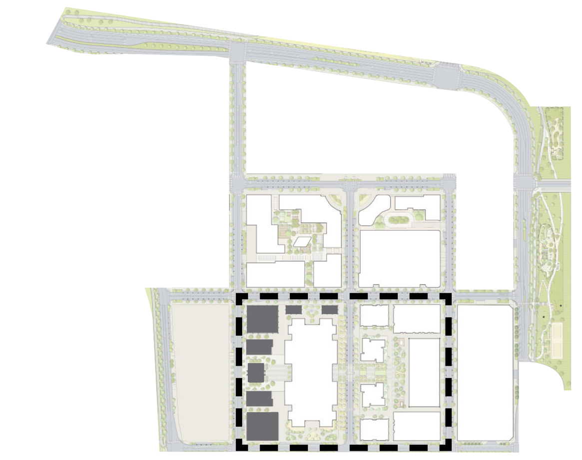
Appendix B

BIRD SAFE DESIGN APPROACH (REQ. PER MMRP BIO-1.2)

BLOCK 4E/4F—PRELIMINARY

Bird Safe Design Approach



KEY PLAN

BLOCK 4E/4F – ELKUS MANFREDI (DESIGN ARCHITECT)

In compliance with the MMRP, and in accordance with recognized good practice, the specific bird safety standards shall be based on the following bird-friendly building principles, to the extent applicable to the particular development area:

- Reduce mirrors and large areas of reflective glass.
- Avoid transparent glass skyways, walkways, or entryways, free-standing glass walls, and minimize transparent building comers, or utilize glazing treatments to mitigate the hazard.
- Minimize funneling of open space toward a building facade.
- Strategically place landscaping to reduce reflection and views of foliage inside or through glass.
- Reduce potential light and glare by implementing Mitigation
- Measures AES-2.1 (requiring low-profile, low-intensity lighting directed downward), AES-2.2 (requiring shielded fixtures for outdoor lighting), and AES-2.3 (requiring low- emissivity reflective coating on exterior glass surfaces).
- To the extent consistent with the normal and expected operations of the uses planned for the particular development area, take appropriate measures to avoid use of unnecessary lighting at night, especially during bird migration season (February-May and August-November) through the installation of motion sensor lighting, automatic lighting shut-off mechanisms, or other effective measures to the extent feasible.
- The specific bird safety standards shall also provide for a monitoring program, and placing signs around the buildings.

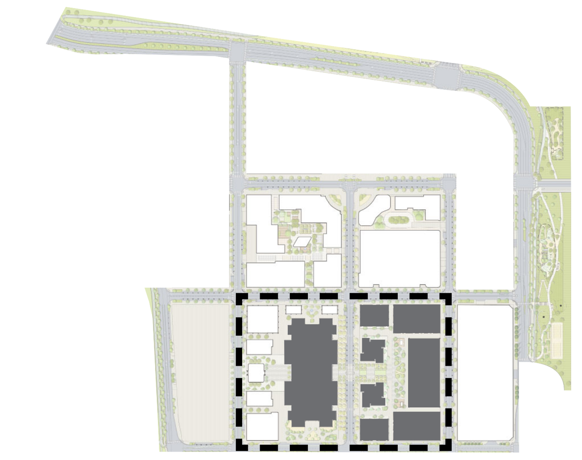
<u>Block 4E/4F - Retail Buildings & Pavilions</u>

In compliance with Bird-Safe Design Standards into Project Buildings and Lighting Design, the following principles will be used as guidelines for implementing the retail design approach:

- The retail buildings design will not incorporate any mirrors or large areas of reflective glass. Primary vision glass will have the lowest practical level of reflectivity while still complying with statutory requirements for energy usage.
- The building façade design incorporates glass in concert with several different cladding materials and texture providing stark contrast to the vision glass.
- The massing of the buildings are broken down in multiple volumes with changes in plane that creates additional contrast, depth, and shadow.
- There will be no free standing glass as part of the retail design.
- To the extent possible the use of glass corners will be minimized and some of the building's glass corners will be curved (intended as an accepted mitigation practice).
- The façades incorporate contrasting solid piers which add shadow and reduce the amount of continuous glass areas.
- Landscaping design and the incorporation of trees will be coordinated with the building (s) design to mitigate excessive reflectivity of the facade design.
- Lighting design is at a formative level and will adhere to required mitigation measures.

BLOCK 4E/4F—PRELIMINARY

Bird Safe Design Approach



BLOCK 4E/4F – FOSTER + PARTNERS (DESIGN ARCHITECT)

In compliance with the MMRP, and in accordance with recognized good practice, the specific bird safety standards shall be based on the following bird-friendly building principles, to the extent applicable to the particular development area:

- Reduce mirrors and large areas of reflective glass.
- Avoid transparent glass skyways, walkways, or entryways, free-standing glass walls, and minimize transparent building comers, or utilize glazing treatments to mitigate the hazard.
- Strategically place landscaping to reduce reflection and views of foliage inside or through glass.
- Reduce potential light and glare by implementing Mitigation
- Motion-sensor, exterior luminaires, with automatic shut-off mechanisms when no activity is recorded or similar effective measures to automatically reduce the light output of luminaires to the extent feasible will be provided.
- Landscape ornamental up-lighting is limited throughout the development and shall be automatically turned off from midnight until 6 AM for compliance with LEED for Neighborhood Development criteria.
- A monitoring program for bird safety will be created. In addition, monitoring of bird safety shall be conducted at regular intervals from occupancy. Contact telephone numbers for authorized bird conservation organizations will be provided to the leaseholders.

<u>Block 4E/4F - Global Food Market</u>

- The building design does not incorporate any mirrors or large areas of reflective glass. Primary vision glass will have the lowest practical level of reflectivity while still complying with statutory requirements for energy usage.
- Glass will be specified with low-emissivity, tinted, fritted, or fluted qualities.
- Timber louvers for screening have been added to reduce reflection.
- The façade design incorporates significant amounts of vertical solids panels which provide contrast.
- The façade incorporates significant amounts of metal sub frames which provide contrast and reduce uniformity of glass elements.
- Storefront type glazing systems are framed within profiled frames which provide contrast, depth, and shadow.
- The storefronts incorporate canopies which add shadow and reduce the amount of continuous glass areas.
- Shadow gaps and façade projections will be detailed to limit perching areas.
- The Roof incorporates overhangs which reduces uniformity and creates additional shadow and contrast.
- Landscaping design and the incorporation of trees is integrated into the building design to mitigate excessive reflectivity and uniformity of the facade design.
- Lighting design is at a formative level and will adhere to required mitigation measures.

<u>Block 4E/4F - Retail / Food & Beverage Buildings</u>

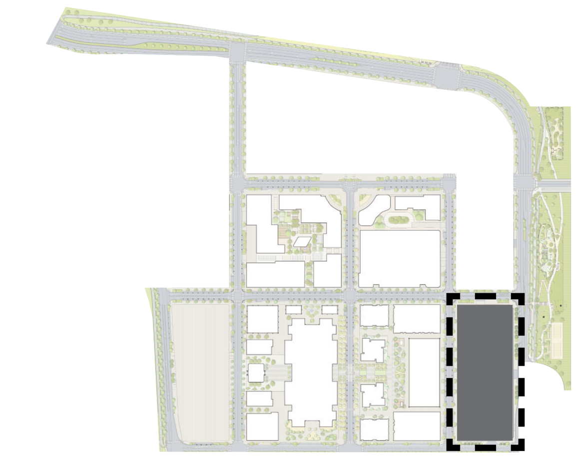
- Retail and Food & Beverage buildings include non-reflective openable and non-openable glazing systems framed in brick masonry with contrasting framing materials as a mitigation measure.
- Storefront type glazing systems are captured within profiled frames which provide contrast, depth, and shadow.
- The glass elements of the façade incorporate significant amounts of metal sub frames which provide contrast and reduce uniformity of glass elements.
- The Retail façades may incorporate awnings and canopies which add shadow and reduce the amount of continuous glass areas.
- Shadow gaps and façade projections will be detailed to limit perching areas.

<u>Block 4E/4F – Office Buildings</u>

- The building design does not incorporate any mirrors or large areas of reflective glass. Primary vision glass will have the lowest practical level of reflectivity while still complying with statutory requirements for energy usage.
- The lower levels of the building frame glazed areas in brick masonry which creates contrast and shadow.
- The massing of the building is broken down changes in plane which creates additional contrast, depth, and shadow.
- The façade incorporates contrasting metal overhangs which add shadow and reduce the amount of continuous glass areas.
- Shadow gaps and façade projections will be detailed to limit perching areas.
- Lighting design is at a formative level and will adhere to required mitigation measures.
- Landscaping design and the incorporation of trees is integrated into the building design to mitigate excessive reflectivity and uniformity of the facade design.

BLOCK 4H—PRELIMINARY

Bird Safe Design Approach



BLOCK 4H – GENSLER (DESIGN ARCHITECT)

Block 4H has been designed to comply with MMRP BIO-1.2 and in accordance with recognized good practice, the specific bird safety standards shall be based on the following bird-friendly building principles, to the extent applicable to the particular development area:

- Reduce mirrors and large areas of reflective glass.
- Avoid transparent glass skyways, walkways, or entryways, free-standing glass walls, and minimize transparent building comers, or utilize glazing treatments to mitigate the hazard.
- Strategically place landscaping to reduce reflection and views of foliage inside or through glass.
- Reduce potential light and glare by implementing Mitigation
- Motion-sensor, exterior luminaires, with automatic shut-off mechanisms when no activity is recorded or similar effective measures to automatically reduce the light output of luminaires to the extent feasible will be provided.
- Landscape ornamental up-lighting is limited throughout the development and shall be automatically turned off from midnight until 6 AM for compliance with LEED for Neighborhood Development criteria.
- A monitoring program for bird safety will be created. In addition, monitoring of bird safety shall be conducted at regular intervals from occupancy. Contact telephone numbers for authorized bird conservation organizations will be provided to the leaseholders.

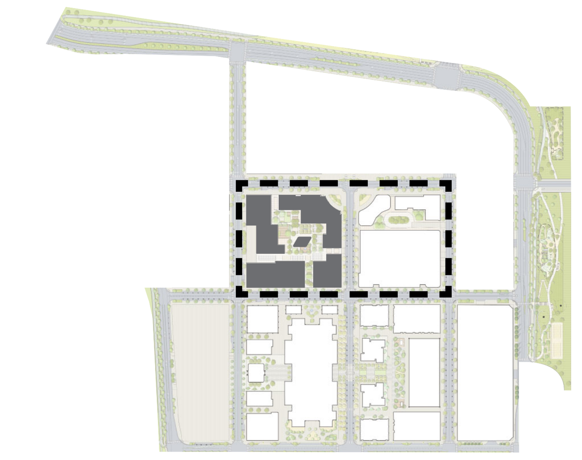
Block 4H - Parking Garage & Retail / Food & Beverage

The design pays close attention to the first 60' of the building façade, which is "Primary Bird Collision Zone". The majority of the Block 4H façade falls within this zone. The largest portion of this façade is the parking garage and is clad with louvers.

The solid areas of façade consists of glass clad elevator tower and grade level retail. These glass facades will employ one or a combination of the following Bird Safe Glass options:

- Keep visible light reflectance low (between 10-20%)
- Glass which reflects ultraviolet light (which birds can see)
- Fritted glass
- Etched Glass
- Translucent Glass
- Glass with an applied film

Attention to details stated above in the design of Block 4H building will allow the for a safe coexistence between the new building and birds.



KEY PLAN

BLOCK 4D—PRELIMINARY

Bird Safe Design Approach

BLOCK 4D – ARQUITECTONICA (DESIGN ARCHITECT)

In compliance with the MMRP, and in accordance with recognized good practice, the specific bird safety standards shall be based on the following bird-friendly building principles, to the extent applicable to the particular development area:

- Reduce mirrors and large areas of reflective glass.
- Avoid transparent glass skyways, walkways, or entryways, free-standing glass walls, and minimize transparent building comers or utilize glazing treatments to mitigate the hazard.
- Minimize funneling of open space toward a building facade.
- Strategically place landscaping to reduce reflection and views of foliage inside or through glass.
- Reduce potential light and glare by implementing Mitigation Measures AES-2.1 (requiring low-profile, low-intensity lighting directed downward), AES-2.2 (requiring shielded fixtures for outdoor lighting), and AES-2.3 (requiring low-emissivity reflective coating on exterior glass surfaces).
- To the extent consistent with the normal and expected operations of the uses planned for the particular development area, take appropriate measures to avoid use of unnecessary lighting at night, especially during bird migration season (February-May and August-November) through the installation of motion sensor lighting, automatic lighting shut-off mechanisms, or other effective measures to the extent feasible.
- The specific bird safety standards shall also provide for a monitoring program and placing signs around the buildings with phone numbers for authorized bird conservation organizations.

Block 4D Hotel

- The building design does not incorporate any mirrors or large areas of reflective glass. Primary vision glass will have the lowest practical level of reflectivity while still complying with statutory requirements for energy usage.
- The massing of the building is broken down into 3 shifting volumes of different heights to avoid being a monolithically rectangular “glass box” and creates multiple façade planes which provide contrast, depth, and shadow.
- Projecting balconies and recessed glazing from the façade frame reduces façade uniformity and creates additional shadow and contrast.
- The façade design incorporates solid textured panels which provide additional contrast and shadow.
- The glass elements of the façade incorporate significant amounts of metal sub frames which provide contrast and reduce uniformity of glass elements.
- Lighting design is at a formative level and will adhere to required mitigation measures.
- Landscaping design and the incorporation of trees is integrated into the building design to mitigate excessive reflectivity and uniformity of the facade design.

Block 4D Health Club

- The building design does not incorporate any mirrors or large areas of reflective glass. Primary vision glass will have the lowest practical level of reflectivity while still complying with statutory requirements for energy usage.
- The massing of the building is broken down into horizontal shifting volumes to avoid being a monolithically rectangular “glass box” and creates multiple façade planes which provide contrast, depth, and shadow.
- The façade design incorporates vertical screening elements in the glazed areas which creates contrast and shadow. These panels are angled in plan relative to the face of glass which provides additional contrast and shadow.
- The glass elements of the façade incorporate significant amounts of metal sub frames which provide contrast and reduce uniformity of glass elements.
- Lighting design is at a formative level and will adhere to required mitigation measures.
- Landscaping design and the incorporation of trees is integrated into the building design to mitigate excessive reflectivity and uniformity of the facade design.

Block 4D Residential Serviced Apartments

- The building design does not incorporate any mirrors or large areas of reflective glass. Primary vision glass will have the lowest practical level of reflectivity while still complying with statutory requirements for energy usage.
- The façade design incorporates significant amounts of solid panel frames with angled profiles which provide contrast and shadow. Textured solid panels are incorporated within the façade which create additional contrast and shadow.
- The façade design incorporates recessed balconies that reduces façade uniformity and creates additional shadow and contrast.
- The glass elements of the façade incorporate significant amounts of metal sub frames which provide contrast and reduce uniformity of glass elements.
- Lighting design is at a formative level and will adhere to required mitigation measures.

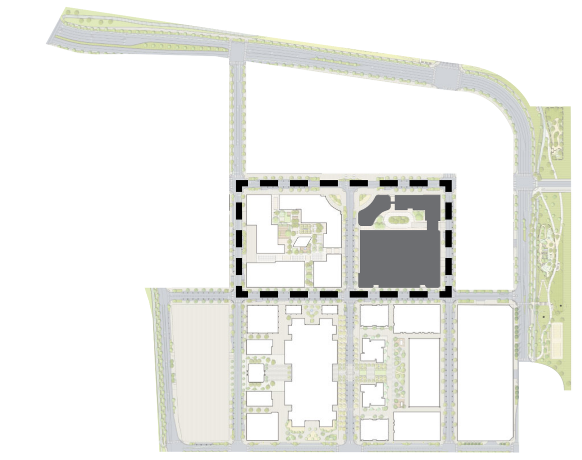
Landscaping design and the incorporation of trees is integrated into the building design to mitigate excessive reflectivity and uniformity of the facade design.

Block 4D Retail / F&B

- Storefront type glazing systems are captured within channel-profiled frames which provide contrast, depth, and shadow.
- The façade design incorporates solid masonry panels which provide additional contrast and shadow.
- The glass elements of the façade incorporate significant amounts of metal sub frames which provide contrast and reduce uniformity of glass elements.
- The Retail façades may incorporate canopies which add shadow and reduce the amount of continuous glass areas.

BLOCK 4D—PRELIMINARY

Bird Safe Design Approach



BLOCK 4D – MORRIS ADJMI (DESIGN ARCHITECT)

In compliance with the MMRP, and in accordance with recognized good practice, the specific bird safety standards shall be based on the following bird-friendly building principles, to the extent applicable to the particular development area:

- Reduce mirrors and large areas of reflective glass.
- Avoid transparent glass skyways, walkways, or entryways, freestanding
glass walls, and minimize transparent building comers, or utilize glazing treatments to mitigate the hazard.
- Minimize funneling of open space toward a building facade.
- Strategically place landscaping to reduce reflection and views of foliage inside or through glass.
- Reduce potential light and glare by implementing Mitigation
- Measures AES-2.1 (requiring low-profile, low-intensity lighting directed downward), AES-2.2 (requiring shielded fixtures for outdoor lighting), and AES-2.3 (requiring low- emissivity reflective coating on exterior glass surfaces).
- To the extent consistent with the normal and expected operations of the uses planned for the particular development area, take appropriate measures to avoid use of unnecessary lighting at night, especially during bird migration season (February-May and August-November) through the installation of motion sensor lighting, automatic lighting shut-off mechanisms, or other effective measures to the extent feasible.
- The specific bird safety standards shall also provide for a monitoring program, and placing signs around the buildings

Residential Block 4D

- The building design does not incorporate any mirrors or large areas of reflective glass. Primary vision glass will have the lowest practical level of reflectivity while still complying with statutory requirement for energy usage.
- The glass elements of the façade incorporate significant amounts of metal sub frames which provide contrast and reduce uniformity of glass elements.
- The massing of the building is broken down into different volumes with changes in plane which creates contrast, depth, and shadow.
- The lower levels of the building frame glazed areas in a brick frame which creates contrast and shadow.
- The upper floor façade design incorporates significant amounts of vertical solids panels which provide contrast and shadow.
- Retail includes non reflective openable and non-openable storefront type glazing systems framed in brick and stone that contrast with the glass as a mitigation measure.
- Lighting design is at a formative level and will adhere to required mitigation measures.
- Landscaping design is integrated into the building design to mitigate excessive reflectivity and uniformity of the facade design.