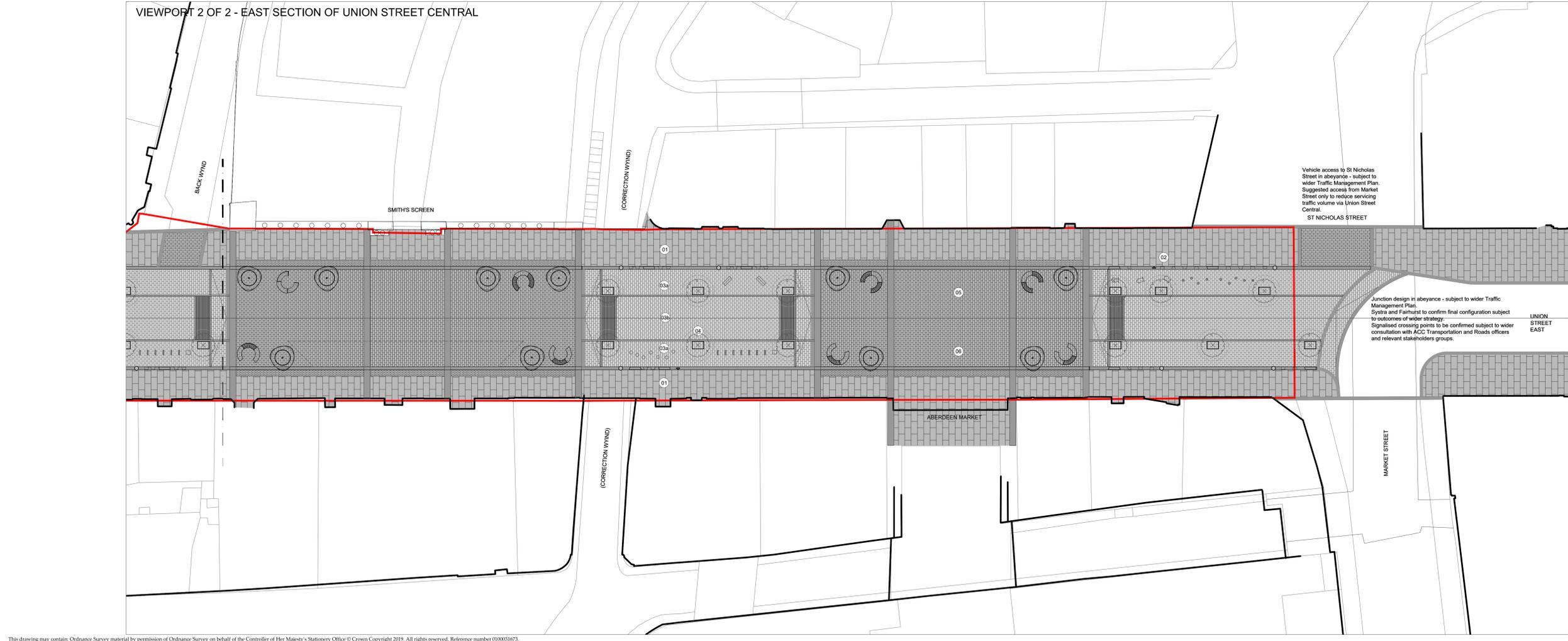
Spatial configuration as currently agreed.

Final selection of materials in abeyance, to be discussed and agreed with ACC client.

Vertical delineation and build ups in abeyance, and all related elements (tactile paving and potential for bins with specific hazard warning finishes) all subject to outcome of the discussion with ACC (kerbs upstand and location of raised tables TBC) and to feasibility (underground surveys).

Junction design in abeyance - subject to wider Traffic Management Plan. Systra and Fairhurst to confirm final configuration subject to outcomes of wider strategy. Signalised crossing points to be confirmed subject to wider consultation with ACC Transportation and Roads officers and relevant stakeholders groups.

VIEWPORT 2 OF 2 - EAST SECTION OF UNION STREET CENTRAL



- To be read in conjunction with:
- General Arrangement drawings:
 - 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan
 - 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
 - 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
 - 8153-LDA-01-XX-DR-L-1004 USC Streetscape Lighting and Utilities
 - 8153-LDA-01-XX-DR-L-1005 USC Streetscape Softworks
 - 8153-LDA-01-XX-DR-L-1100 USC Streetscape Existing vs Proposed
 - Site Section drawings:
 - 8153-LDA-01-XX-DR-L-4001 USC Streetscape Existing vs Proposed Sections
 - Detail drawings:
 - 8153-LDA-01-XX-DR-L-5000 series (Street Furniture)
 - 8153-LDA-01-XX-DR-L-1100 series (Hardworks)
 - Landscaping Specification:
 - 8153-LDA-01-XX-SP-L-001 Outline Specification
 - Landscaping Management and Maintenance Schedule:
 - 8153-LDA-01-XX-SP-L-1002

Junction design in abeyance - subject to wider Traffic Management Plan. Systra and Fairhurst to confirm final configuration subject to outcomes of wider strategy. Signalised crossing points to be confirmed subject to wider consultation with ACC Transportation and Roads officers and relevant stakeholders groups.

Vehicle access to St Nicholas Street in abeyance - subject to wider Traffic Management Plan. Suggested access from Market Street only to reduce servicing traffic volume via Union Street Central.

D	Issued for RIBA Stage 3	JMs	22.04.22
C	Revised for Stage 1 and plan update	JMs	31.01.22
B	Issued for Stage 1: 1:00 plan update	JMs	18.05.22
A	Updated to November Committee Proposals	JMs	18.11.21
REV.	DESCRIPTION	APP.	DATE

LDĀDESIGN

PROJECT TITLE
ABERDEEN CITY CENTRE VISION

DRAWING TITLE
Union Street Central Streetscape
General Arrangement Plan

ISSUED BY Glasgow T: 0141 222 9780
DATE sep 2021 DRAWN JMs
SCALE/AD 1:200 CHECKED JMs
STATUS Draft APPROVED KT

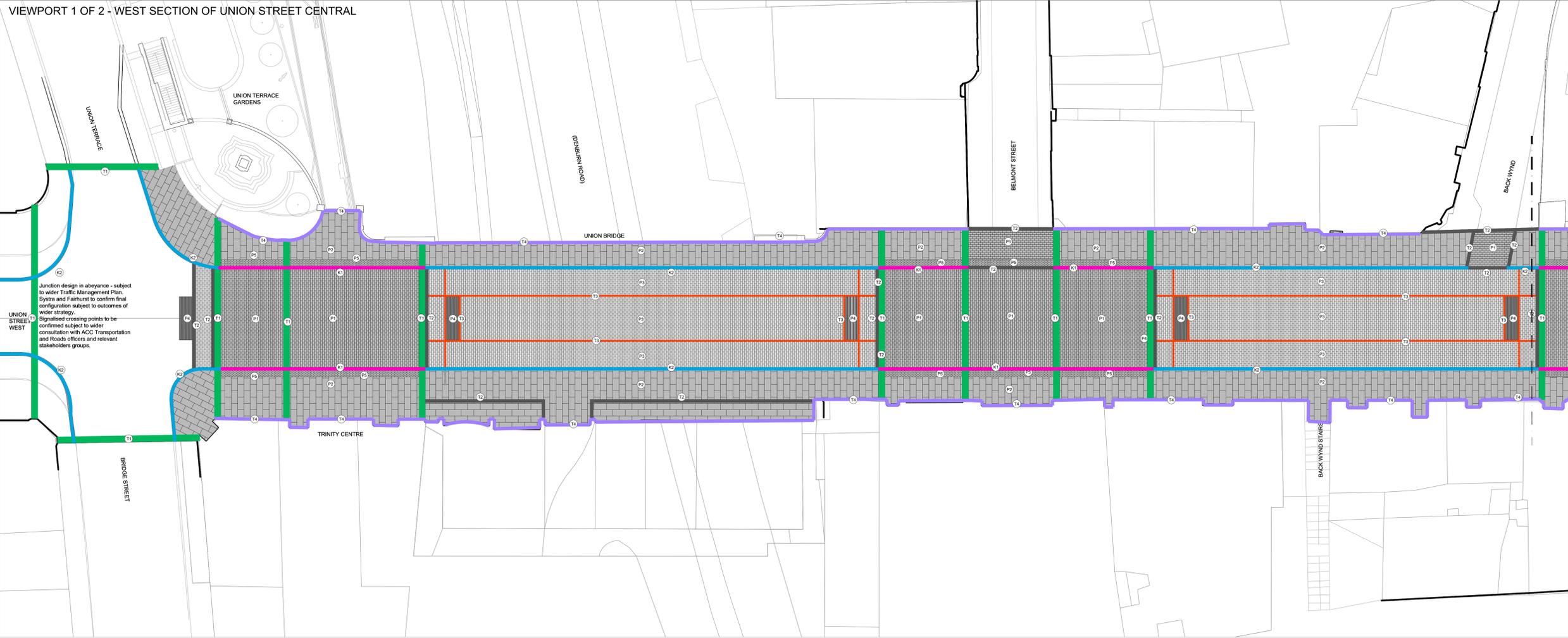
DWG. NO 8153-LDA-01-XX-DR-L-1001

No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only.

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Source: Ordnance Survey

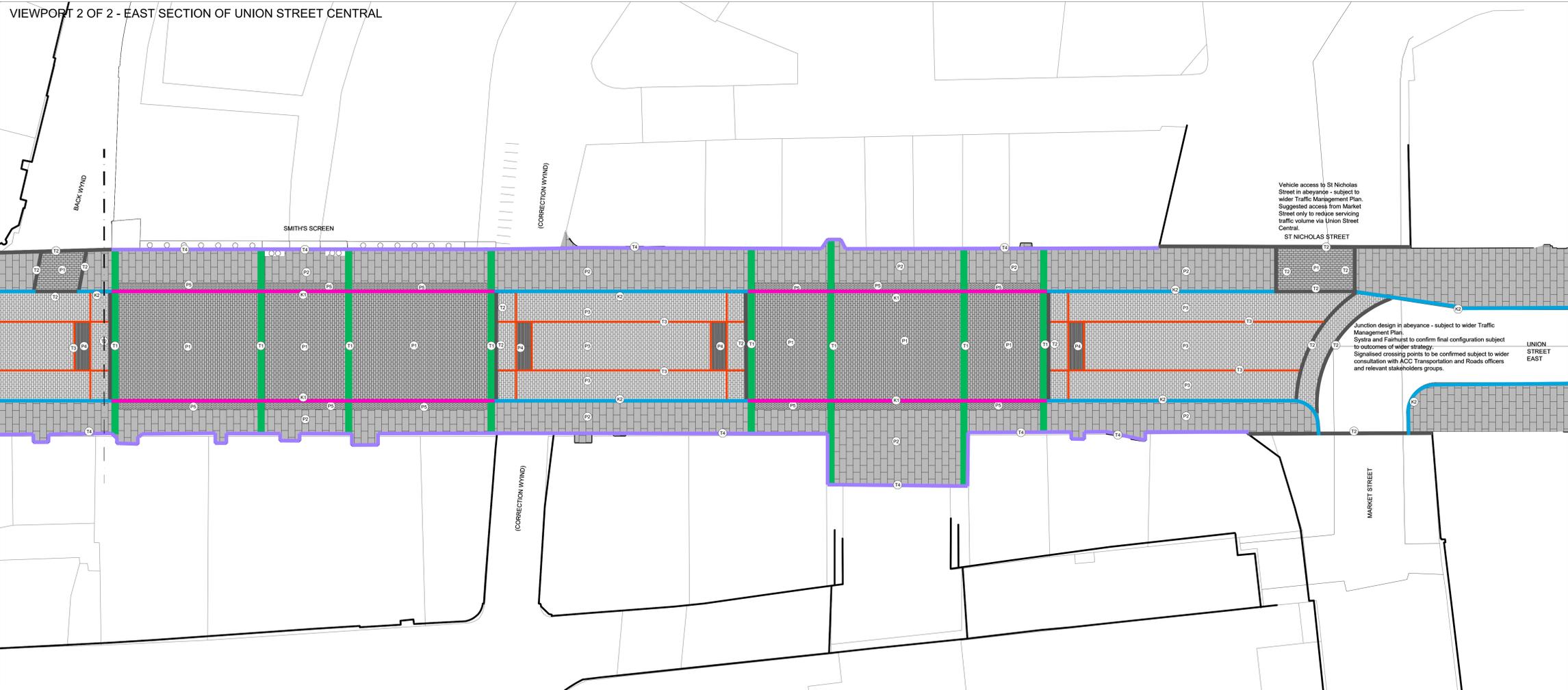
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VIEWPORT 1 OF 2 - WEST SECTION OF UNION STREET CENTRAL



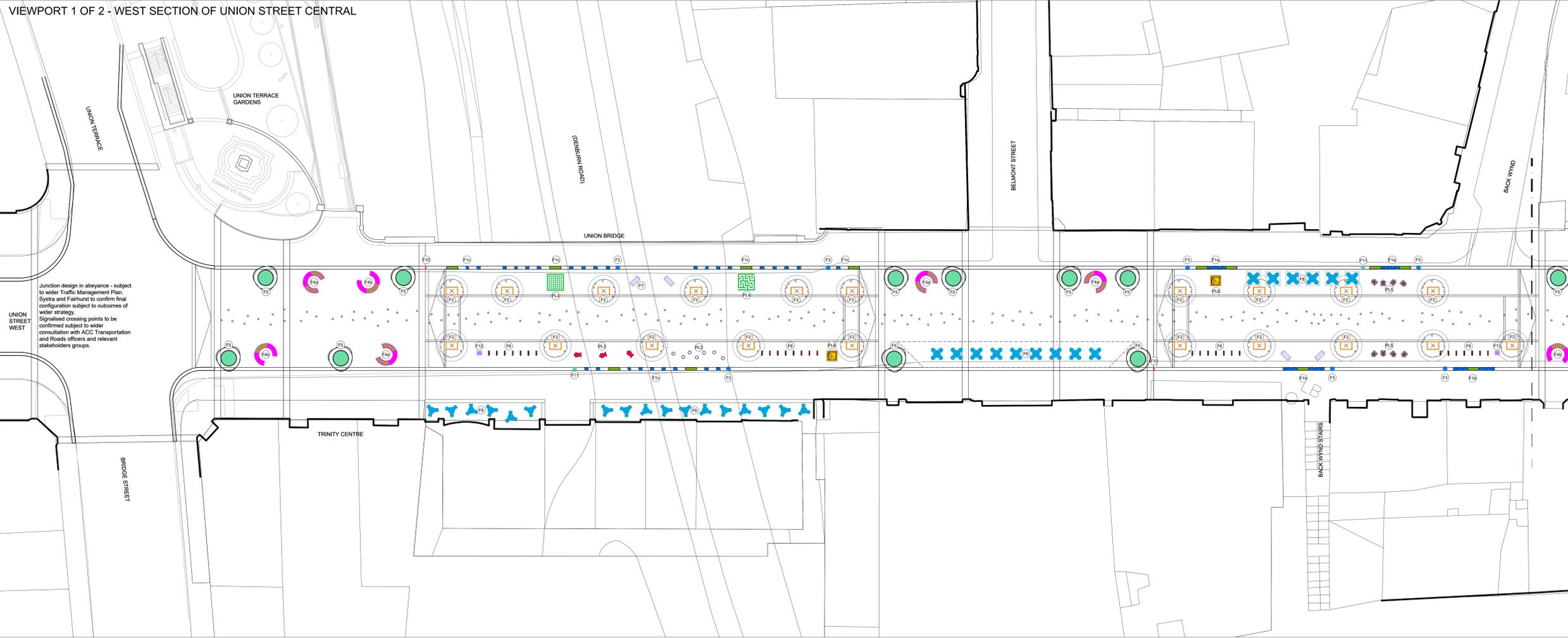
- LEGEND**
- SURFACE FINISHES**
- Paving Type 1 (P1): Scottish natural stone sett paving to plazas and areas of vehicular overrun on footways; Supplier: Tradbrocks/CEC Stone; Colour: Dark grey/black to match footway paving in overall tone (P2); Finish: fine picked or flame finish; Size: 250mm(x) x 250-500mm(l) 150mm(d)*
 - Paving Type 2 (P2): Scottish natural stone slab paving to footways; Supplier: Tradbrocks/CEC Stone; Colour: Dark grey/black to match plazas in overall tone (P1); Finish: fine picked or flame finish; Size: 800(w) x 1200-1500mm (l) x 80mm (d)
 - Paving Type 3 (P3): Scottish natural stone sets to activity zone and central corridor (excluding r/corridor); Supplier: Tradbrocks/CEC Stone; Colour: Mix of three tones of grey; Finish: flat top and fine picked; Size: 200mm(x) x 250-500mm(l) x 150mm(d)*
 - Paving Type 4 (P4): Scottish natural stone curbside paving; Supplier: Tradbrocks/CEC Stone; Colour: Dark grey/black to match plazas in overall tone (P1); Finish: fine picked or flame finish; Size: 400(w) x 600mm (l) x 70mm (d)
 - Paving Type 5 (P5): Scottish natural stone tactile paving; Supplier: Tradbrocks/CEC Stone; Colour: Light grey to contrast with plazas in overall tone (P1); Finish: flat top and fine picked; Size: 400mm(w) x 400mm(l) x 70mm(d)*
- NOTE:** (*): Depth to allow for vehicular overrun for service vehicles and occasional bus, to be confirmed by Fairhurst.
- KERBS, TRIMS AND EDGES**
- Kerb Type 1 (K1): Scottish natural stone bullnose kerb; Colour: whipsale grey; Supplier: CED Stone; Finish: fine picked or punch finish; Size: 400(w) x 900-1200 (l) x 255mm(d)*; Laid 20mm upstand to plazas.
 - Kerb Type 2 (K2): Scottish natural stone bullnose kerb; Colour: whipsale grey; Supplier: CED Stone; Finish: fine picked or punch finish; Size: 400(w) x 900-1200 (l) x 255mm(d)*; Laid 50mm upstand.
 - Trim Type 1 (T1): Scottish natural stone kerb; Colour: whipsale grey; Supplier: CED Stone; Finish: fine picked or punch finish; Size: 800(w) x 900-1200 (l) x 255mm(d)*; Laid flush.
 - Trim Type 2 (T2): Scottish natural stone kerb; Colour: whipsale grey; Supplier: CED Stone; Finish: fine picked or punch finish; Size: 400(w) x 900-1200 (l) x 255mm(d)*; Laid flush to interface with adjacent surfaces.
 - Trim Type 3 (T3): Scottish natural stone kerb; Colour: whipsale grey; Supplier: CED Stone; Finish: fine picked or punch finish; Size: 200(w) x 900-1200 (l) x 255mm(d)*; Laid flush.
 - Trim Type 4 (T4): Scottish natural stone cubic sets; Supplier: Tradbrocks/CEC Stone; Colour: whipsale grey; Finish: flat top and fine picked; Size: 50mm(w) x 50mm(l) x 60mm(d)*; Laid flush to interface with adjacent surfaces. Trim width varies depending on location. Minimum 3 rows of cubic sets.
- NOTE:** Ultimate selection of materials will be depending upon availability within the marketplace. Further dialogue with ACC.

VIEWPORT 2 OF 2 - EAST SECTION OF UNION STREET CENTRAL



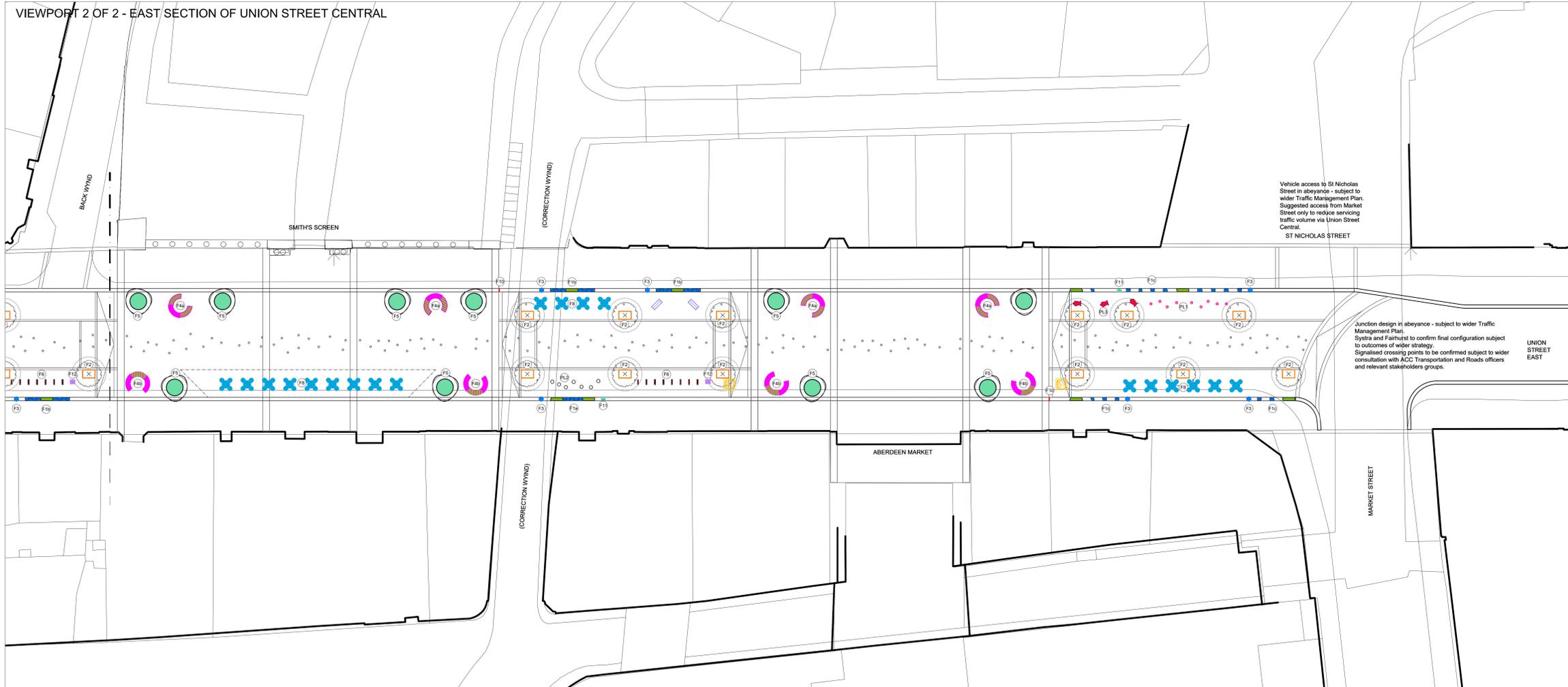
- NOTE:**
- Current design proposals is **INDICATIVE only**, subject to further consultation with ACC Client and wider engagement with relevant stakeholders.
- Further details to be provided at RIBA Stage 4:
- junction design (subject to liaison with SYSTRA for wider Traffic Management Plan)
 - crossing points (subject to liaison with SYSTRA and engagement with relevant stakeholders)
 - accessibility (proposals based on option 2 within Sketchbook 02)
 - material strategy (proposals based on draft Urban Design Manual palette, to be discussed with ACC)
- Spatial configuration as currently agreed.
- Final selection of materials in abeyance, to be discussed and agreed with ACC client.
- Vertical delineation and build ups in abeyance, and all related elements (tactile paving and potential for trims with specific hazard warning finishes) all subject to outcome of the discussion with ACC (kerbs upstand and location of raised tables TBC) and to feasibility (underground surveys).
- TO BE READ IN CONJUNCTION WITH:**
- General Arrangement drawings: 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan; 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture; 8153-LDA-01-XX-DR-L-1004 USC Streetscape Lighting and Utilities; 8153-LDA-01-XX-DR-L-1005 USC Streetscape Softworks; 8153-LDA-01-XX-DR-L-1100 USC Streetscape Existing vs Proposed
 - Site Section drawings: 8153-LDA-01-XX-DR-L-4001 USC Streetscape Existing vs Proposed Sections
 - Detail drawings: 8153-LDA-01-XX-DR-L-5000 series (Street Furniture); 8153-LDA-01-XX-DR-L-5100 series (Hardworks)
 - Landscape Specification: 8153-LDA-01-XX-SP-L-1001 Outline Specification
 - Landscape Management and Maintenance Schedule: 8153-LDA-01-XX-SP-L-1002
- REVISIONS:**
- | | | | |
|------|---|------|-----------|
| D | Issued for RIBA Stage 3 | JMS | 22.04.22 |
| C | Revised for Stage 1 and plan update | JMS | 31.01.22 |
| B | Issued for Stage 1 and plan update | JMS | 16.01.22 |
| A | Updated to November Committee Proposals | JMS | 18.11.21 |
| REV. | DESCRIPTION | DATE | APP. DATE |
- LDĀDESIGN**
- PROJECT TITLE
ABERDEEN CITY CENTRE VISION
- DRAWING TITLE
Union Street Central Streetscape Surface Finishes
- ISSUED BY: Glasgow T: 0141 222 9780
DATE: Sep 2021 DRAWN: MGS
SCALE: A3 1:200 CHECKED: JMS
STATUS: Draft APPROVED: KT
- DWG. NO 8153-LDA-01-XX-DR-L-1002**
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Source: Ordnance Survey

VIEWPORT 1 OF 2 - WEST SECTION OF UNION STREET CENTRAL



- LEGEND**
- STREET FURNITURE**
- Street Furniture Type 1a (F1a): Scottish natural stone block seating with two planters
 - Street Furniture Type 1b (F1b): Scottish natural stone block seating with one planter
 - Street Furniture Type 1c (F1c): Scottish natural stone block seating. F1c arranged as single units to act as reinforced barrier (preventing vehicles access to the footway along the Union Bridge).
 - Street Furniture Type 2 (F2): Street Planters
 - Street Furniture Type 3 (F3): Bins (typically associated with seating F1a+b)
 - Street Furniture Type 4a (F4a): Feature 3/4 circular seat with armrests, two timber top and backrest.
 - Street Furniture Type 4b (F4b): Feature 3/4 circular seat with armrests, one timber top and backrest.
 - Street Furniture Type 5 (F5): Large circular tree planters
 - Street Furniture Type 6 (F6): Cycle stands
 - Street Furniture Type 7 (F7): Art Exhibition Boards
 - Street Furniture Type 8 (F8): Canopies for outdoor seating areas (TBC). Potential to use loading bays to plazas as outdoor seating (only out of service window).
 - Street Furniture Type 10 (F10): Wayfinding boards
 - Street Furniture Type 11 (F11): Drinking fountains
 - Street Furniture Type 12 (F12): Bike tool station
 - Street Furniture Type 16 (F16): Existing bollards to Union Bridge (600c). Remove and store for potential reuse elsewhere in the city centre. TBC with ACC client.
- NOTE:**
For further details, refer to document number 8153-LDA-01-XX-SP-L-1001/Union Street Central Outline Specification.
- Softworks and Lighting information moved to separate layout for clarity. Refer to drawings:
 * 8153-LDA-01-XX-DR-L-1004 Union Street Central Streetscape Lighting and Utilities
 * 8153-LDA-01-XX-DR-L-1100 USC Streetscape Existing vs Proposed
 * 8153-LDA-01-XX-SP-L-1001/Union Street Central Streetscape Softworks
- INFORMAL PLAY & ART**
- Play Type 1 (PL1): Informal Play Elements - Metal play poles (TBC)
 - Play Type 2 (PL2): Informal Play Elements - play spheres (TBC)
 - Play Type 3 (PL3): Informal Play Elements - Aberdeen Bestiary-themed play elements (TBC)
 - Play Type 4 (PL4): Informal Play Elements - board games painted on to surface (TBC)
 - Play Type 5 (PL5): Informal Play Elements - Talking tubes
 - Play Type 6 (PL6): Informal Play Elements - Singing stones
- NOTE:**
Informal Play and Art Strategy TBC - subject to further consultation. Final selection to be discussed and agreed with ACC client.

VIEWPORT 2 OF 2 - EAST SECTION OF UNION STREET CENTRAL



- NOTE:**
Current design proposals are INDICATIVE only, subject to further consultation with ACC Client and wider engagement with relevant stakeholders.
- Further details to be provided at RIBA Stage 4:
 - junction design (subject to liaison with SYSTRA for wider Traffic Management Plan)
 - crossing points (subject to liaison with SYSTRA and engagement with relevant stakeholders)
 - accessibility (proposals based on option 2 within Sketchbook 02)
 - material strategy (proposals based on draft 'Urban Design Manual' palette, to be discussed with ACC)
- Spatial configuration as currently agreed.
- Final selection of materials in abeyance, to be discussed and agreed with ACC client.
- Vertical delineation and build ups in abeyance, and all related elements (tactile paving and potential for firms with specific hazard warning finishes) all subject to outcomes of the discussion with ACC (kerbs upstand and location of raised tables TBC) and to feasibility (underground surveys).
- To be read in conjunction with:
 - General Arrangement drawings:
 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan
 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
 8153-LDA-01-XX-DR-L-1004 USC Streetscape Lighting and Utilities
 8153-LDA-01-XX-DR-L-1005 USC Streetscape Softworks
 8153-LDA-01-XX-DR-L-1100 USC Streetscape Existing vs Proposed
 - Site Section drawings
 8153-LDA-01-XX-DR-L-4001 USC Streetscape Existing vs Proposed Sections
 - Detail drawings
 8153-LDA-01-XX-DR-L-5000 series (Street Furniture)
 8153-LDA-01-XX-DR-L-6100 series (Hardworks)
 - Landscape Specification
 8153-LDA-01-XX-SP-L-1001 Outline Specification
 - Landscape Management and Maintenance Schedule
 8153-LDA-01-XX-SP-L-1002
- LDADesign**
 ABERDEEN CITY CENTRE VISION
- DRAWING TITLE**
 Union Street Central Streetscape
 Street Furniture
- ISSUED BY Glasgow T: 0141 222 9780
 DATE sep 2021 DRAWN MGJ
 SCALE/AD 1:200 CHECKED JWS
 STATUS Draft APPROVED KT
- DWG. NO 8153-LDA-01-XX-DR-L-1003**
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VIEWPORT 1 OF 2 - WEST SECTION OF UNION STREET CENTRAL



2.8193.D1.AC.UNION_ST_CENTRAL_CAD.DRAWINGS.8153.LDA.01.XX.DR.L.1001.USC.STREETSCAPE.LIGHTING.AND.UTILITIES.DWG

Union Street West
 Junction design in abeyance - subject to wider Traffic Management Plan. Systra and Fairhurst to confirm final configuration subject to outcomes of wider strategy. Signalised crossing points to be confirmed subject to wider consultation with ACC Transportation and Roads officers and relevant stakeholders groups.

- LEGEND**
- LIGHTING**
 - (L1) In-ground 'constellation' way-finding lighting to cycle route (indicative quantity and arrangement)
 - (L2) Lighting feature Type 2 (L2): In-ground linear way-finding lighting to cycle route (patented modules)
 - (L3) Lighting feature Type 3 (L3): Allowance for Accent Lighting to key buildings, structures and monuments (subject to be confirmed following detailed study of the facades)
 - (L4) Lighting feature Type 4 (L4): Tree uplights to trees in movable planters along central corridor (SF4). Options for power connection (central corridor) to be confirmed by M&E Engineers
 - (L4a) Lighting feature Type 4a (L4a): Tree uplights to trees in fixed planters within Plazas
 - (L5) Lighting feature Type 5 (L5): Allowance Supplementary Feature Lighting to street furniture elements
 - (L6) Lighting feature Type 6 (L6): Allowance for Iconic Feature Lighting to plazas
 - (L7) Lighting feature Type 7 (L7): Allowance for Sentinel Lighting at Key Nodes (street entrances and steps)
 - (L8) Lighting feature Type 8 (L8): Catenary Tumbler / lighting columns. Extent / positions TBC
- NOTE:**
 The Lighting proposals illustrated is indicative only, subject to further consultation with Client and relevant stakeholders groups engagement. Suitable lighting levels to be verified by Engineers.
- UTILITIES**
- (U1) Utilities Type 1 (U1): Recessed water, power and drainage outlets. 2no. GRAS boxes per plaza. Power supply for each unit: 1 x 63amp, 2 x 32amp, 2 x 16 amp plus water supply (TBC)

NOTE:
 Current design proposals is **INDICATIVE** only, subject to further consultation with ACC Client and wider engagement with relevant stakeholders.

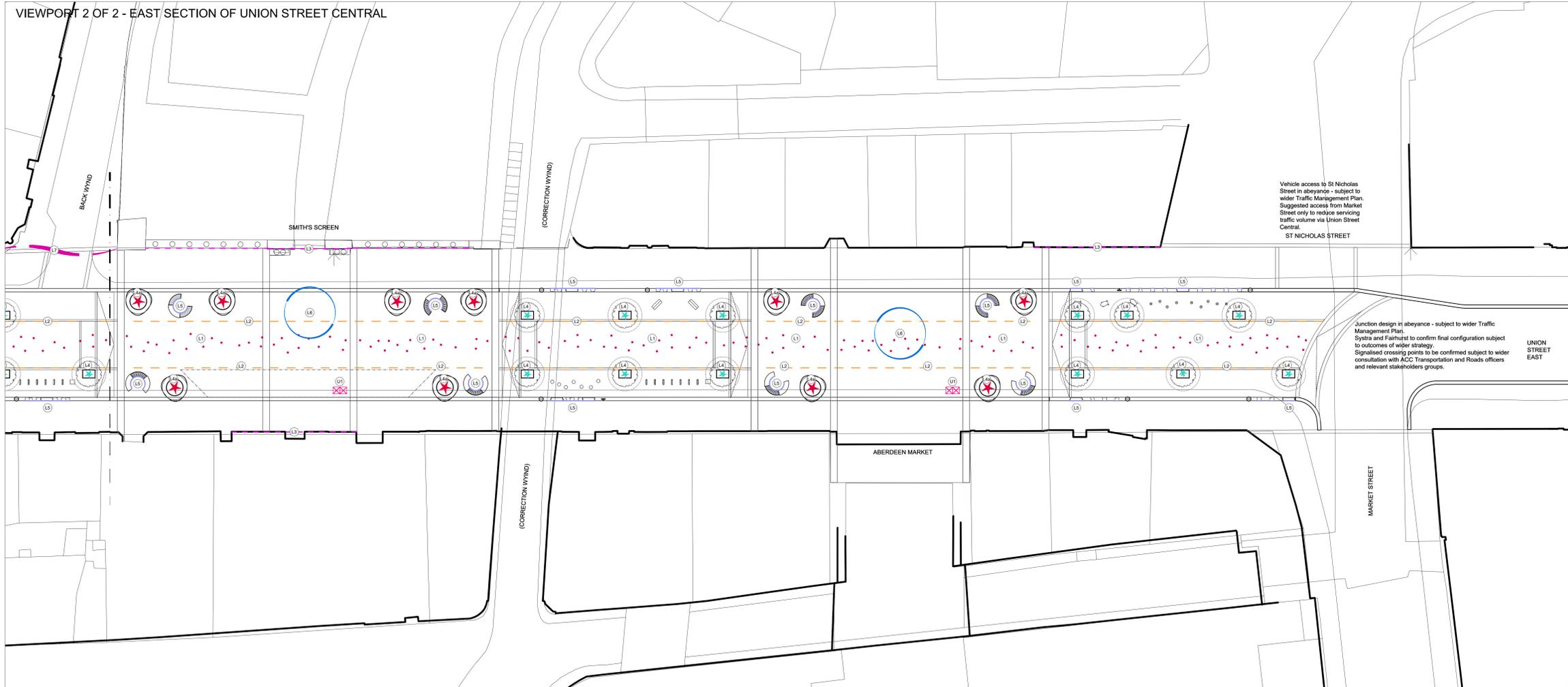
Further details to be provided at RIBA Stage 4:
 - junction design (subject to liaison with SYSTRA for wider Traffic Management Plan)
 - crossing points (subject to liaison with SYSTRA and engagement with relevant stakeholders)
 - accessibility proposals based on option 2 within Sketchbook 02)
 - material strategy (proposals based on draft 'Urban Design Manual' palette, to be discussed with ACC)

Spatial configuration as currently agreed.

Final selection of materials in abeyance, to be discussed and agreed with ACC client.

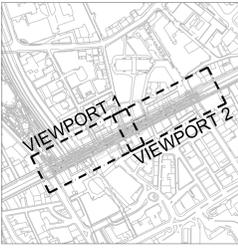
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VIEWPORT 2 OF 2 - EAST SECTION OF UNION STREET CENTRAL



Vehicle access to St Nicholas Street in abeyance - subject to wider Traffic Management Plan. Suggested access from Market Street only to reduce servicing traffic volume via Union Street Central.
 ST NICHOLAS STREET

Junction design in abeyance - subject to wider Traffic Management Plan. Systra and Fairhurst to confirm final configuration subject to outcomes of wider strategy. Signalised crossing points to be confirmed subject to wider consultation with ACC Transportation and Roads officers and relevant stakeholders groups.



- To be read in conjunction with:
- General Arrangement drawings:
 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan
 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
 8153-LDA-01-XX-DR-L-1005 USC Streetscape Softworks
 8153-LDA-01-XX-DR-L-1100 USC Streetscape Existing vs Proposed
 - Site Section drawings
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 - Landscape Management and Maintenance Schedule
 8153-LDA-01-XX-SP-L-1002

7. Issued for RIBA Stage 3
 REV. DESCRIPTION JWS 27.04.22
 DATE DRAWN MGS
 SCALE/DRAWN 1:200 CHECKED JWS
 STATUS Draft APPROVED KT

LDĀDESIGN

PROJECT TITLE
 ABERDEEN CITY CENTRE VISION

DRAWING TITLE
 Union Street Central Streetscape
 Lighting and Utilities

ISSUED BY Glasgow T: 0141 222 9780
 DATE Apr 2022 DRAWN MGS
 SCALE/DRAWN 1:200 CHECKED JWS
 STATUS Draft APPROVED KT

DWG. NO 8153-LDA-01-XX-DR-L-1004

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VIEWPORT 1 OF 2 - WEST SECTION OF UNION STREET CENTRAL



- LEGEND**
- SOFTWORKS**
- MR** Tree Type 1 (T1)
Proposed feature trees to Plazas
Mix of the following species:
Acer ginnala (Ag), Amelanchier lamarckii (Al), Malus 'Russet' (MR)
 - Cp** Tree Type 2 (T2)
Proposed umbrella form trees to frame the Central Corridor
Mix of the following species:
Castanopsis praecox (Cp), Eucalyptus hamiltonianus (Eh), Malus 'Everest' (ME), Pinus Walleyi (PW)
 - TP** Trailing Plants (TP1)
Mix 1 - mat forming groundcover mix within circular planters to Plazas
 - TP2** Trailing Plants (TP2)
Mix 2 - mat forming groundcover mix within rectangular planters by central corridor.
 - UP** Upright Perennials (UP)
Herbaceous planting mix - within linear planters
- Planting selection - subject to further consultation.
Final selection to be discussed and agreed with ACC client.
- For more details on the plant species refer to:
8153-LDA-01-XX-SP-L-1001 Outline Specification.
- For information about the maintenance regime refer to:
8153-LDA-01-XX-SP-L-1002 Landscape Management and Maintenance Schedule.

NOTE:

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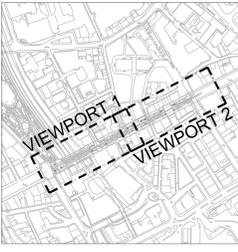
Further details to be provided at RIBA Stage 4 -
- junction design (subject to liaison with SYSTRA for wider Traffic Management Plan)
- crossing points (subject to liaison with SYSTRA and engagement with relevant stakeholders)
- accessibility (proposals based on option 2 within Sketchbook 02)
- material strategy (proposals based on draft Urban Design Manual palette, to be discussed with ACC)

Spatial configuration as currently agreed.

Final selection of materials in abeyance, to be discussed and agreed with ACC client.

Vertical delineation and build ups in abeyance, and all related elements (tactile paving and potential for trams with specific hazard warning finishes) all subject to outcome of the discussion with ACC. (heights upland and location of raised tables TBC) and to feasibility (underground surveys).

VIEWPORT 2 OF 2 - EAST SECTION OF UNION STREET CENTRAL



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8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
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8153-LDA-01-XX-DR-L-1100 USC Streetscape Existing vs Proposed
 - Site Section drawings
8153-LDA-01-XX-DR-L-4001 USC Streetscape Existing vs Proposed Sections
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8153-LDA-01-XX-SP-L-1001 Outline Specification
8153-LDA-01-XX-SP-L-1002 Landscape Management and Maintenance Schedule

LD A DESIGN

PROJECT TITLE
ABERDEEN CITY CENTRE VISION

DRAWING TITLE
Union Street Central Streetscape Softworks

ISSUED BY Glasgow T: 0141 222 9780
DATE APR 2022 DRAWN MGJ
SCALE 1:200 CHECKED JWA
STATUS Draft APPROVED KT

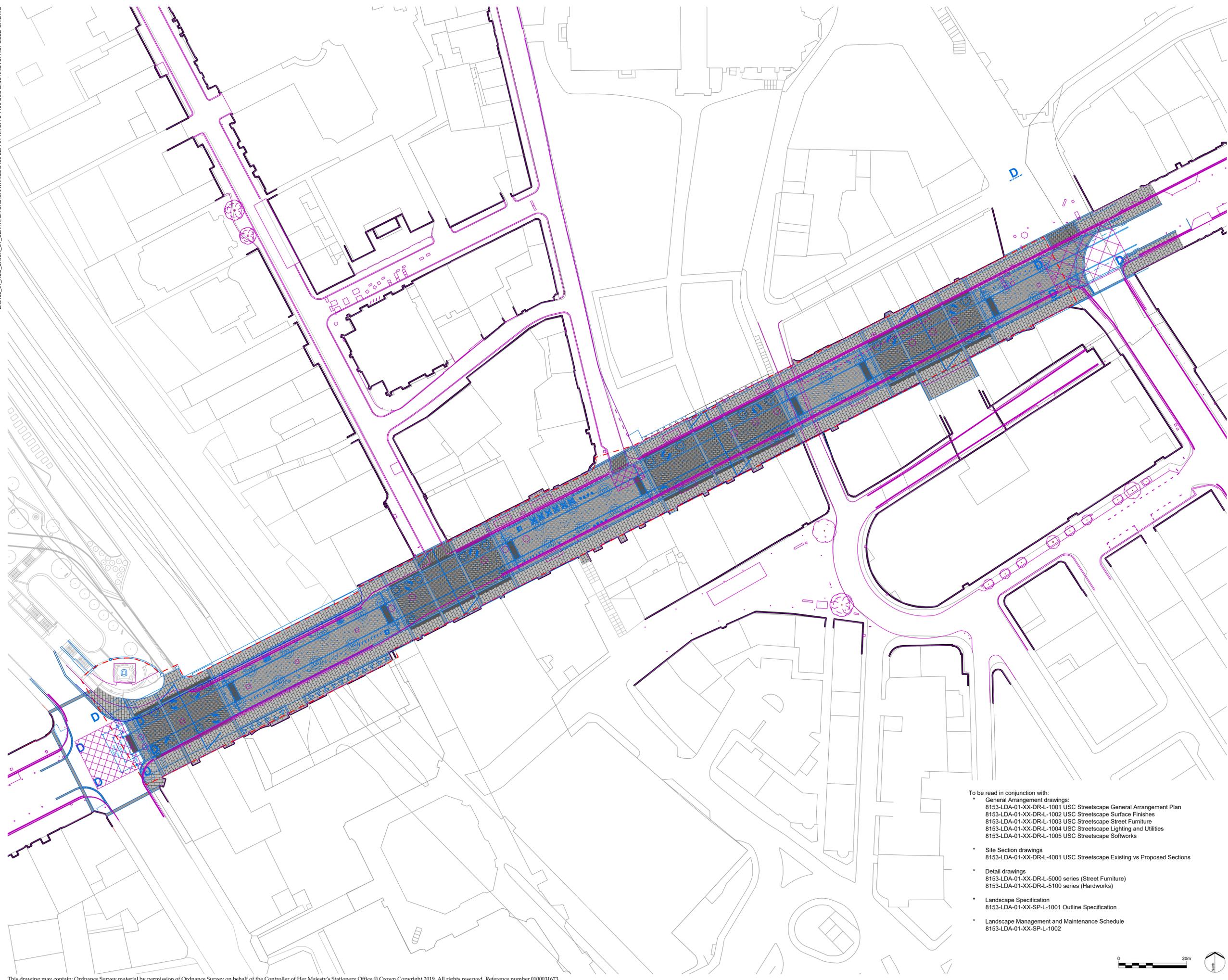
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LEGEND

STREETSCAPE GENERAL ARRANGEMENT

-  Indicative extent of Union Street Central Intervention Area
-  Existing layout of Union Street Central
-  Current Streetscape design proposals for Union Street Central
-  Typical width across the length of Union Street Central

A	Issued for RIBA Stage 3	JWa	22.04.22
/	Issued for Information	JWa	01.03.22
REV.	DESCRIPTION	APP.	DATE

LDA DESIGN

PROJECT TITLE
Aberdeen City Centre Vision

DRAWING TITLE
**Union Street Central Streetscape
General Arrangement Plan - Existing VS Proposed**

ISSUED BY	Glasgow	T: 0141 222 9780
DATE	Feb 2022	DRAWN MGu
SCALE/RAI	1:500	CHECKED JWa
STATUS	Draft	APPROVED JWa

DWG. NO 8153-LDA-01-XX-DR-L-1100

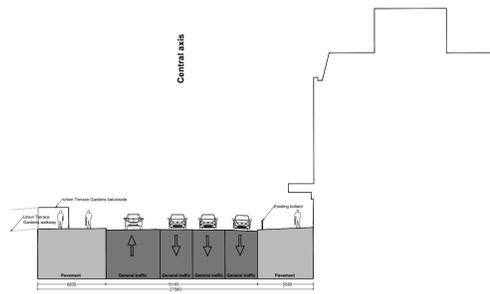
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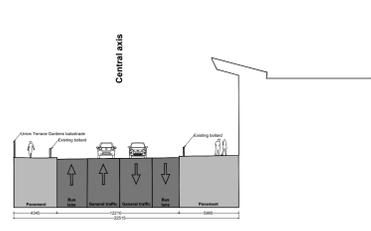
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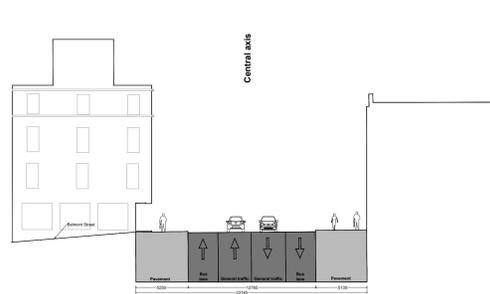
Section A - Existing



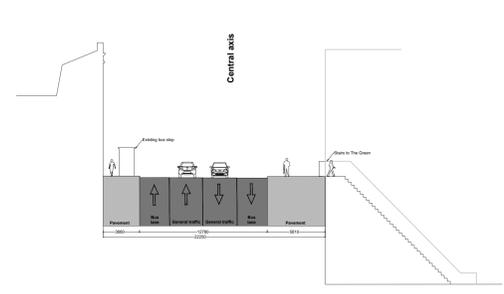
Section B - Existing



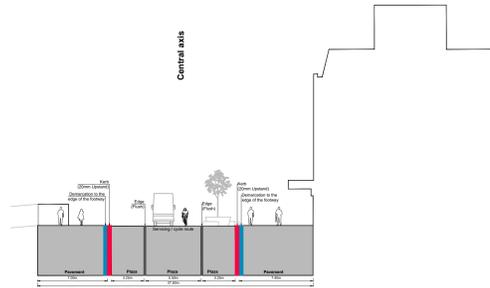
Section C - Existing



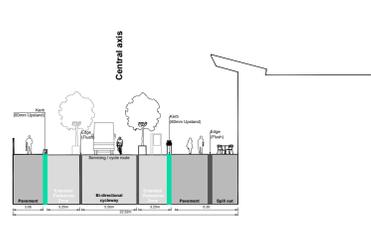
Section D - Existing



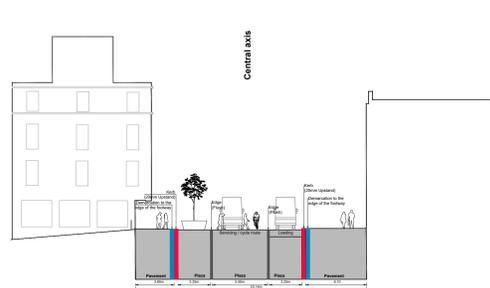
Section A - Proposed



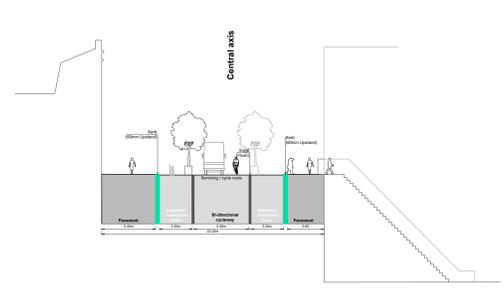
Section B - Proposed



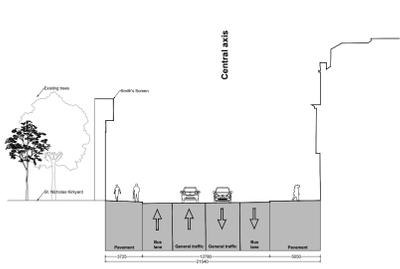
Section C - Proposed



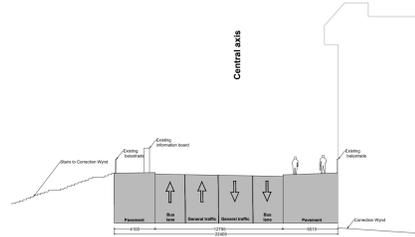
Section D - Proposed



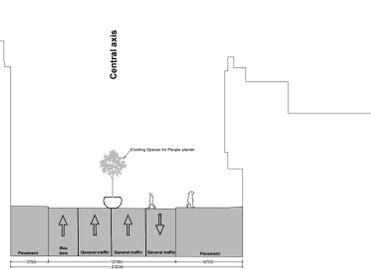
Section E - Existing



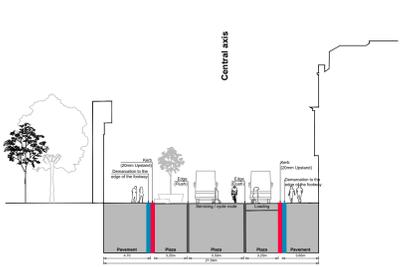
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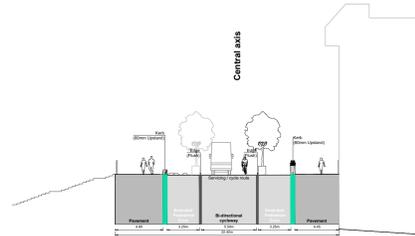
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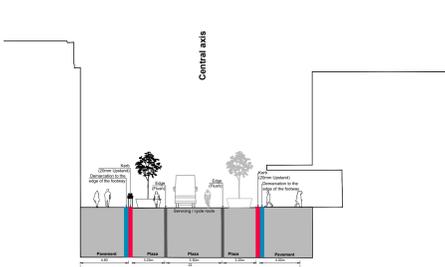
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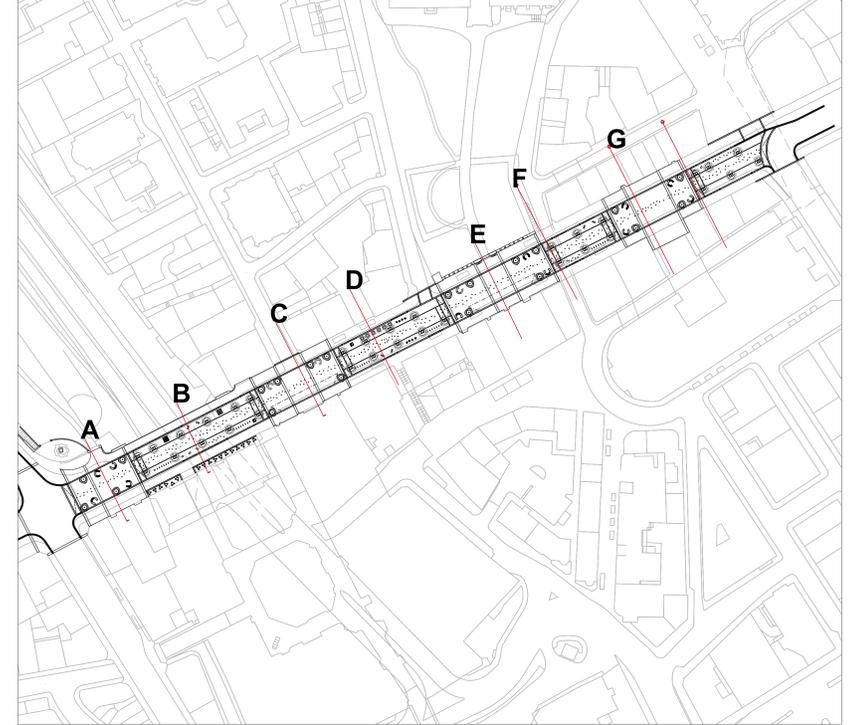
Section F - Proposed



Section G - Proposed



Sections Location Plan 1:1000



Note: Levels are indicative: existing levels to be confirmed by accurate topographical survey; proposed levels to be coordinated with Engineers.

To be read in conjunction with: General Arrangement drawings: 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan...

Detail drawings: 8153-LDA-01-XX-DR-L-5000 series (Street Furniture), 8153-LDA-01-XX-DR-L-5100 series (Hardworks), Landscape Specification, Landscape Management and Maintenance Schedule.

Table with columns: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

LD A DESIGN ABERDEEN CITY CENTRE VISION

DRAWING TITLE: Union Street Central Streetscape Existing vs Proposed

Table with columns: ISSUED BY, DATE, SCALE, STATUS, Glasgow, March 2022, 1:250, Draft, T: 0141 222 9780, DRAWN, CHECKED, APPROVED, MW, JWA, KT.

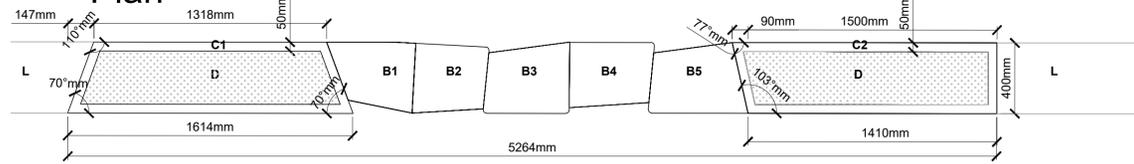
DWG. NO 8153-LDA-01-XX-DR-L-4001

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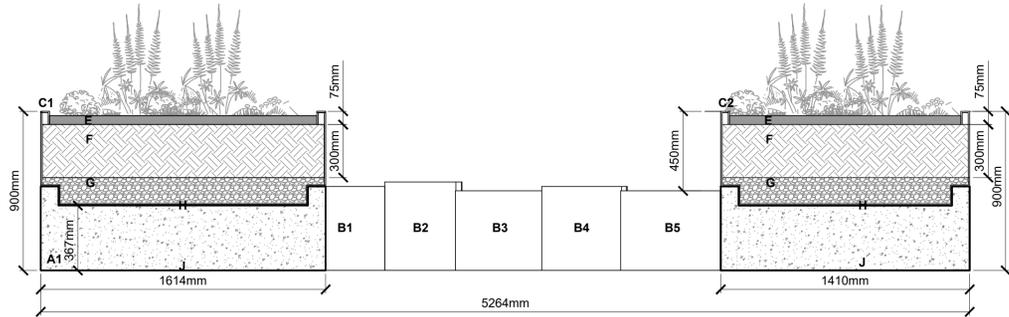


F1a Natural stone block seating with two planters

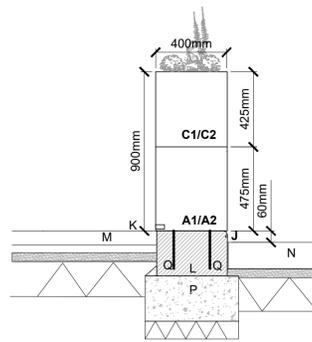
Plan



Elevation



Elevation

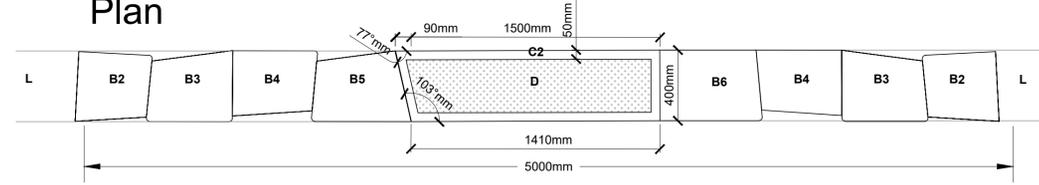


Indicative isometric

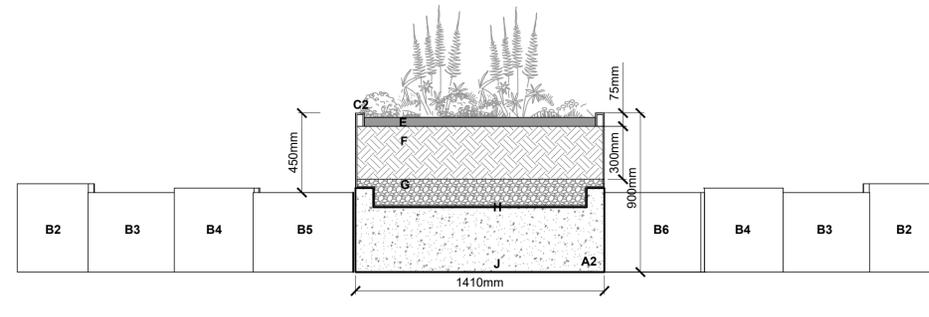


F1b Natural stone block seating with one planter

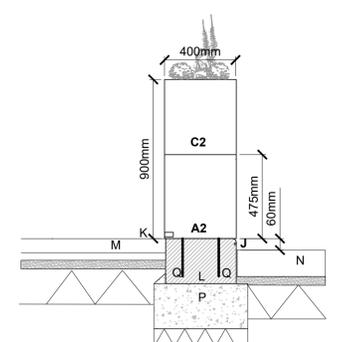
Plan



Elevation



Elevation



Indicative isometric



Street Furniture F1a & F1b

- A Natural stone block [type A1 and A2] supplied by CED Stone or equal and approved
- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- B Natural stone block seating [type B1-B6]
- For details refer to drawing 8153-LDA-01-XX-DR-L-5002 F1C Detail
- C Linear Steel Planter [type C1 and C2] supplied by IOTA or equal and approved
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- D Fixing method: fixing by interlocking on the top of natural stone [type A1 and A2]
- E Soft landscape planting
- For locations refer to drawing 8153-LDA-01-XX-DR-L-1005 USC Streetscape Softworks
- F 50mm min bark mulch, finished level to be minimum 25mm below the top line of the planter edge
- G Topsoil min 300mm deep for shrubs to BS3882:2015
- H Planter drainage: min 150mm deep 12mm nominal sized clean aggregate wrapped in permeable geotextile
- J Drainage holes: Details to be developed by manufacturer and submitted for review
- K Allow for integral LED linear lighting and waterproof USB port
- For further information, refer to 8153-LDA-01-XX-SP-L-1004 USC Streetscape Lighting and Utilities
- L Natural Stone Kerb [type K2], laid with 60 mm upstand refer to detail L-5101
- M P2 Block Paving refer to detail L-5100
- N P3 Block Paving refer to detail L-5100
- P Concrete foundation with haunch to Engineer's details and specification.
- Q Units to be supplied with dowels for fixings welded to kerbs. Dowels to be 316 stainless steel; fixing, dimension, location and frequency to be confirmed by Structural Engineer. Dowels to be set in epoxy resin. Position of the pre-drilled cores and dowels to be fully coordinated prior to fabrication.

Notes

- Joints between units to be filled with flexible mortar to match stone colour, subject to approval from landscape architect.
- 20mm bullnose to all exposed edges. Pencil round when not exposed/along the joint between different units
- Setting out of the units to be confirmed by Landscape architect and fully coordinated with the position of the kerbs and paving laying parameters.
- Drawings show architectural design intent; these illustrate the desired dimensions and aesthetic of the feature elements. Manufacturer to provide complete shop drawings for landscape architect approval, including fabrication, structural, foundation, installation drawings and material specification
- All products to be approved by project landscape architect and installed as manufacturer's recommendation
- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 USC Streetscape Surface Finishes Typical Details, 8153-LDA-01-XX-DR-L-5100 USC Streetscape Surface Finishes Typical Details and 8153-LDA-01-XX-DR-L-5101 USC Streetscape Kerbs Trims Edges Typical Details

REV.	DESCRIPTION	APP.	DATE
A	Issued for stage 3	JW	22.04.22
-	Issued for cost plan update	JW	31.01.22

LDA DESIGN

PROJECT TITLE
Aberdeen City Centre Vision

DRAWING TITLE
Union Street Central Streetscape
F1a and F1b Seat Planter Details

ISSUED BY	Glasgow	T: 0141 222 9780	
DATE	Jan '22	DRAWN	MMc
SCALE/RAI	1:20	CHECKED	RW
STATUS	Draft	APPROVED	KT

DWG. NO 8153-LDA-01-XX-DR-L-5001

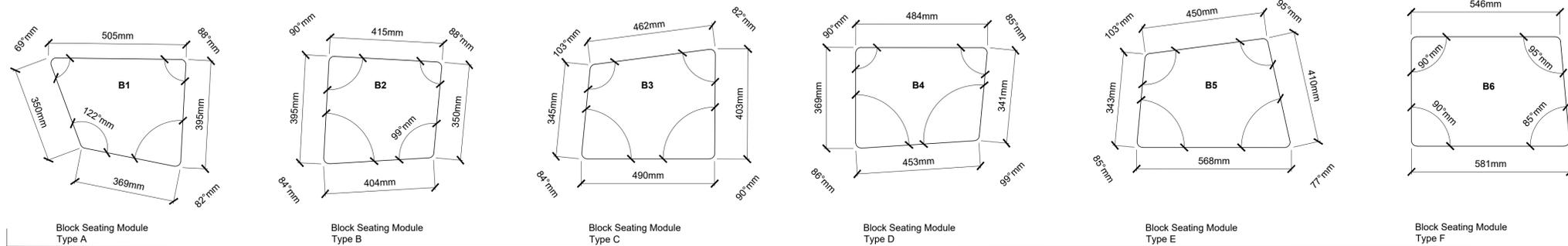
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Sources: Ordnance Survey



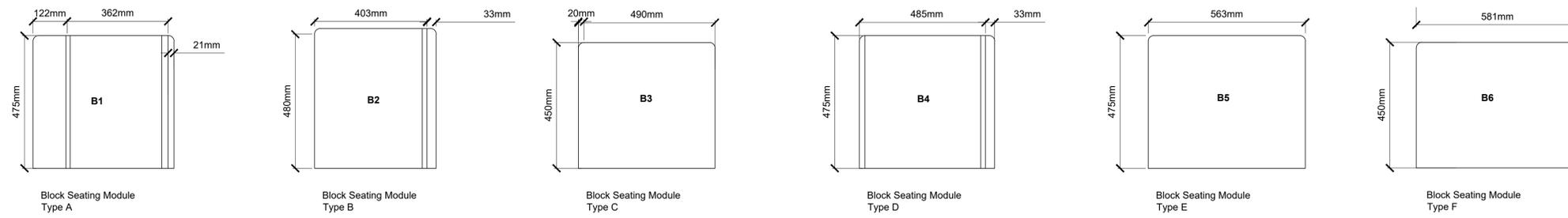
F1C Natural stone block seating

Plan



Elevation View

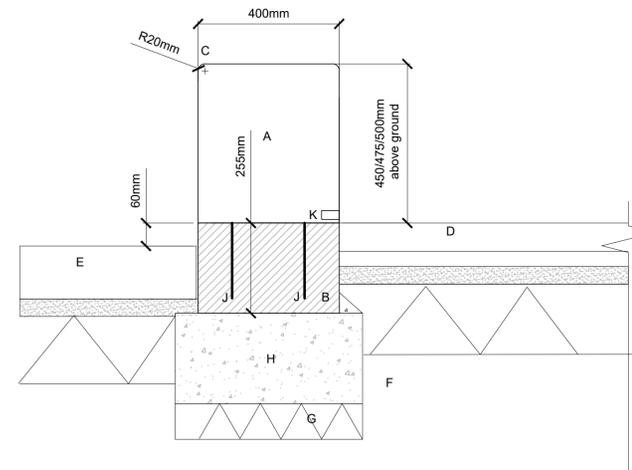
Elevation



Indicative isometric



Typical section



Street Furniture F1c

- Natural stone block seating
- For materials and finishes details refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- For locations refer to 8153-LDA-01-XX-SP-L-1003 USC Street furniture
- The constructed seat to act as a bollard to Union Bridge to prevent vehicle loading on pedestrian bridge

- A** Natural stone block seating [type B1, B2, B3, B4, B5&B6]. Units to be supplied with pre-drilled cores to accept dowels for fixing into the ground and anti skate studs.
- B** Natural Stone Kerb [type K2], laid with 60 mm upstand. refer to detail L-5101
- C** 20mm bullnose to all exposed edges. Pencil round when not exposed/along the joint between different units
- D** P2 Block Paving refer to detail L-5100
- E** P3 Block Paving refer to detail L-5100
- F** Subgrade to Engineer's details and specification
- G** Sub-base to Engineer's details and specification
- H** Concrete foundation with haunch to Engineer's details and specification.
- J** Units to be supplied with dowels for fixings welded to kerbs. Dowels to be 316 stainless steel: fixing, dimension, location and frequency to be confirmed by Structural Engineer. Dowels to be set in epoxy resin. Position of the pre-drilled cores and dowels to be fully coordinated prior to fabrication.
- K** Allow for integral LED linear lighting and waterproof USB port
 - For further information, refer to 8153-LDA-01-XX-SP-L-1004 USC Streetscape Lighting and Utilities
- Joints between units to be filled with flexible mortar to match stone colour, subject to approval from landscape architect.
 - Setting out of the units to be confirmed by Landscape architect and fully coordinated with the position of the kerbs and paving laying parameters.
 - Drawings show architectural design intent; these illustrate the desired dimensions and aesthetic of the feature elements. Manufacturer to provide complete shop drawings for landscape architect approval, including fabrication, structural, foundation, installation drawings and material specification
 - For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
 - For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
 - To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 USC Streetscape Surface Finishes Typical Details and 8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes

REV.	DESCRIPTION	APP.	DATE
A	Issued for stage 3	JWa	22.04.22
-	Issued for cost plan update	JWa	31.01.22

LDA DESIGN

PROJECT TITLE
Aberdeen City Centre Vision

DRAWING TITLE
Union Street Central Streetscape
F1C Block Seat Detail

ISSUED BY	DATE	SCALE	STATUS	DESIGNED BY	CHECKED BY	DRAWN BY	APPROVED BY
Glasgow	Jan '22	1:10	Draft	JWa	RW	MMc	KT

DWG. NO 8153-LDA-01-XX-DR-L-5002

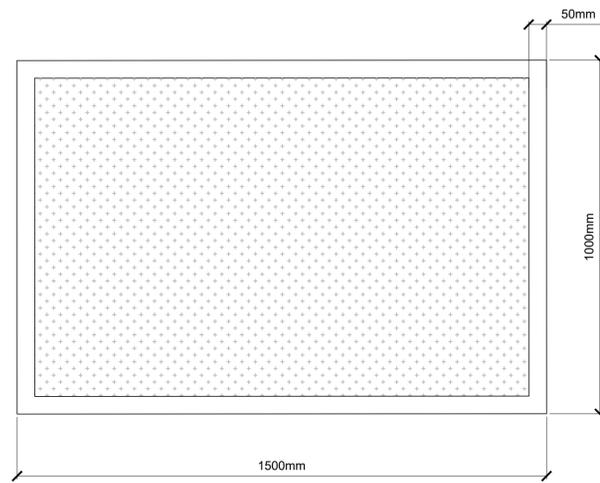
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Sources Ordnance Survey



F2 Tree Planter

Plan



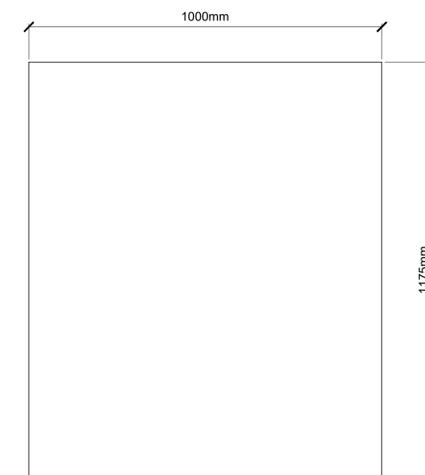
Section



Indicative isometric



Elevation

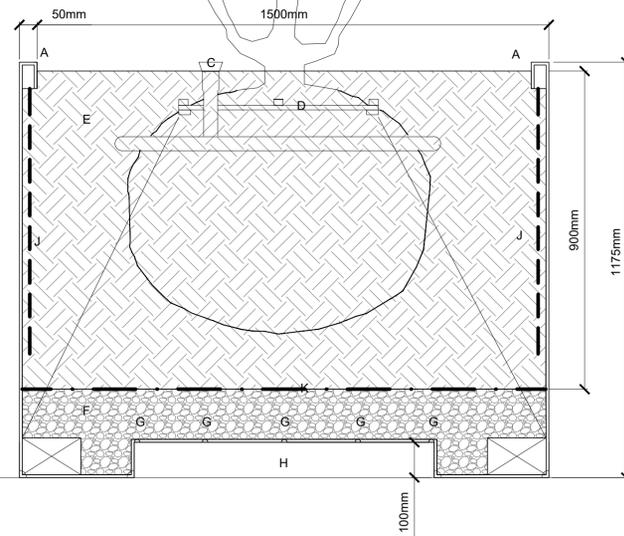


Street Furniture F2

- A Description: Steel Planter
- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- B Tree species
- Refer to drawing 8153-LDA-01-XX-DR-L-1005 USC Streetscape Softworks
- C Irrigation and aeration system
- D Tree anchor root ball system
- E Imported Topsoil
- Tree planter filled with approved well draining loamy topsoil to BS 3882. Mix backfill soil with 6kg spent mushroom compost
- F Planter bottom drainage layer
- Minimum 140mm deep 12mm nominal sized clean aggregate wrapped in permeable geotextile
- G Drainage hole at the base of the planter pot
- H Raised central section to allow lifting & relocation via forklift when required.
- J Root barrier, to facilitate the replacement of trees should it be required
- K Geotextile layer between the growing medium and the gravel

Notes:

- All products to be approved by project landscape architect and installed as per manufacturer's recommendation
- Anchor system to be developed if required for stability in coordination with engineers and manufacturer



REV.	DESCRIPTION	APP. DATE
A	Issued for Stage 3	JWa 22.04.22
-	Issued for cost plan update	JWa 31.01.22

LD A DESIGN

PROJECT TITLE
Aberdeen City Centre Vision

DRAWING TITLE
Union Street Central Streetscape
F2 Tree Planter Detail

ISSUED BY	Glasgow	T: 0141 222 9780
DATE	Jan '22	DRAWN MMc
SCALE: A1	1:10	CHECKED RW
STATUS	Draft	APPROVED KT

DWG. NO 8153-LDA-01-XX-DR-L-5003

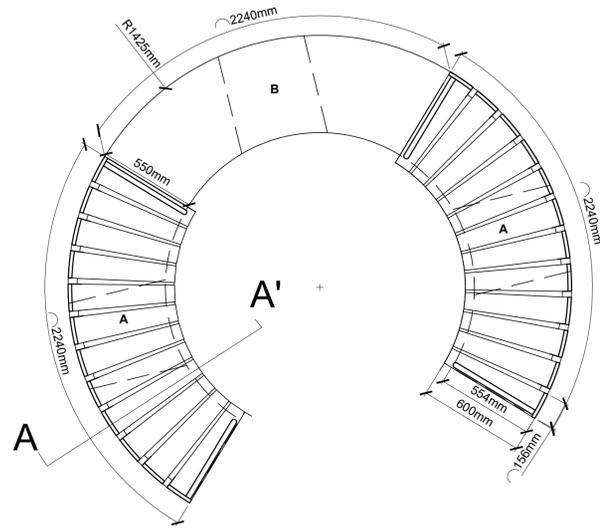
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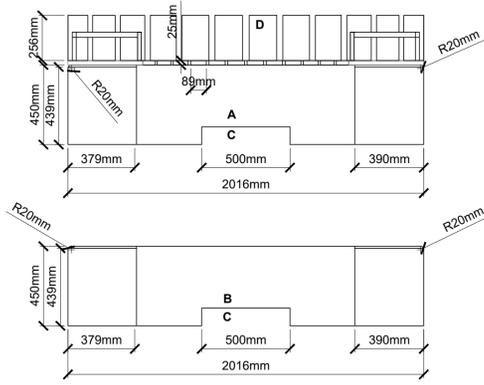


F4a Circular bench with two timber bench tops

F4a Plan



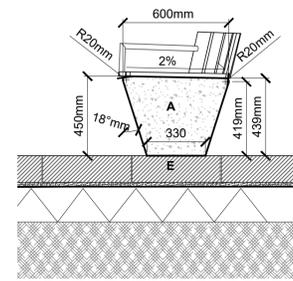
1/4 Module Elevation



Indicative isometric



Section A-A'

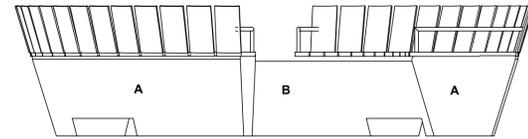


Street Furniture F4a

- A 1/4 circular seat [type A] with timber slats and backrest
- B 1/4 circular seat [type B]
- C Raised central gap section to allow lifting and relocation via forklift when required
- D Timber seat top
- E P1 Block paving refer to drawing L-5100

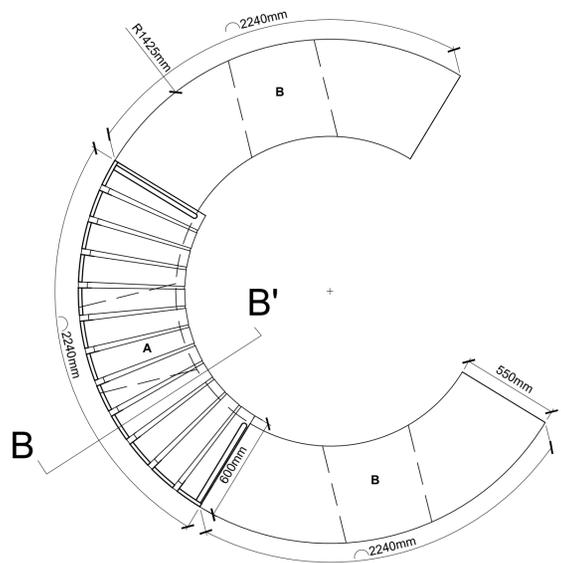
- Setting out of the units to be confirmed by Landscape architect and fully coordinated with the position of the kerbs and paving laying parameters.
- Units to be supplied with pre-drilled cores to accept dowels for fixing into the ground if required and anti skate studs.
- 20mm bullnose to all exposed edges. Pencil round when not exposed/along the joint between different units
- Drawings show architectural design intent; these illustrate the desired dimensions and aesthetic of the feature elements. Manufacturer to provide complete shop drawings for landscape architect approval, including fabrication, structural, foundation, installation drawings and material specification
- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 USC Streetscape Surface Finishes Typical Details and 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes

Elevation

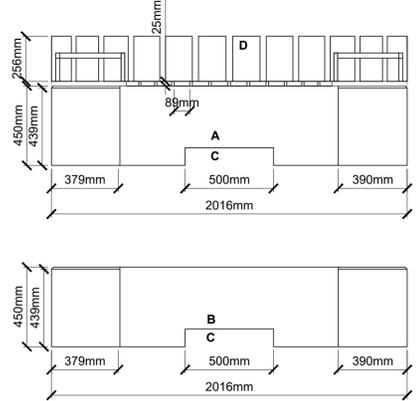


F4b Circular bench with two timber bench tops

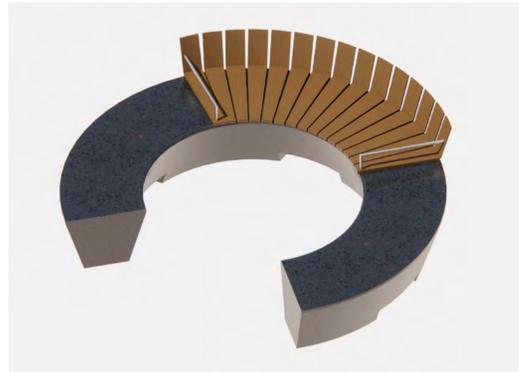
F4b Plan



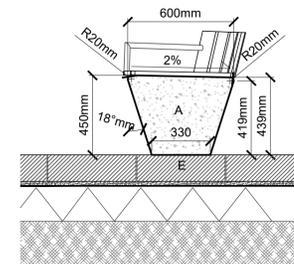
1/4 Module Elevation



Indicative isometric



Section B-B'



Street Furniture F4b

- A 1/4 circular seat [type A] with timber slats and backrest
- B 1/4 circular seat [type B]
- C Raised central gap section to allow lifting and relocation via forklift when required
- D Timber seat top
- E P1 Block paving refer to drawing L-5100

- Setting out of the units to be confirmed by Landscape architect and fully coordinated with the position of the kerbs and paving laying parameters.
- Units to be supplied with pre-drilled cores to accept dowels for fixing into the ground if required and anti skate studs.
- 20mm bullnose to all exposed edges. Pencil round when not exposed/along the joint between different units
- Drawings show architectural design intent; these illustrate the desired dimensions and aesthetic of the feature elements. Manufacturer to provide complete shop drawings for landscape architect approval, including fabrication, structural, foundation, installation drawings and material specification
- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1003 USC Streetscape Street Furniture
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 USC Streetscape Surface Finishes Typical Details and 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes

REV.	DESCRIPTION	APP. DATE
A	Issued for Stage 3	JWa 22.04.22
-	Issued for cost plan update	JWa 31.01.22

LDĀDESIGN

PROJECT TITLE
Aberdeen City Centre Vision

DRAWING TITLE
Union Street Central Streetscape
F4a&F4b Circular Seating Details

ISSUED BY	Glasgow	T: 0141 222 9780
DATE	Jan '22	DRAWN MMc
SCALE@A1	1:20	CHECKED RW
STATUS	Draft	APPROVED KT

DWG. NO 8153-LDA-01-XX-DR-L-5004

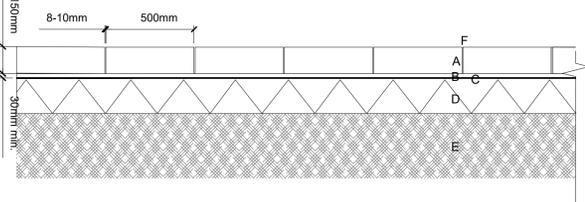
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Z:\18153_01_ACC_UNION_ST_CENTRAL\CDRAWINGS\8153-LDA-01-XX-DR-L-5100 UCS STREETSCAPE SURFACE FINISHES TYPICAL DETAILS.D

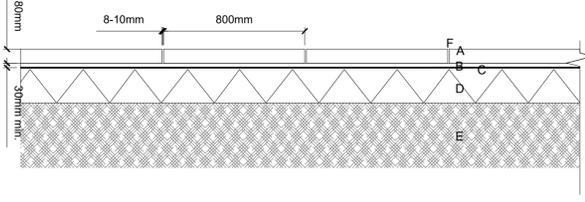
Scottish Natural Stone Setts [P1] Scale: 1:20



- A Scottish Natural Stone Sett Paving type 1 supplied by CED Stone, or equal approved.
Colour: Dark grey/black to match plaza paving in overall tone [P2]
Finish: Fine picked or flame finish
Sizes (WxLxD): 250mm x 250-500mm x 150 mm
Laying Pattern: laid to stretcher bond pattern
- B Laid on min 30mm proprietary bedding mortar to Engineers' detail and specification.
- C Geo-textile to infrastructure to Engineers' detail and specification
- D Well compacted sub-base to Engineers' detail and specification
- E Sub-soil to Engineers' detail and specification
- F Nominal 8-10mm joints filled with grout mortar, finished flush to surface of paving.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5101 USC Streetscape Kerbs Trims Edges Typical Details
- Any manholes within are to be recessed.

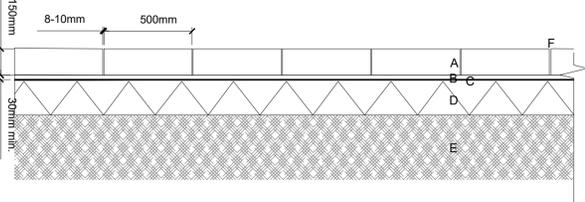
Scottish Natural Stone Slabs [P2] Scale: 1:20



- A Scottish Natural Stone Slab Paving type 2 supplied by CED Stone, or equal approved.
Colour: Dark grey/black to match plaza paving in overall tone
Finish: Fine picked or flame finish
Sizes (WxLxD): 800mm x 1200-1500mm x 80 mm
Laying Pattern: laid to stretcher bond pattern.
- B Laid on min 30mm proprietary bedding mortar to Engineers' detail and specification.
- C Geo-textile to infrastructure to Engineers' detail and specification
- D Well compacted sub-base to Engineers' detail and specification
- E Sub-soil to Engineers' detail and specification
- F Nominal 8-10mm joints filled with grout mortar, finished flush to surface of paving.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5101 USC Streetscape Kerbs Trims Edges Typical Details
- Any manholes within are to be recessed.

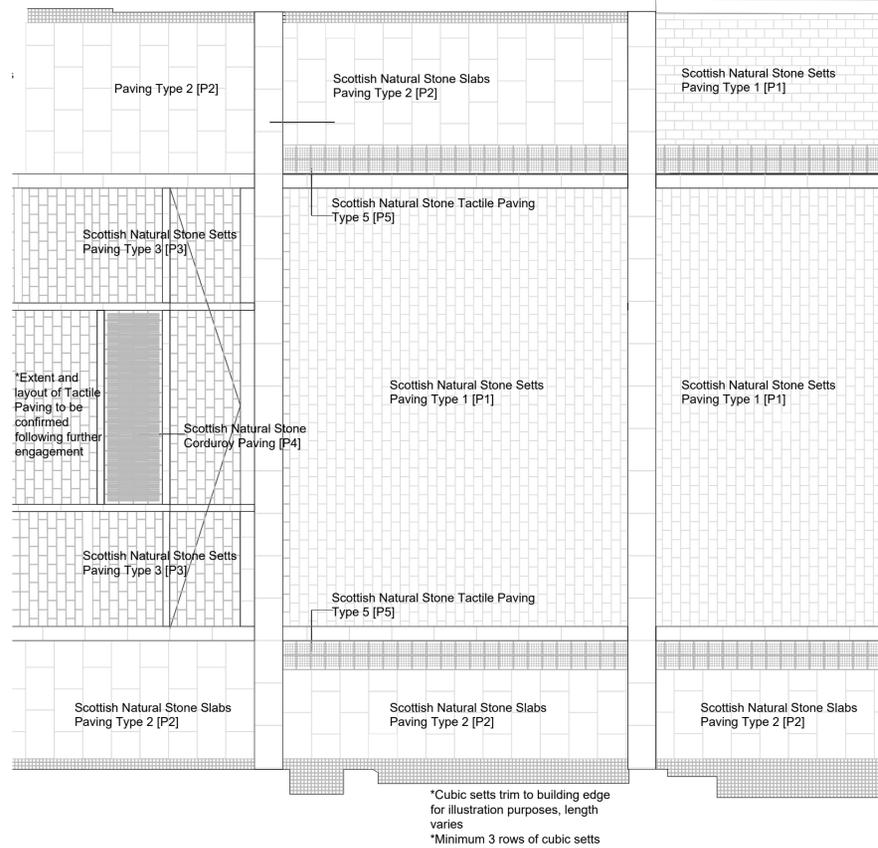
Scottish Natural Stone Setts [P3] Scale: 1:20



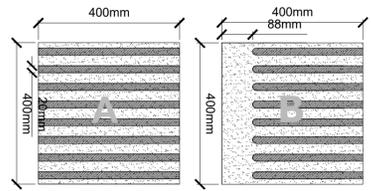
- A Scottish Natural Stone Sett Paving type 3 supplied by CED Stone, or equal approved.
Colour: Mix of three tones of grey
Finish: Flat top and fine picked
Sizes (WxLxD): 250mm x 250-500mm x 150 mm
Laying Pattern: laid to stretcher bond pattern.
- B Laid on min 30mm proprietary bedding mortar to Engineers' detail and specification.
- C Geo-textile to infrastructure to Engineers' detail and specification
- D Well compacted sub-base to Engineers' detail and specification
- E Sub-soil to Engineers' detail and specification
- F Nominal 8-10mm joints filled with grout mortar, finished flush to surface of paving.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5101 USC Streetscape Kerbs Trims Edges Typical Details
- Any manholes within are to be recessed.

Detailed Plan Scale: 1:100

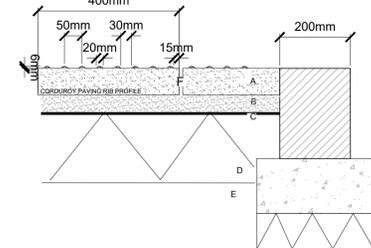


Scottish Natural Stone Corduroy Paving [P4] Scale 1:10



UNIT TYPE A
NATURAL STONE
CORDUROY
PAVING STANDARD UNITS
400mm

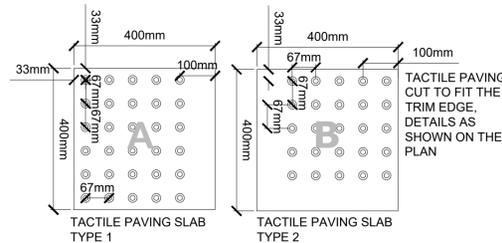
UNIT TYPE B
NATURAL STONE
CORDUROY
PAVING SPECIAL END UN
400mm



- A Scottish Natural Stone Sett Paving type 4 supplied by CED Stone, or equal approved.
Colour: Dark Grey
Finish: Fine picked or flame finish
Size: 400x400x70mm
- B Laid on min 30mm proprietary bedding mortar to Engineers' detail and specification.
- C Geo-textile to infrastructure to Engineers' detail and specification
- D Well compacted sub-base to Engineers' detail and specification
- E Sub-soil to Engineers' detail and specification
- F Nominal 8-10mm joints filled with grout mortar, finished flush to surface of paving.

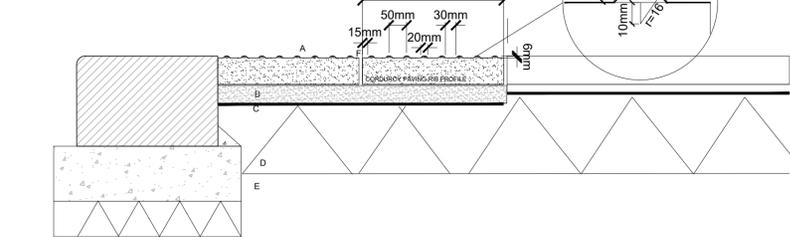
- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5101 USC Streetscape Kerbs Trims Edges Typical Details
- Any manholes within are to be recessed.
- Where tactile paving slabs require cutting and removal of some blisters a consistent margin and neat fitting edge are required. Any cutting of slabs to be agreed and confirmed with the Landscape Architect. Where cutting is required units should not be cut through blisters.

Scottish Natural Stone Tactile Paving [P5] Scale 1:10



TACTILE PAVING SLAB
TYPE 1

TACTILE PAVING SLAB
TYPE 2



- A Scottish Natural Stone Sett Paving type 5 supplied by CED Stone, or equal approved.
Colour: Light Grey
Finish: Fine picked or flame finish
Size: 400x400x70mm
- B Laid on min 30mm proprietary bedding mortar to Engineers' detail and specification.
- C Geo-textile to infrastructure to Engineers' detail and specification
- D Well compacted sub-base to Engineers' detail and specification
- E Sub-soil to Engineers' detail and specification
- F Nominal 8-10mm joints filled with grout mortar, finished flush to surface of paving.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC Streetscape General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 USC Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5101 USC Streetscape Kerbs Trims Edges Typical Details
- Any manholes within are to be recessed.
- Any cutting of slabs to be agreed and confirmed with the Landscape Architect.
- Units to comprise of raised topped ribs, 20mm in diameter at base and raised 6mm (+0.5mm) from surface of slabs.
- Ribs to be spaced at equal centres of 50mm. Centre line of ribs to align through in all directions of corduroy paving.

NOTES:
For location of paving types and trim/edges please refer to drawings:
8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes
8153-LDA-01-XX-DR-L-5101 UCS Streetscape Surface Kerbs Edges Trim Details
8153-LDA-01-XX-SP-L-1001 USC Outline Specification
For further details on workmanship, refer to the full NBS specification

SETTING OUT
Set out on site to be undertaken/checked with Landscape Architect

NATURAL STONE PAVING

1. Natural stone paving to be as supplied by CED stones or equal approved
2. Paving dimensions as per specification. Laying parameters as shown in details above, but note point 18 regarding joints.
3. Thicknesses as specification.
4. Natural stone paving shall not show any signs of delamination, warpings, cracks, chips, discolouration or any defects.
5. Natural stone paving to be supplied with finishes and sides as specified.
6. Drawings are indicative/show the design intent, all dimensions to be verified on site.
7. The sample panel (with paving slabs, setts and cubes, including pointing, approved by the Landscape Architect and Engineer to be used thereafter as a control panel for slab laying and finishes.

PAVING LAYING PARAMETERS

Cuttings

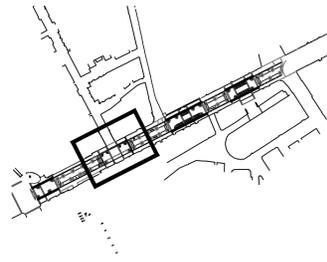
8. Where cuttings of units is required to suit building facades, trims or features, cuts to the units are made a minimum of one unit back from building edges, trims or features.
9. Where cuttings of units is required to suit building facades, ramps, service covers, kerbs, entrances and end of works etc, cuts courses are located 2-3 rows back.
10. The final size of the inground GIFAS power and water supply unit to be determined by the power provision requirements. The unit is to be set out as to be coincident with the paving laying pattern.
11. Unless otherwise indicated or approved, no paving slab/sett length shall be less than its width. Absolute cut length of the slab to be 120% of the width.
12. Where cut dimensions would result in the slab or sett lengths being less than the width it may be necessary to adjust the bond or turn paving unit 90 degrees. The Contractor is to liaise with the Landscape Architect to confirm requirements.
13. The number of slabs of minimum width shall be kept to a minimum and only to be used where agreed on site.
14. Cut slabs not to be located at the edge of paving.
15. If necessary incorporate the oversize units with false joints.
16. Slabs are to be cut neatly, evenly and smoothly with parallel joint width maintained.

Joints

17. Nominal width of joint to be 10mm (+/- 5mm) or as specification. Joints to be consistent and even. Where joints are 10mm or less saw blade the joint locally to ensure near 10mm joint.
18. Minimum overlap of joints from one course to the next to be 150mm. Joints are not to be regularly staggered from row to row. Bonding pattern to be broken up at every third row.
19. Any cutting of joints approved by the Landscape Architect must be to the full depth of the joint.
20. Joints to be filled with grey colour mortar to match the natural stone paving and to Engineers' specification. Sample of the infill material to be approved by Landscape Architect and Engineer prior to works commencing on site.
21. Pointing finish is flush with surface of slab, maximum 1-2mm below to avoid staining surface. Recessed joints and staining will not be accepted.
22. If a slurry type mortar is used then ensure that paving is well watered / washed down as works proceed to avoid staining.
23. Slabs are to be inspected and approved prior to pointing, to allow for any adjustments to the arrangement in order that an even distribution of colour and size is maintained and jointing pattern is irregular and not repeated.

Manhole Covers/Edges/Building facade

24. Paving joints and rows to be considered in relation to manhole covers position.
25. Cuttings at manholes:
 - no over cutting at corners allowed
 - slabs to be laid flush with the covers
 - maximum 10mm joints around metalwork, joints to be of an even and consistent width.
 - a minimum slab width of 100mm retained at all times were slab cutting is required at manhole covers positions. No over cutting at corners allowed, slabs to be laid to finish flush with covers.
26. All slabs and kerbs to be placed as whole units adjacent to the building facade, gullies, manhole covers and street furniture
27. Paving slabs to be arranged so as to allow for joints to be coincident with the corner of the building/railing/cope etc in both directions. Allow for adjustment to slab laying arrangement to suit this and also cutting rows to tie in with building, railing and corner details. Diagonal cuts to be avoided.
28. Minimum cut at building/kerb line to be 60% of slab width. Any cuts are made at minimum 1no. unit back from the edges, facades or features. Number of slabs with minimum dimensions to be kept as minimum.
29. A minimum slab width of 150mm retained at all times were slab cutting is required at manhole covers.
30. Paving rows aligned to building edges. Where alignment is not possible, a minimum overlap of 150mm to building edge to be maintained at all times.
31. Refer to Engineers' drawings for manholes, gullies and slot drain locations. Where required, proposed slot drains to be set out as to be centred on and coincident with a band of cubes. Existing services/manholes that can not be coincident with paving to be reviewed with Landscape Architect.
32. All manhole cover to be recessed where possible, this includes new and replacement covers.
33. Where covers cannot be recessed (new or existing e.g. Water Tobys), then ironwork is to be painted black on completion. Ensure surrounding finishes are protected before painting and until paint is dry to avoid staining.
34. Diagonal cuts to paving not permitted.
35. All street furniture including bollards to be core drilled and root fixed with a minimum 100mm overlap.



REV. DESCRIPTION DATE

1 First Issue for Information 22.04.22

APP. DATE

LDĀ DESIGN

PROJECT TITLE
ABERDEEN CITY CENTRE VISION

DRAWING TITLE
Streetscape Surface Finishes Typical Details

ISSUED BY	Glasgow	T: 0141 222 9780
DATE	April 2022	DRAWN
SCALE	As shown	CHECKED
STATUS	Draft	APPROVED

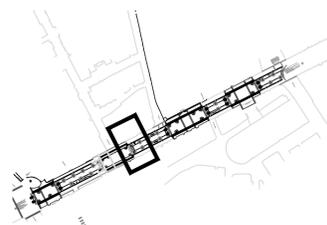
DWG. NO 8153-LDA-01-XX-DR-L-5100

No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only.

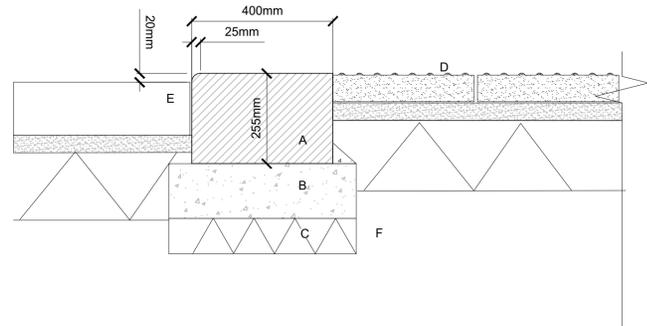
© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2015
Sources Ordnance Survey

Scale as shown





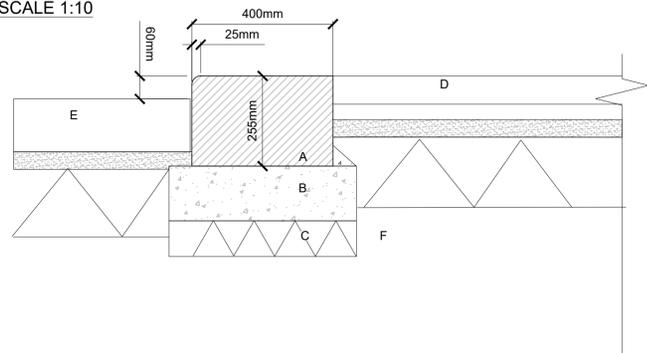
SCOTTISH NATURAL STONE KERB K1, 20mm UPSTAND TO ROAD
SCALE 1:10



- A Natural Stone Kerb 400mm x 900-1200mm x 255mm (WxLxD), laid with 20 mm upstand.
- B Concrete foundation with haunch to Engineer's details and specification.
- C Sub-base to Engineer's details and specification.
- D P5 Block Paving refer to detail L-5100
- E P1 Block Paving refer to detail L-5100
- F Subgrade to Engineer's details and specification.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 UCS Streetscape Surface Finishes Typical Details

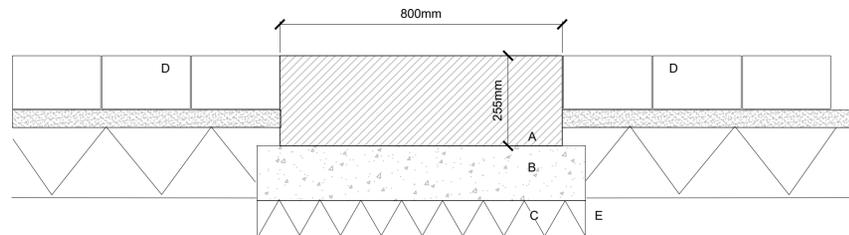
SCOTTISH NATURAL STONE KERB K2, 60mm UPSTAND TO ROAD
SCALE 1:10



- A Natural Stone Kerb 400mm x 900-1200mm x 255mm (WxLxD), laid with 60 mm upstand.
- B Concrete foundation with haunch to Engineer's details and specification.
- C Sub-base to Engineer's details and specification.
- D P2 Block Paving refer to detail L-5100
- E P3 Block Paving refer to detail L-5100
- F Subgrade to Engineer's details and specification.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 UCS Streetscape Surface Finishes Typical Details

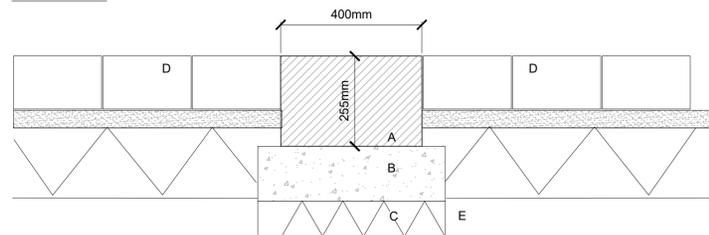
SCOTTISH NATURAL STONE TRIM T1, LAID FLUSH
SCALE 1:10



- A Natural Stone Kerb 800mm x 900-1200mm x 255mm (WxLxD), laid flush.
- B Concrete foundation with haunch to Engineer's details and specification.
- C Sub-base to Engineer's details and specification.
- D P1 or P2 or P5 depending on locations. For adjacent surfaces refer to detail L-5100
- E Subgrade to Engineer's details and specification.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 UCS Streetscape Surface Finishes Typical Details

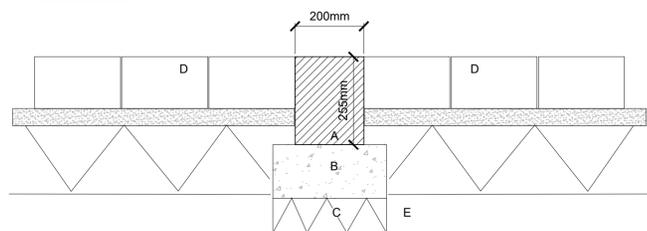
SCOTTISH NATURAL STONE TRIM T2, LAID FLUSH
SCALE 1:10



- A Natural Stone Kerb 400mm x 900-1200mm x 255mm (WxLxD), laid with 60 mm upstand.
- B Concrete foundation with haunch to Engineer's details and specification.
- C Sub-base to Engineer's details and specification.
- D P1 or P2 or P3 depending on locations. For adjacent surfaces refer to detail L-5100
- E Subgrade to Engineer's details and specification.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 UCS Streetscape Surface Finishes Typical Details

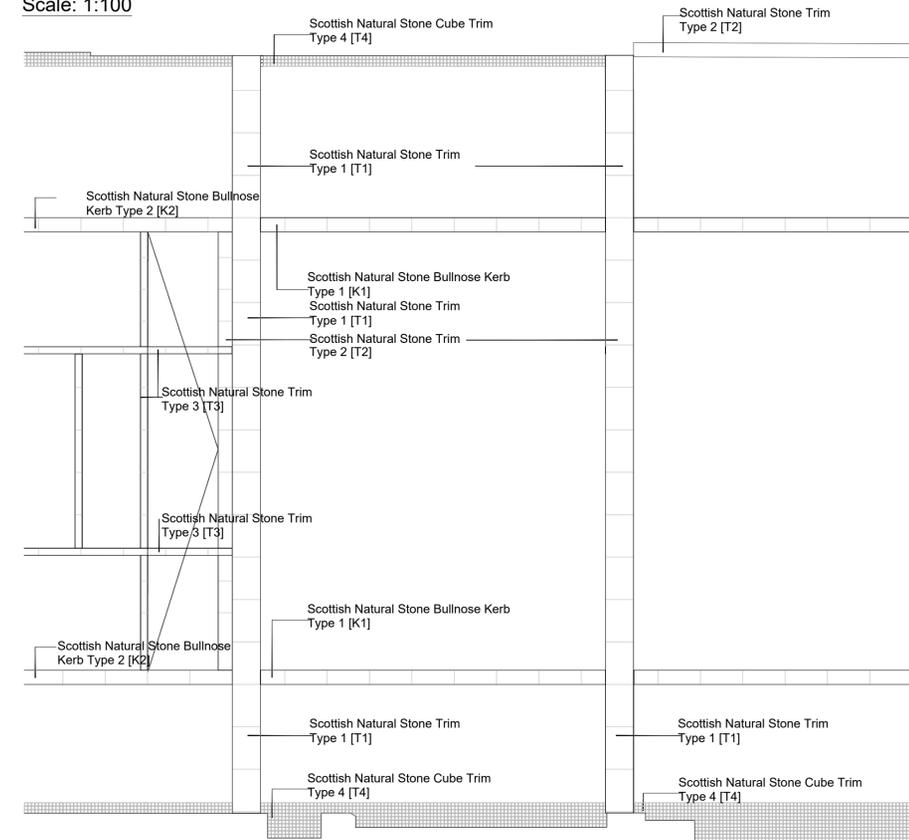
SCOTTISH NATURAL STONE TRIM T3, LAID FLUSH
SCALE 1:10



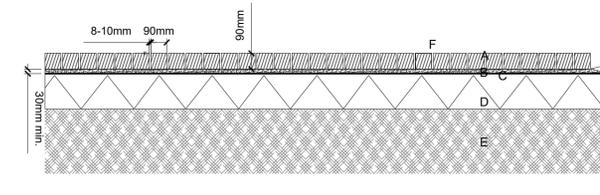
- A Natural Stone Kerb 200mm x 900-1200mm x 255mm (WxLxD), laid with 60 mm upstand.
- B Concrete foundation with haunch to Engineer's details and specification.
- C Sub-base to Engineer's details and specification.
- D P3 or P4 depending on locations. For adjacent surfaces refer to detail L-5100
- E Subgrade to Engineer's details and specification.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 UCS Streetscape Surface Finishes Typical Details

Detailed Plan
Scale: 1:100



Scottish Natural Stone Cube Trim Type 4 [T4]
Scale: 1:20



- A Scottish Natural Stone Cube Trim Type 4 supplied by CED Stone, or equal approved. Colour: Dark grey/black to match plaza and footway paving in overall tone [P1&2]
Finish: Fine picked or flame finish
Sizes (WxLxD): 90mm x 90mm x 90 mm
Laying Pattern: laid to stack bond pattern.
- B Laid on min 30mm proprietary bedding mortar to Engineers' detail and specification.
- C Geo-textile to infrastructure to Engineers' detail and specification
- D Well compacted sub-base to Engineers' detail and specification
- E Sub-soil to Engineers' detail and specification
- F Nominal 8-10mm joints filled with grout mortar, finished flush to surface of paving.

- For locations, refer to 8153-LDA-01-XX-DR-L-1001 USC General Arrangement Plan and 8153-LDA-01-XX-DR-L-1002 UCS Streetscape Surface Finishes
- For further information, refer to 8153-LDA-01-XX-SP-L-1001 USC Outline Specification
- To be read in conjunction with 8153-LDA-01-XX-DR-L-5100 UCS Streetscape Surface Finishes Typical Details
- Any manholes within are to be recessed.

REV.	DESCRIPTION	DATE
1	First Issue for Information	22.04.22

LDA DESIGN

PROJECT TITLE
ABERDEEN CITY CENTRE VISION

DRAWING TITLE
UCS Streetscape Surface Kerbs Trims Edges Details

ISSUED BY	DATE	SCALE	STATUS	ISSUED BY	DATE	SCALE	STATUS
Glasgow	April 2022	As shown	Draft	T: 0141 222 9780	APRIL 2022	AS SHOWN	DRAFT

DWG. NO 8153-LDA-01-XX-DR-L-5101

No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only.

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Sources Ordnance Survey

Scale as shown



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