

PORTFOLIO OF RUOXI CAO



Ruoxi Cao
M.LA , SITES AP, LEED GA

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PROPOSED LANDFORMS MODEL

Software AutoCAD, Photoshop, Illustrator, InDesign, ArcGIS, Rhino

CLOSING THE GAP

Boyle Heights is a high-density neighborhood of low income and education in Los Angeles. Residents and officials stated that Boyle Heights lack of park spaces. There are existing **opens spaces gap**. My design intention possibly address this issue through landscape design to help young generation to be more involved in bright future. My proposed plan close the gap by introducing parks, commercials, **connections to the LA River** to the site to help active the community and provide places for community gathering and increasing the connection to the world.

Type Public Realm
Academic

Location Los Angeles, CA, USA

Duration 03/2016 - 05/2016

Area Size Neighborhood-6.52 square miles

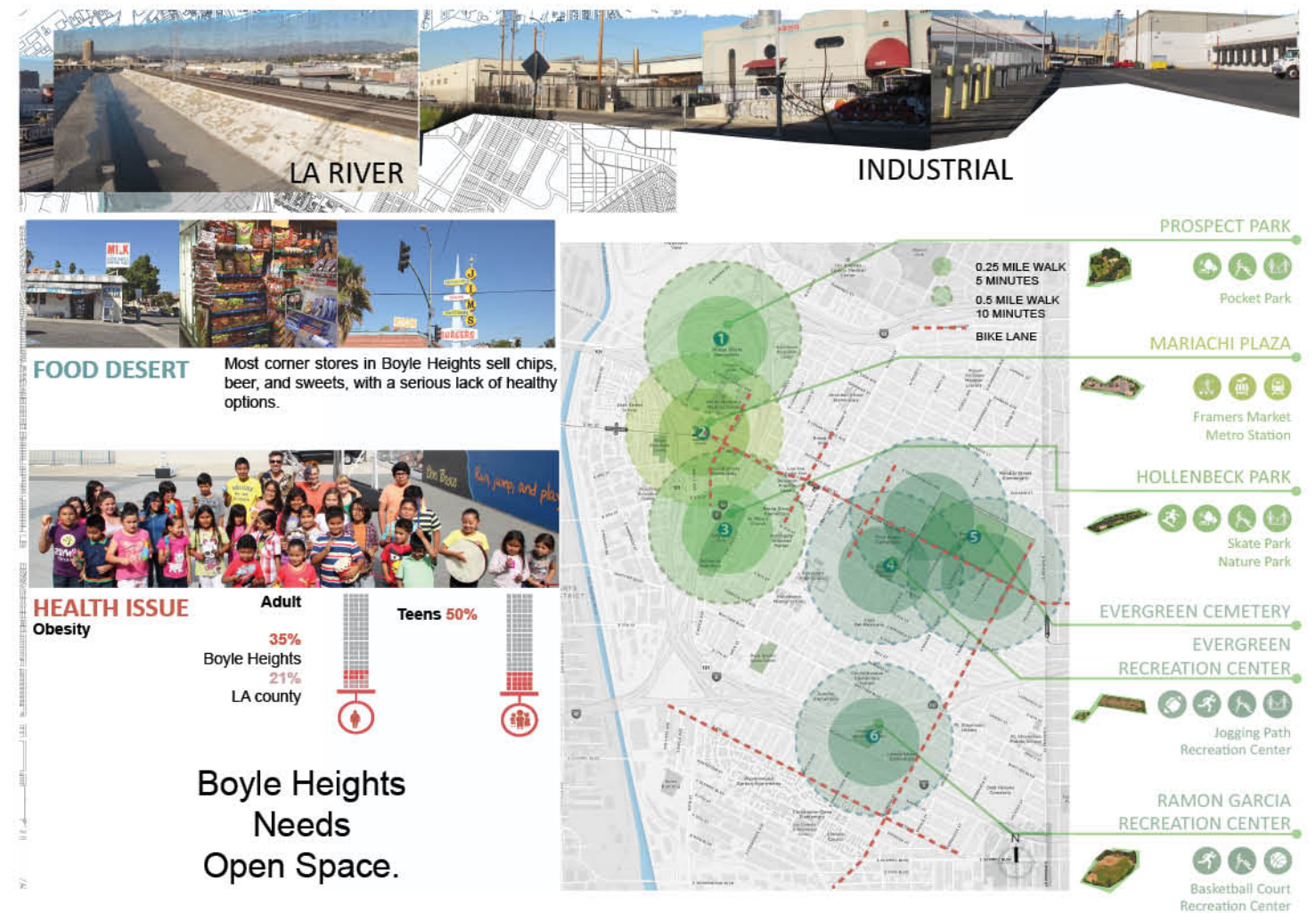
Enlarged Site - 180 Acre

Instructor Gerdo Aquino, Ying-Yu Hung, Gabe Mason

PORTFOLIO OF RUOXI CAO

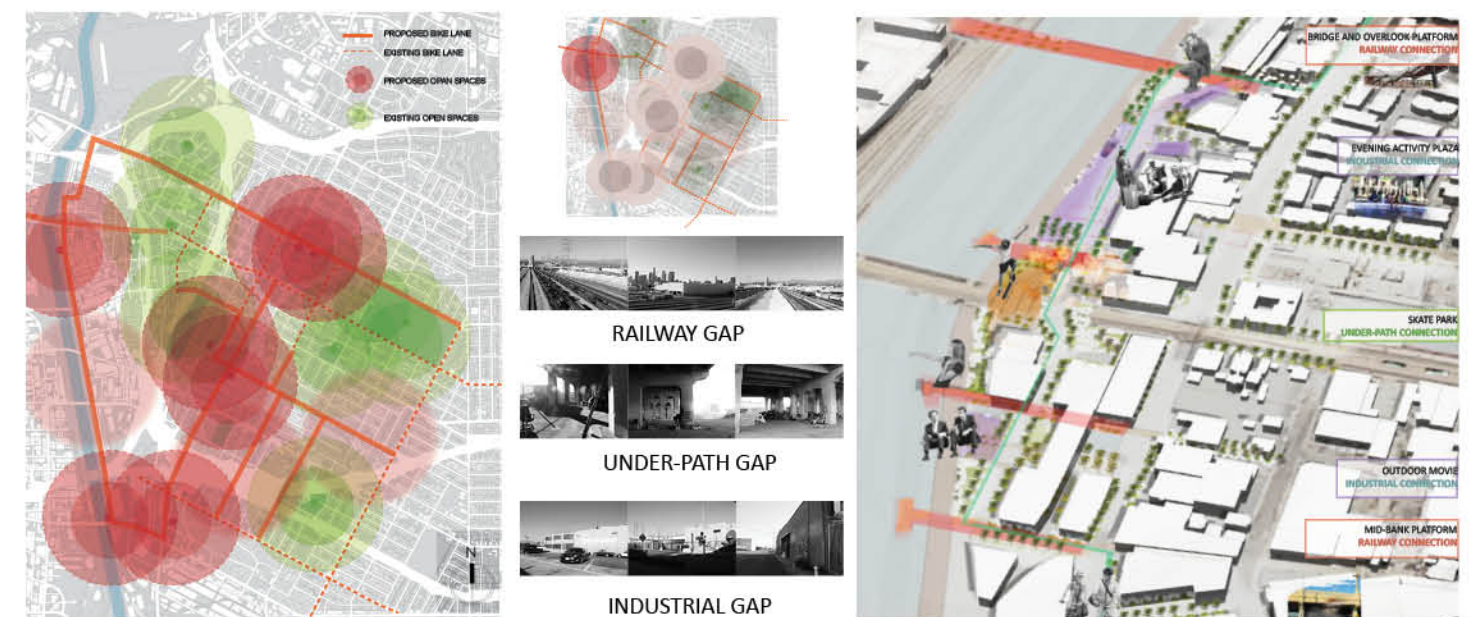
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ANALYSIS



BOYLE HEIGHTS NEIGHBORHOOD

NEIGHBORHOOD STRATEGY



PROPOSED OPEN SPACE NETWORK

PROPOSED SITE PLAN

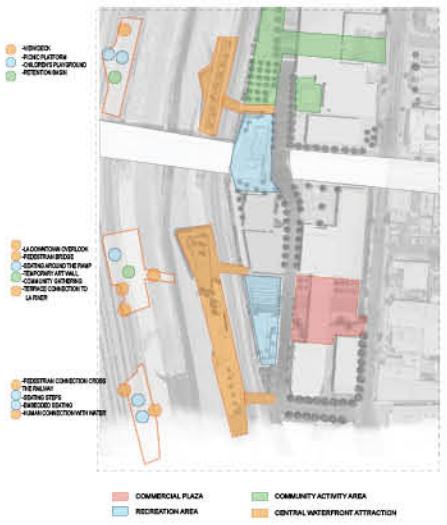
PORTFOLIO OF RUOXI CAO

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ENLARGED PLAN



GRADING PLAN



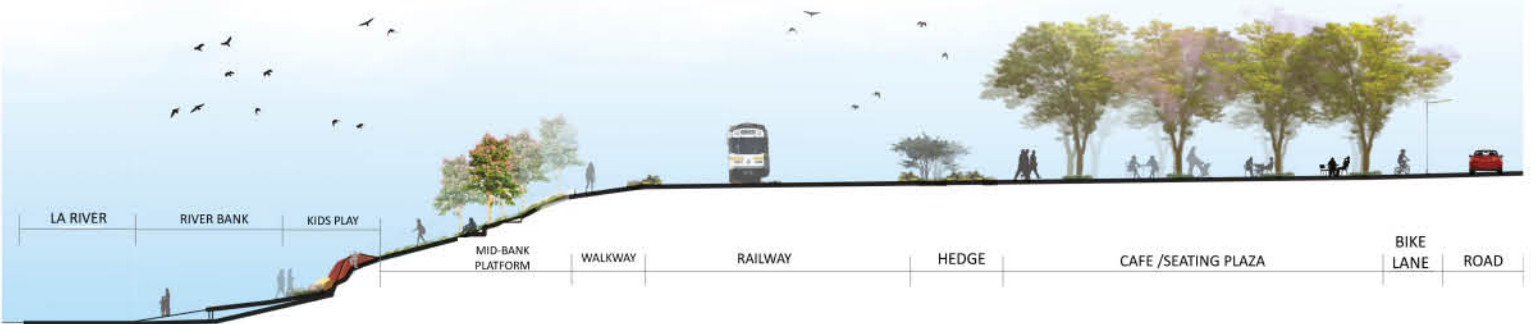
PROGRAM PLAN



PROPOSED STREET PARK



STREET AMENITIES



A-A' SECTION

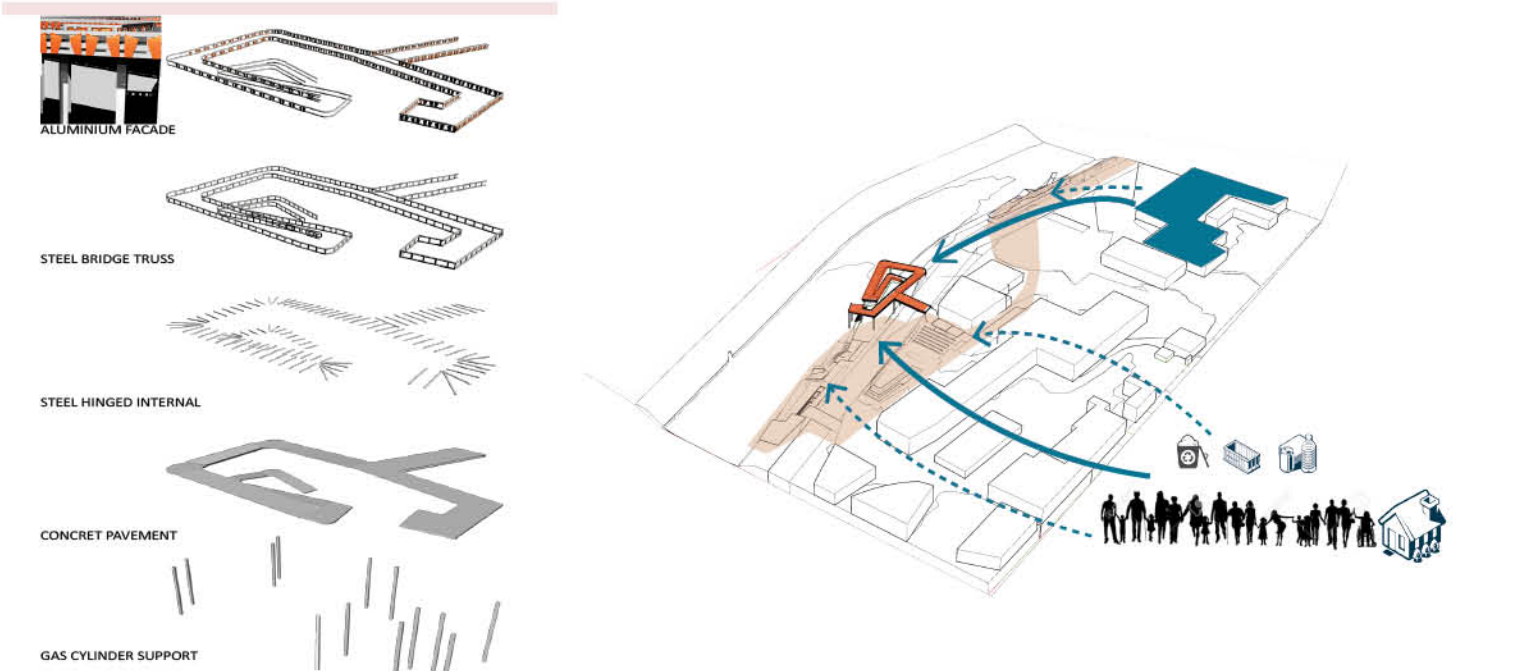
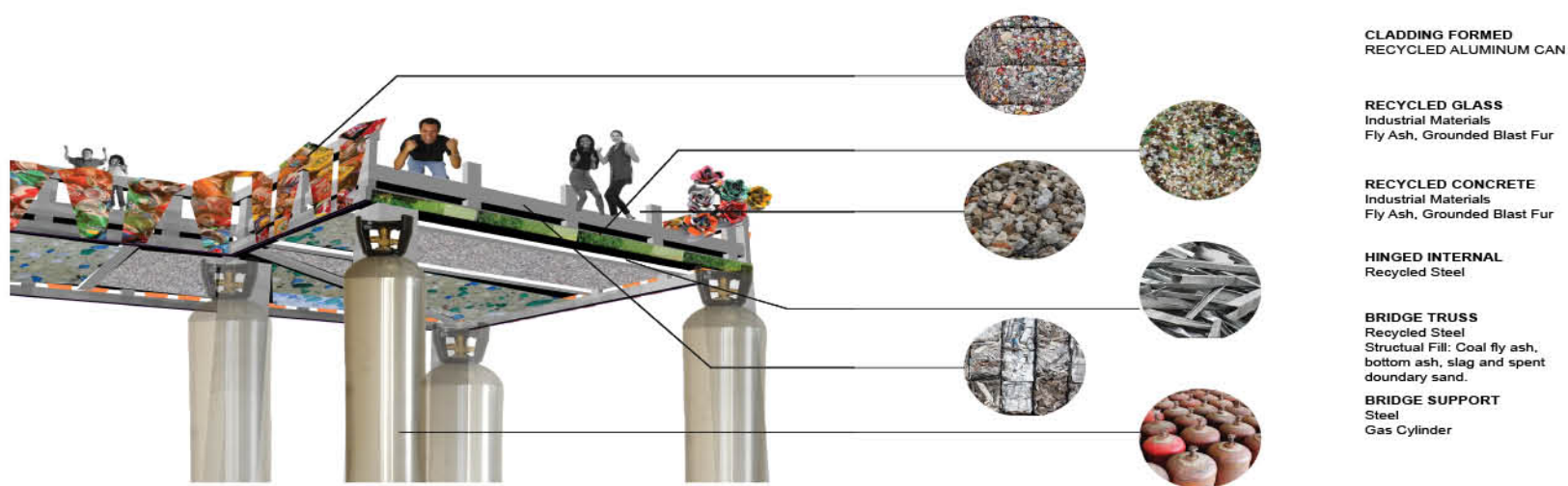


LA RIVER WATERFRONT

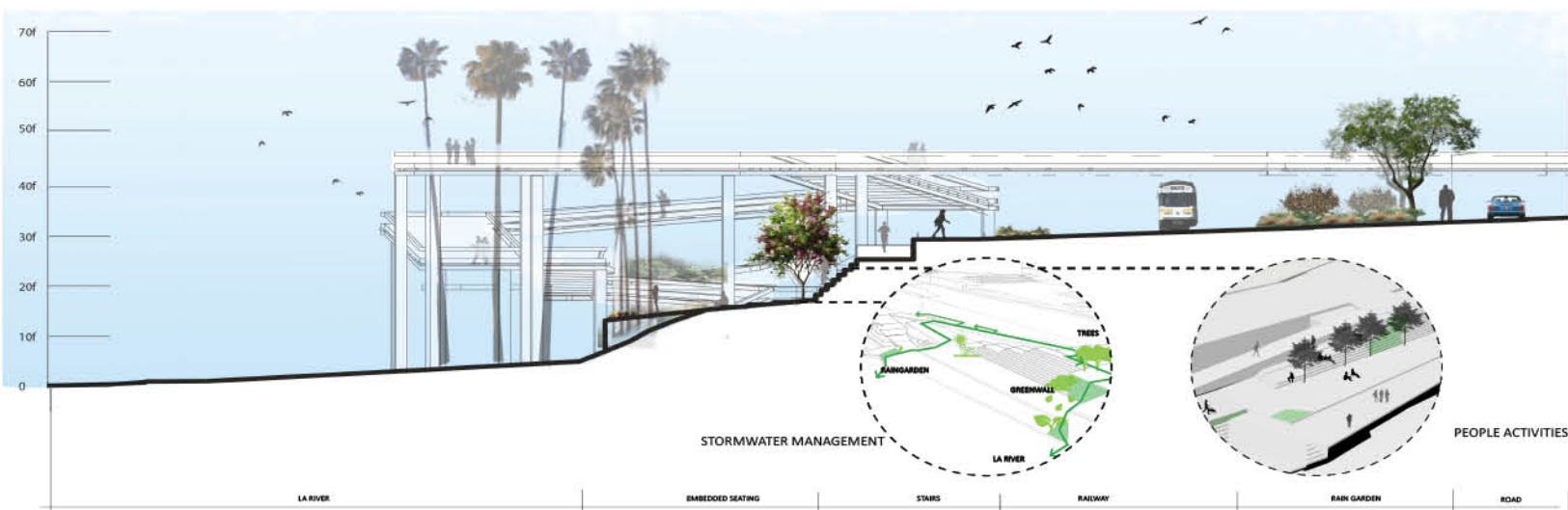


AMPHITHEATER NIGHT VIEW

DETAILED DESIGN

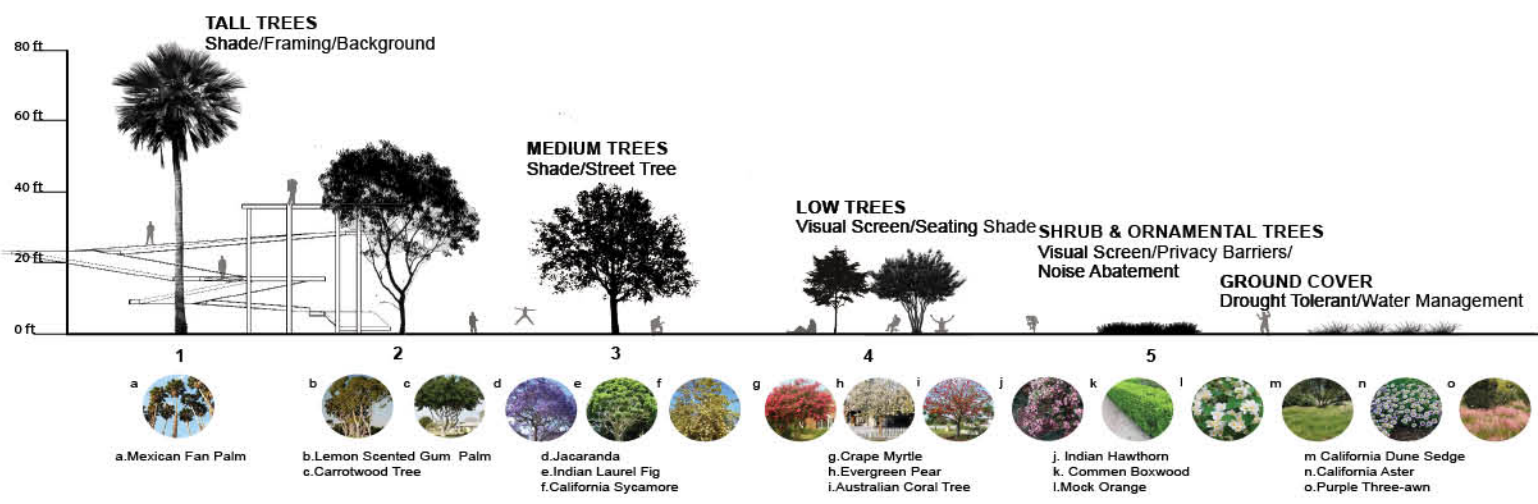


SECTION



B-B' SECTION

PLANTING DESIGN

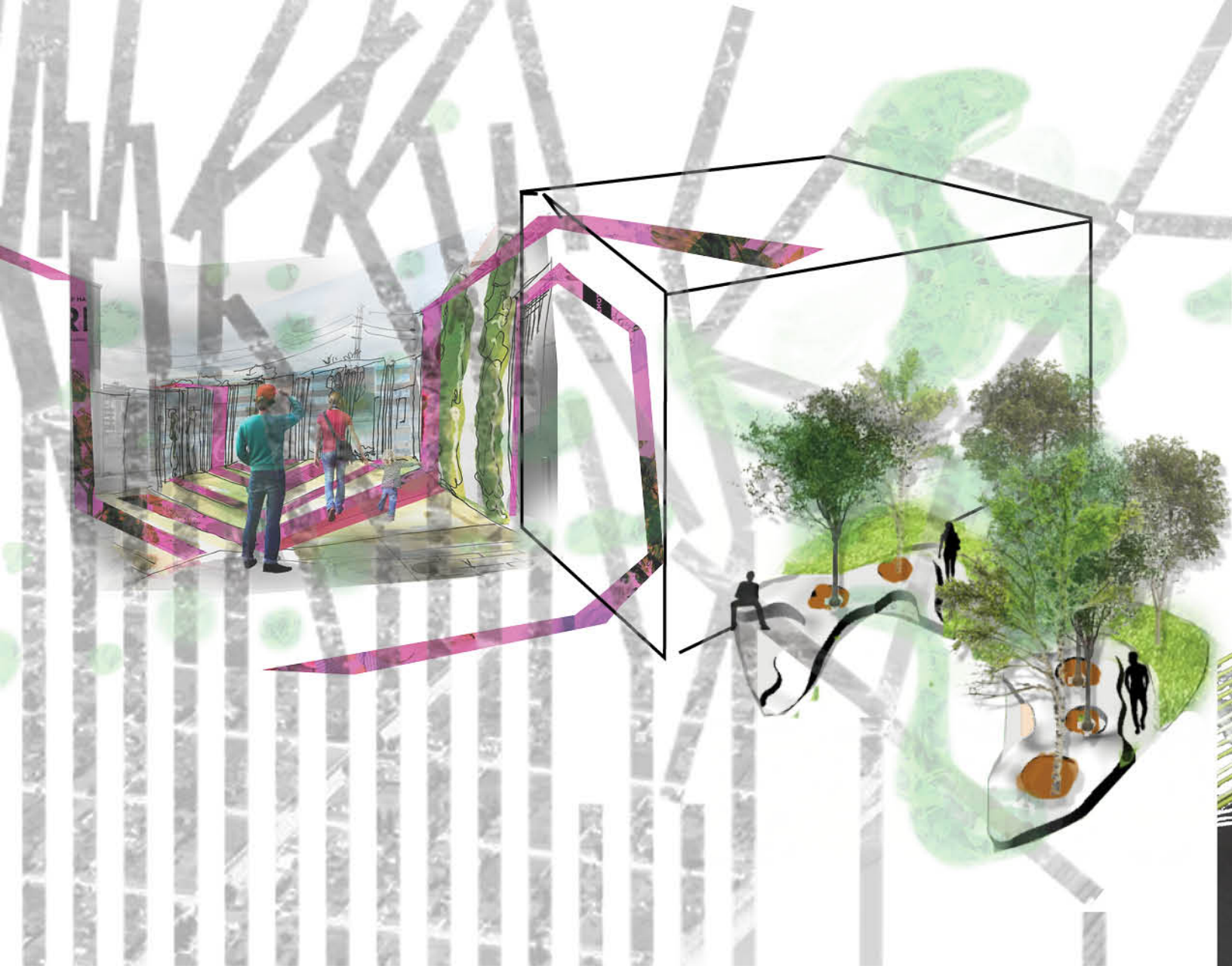


PERSPECTIVE



PLATFORM STAGE





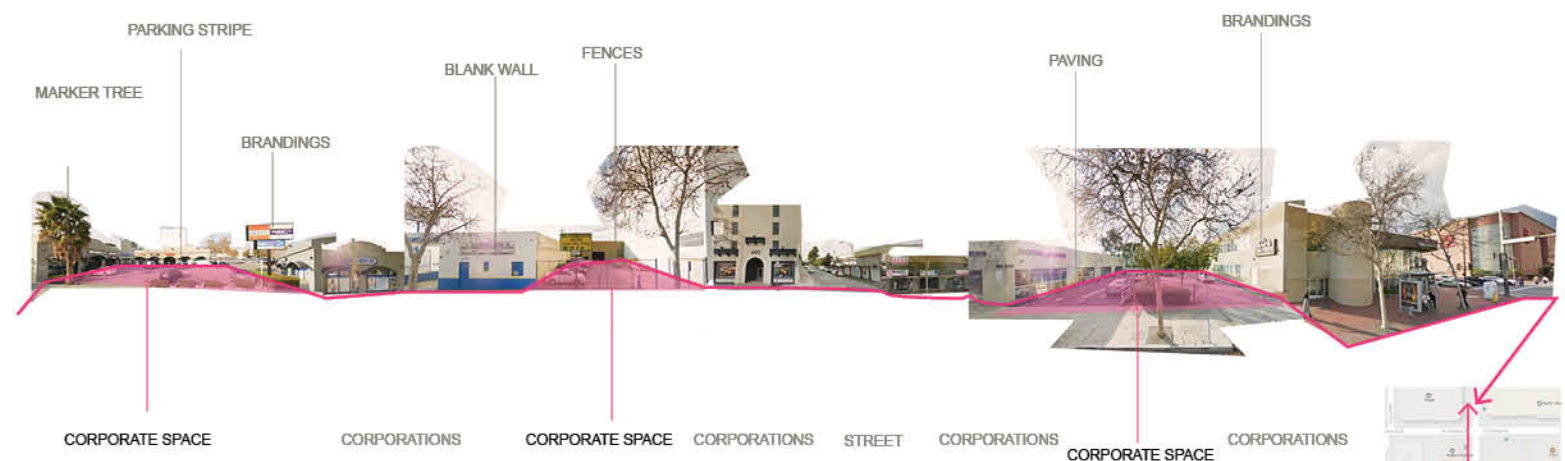
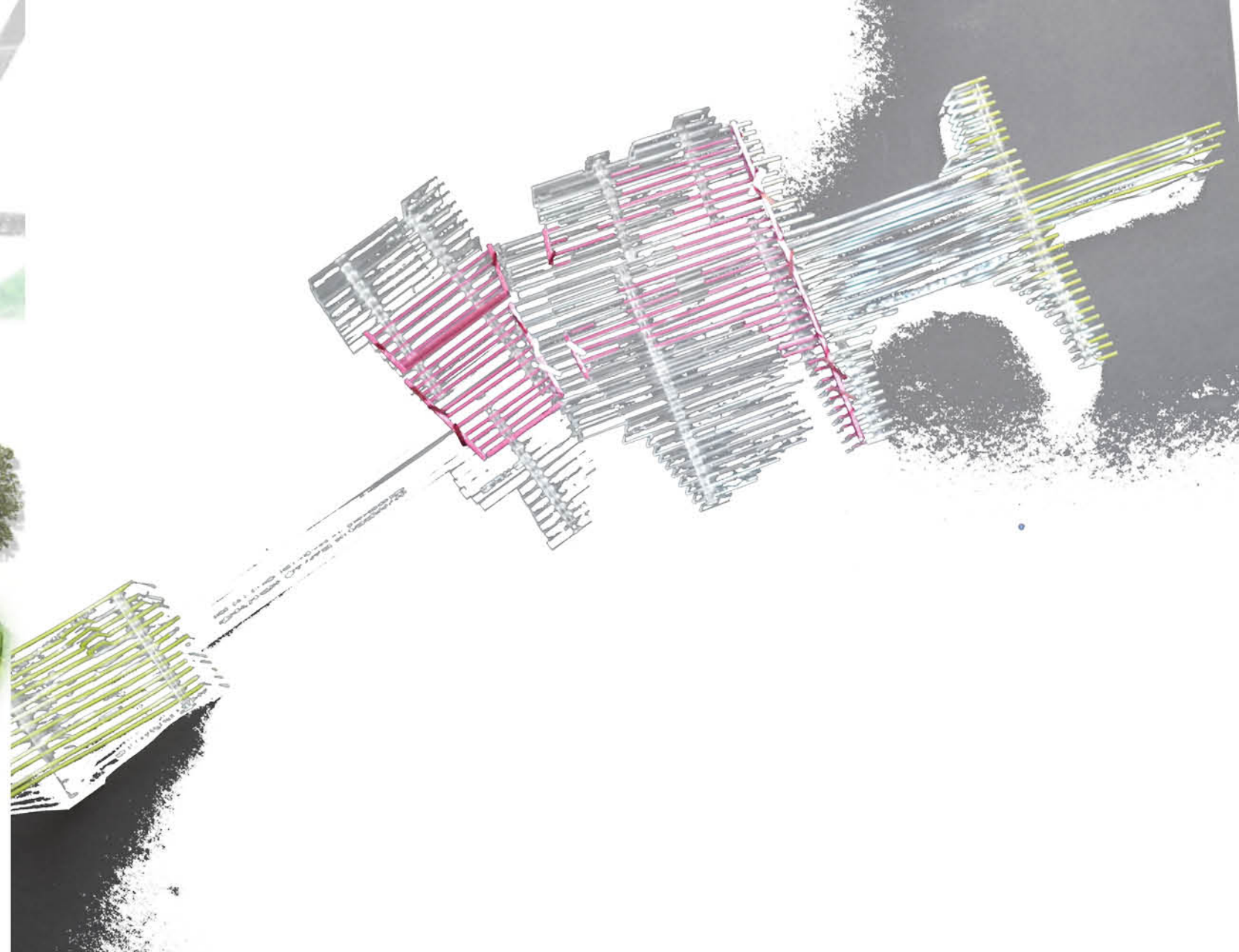
PROPOSED PLAN

Software AutoCAD, Photoshop, Illustrator, InDesign, ArcGIS, Rhino

THE CORPORATE CONNECTION: IN SEARCH OF A BUSINESS-LIKE BEAUTY

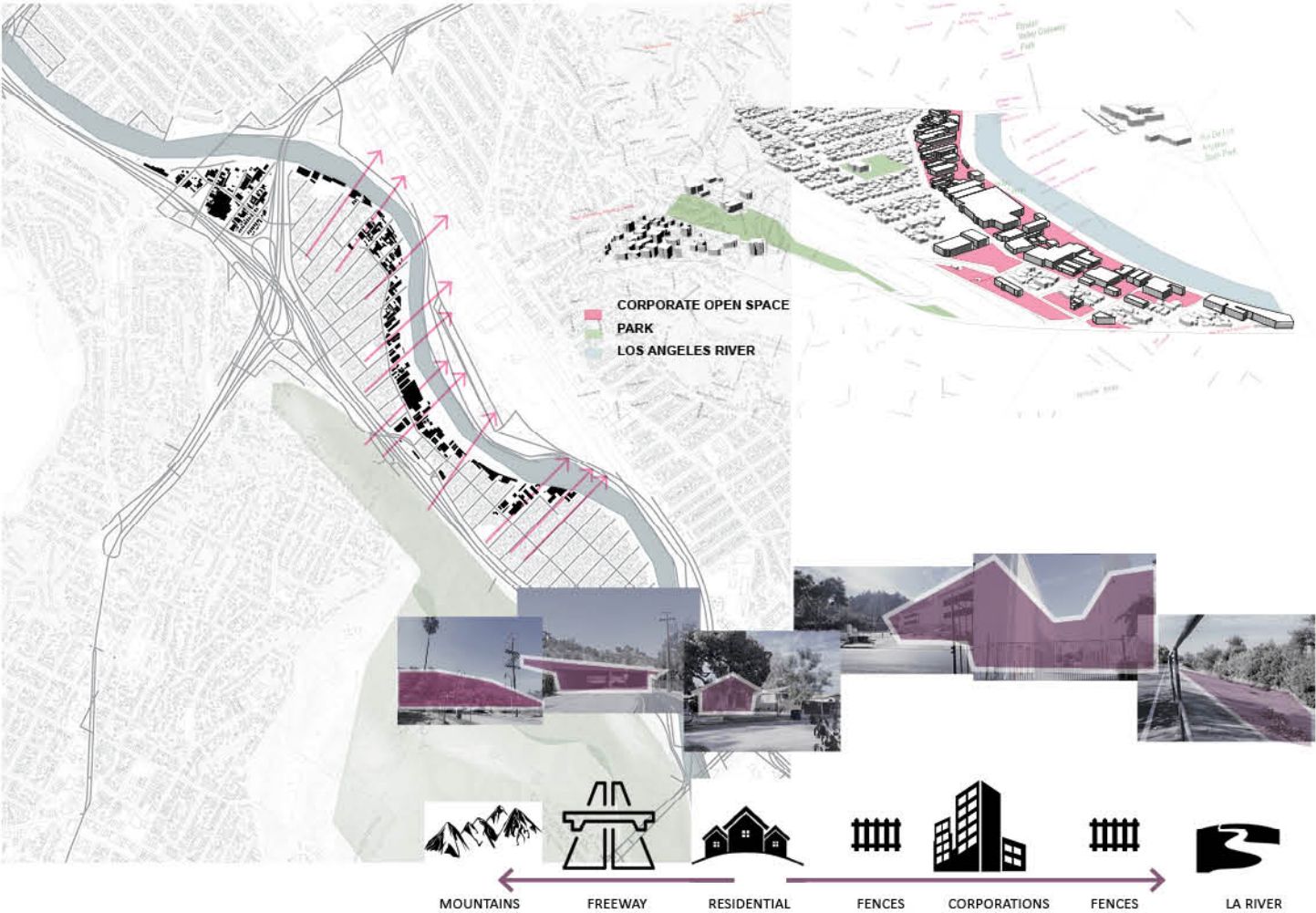
Vernacular corporate landscapes are open spaces in private ownership which were not professionally-designed but were laid down for basic practical, aesthetic and company identity purposes by the people who own and maintain them. Through understanding their basic logics, we can adopt their 'common' ideas in a more self-conscious and intelligently designed way.

Type Thesis
Academic
Location Los Angeles, CA, USA
Duration 08/2016 - 05/2017
Instructor Peter Culley



Location :91203, Los Angeles, CA
Source: Google Maps. <https://www.google.com/maps/>

INTERROGATING THE CORPORATE BELT IN FROGTOWN



FUTURE FROGTOWN

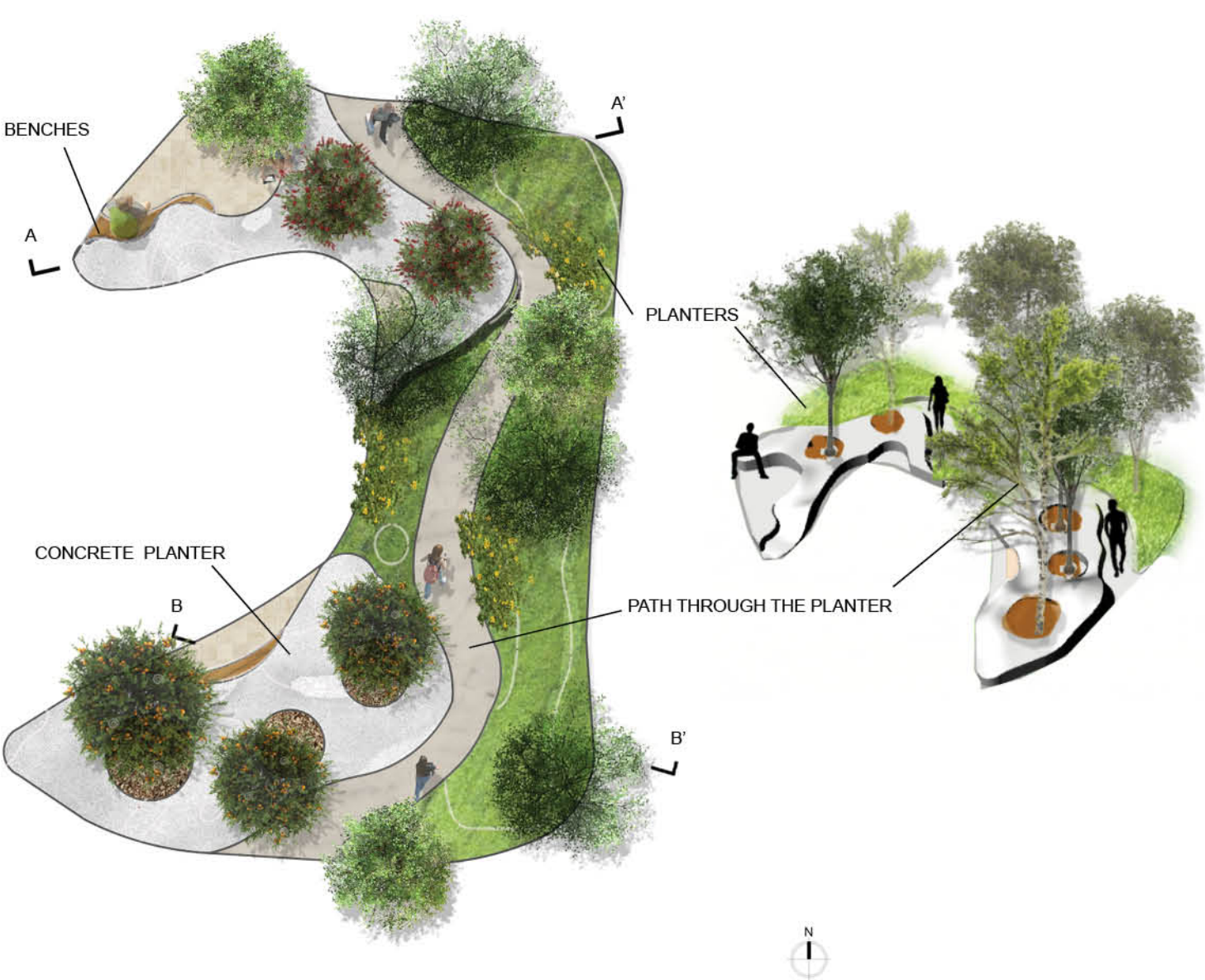


WARNINGS



GRAYWATER FOR CO-ACTIVITY

PLANTER DESIGN



PLANTER SITE PLAN



A- A' SECTION

B- B' SECTION



SITE RENDERING

Software Revit, Lumion, Enscape, AutoCAD, Landfx, Photoshop, InDesign

JCNI PARCEL 7 DEVELOPMENT

JCNI Parcel 7 is a 99 unit 4-story multifamily housing. The composition and finishes of the building façade work in tandem with the landscape design to create an integrated, high-performance, and welcoming environment for the residents. Landscape design connects the interior living spaces with the surrounding urban fabric through the use of integrated bioretention gardens, public and private gathering areas, shaded seating, ADA accessibility, and public amenities such as community gardens, dog park, and communal tables. The unusual site conditions have created the opportunity for a multi-level and landscape that will demonstrate best practice in the provision of social spaces and environmental sustainability.

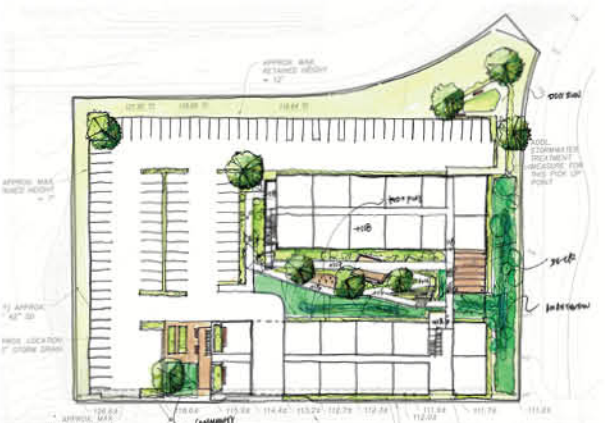
Type Residential
Professional
Location San Diego, CA, USA
Duration 03/2016 - On going
Area Size 26,400 sqft
Company BNIM Architects

Design Process:
Schematic Design
Conceptual Design
Construction Documents
Cost Estimate
Site Modeling
Site Rendering

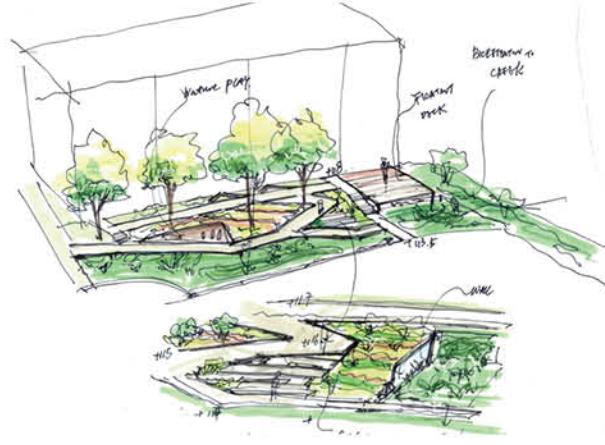
SCHEMATIC DESIGN



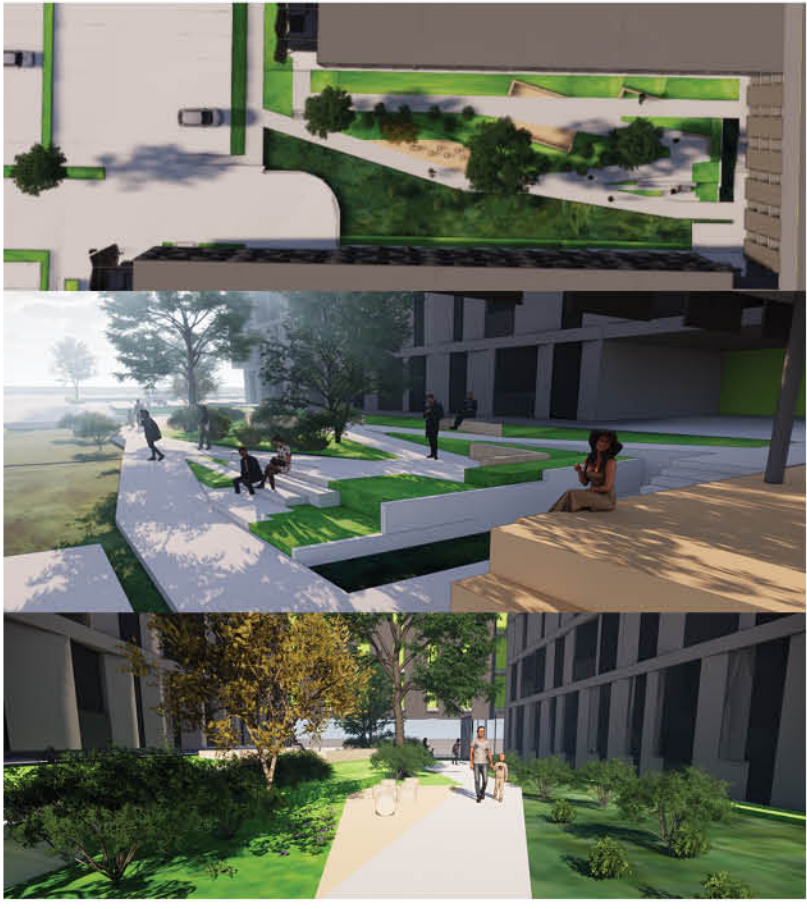
DESIGN PROCESS



GRADING PLAN

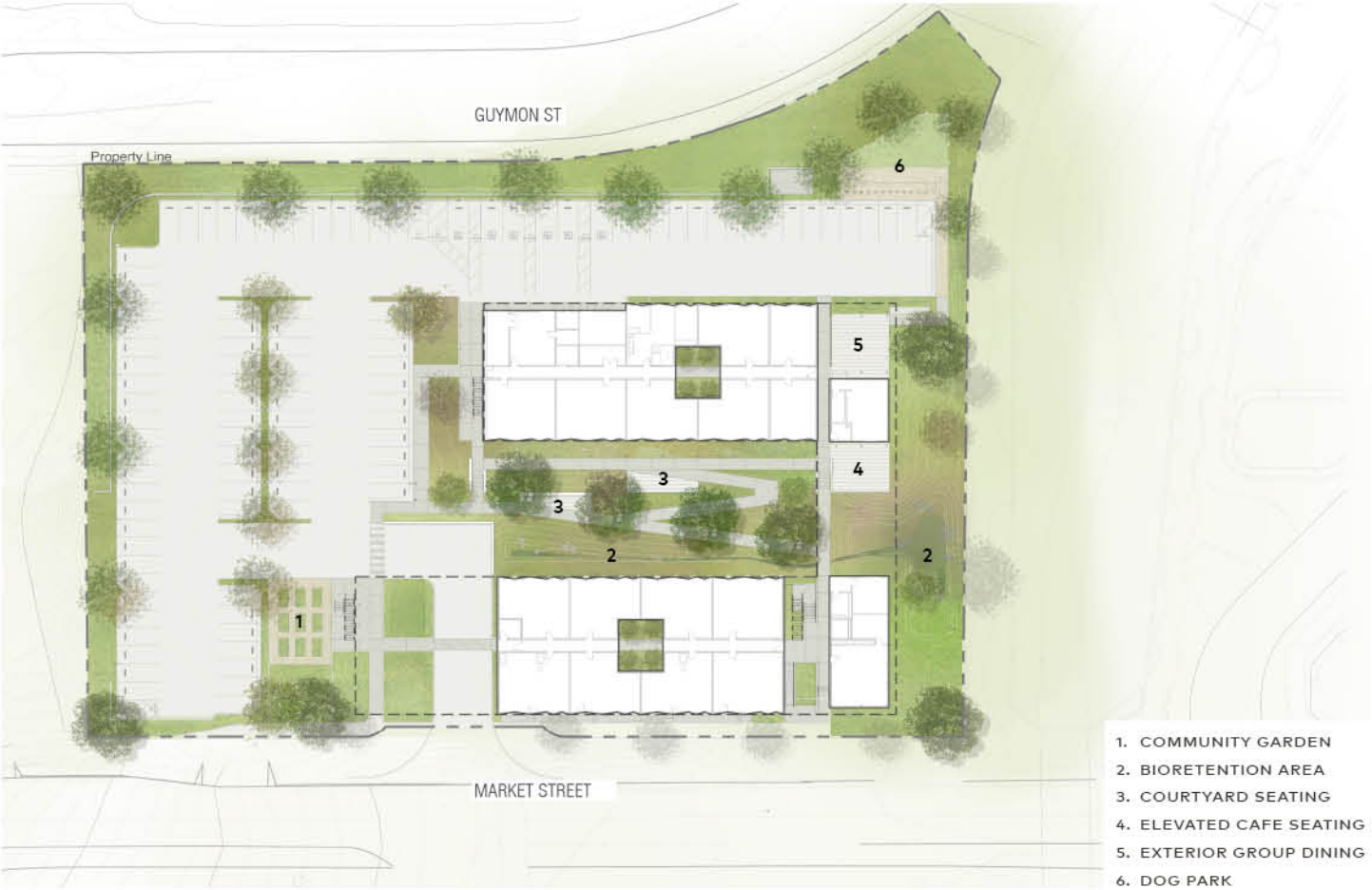


SKETCHES



MODELS

SITE PLAN

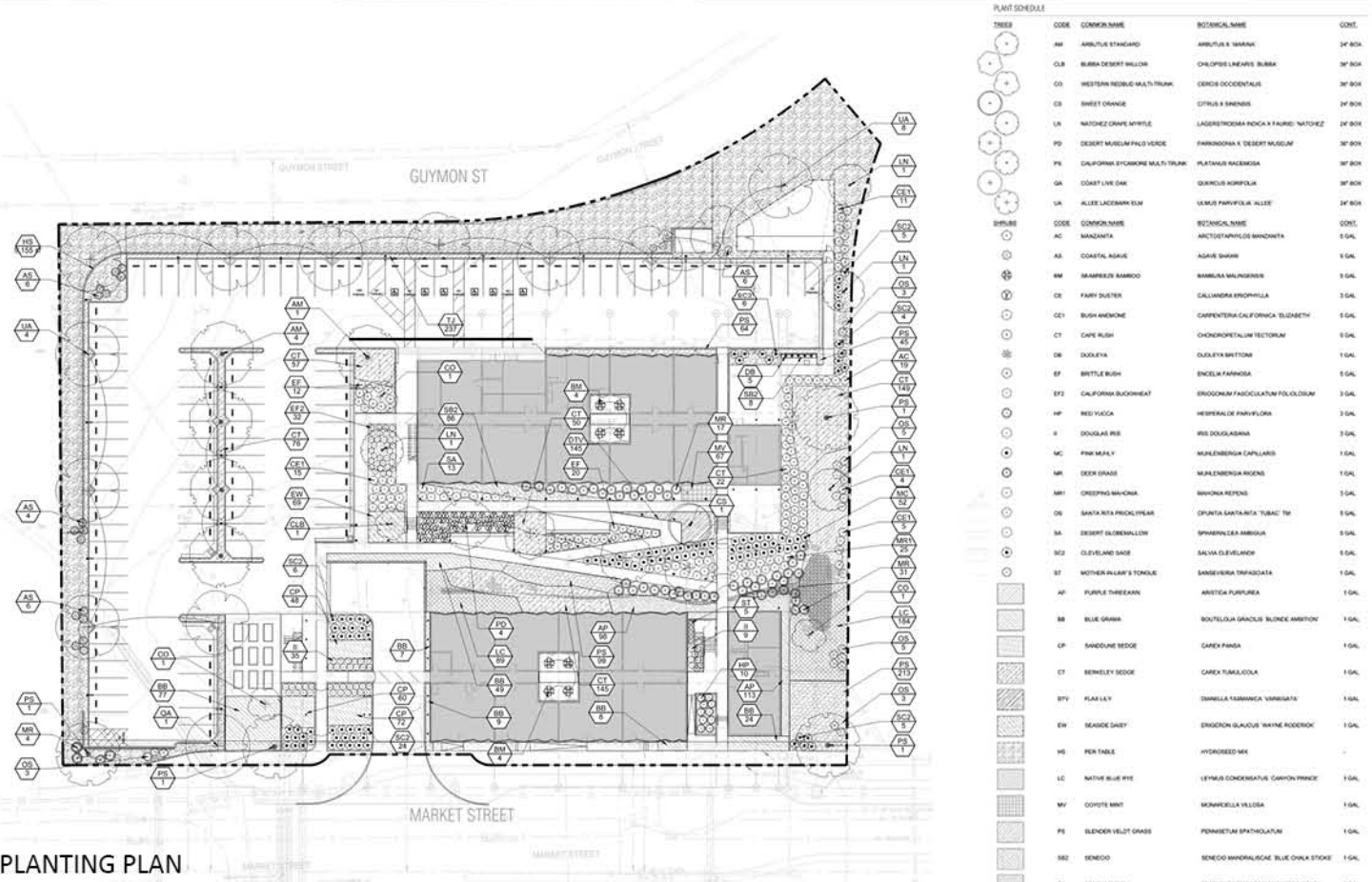


LIGHTING STUDIES



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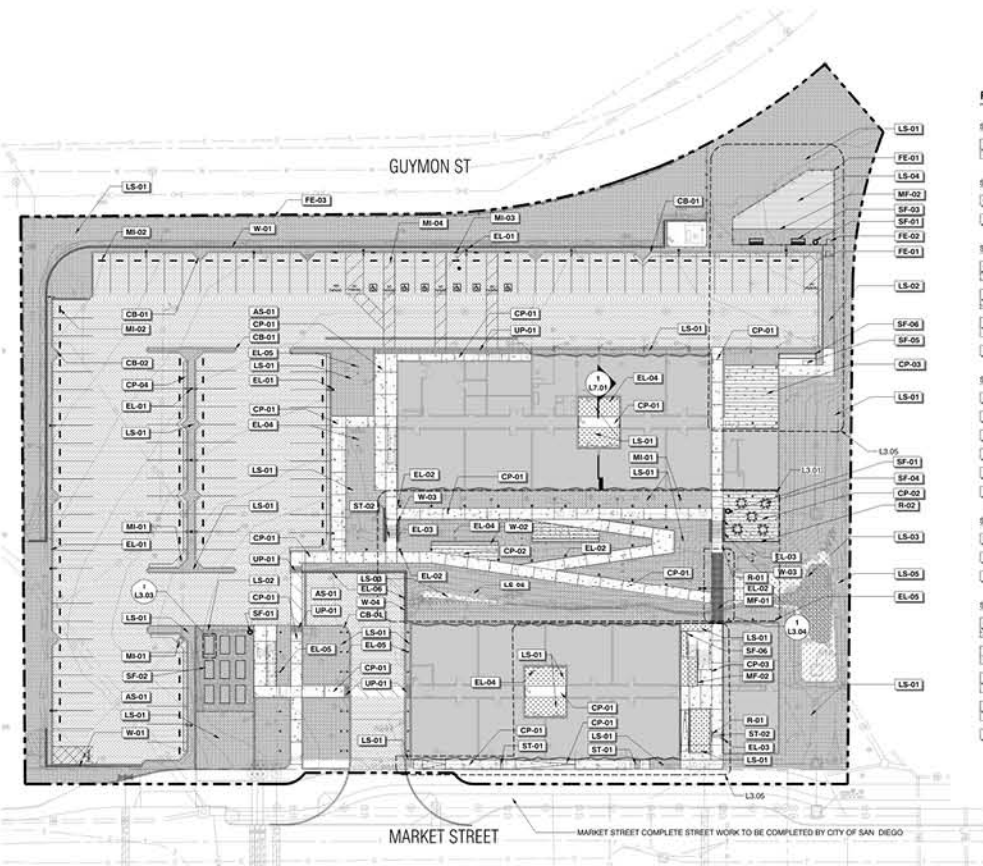
PLANTING DESIGN



PLANTING PLAN

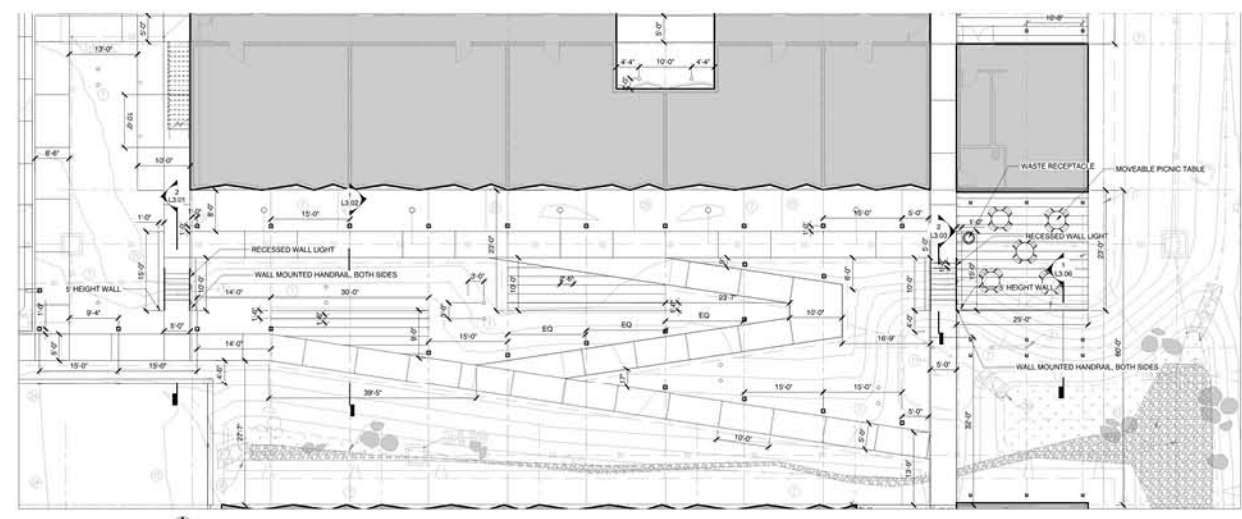
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CONSTRUCTION PLAN AND DETAILS

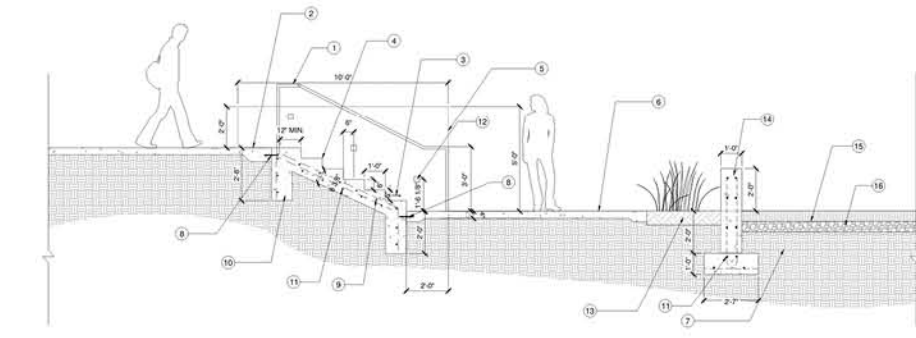


REFERENCE NOTES SCHEDULE

SYMBOL		ARTIFICIAL SURFACE DESCRIPTION	SYMBOL		METAL FABRICATION DESCRIPTION
AS-01	ASPHALT PAVING - TYPE 1		MF-01	BRIDGE	
CB-01	CURB DESCRIPTION		MF-02	STEEL EDGING	
CB-02	VEHICULAR CURB		MF-03	MISCELLANEOUS DESCRIPTION	
CB-03	LANDSCAPE CURB		MF-04	AREA DRAIN INLET	
CP-01	CONCRETE PAVING - TYPE 1		MF-05	WHEEL STOP	
CP-02	CONCRETE PAVING - TYPE 2		MF-06	ADA SIGNAGE	
CP-03	CONCRETE PAVING - TYPE 3		MF-07	PARKING LOT STRIPE	
CP-04	CONCRETE GUTTER		MF-08	RAILING DESCRIPTION	
EL-01	SITE LIGHTING DESCRIPTION		R-01	HANDRAIL	
EL-02	POLE MOUNTED LUMINAIRE - TYPE 1		R-02	GUARDRAIL	
EL-03	BOLLARD LUMINAIRE - TYPE 1		SF-01	WASTE RECEPTACLE	
EL-04	RECESSED WALL LIGHT		SF-02	COMMUNITY GARDEN PLANTERS	
EL-05	FLOOR LUMINAIRE - TYPE 1		SF-03	BENCH - TYPE 1	
EL-06	WALL LIGHT - TYPE 2		SF-04	TABLE - TYPE 1	
FE-01	FENCING DESCRIPTION		SF-05	BBQ GRILL	
FE-02	DOG PARK SECURITY FENCE		SF-06	CONCRETE PLANTER	
FE-03	SECURITY FENCING GATE		ST-01	STAIR - TYPE 1	
FE-04	SECURITY FENCE		ST-02	STAIR - TYPE 2	
LS-01	LANDSCAPE DESCRIPTION		UP-01	UNIT PAVING DESCRIPTION	
LS-02	PLANTING AREA		UP-02	TRUNCATED DOME PAVERS	
LS-03	STABILIZED DECOMPOSED GRANITE		W-01	WALL DESCRIPTION	
LS-04	BIORETENTION PLANTING AREA		W-02	RETAINING WALL - TYPE 1	
LS-05	SYNTHETIC TURF		W-03	SEAT WALL - TYPE 1	
LS-06	LANDSCAPE BOULDER		W-04	CONCRETE WALLS	

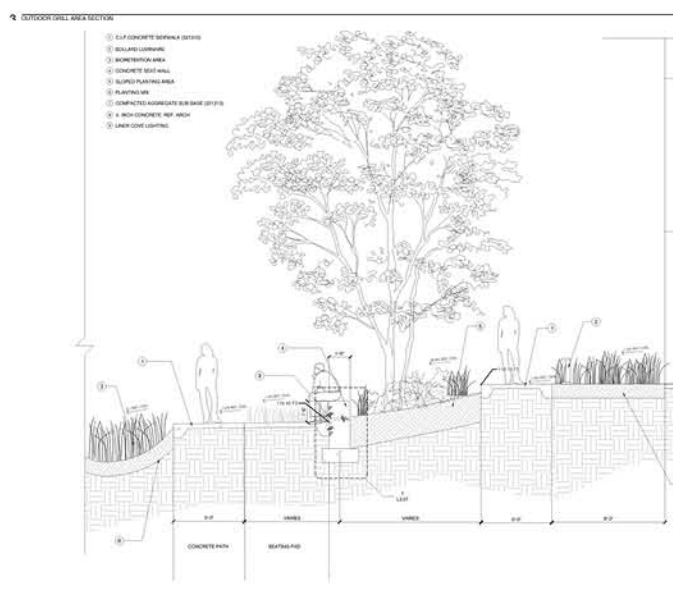
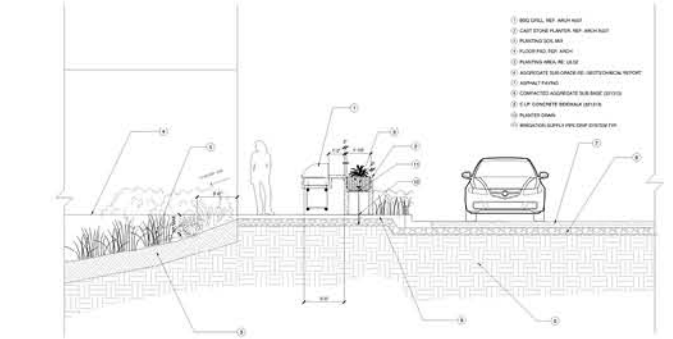


1 CONSTRUCTION PLAN

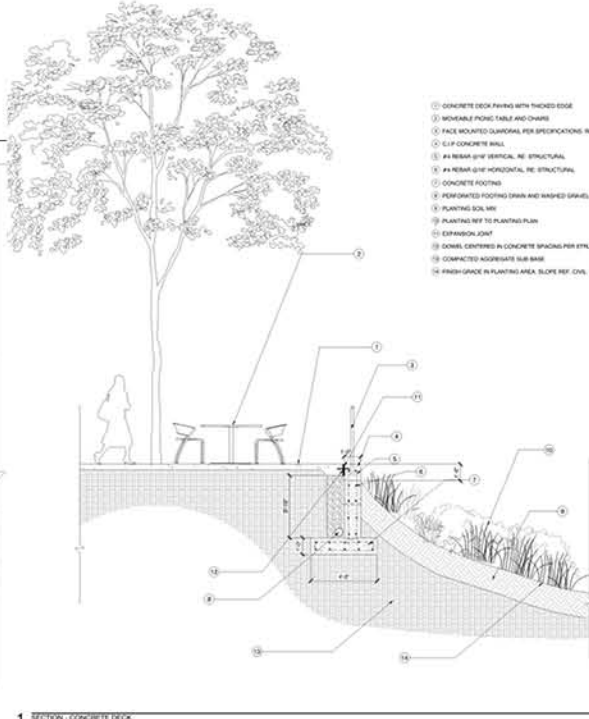


2 SECTION - CONCRETE STAIR TO NORTH BUILDING

- 1 GALVANIZED STEEL HANDRAIL, 1 1/2" DIA. EMBOSSED RE. STRUCTURAL FOR CONCRETE FOOTING AND REINFORCEMENT HANDRAILS SHALL NOT ROTATE IN THEIR FITTINGS
- 2 THICKENED EDGE TYP.
- 3 PROVIDE POSITIVE DRAINAGE TYP.
- 4 1/4" RADIUS @ STAIR NOSINGS / 1/2" HIGH BATTER TYP. CONTRASTING STRIPS SHALL MATCH ARCHITECTURAL STAIRS
- 5 C.I.P. CONCRETE WALL BEYOND
- 6 C.I.P. CONCRETE SIDEWALK (231313)
- 7 COMPACTED AGGREGATE SUB BASE (231313)
- 8 #4 DOWELS @ 12" O.C. (231313)
- 9 C.I.P. REINFORCED CONCRETE STAIR (231313)
- 10 C.I.P. REINFORCED CONCRETE STAIR FOOTING (231313)
- 11 #4 DOWELS @ 12" O.C.
- 12 RECESSED WALL LIGHT
- 13 PLANTING MIX
- 14 CONCRETE WALL
- 15 ASPHALT PAVING
- 16 AGGREGATE SUB GRADE RE. GEOTECHNICAL REPORT

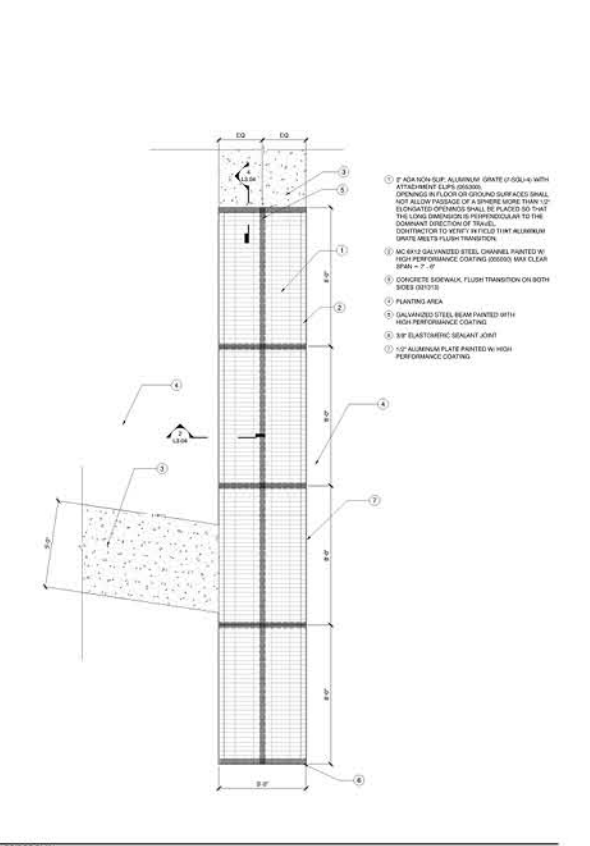


SECTION COURTYARD SEAT WALL

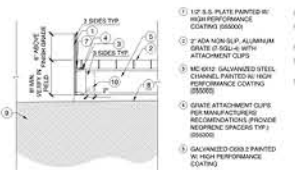


1 SECTION - CONCRETE DECK

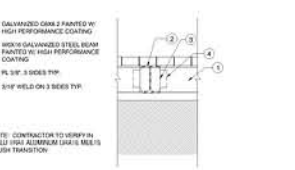
- 1 CONCRETE DECK PAVING WITH THICK EDGE
- 2 MOVABLE PAVING TABLE AND CHAIRS
- 3 FACE MOUNTED LUMINAIRE PER SPECIFICATIONS RE. IRI
- 4 C.I.P. CONCRETE WALL
- 5 #4 REBAR @ 12" VERTICAL RE. STRUCTURAL
- 6 #4 REBAR @ 12" HORIZONTAL RE. STRUCTURAL
- 7 PLANTING MIX
- 8 PLANTING REF. TO PLANTING PLAN
- 9 DRAINAGE JOINT
- 10 DRAIN COMPRISED IN CONCRETE SPACING PER SPECIFIM
- 11 COMPACTED AGGREGATE SUB BASE
- 12 FRESH GRADE IN PLANTING AREA SLOPE REF. CIVIL PROV.



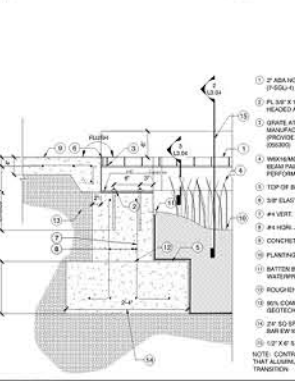
1 METAL BRIDGE PLAN



2 BRIDGE SECTION A

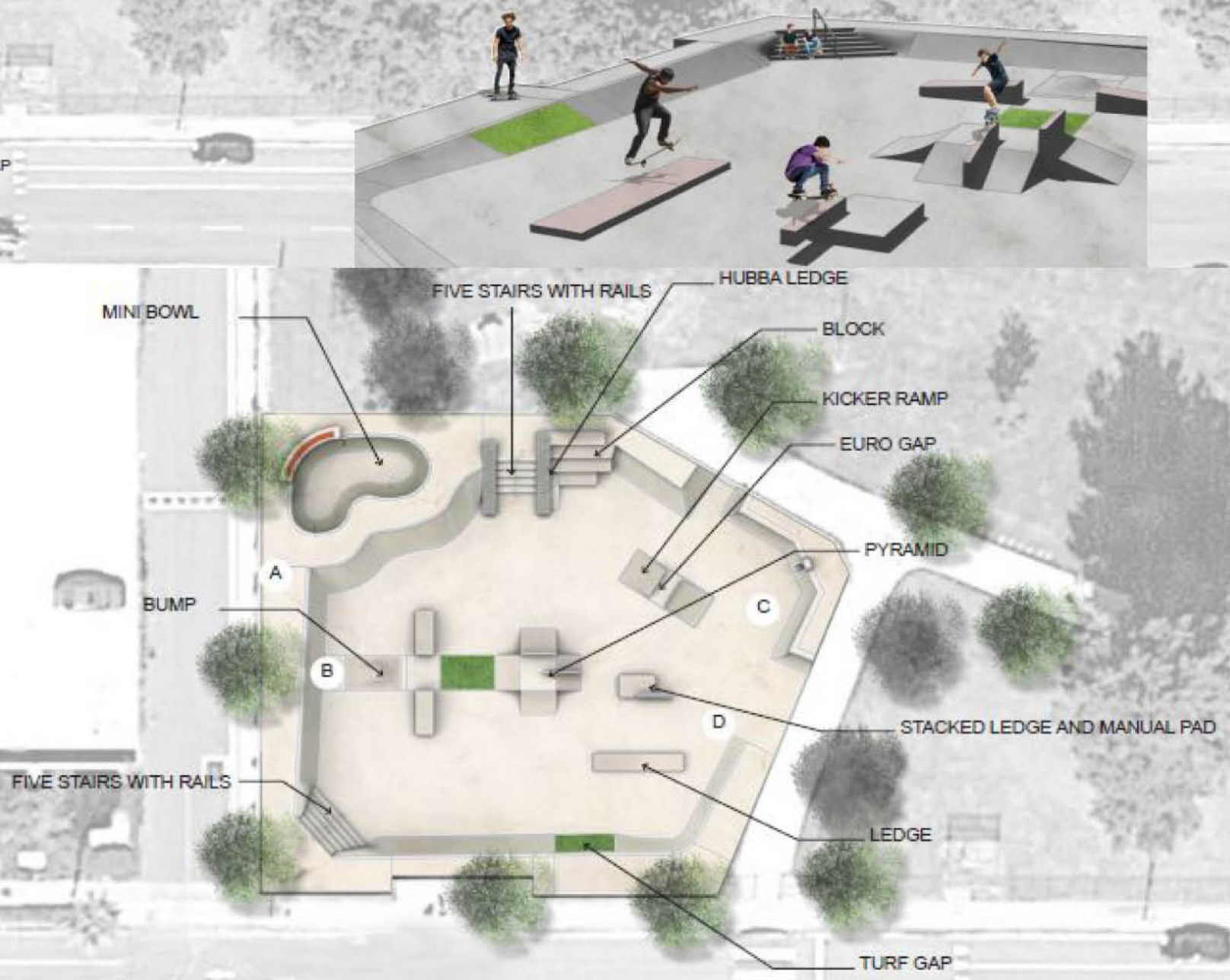


3 BRIDGE SECTION B



4 BRIDGE SECTION C

- 1 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING (230000)
- 2 #4 ADA NON-SLIP ALUMINUM GRATE @ 30"x30" WITH ATTACHMENT CLIPS
- 3 MC-6012 GALVANIZED STEEL CHANNEL PAINTED W/ HIGH PERFORMANCE COATING
- 4 GRATE ATTACHMENT CLIPS PER MANUFACTURER'S RECOMMENDATIONS PROVIDE NEOPRENE SPACERS TYP. (230000)
- 5 GALVANIZED CHANNEL PAINTED W/ HIGH PERFORMANCE COATING
- 6 FACE OF CONCRETE WALL
- 7 3/8" ELASTOMERIC SEALANT JOINT
- 8 FINISH GRADE
- 9 COMPACTED SUB GRADE PER GEOTECHNICAL REPORT
- 10 3/4" WELD ON 3 SIDES TYP. (230000)
- 11 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 12 MC-6012 GALVANIZED STEEL CHANNEL PAINTED W/ HIGH PERFORMANCE COATING
- 13 CONCRETE SIDEWALK FLUSH TRANSITION ON BOTH SIDES (231313)
- 14 PLANTING AREA
- 15 GALVANIZED STEEL BEAM PAINTED WITH HIGH PERFORMANCE COATING
- 16 1/2" ALUMINUM PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 17 2" ADA NON-SLIP ALUMINUM GRATE @ 30"x30" WITH ATTACHMENT CLIPS
- 18 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 19 3/8" ELASTOMERIC SEALANT JOINT
- 20 3/4" WELD ON 3 SIDES TYP. (230000)
- 21 MAXIMUM 1/2" GALVANIZED STEEL BEAM PAINTED W/ HIGH PERFORMANCE COATING
- 22 TOP OF BRIDGE FOOTING
- 23 3/8" ELASTOMERIC SEALANT JOINT
- 24 1/4" VERT. 10" O.C. BY
- 25 #4 HOR. AT 10" O.C. BY
- 26 CONCRETE SIDEWALK (230000)
- 27 PLANTING AREA, RE. L&S
- 28 BATTERY BAR TO SECURE WATERPROOF MEMBRANE
- 29 ROUGHENED JOINT
- 30 3/8" ELASTOMERIC SEALANT JOINT
- 31 3/4" WELD ON 3 SIDES TYP. (230000)
- 32 2" ADA NON-SLIP ALUMINUM GRATE @ 30"x30" WITH ATTACHMENT CLIPS
- 33 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 34 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 35 3/8" ELASTOMERIC SEALANT JOINT
- 36 3/4" WELD ON 3 SIDES TYP. (230000)
- 37 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 38 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 39 3/8" ELASTOMERIC SEALANT JOINT
- 40 3/4" WELD ON 3 SIDES TYP. (230000)
- 41 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 42 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 43 3/8" ELASTOMERIC SEALANT JOINT
- 44 3/4" WELD ON 3 SIDES TYP. (230000)
- 45 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 46 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 47 3/8" ELASTOMERIC SEALANT JOINT
- 48 3/4" WELD ON 3 SIDES TYP. (230000)
- 49 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 50 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 51 3/8" ELASTOMERIC SEALANT JOINT
- 52 3/4" WELD ON 3 SIDES TYP. (230000)
- 53 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 54 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 55 3/8" ELASTOMERIC SEALANT JOINT
- 56 3/4" WELD ON 3 SIDES TYP. (230000)
- 57 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 58 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 59 3/8" ELASTOMERIC SEALANT JOINT
- 60 3/4" WELD ON 3 SIDES TYP. (230000)
- 61 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 62 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 63 3/8" ELASTOMERIC SEALANT JOINT
- 64 3/4" WELD ON 3 SIDES TYP. (230000)
- 65 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 66 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 67 3/8" ELASTOMERIC SEALANT JOINT
- 68 3/4" WELD ON 3 SIDES TYP. (230000)
- 69 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 70 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 71 3/8" ELASTOMERIC SEALANT JOINT
- 72 3/4" WELD ON 3 SIDES TYP. (230000)
- 73 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 74 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 75 3/8" ELASTOMERIC SEALANT JOINT
- 76 3/4" WELD ON 3 SIDES TYP. (230000)
- 77 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 78 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 79 3/8" ELASTOMERIC SEALANT JOINT
- 80 3/4" WELD ON 3 SIDES TYP. (230000)
- 81 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 82 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 83 3/8" ELASTOMERIC SEALANT JOINT
- 84 3/4" WELD ON 3 SIDES TYP. (230000)
- 85 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 86 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 87 3/8" ELASTOMERIC SEALANT JOINT
- 88 3/4" WELD ON 3 SIDES TYP. (230000)
- 89 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 90 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 91 3/8" ELASTOMERIC SEALANT JOINT
- 92 3/4" WELD ON 3 SIDES TYP. (230000)
- 93 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 94 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 95 3/8" ELASTOMERIC SEALANT JOINT
- 96 3/4" WELD ON 3 SIDES TYP. (230000)
- 97 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 98 1/2" S.S. PLATE PAINTED W/ HIGH PERFORMANCE COATING
- 99 3/8" ELASTOMERIC SEALANT JOINT
- 100 3/4" WELD ON 3 SIDES TYP. (230000)



SKATE PARK SITE PLAN

Software Rhino, Vray, AutoCAD, Photoshop, InDesign

HARBOR CITY SKATE PARK

Located at Harbor City Park, between Torrance and Carson, the new 11,000 square foot concrete skatepark has been earning rave reviews from skateboarders across the South Bay. South Bay skateboarders are loving the smooth concrete, innovative obstacles and healthy balance of street and transition-style terrain. These schematic design were loved by the skateboarders in the community.

Type Skate Park
Professional

Location Los Angeles, CA, USA

Duration 09/17 - 03/18

Area Size 11,000 sqft

Company City of Los Angeles, Department of Recreation and Parks

Design Process:

Schematic Design

3D Modeling

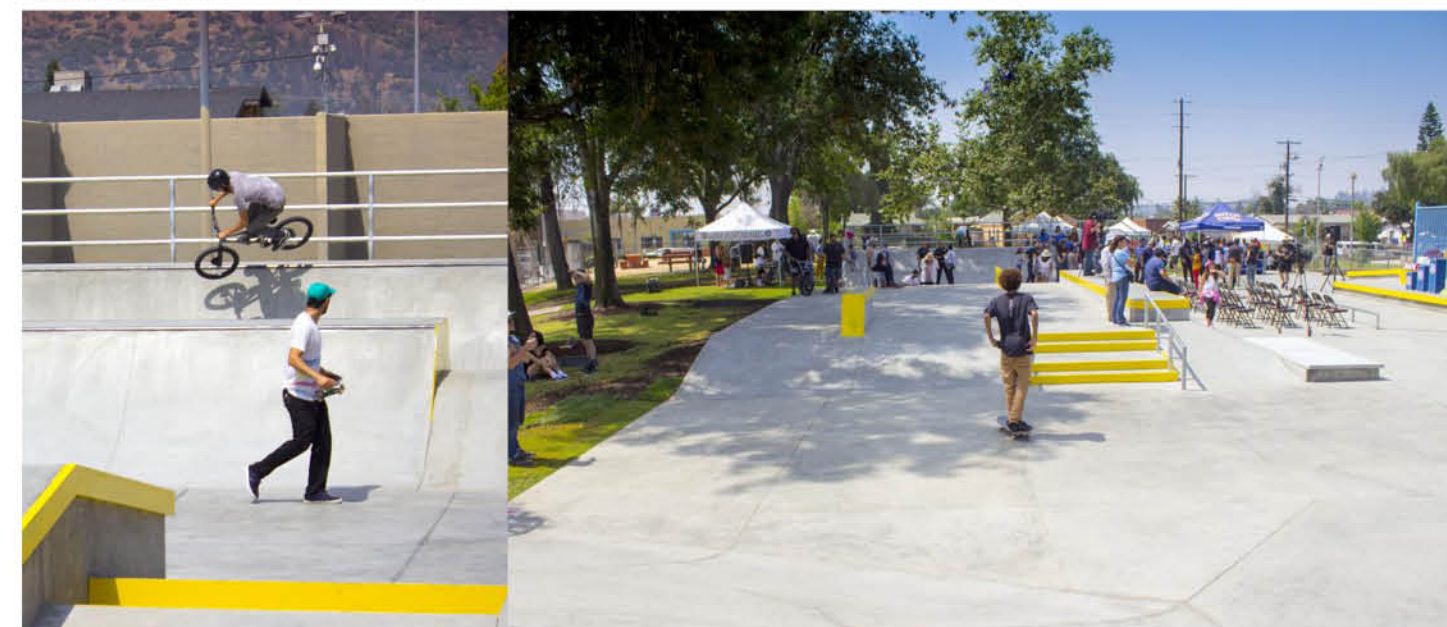
Site Rendering

Community Presentation

SCHEMATIC DESIGN



COMMUNITY INVOLVEMENT



Resource: <https://www.laparks.org/skatepark/harbor-city-skate-park>

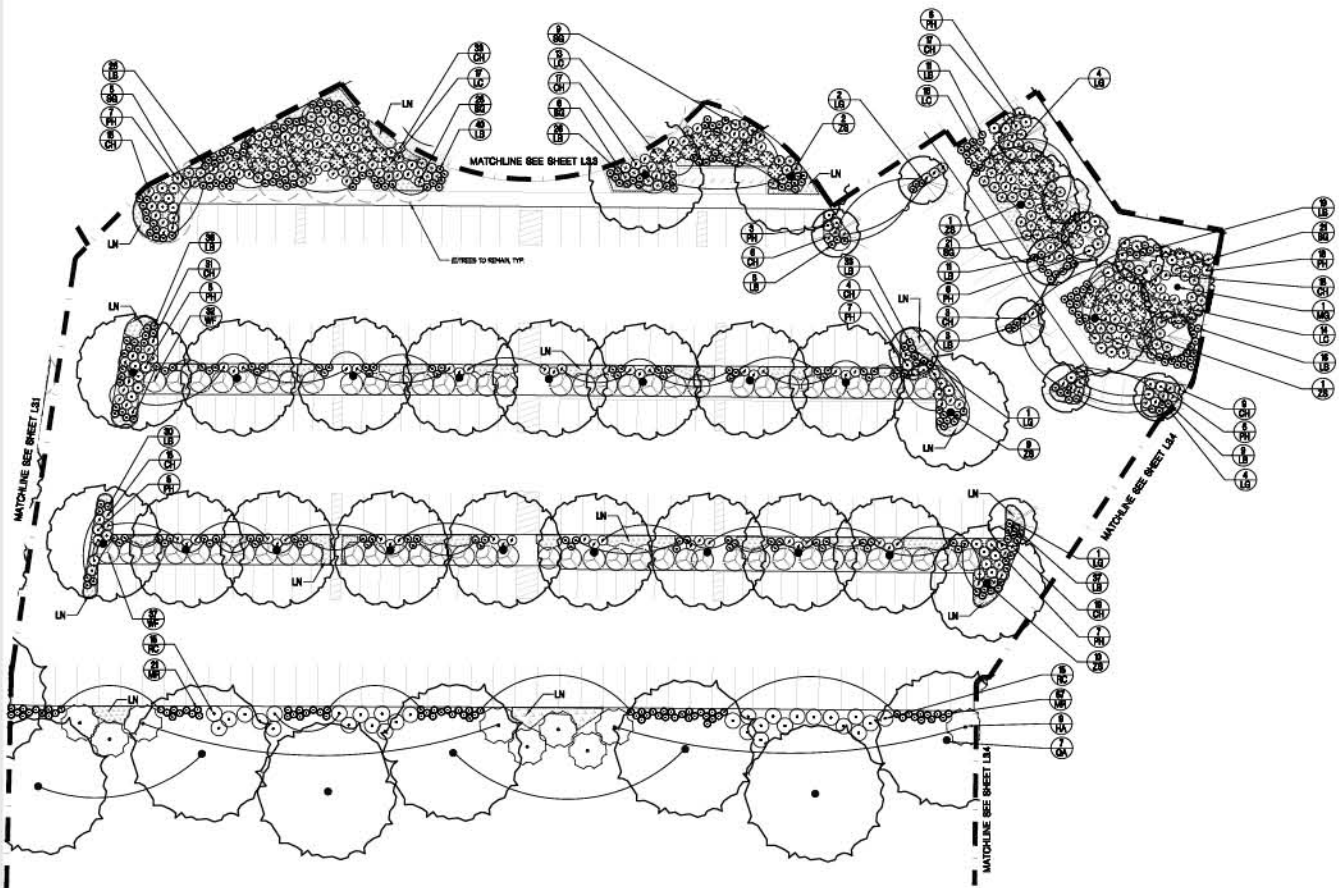


Software AutoCAD, Photoshop

Santa Rosa Medtronic campuses are the headquarters for two of Medtronic's largest businesses within its coronary and vascular divisions — the coronary and structural heart and the aortic, peripheral and venous businesses. The design renovated the landscape in the parking lot and bring active plaza area. Using native plants, the design places a high degree of emphasis on the public realm through a series of elements that connect the project to the company, of which it is a vital part.

Company Firma Design Group

Design Process:
Construction Documents
Planting Plan
Construction Details
Site Rendering



SITE PHOTOS

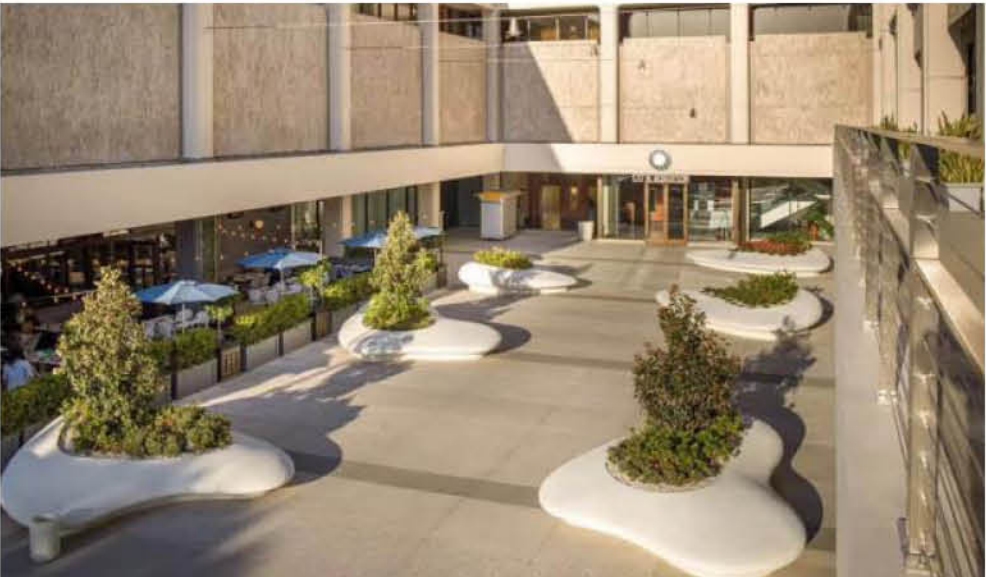


Design Process:
Construction Documents
Site Plan
Planting Design
Irrigation Plan

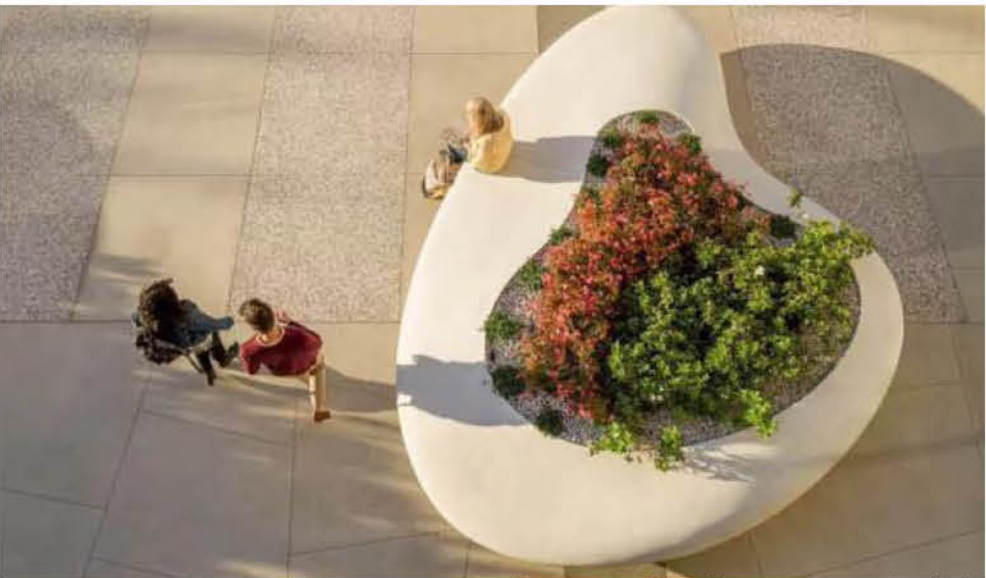


SAN FERNANDO ROAD PARK
SYLMAR, CA, 91342
CITY OF LOS ANGELES

Design Process:
Planter 3D Modeling
3D printing
Construction Documents
Site Modeling
Planter Analysis



ROBERTSON PLAZA
LOS ANGELES, CA, 90048
HKLA



PAINTINGS & MODELS



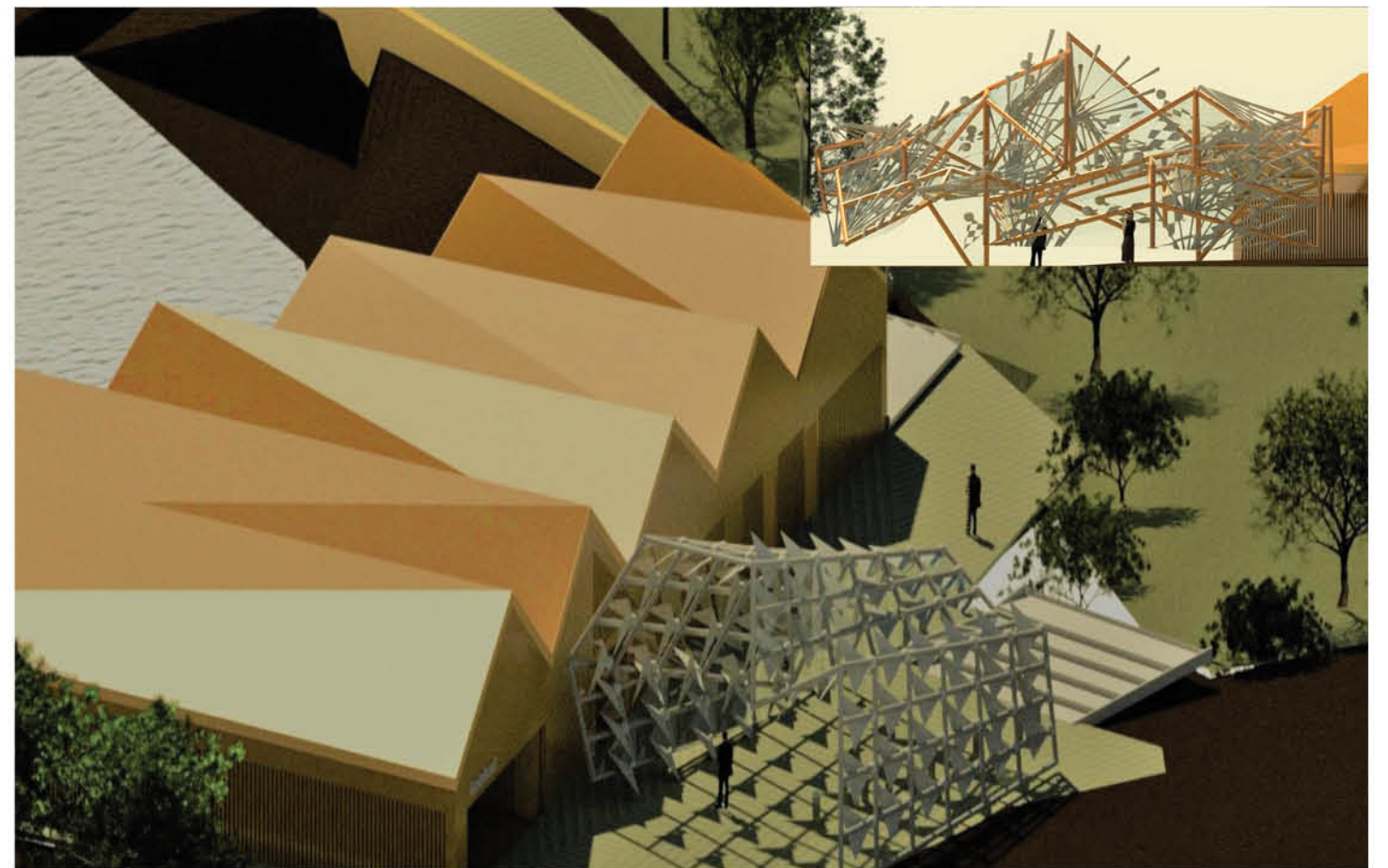
WATER COLOR RENDERING

PORTFOLIO OF RUOXI CAO

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PENCIL DRAWING



REVIT PRACTICE naturum Kosterhavet /White Arkitekter with new Green House

PORTFOLIO OF RUOXI CAO

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