

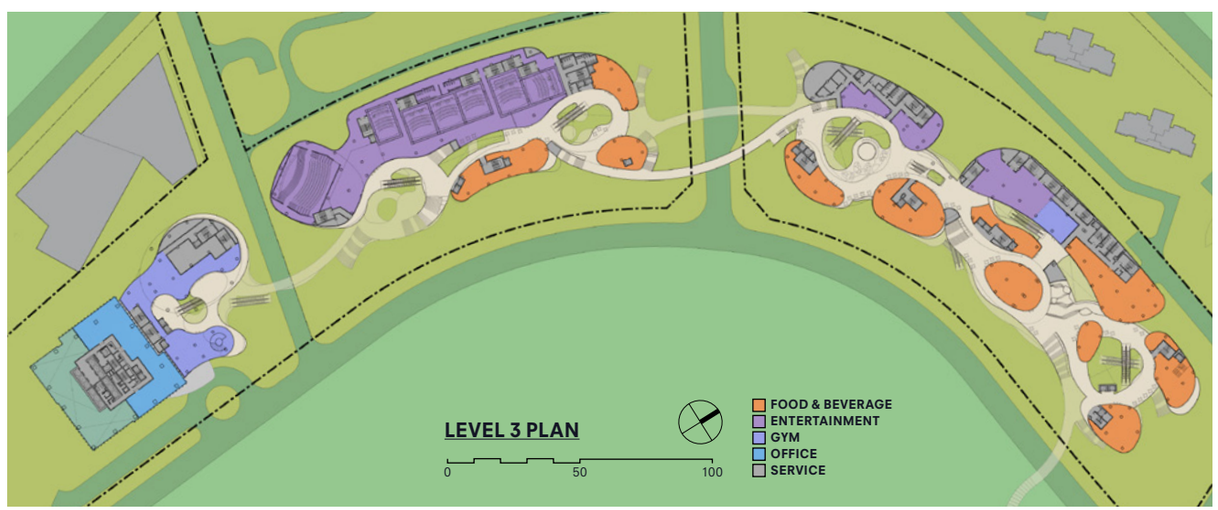


Nansha Urban Park

Nansha District, Guangzhou, China
at: The Jerde Partnership (D. Ha, DP)

Developed the facade design – proportions, details, and constructability – of this outdoor mixed-use retail, entertainment, and office tower project. The commercial portion is the social focus of a large residential and international sports masterplan situated along a straight of the Pearl River Delta.

Although smaller than most Jerde Chinese projects, the variety of organic forms packed within a tight linear site made it equally complex.









While the amorphic curves had to be either segmented, for the stone and glass, or resolved as simpler curves, the greatest challenge was communicating what materials, and combinations thereof, each facade was made out of to the executive architects and facade engineers in China.

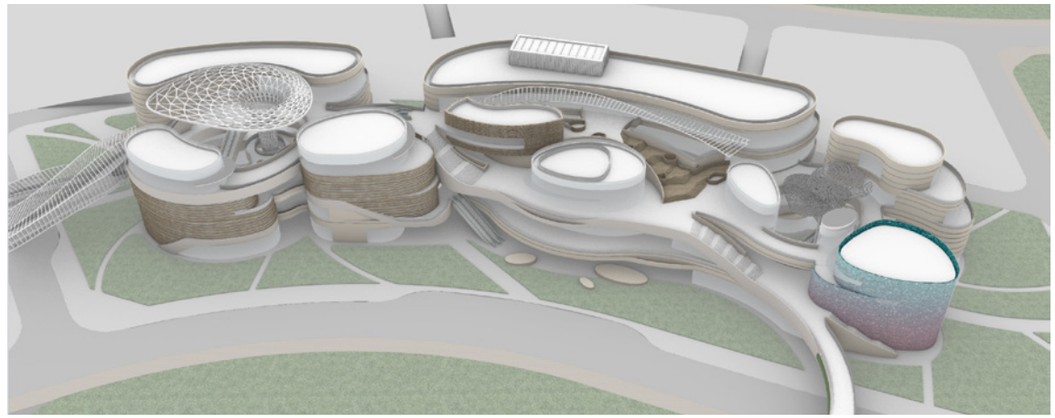
The design called out 11 types of facade materials and material combinations – such as wood slats hung in front of glass and plaster, and garden walls mixed with concrete – fluidly weaving over the buildings and throughout the project. I undertook to clarify, via 2D drawings, where each material stopped and started.

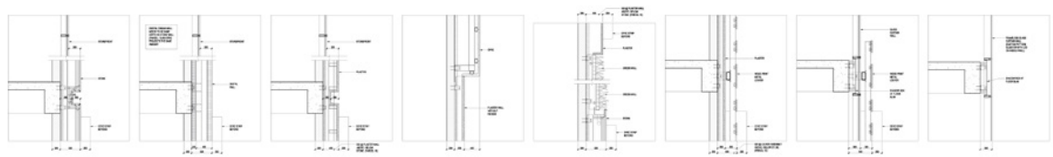




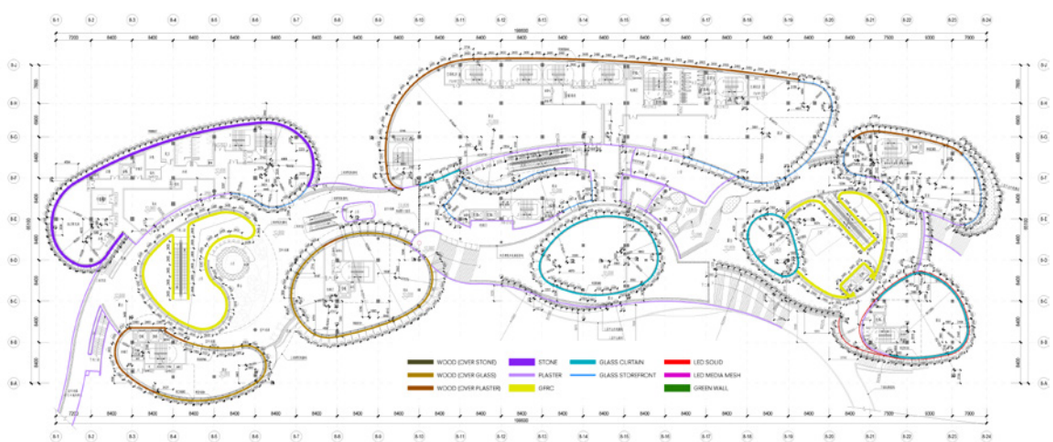
Having inherited a single-line plan paired with very sculptural renderings, another big design challenge was to create the intended depth of the facade without taking up too much of either the tenant lease space or the public walkways.

This mediation process entailed the smart location of deeper facades away from visitors' physical reach, above the walking plane or on the sides where they function more like billboards, advertising the design of the complex from afar.



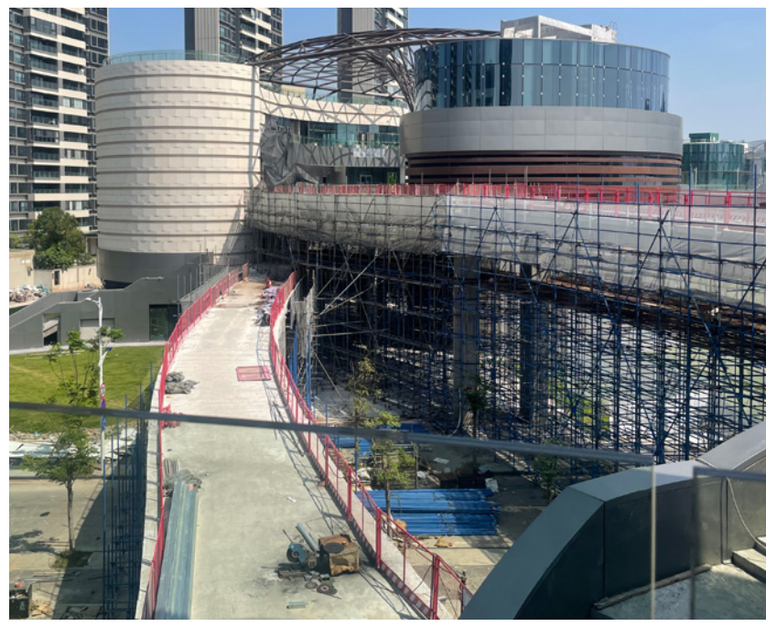


WALL DEPTH STUDY



FACADE TYPE



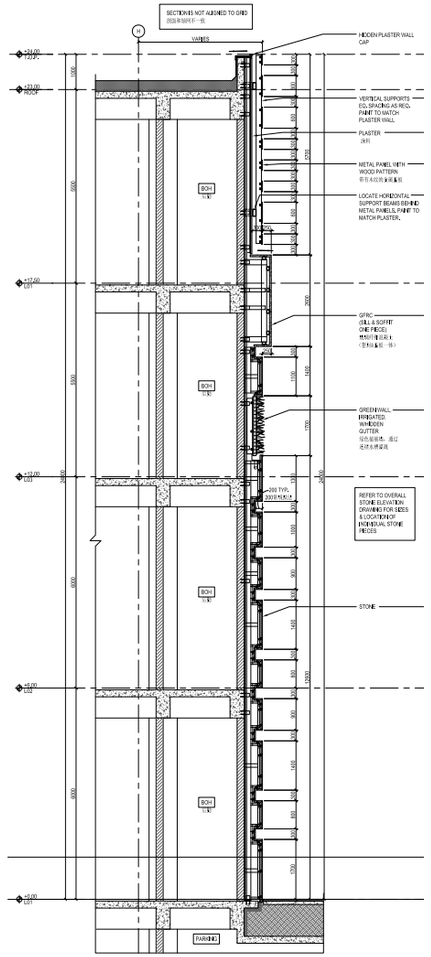


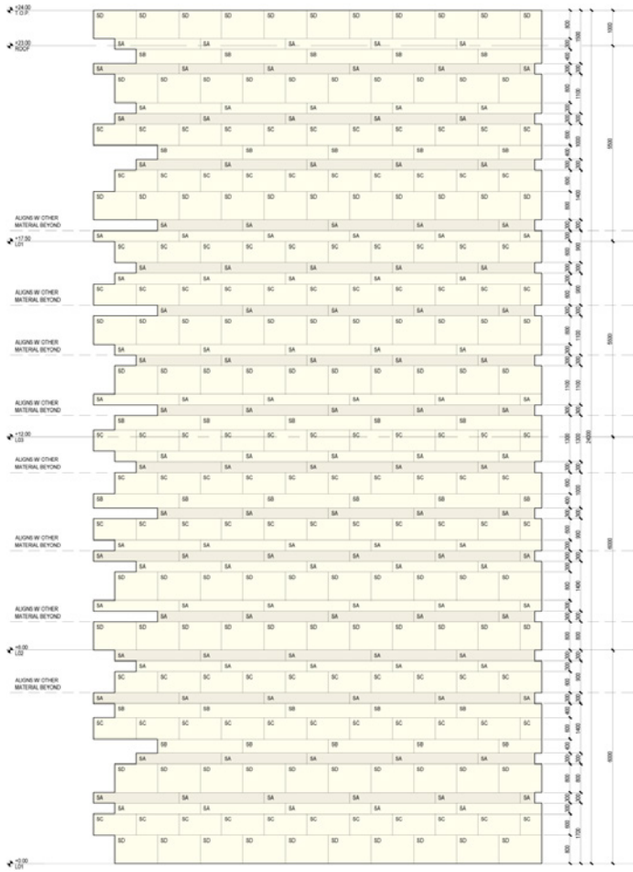




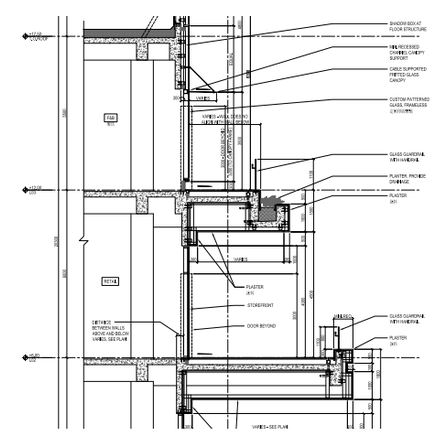
Through value engineering studies during CDs and construction, the number of facade (material design) types was reduced from 11 to 7 and simplified.

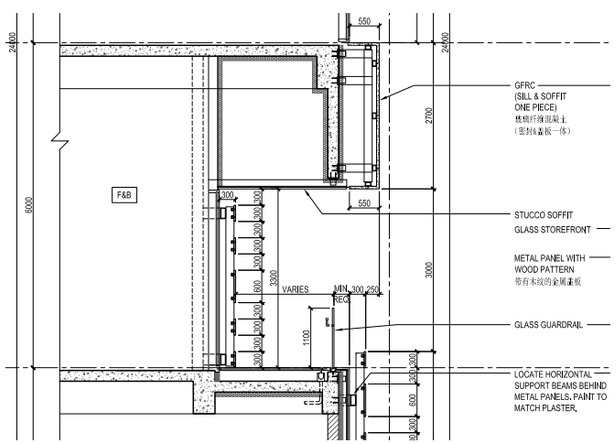
Metal panels replaced plaster and finished concrete walls; porous metal screens floating over glass replaced the wood screens floating over plaster; patterns applied to glass replaced the wood screens floating in front of the glass; lights behind glass replaced the LED walls; and the green/garden walls facing the residential towers were completely removed.





STONE PATTERN DESIGN





Woven Hill

S.E. Asia
at: The Jerde Partnership (D. Ha, DP)

Developed conceptual residential masterplan designs for a very difficult, hilly site in SE Asia.

Placed 2-3,000 residences on the steep and twisted terrain, which had been subdivided into 12 parcels by roads and large drainage canals.

I was responsible for the (more) organic layout designs, as well as project organization, development calculations, and site section studies.

The residential typology designs came from the local design architect.

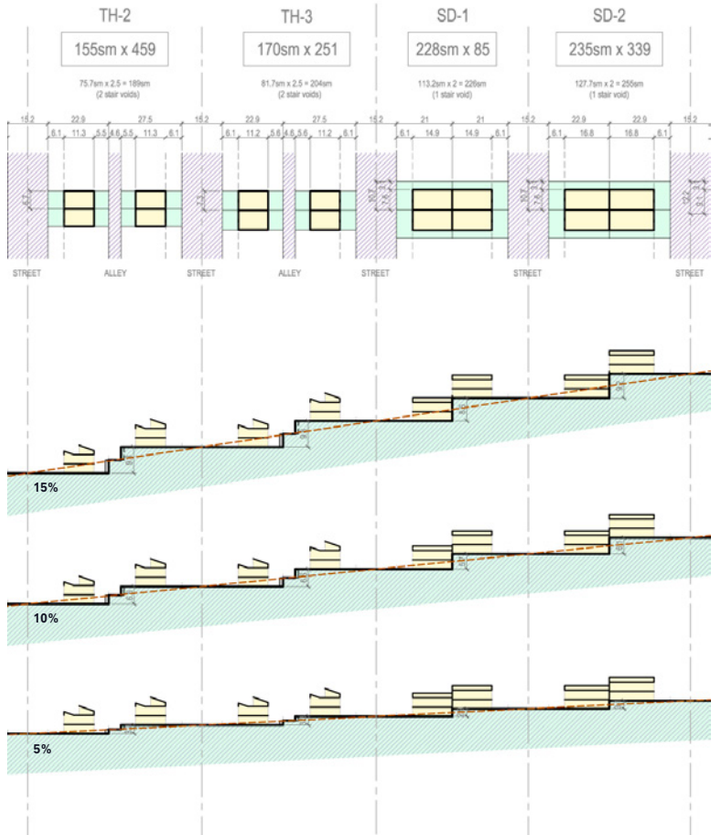


795 SEMI-DETACHED HOUSES	730 TOWNHOUSES	1,298 CONDOS (12 HIGH RISES)
SD-1 / 2,420 sf (lot): 83 units (10%)	TH-1 / 1,360 sf (lot): 130 units (18%)	CO-1 / 1,240 sf (avg unit) : 328 units (5 high rises)
SD-2 / 2,640 sf (lot): 421 units (53%)	TH-2 / 1,650 sf (lot): 443 units (61%)	CO-2 / 1,130 sf (avg unit) : 460 units (2 high rises)
SD-3 / 3,200 sf (lot): 291 units (37%)	TH-3 / 1,800 sf (lot): 157 units (21%)	CO-3 / 1,400 sf (avg unit) : 180 units (2 high rises)
		CO-4 / 1,320 sf (avg unit) : 330 units (3 high rises)

Semi-detached housing units were mostly located on the quieter east and north-west parcels.

Due to their lower value, townhomes and high-rise condominium towers were located on west and south sides of the site facing the local (formerly international) airport.

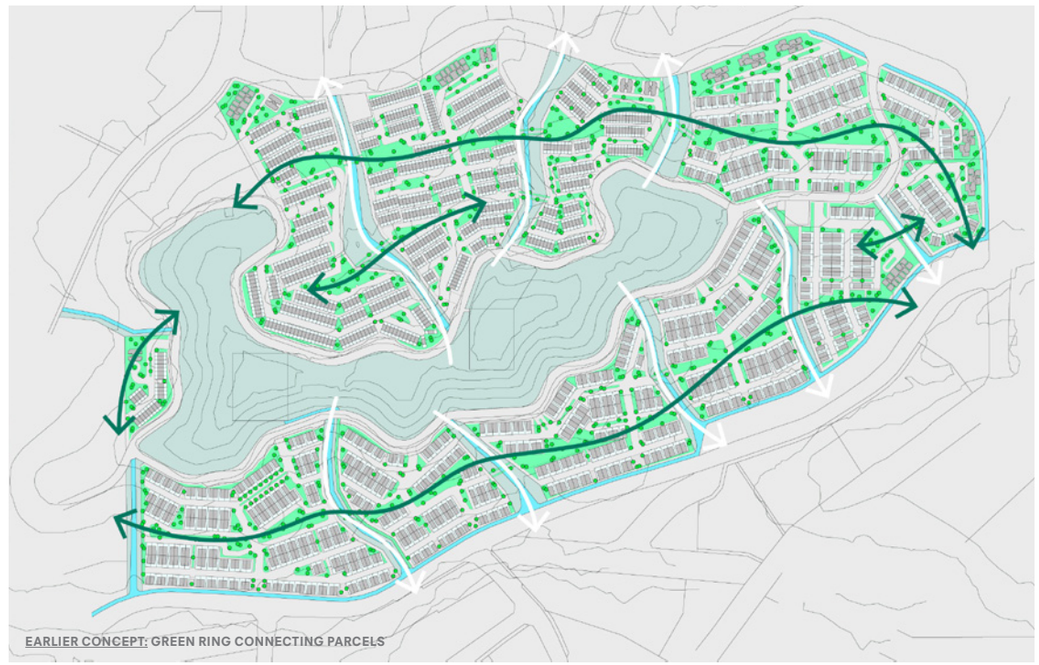
Different options looked at placing townhouses vs semi-detached houses on the north side of the site facing the highway. The highway is elevated, but actually sits below most of the site.







PERSPECTIVE:
MORE MONOLITHIC HOUSING LAYOUT ON HEAVILY REGRADED SITE



EARLIER CONCEPT: GREEN RING CONNECTING PARCELS

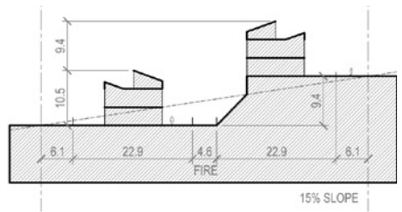
The biggest design challenge was the steep slope of the site. Studies compared keeping the existing slope or altering it for a more consistent housing layout.

Placing residences along the existing slope created more organic neighborhoods, and reduced the big cost of earthwork. However, in these schemes, residences couldn't always be grouped as efficiently, creating more variations of building typologies and adding time to foundation work. In these studies, street slopes also varied more greatly.







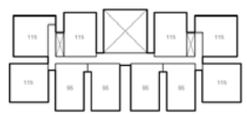


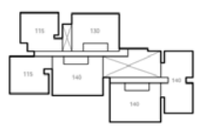


Placing residences in more monolithic layouts reduced the construction cost of the buildings, but increased the cost of the earthwork since the slopes had to be significantly engineered. Though more efficient from the building construction perspective, these schemes felt overpowering for the site and were less visually engaging.

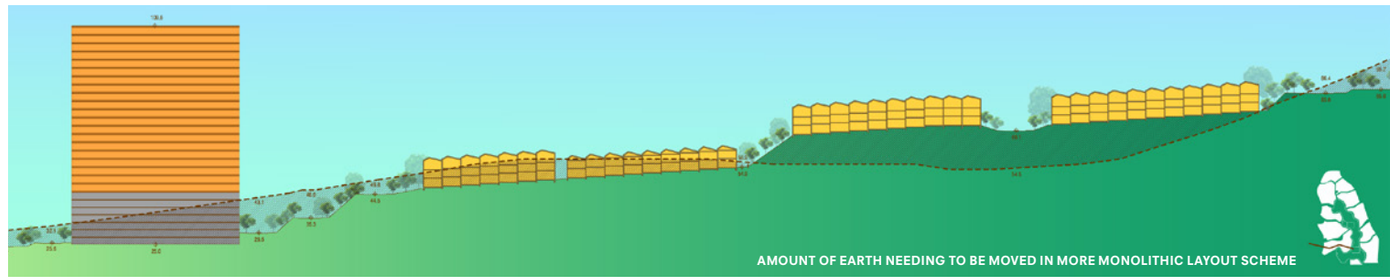
The different schemes also looked at entering the parcels from the top ring road – which meant a longer journey, but more privacy and security – or entering from the base ring road.


CO-1


CO-2


CO-3


CO-4







The parcels were too small and shaped too irregularly to fit residences along streets which slowly slalomed down the hill in an efficient way. These options were never developed past quick sketches.

Regarding open space requirements, studies looked at creating one large space per parcel, or creating large communal green spaces across the drainage channels which separate the parcels. If allowed by the city, this second private-public venture would benefit the community better as it would tie the parcels together into a continuous hilltop community.



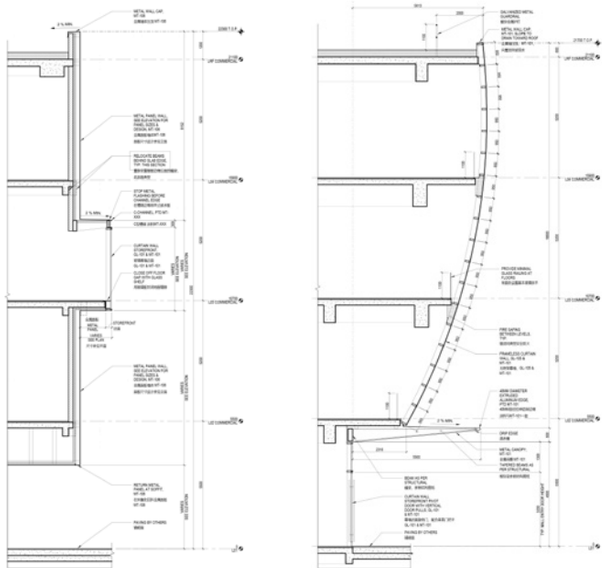


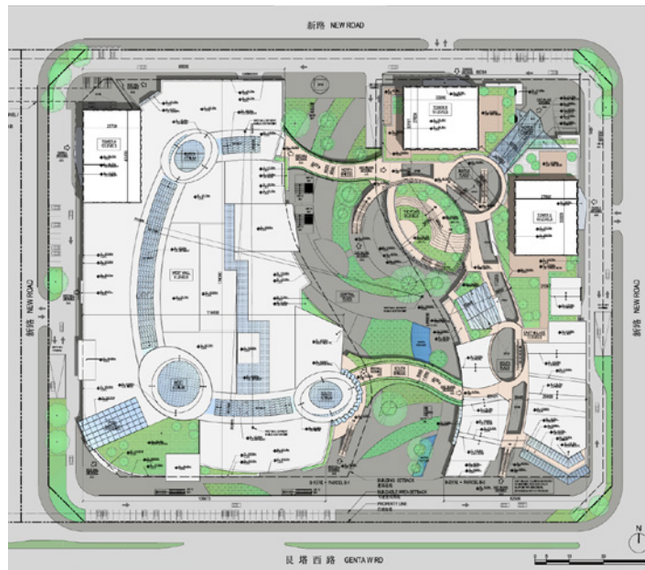


Zhuji Park Central

Zhuji, Zhejiang, China
at: The Jerde Partnership (K. Ho, DP)

Developed the constructibility of the very many different facade designs, bridges, skylights, and intersecting building envelope conditions of the indoor-outdoor shopping center portion of this mixed-use project, through a series of detailed studies, including over 40 wall sections, in the DD phase. This led the design team to make many necessary changes to the massing. Also studied the housing design and contributed to the tenant signage and other design criteria.



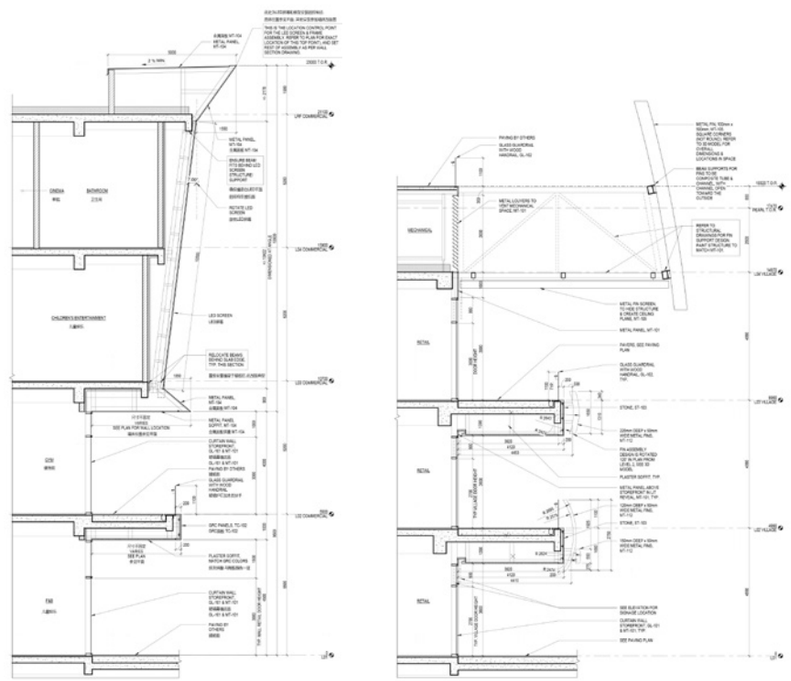




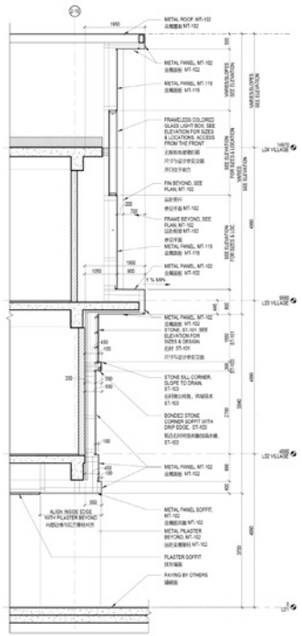


This mixed-use project consists of two shopping centers – a 4 story indoor mall for higher-end stores, featuring family-friendly venues such as children's education spaces and a cinema; and a 3 story outdoor mall for local mom-and-pop stores featuring a rooftop amphitheater – with three serviced apartment towers popping out, and connected by walkways and bridges across a public right of way park (above basement parking) programmed with carefully placed vegetation, water features, and a giant LED viewing screen.





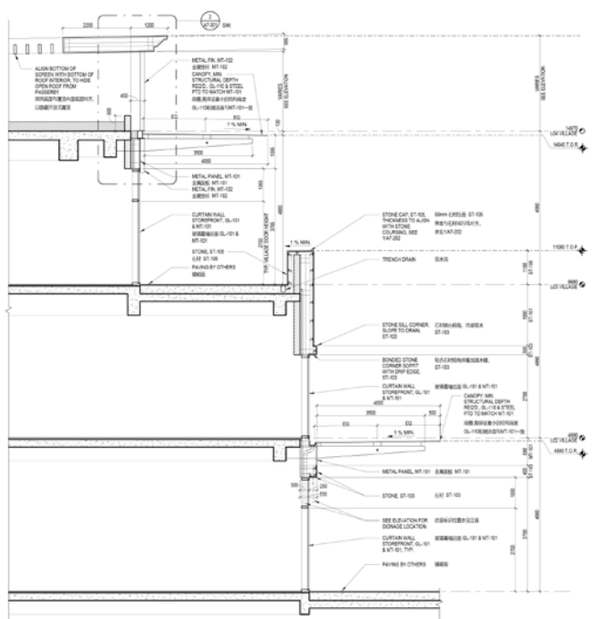


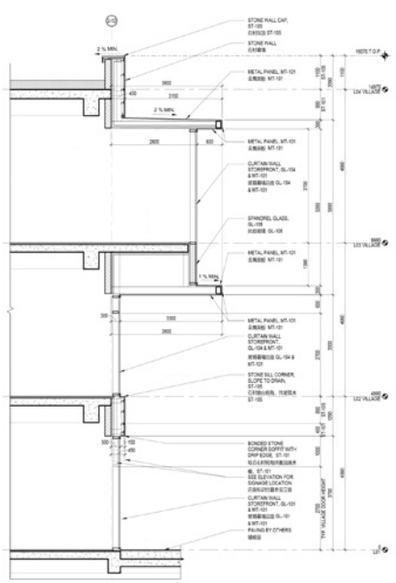




One of the challenges, as in all projects in China, was to guesstimate the level of detail that the client would be interested in maintaining during a fast-tracked and value-engineered project, where availability of materials plays a big role: detailing the design intent without over-designing.

Another big challenge was to keep track, coordinate, and update drawings to reflect the many client-directed changes happening while the set was developed. Humanist sans-serif and sketchy fonts reinforce the design concepts.













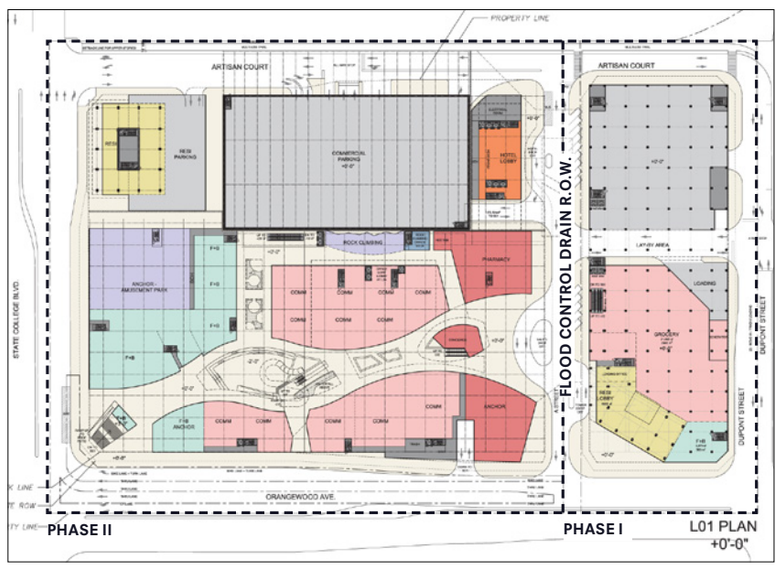


Riverwalk Anaheim

Anaheim, CA
at: Hopscape (as Principal)

Developed this very dense and complex mixed-use project next to the Angels Stadium – during the DD phase, as one of the design principals – focusing on the program and architectural development of the: residential (high-rise & low-rise), hotel, entertainment, food hall, b.o.h. (loading, trash), and parking (above & underground). Also studied exiting, plumbing, signage, and designs of integrated art.

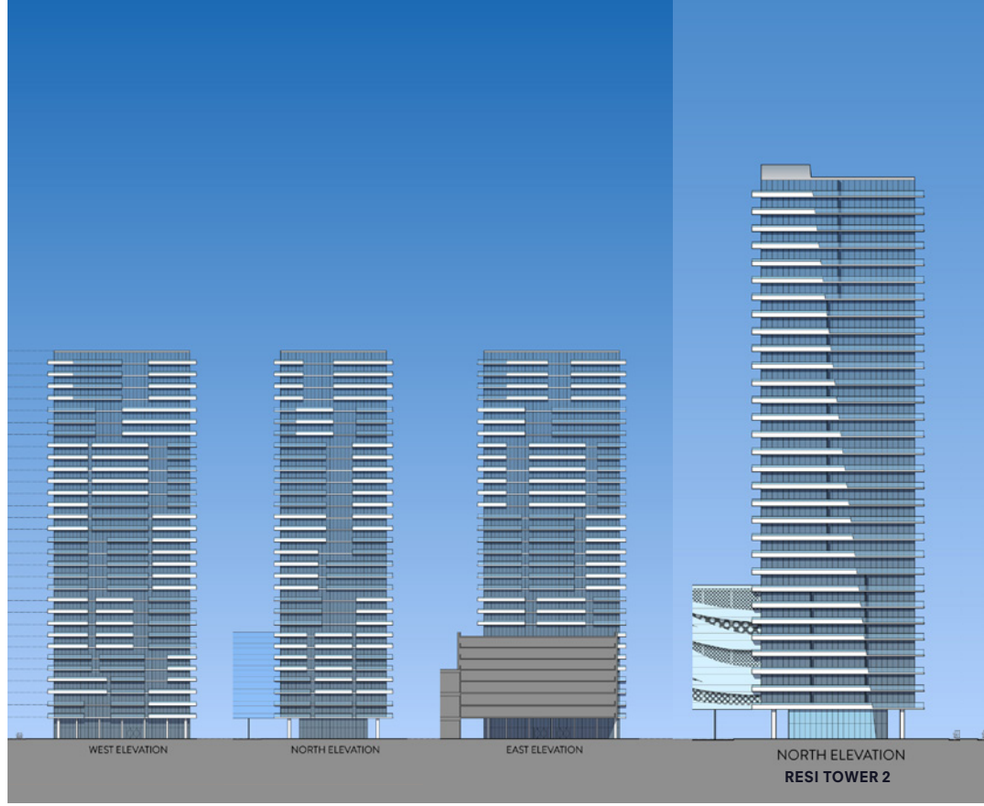
Difficulties arose from the high FAR requested by the client, and a site split by a drainage ROW, leading to talks with the Angels and phasing.





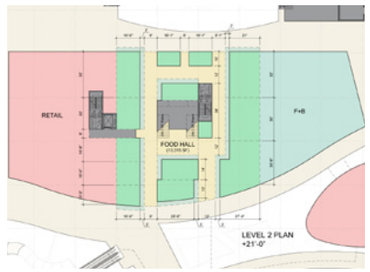
The project consists of 500,000 sf of mixed commercial – retail, dining, a food hall, a cinemaplex, an ice rink, a surf park, and other entertainment venues – on a 2-3 level podium; plus 315 residential units in 2 towers and 30 townhouses with amenity decks, a 200-key boutique hotel, an office building, and parking in both above and underground structures.





RESI TOWER 2






FOOD HALL

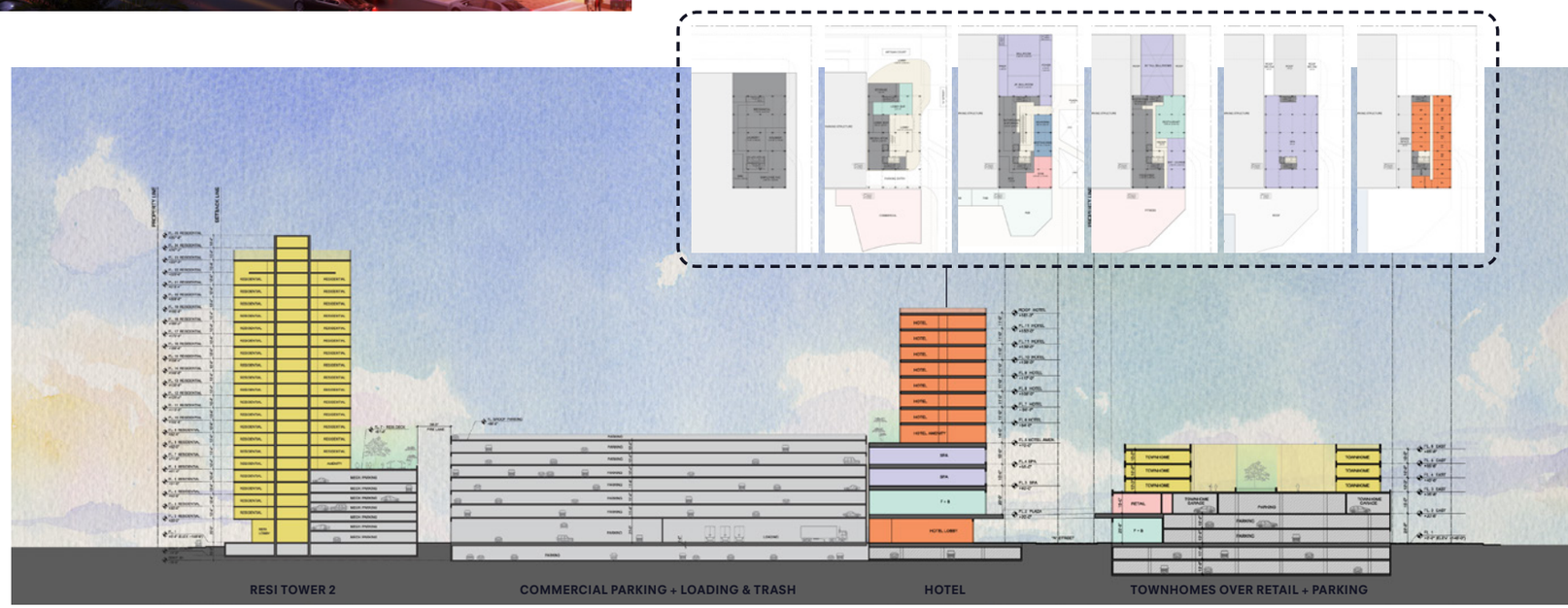

RESI TOWER 1



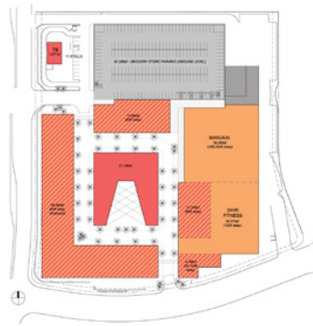


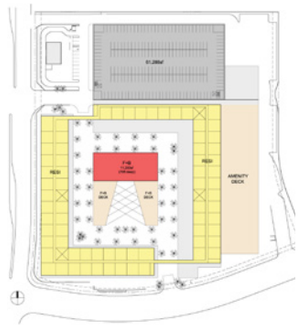


The complexity of the project lies in the vertical structuring of the layers of programs which have independent requirements for privacy, circulation/ exiting, mechanical, and structural support: surf park vs ice rink vs cinema vs office vs restaurant vs retail vs residential.



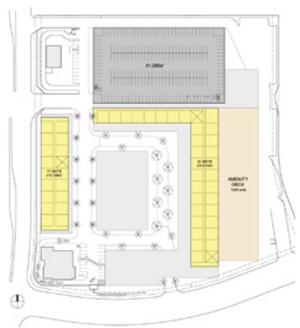


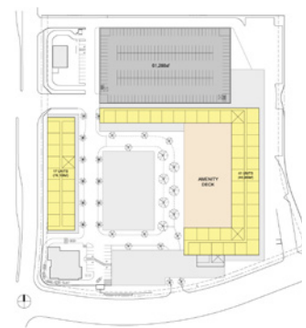


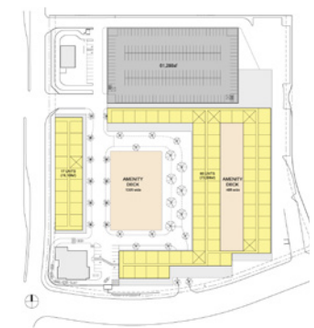












South Hills Plaza

West Covina, CA
at: Hopscape (as Principal)

Developed a series of SD/schematic design masterplan options for redeveloping the existing service retail plaza into a mixed-use project, with housing above the retail and a more pedestrian friendly environment of engaging public outdoor space.

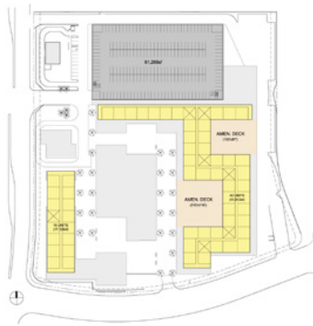
As in most SoCal projects, parking count controlled both housing and leasing areas. The project looked at both costly underground parking and above ground structures hidden by retail and housing.

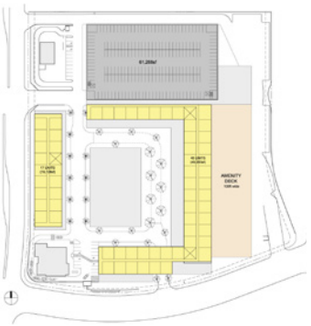






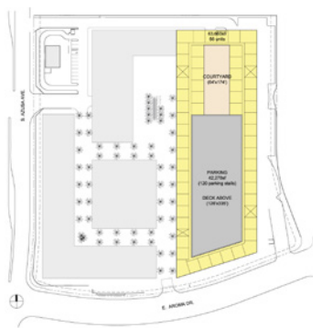


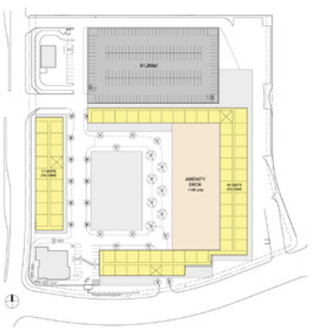




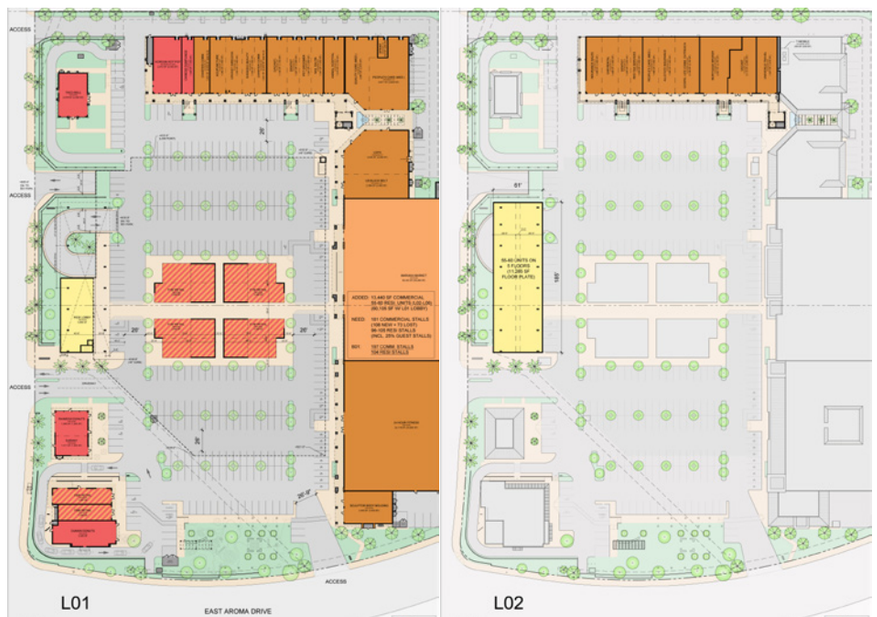






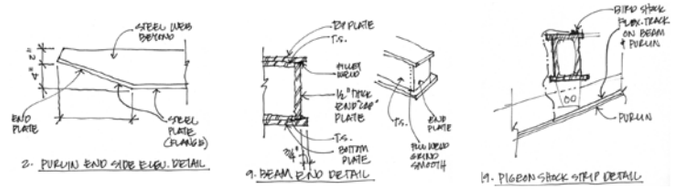


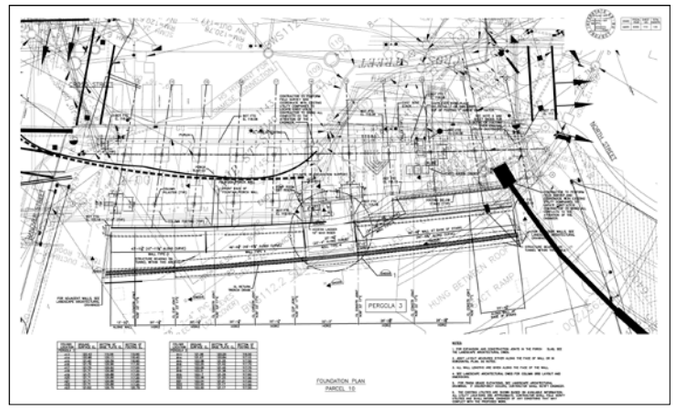
Design constraints included saving existing structures (not touching the NW corner at all), using the existing curb cuts/entries (which relate to the varied topography of the site), leaving the loading dock in place, upgrading the existing parking to current accessibility standards, avoiding building on the drainage easement which passes diagonally through the site, and height restrictions; leaving lot coverage and land use up for (re)entitlement.









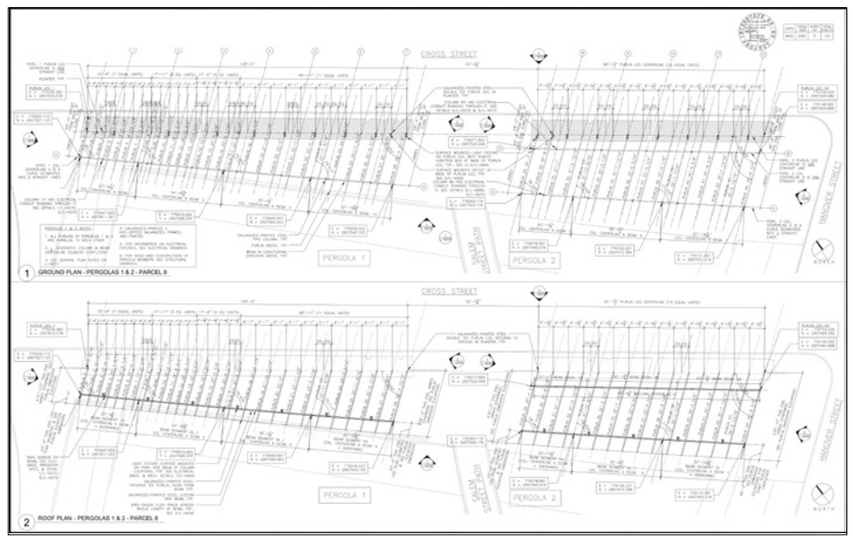


Urban-Scale Pergolas+

North End Parks, (The Big Dig), Boston, MA
at: CSS for GGN (S. Nichol, DP)

Fine-tuned the design and developed the constructibility – fabrication, cost, and details – of 3 urban-scale steel pergolas, which, as part of the North End Parks, sit directly on top of the Big Dig/ Interstate 93 tunnels. Also contributed to the railing and paving designs.

Provided many design detail options throughout, to communicate conceptual intent with park designers, structural engineer, metal fabricator, vendors+, visiting two galvanizing plants in the process.



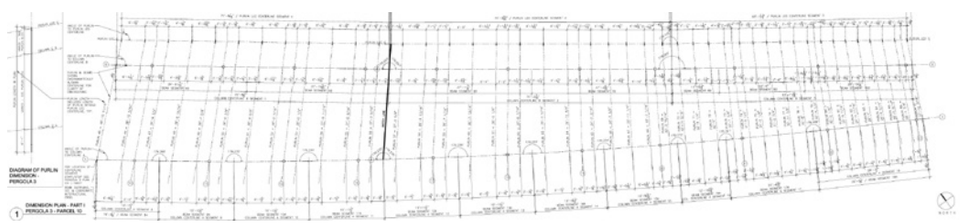


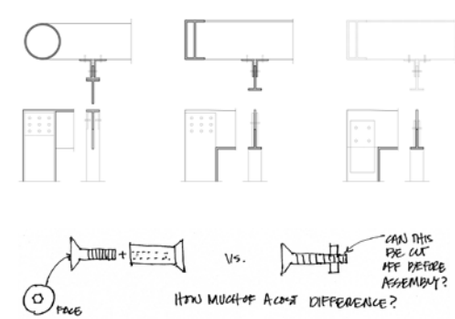


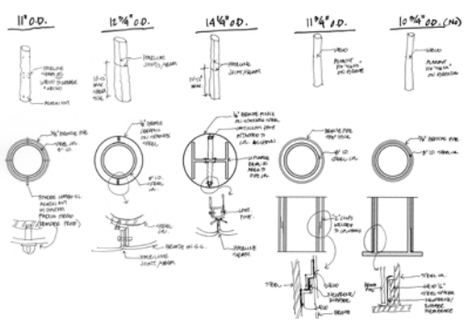


Through this multifaceted endeavor, the pergolas were changed from bronze to painted (structural) steel, and became lighter and more elegant. When they were sent out to bid, they fell within budget!

The difficulties in this project arose from the scale, continuous variation in size and direction, electrification (outlets and lights run through them), and the fact that the structures sit directly on top of highway tunnels which need to be accessed for maintenance and emergencies.

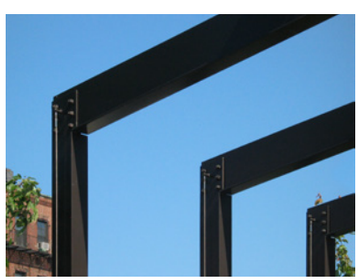
















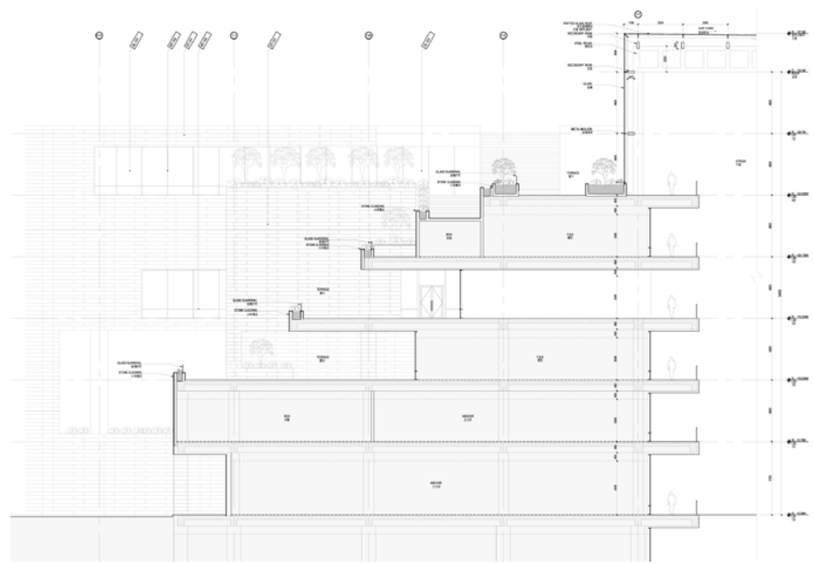
Joy Breeze

Daxing, Beijing, China
at: The Jerde Partnership (E. Lopez, DP)

Coordinated with executive architect and design team to organize and develop DD plan, section, and detail design drawings for the renovation of an existing 8-level mixed-use center.

The design turns the former closed-off complex into an interactive one, welcoming the public in through a series of large architectural gestures: the basement retail is opened to the sky; new glowing masses guide pedestrians through; heavily built parts are cut out; and many interior spaces extend to outdoor terraces.

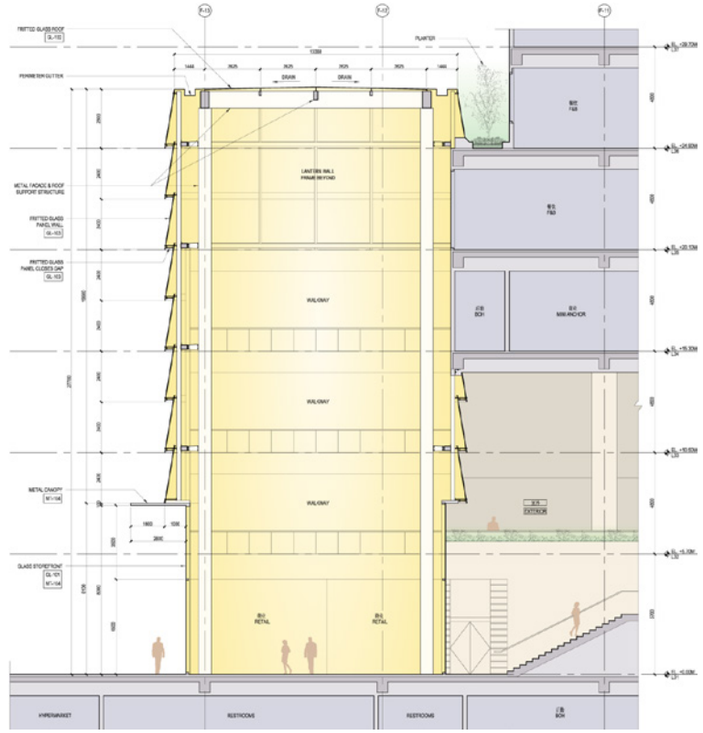




This approach takes on sculptural form in the entrance-facing facade, which is carved into a vertical climbing garden, breaking down the massive scale of the 35m tall structure and creating a very dynamic, interactive public space with views over the city.

The design changed through many cost-analyses: water features were changed to symbolic materials such as glowing glass, the design of glass volumes was simplified, and some planted walls were removed.

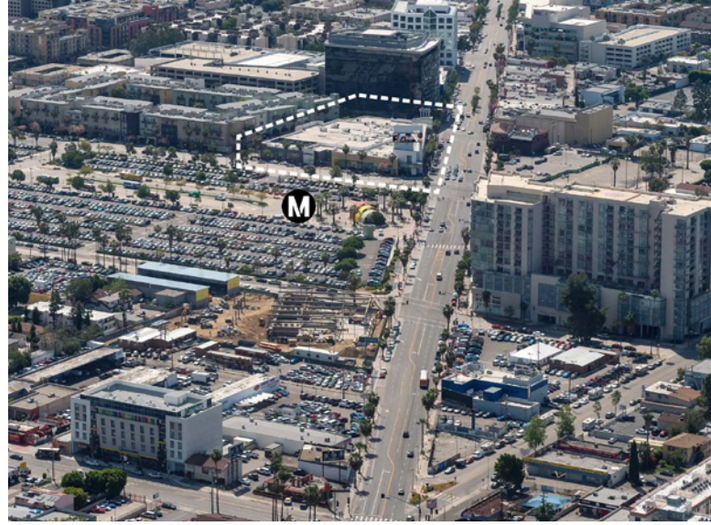












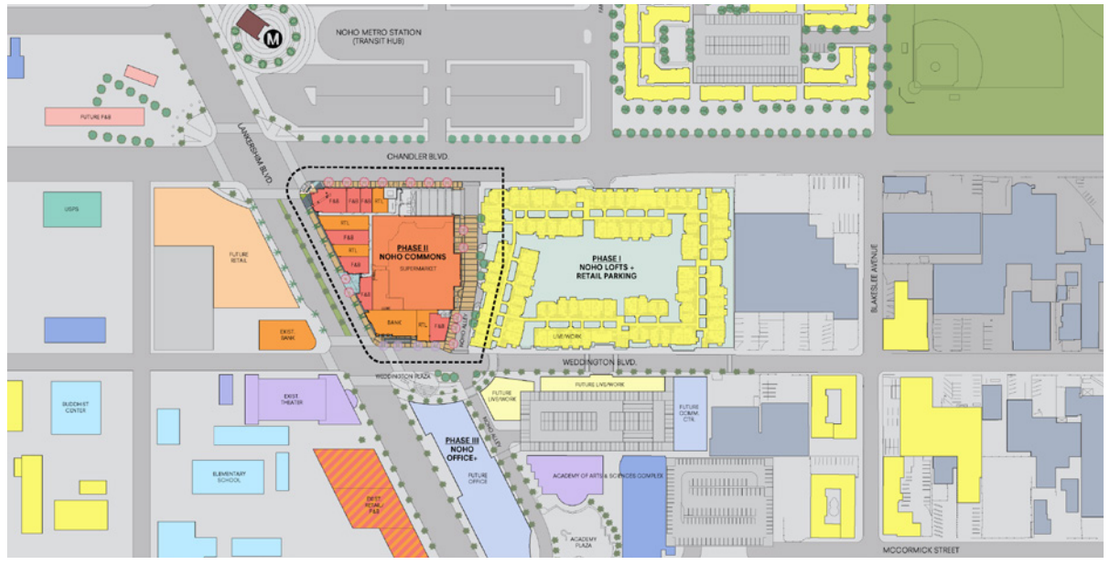


NoHo Commons

North Hollywood, CA
at: The Jerde Partnership (T. McKerrow, DP)

Managed this 70,000 sq ft core and shell service retail project as Phase 2 (of 3) of a transit-oriented CRA and JH Snyder mixed-use development across the street from the North Hollywood Metro transportation hub.

Ran the project from DD through CA, coordinating the consultants; clearing approvals from zoning/city (new private street, tied lots,"off-site" parking under Phase 1, signage, billboards) and building safety (accessibility, fire, public health); and getting the building permit.









The project contains a gym (originally a supermarket), and a mix of 12 streetfront retail and dining tenants which maintain the historic pedestrian scale and character of the neighborhood.

Work involved integrating two public art projects; value engineering during construction; as well as creating the tenant design criteria booklet and coordinating with the tenants, some building out their TI while the project was still in construction.









Timişoara Citywalk

Timisoara, Romania
at: The Jerde Partnership (D. Rogers, DP)

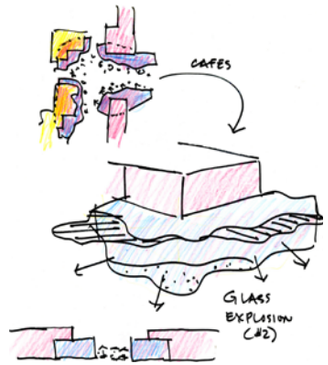
Developed 4.35K sqm (incl. 1,200 resi. units) mixed-use project in a 2-person team, doing most of the masterplan and commercial design work through sketches, plans, sections, studies of circulation and parking, area tabulations, green design concepts, and overseeing the residential design; the other team member working on 3D modeling and organizing the presentations.

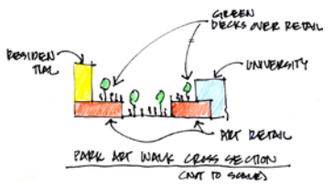
Attached to an existing mall the client owned, the mixed-use project envisioned itself as a new city center.



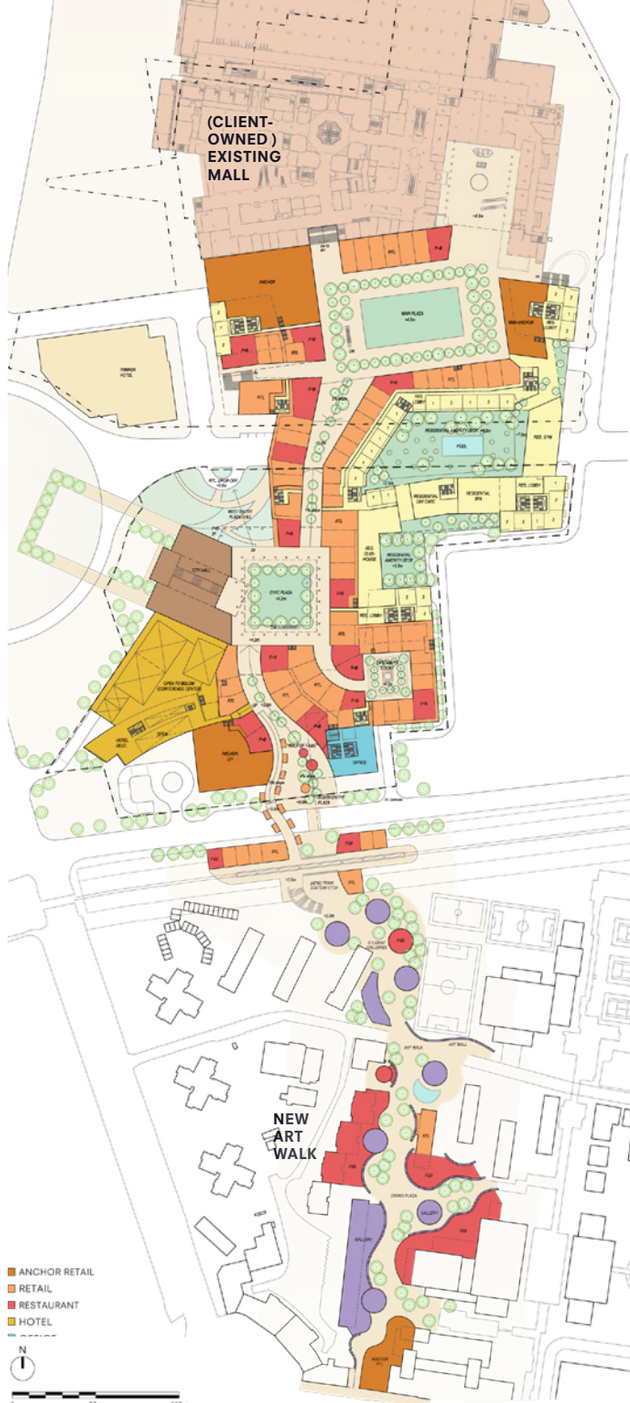








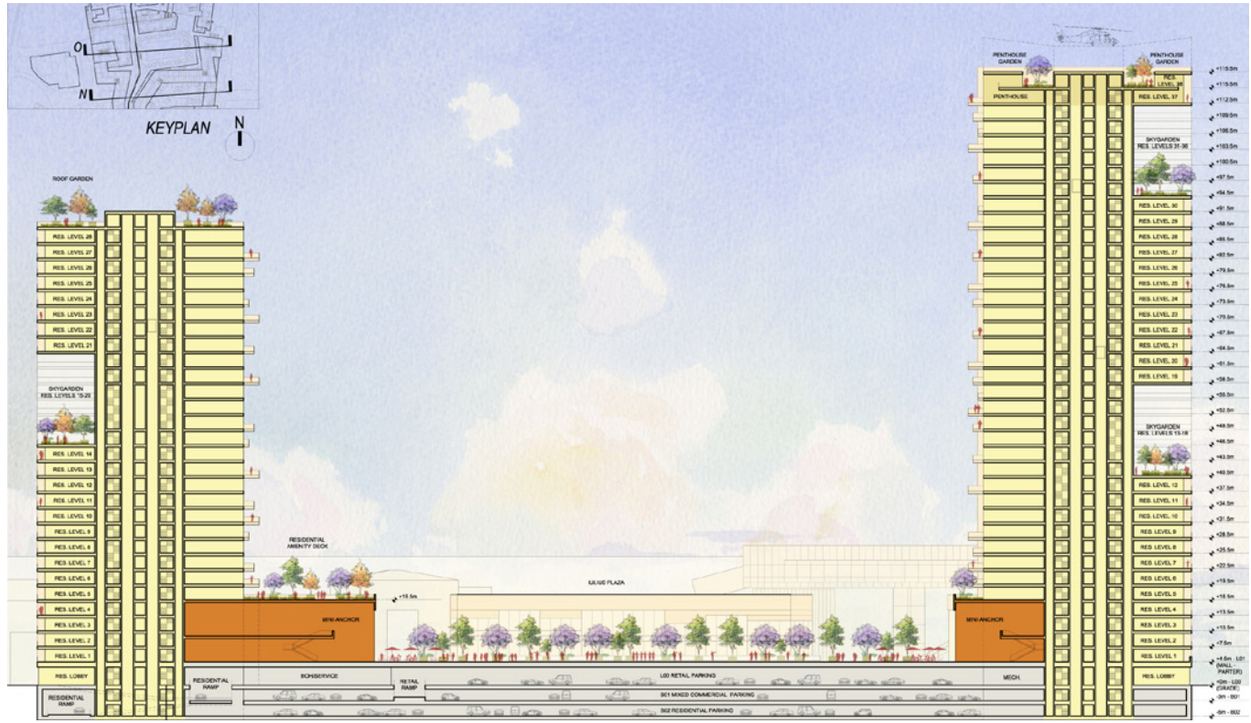


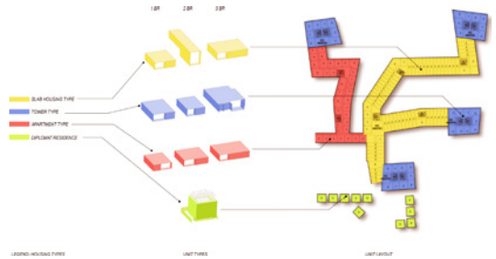


So as to tie it to the historic city center, pedestrian public space was made continuous through an interstitial art walk (on a university campus) and a series of contextual open squares.

The diversity of programs on a relatively small footprint – city hall, hotel and conference center, office, diplomatic housing, retail, entertainment, and residential towers – resulted in very complex design for arrival and departure drop-off points, secure parking, and b.o.h. services.

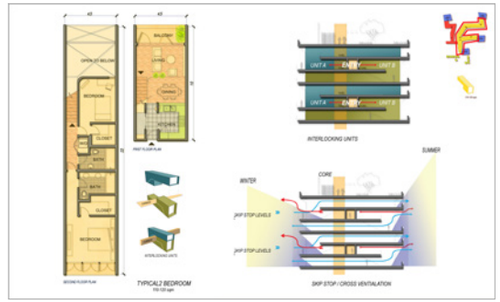


















Tangshan Westrail City

Tangshan, Hebei, China
at: Hopscape (as Principal)

Lead project from DD through CA as the technical design principal, organizing the drawing set, detailing the design intent, redlining executive architect and facade engineer drawings, and answering design questions during construction. Also conceptually designed environmental graphics.

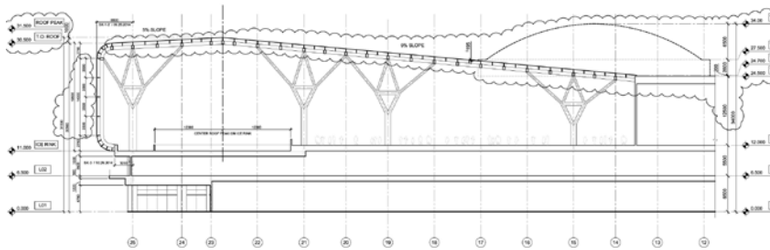
This 1.1M sqm project – retail, entertainment, office, and serviced apartments – was budgeted for a small developer in a "third-tier" city.









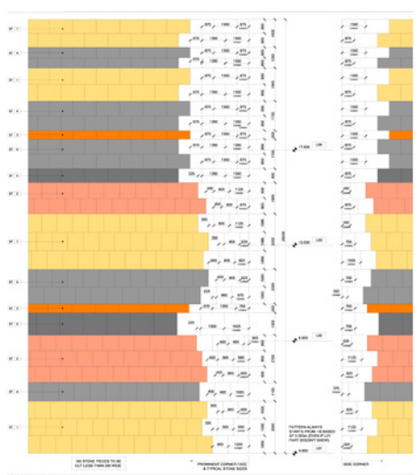




The project acts as the civic face of a new residential neighborhood designed by others, with which we had to coordinate.

Opening up from an interior shopping center with (inter)national tenants to an LED screen covered outdoor street, the design meets the ground on the residential side with small, locally owned shops.

Family-oriented entertainment venues include an ice skating rink, go-kart racing, an enclosed water park, a theater, an 8-screen cinema, a gym with a swimming pool, and climbing walls.





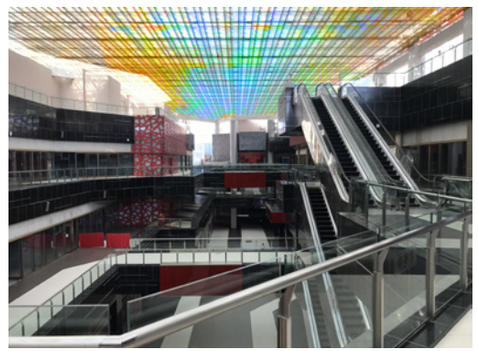
ENVIRONMENTAL GRAPHICS



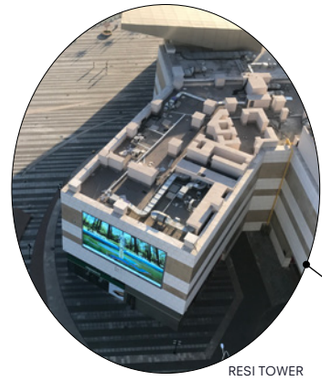
Like many development projects in China, this one was fast-tracked, with the foundation and basement columns in place while the upper stories were still being designed, and with programs and building parts continuously changing – such as towers appearing and disappearing – based on potential tenants and financing.





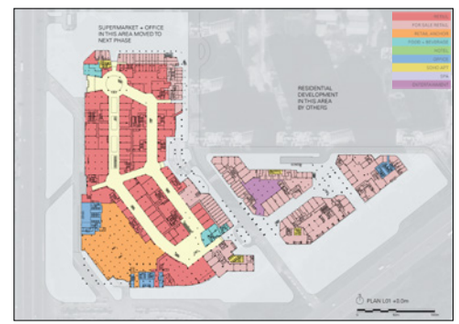


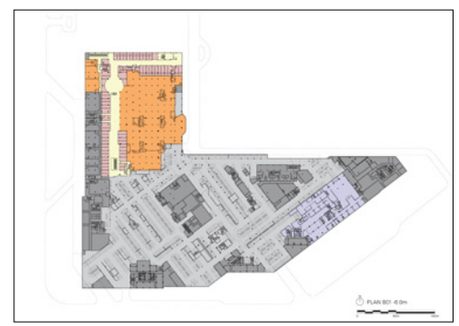




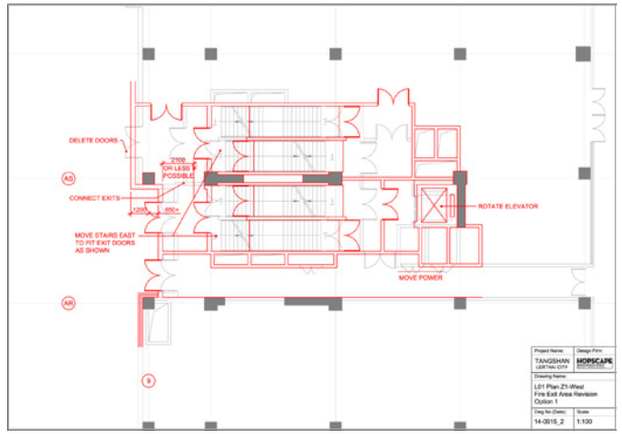


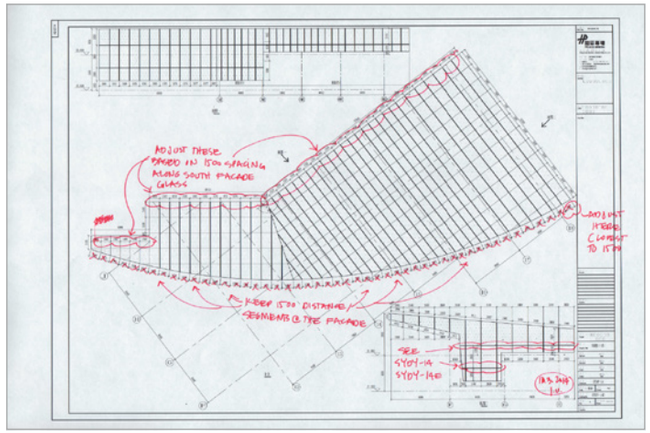


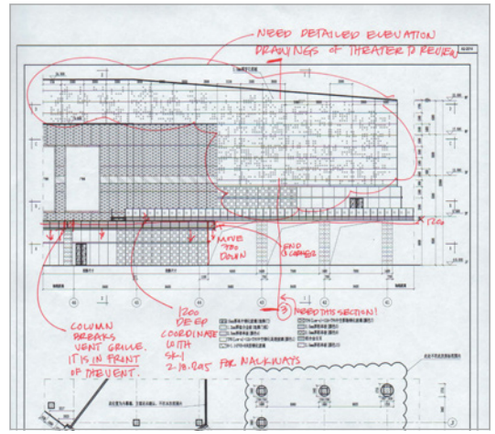


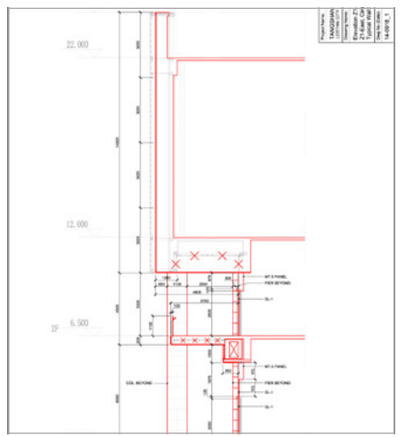


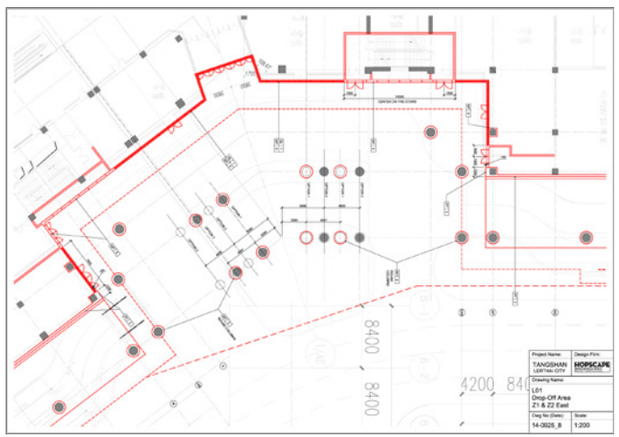
I made an effort to be readily available to answer questions via multiple channels, including WeChat, so as to improve communication and thus, as much as possible, the outcome.



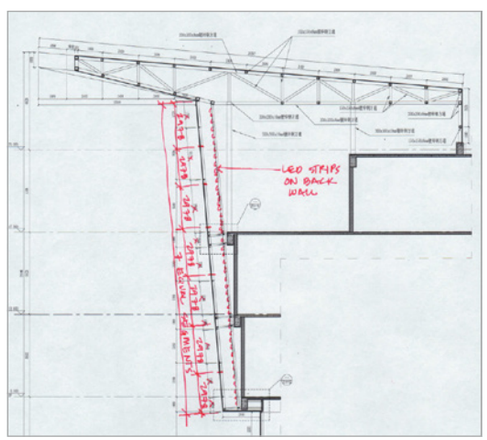


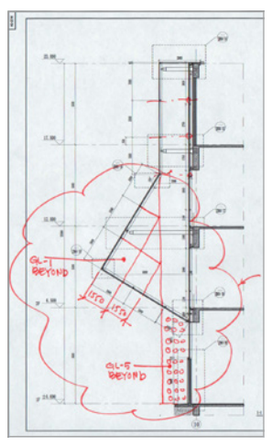


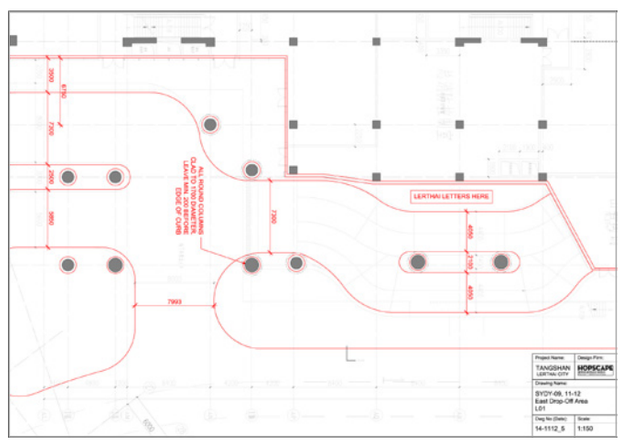


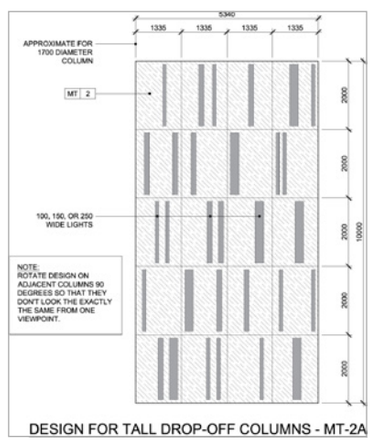
















Handan Gateway City

Handan, Hebei, China
at: Hopscape (as Principal)

Lead mixed-use project from SD to CA as the design principal, establishing the exterior design language of this modern-traditional development by studying historic Chinese buildings – their scale, rhythm, roofs, and patterns – then translating the concepts into details, and coordinating with the local architects throughout construction.

Built in a city of historic significance and acting as the gateway to Congtai Great Park, the project was restricted to (interpretive) historic design.











This 800 m long, 7-level, 300,000 sqm development consists of retail, dining, entertainment, office space, and residential villas, plus a hotel and two residential high-rises.

The highest underground level, the commercial level above parking, connects directly to a major subway stop. The loading dock and b.o.h. sit at 3 levels below grade.

The project also includes a mosque and several (empty) traditional pavilion structures, designed by others.

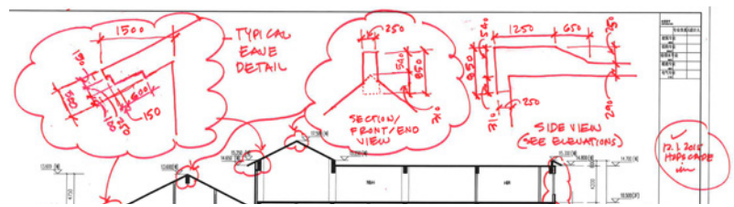






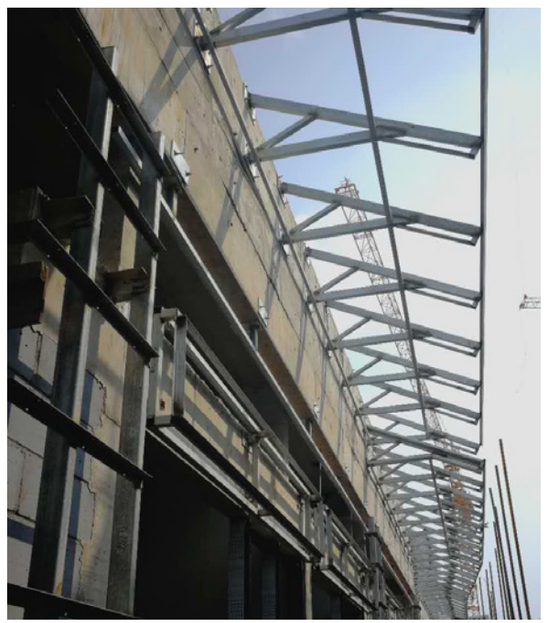




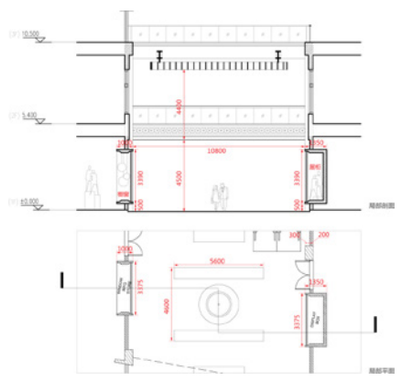


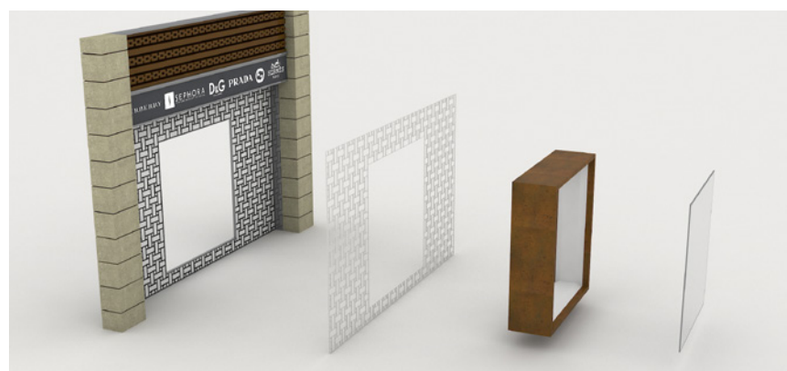
This project was very fast-tracked – foundation work started just as we began developing the design (DD) – and it underwent large programmatic changes during construction.

Several (earlier, additional) high-rise structures were taken out of the project, and a some changed program – from office to hotel, and from serviced single apartments to multifamily condos – sometimes during the construction of the building envelope.













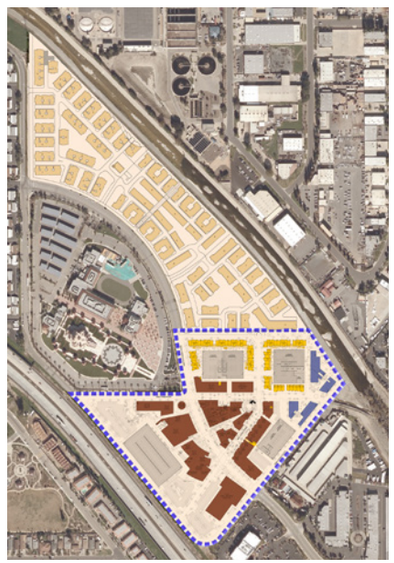


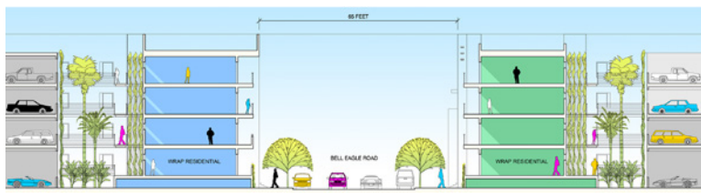












Bell Eagle

Chino Hills, CA
at: The Jerde Partnership (E. Lopez, DP)

Worked on core 2-3 person team developing the masterplan for this self-sustaining neighborhood of retail, office, and housing, later solely focusing on the multifamily residential design.

This walkable mixed-use “urban core,” adjacent to a proposed medium-density residential development by others, creates the much desired “15 minute city” neighborhood. One street with boutique retail is closed to traffic, while the other streets are design to slow traffic down.

Buffered from the parking structures they wrap with screens and vegetation, the single-loaded housing – which allows for passive cooling with through-ventilation – falls into three categories:

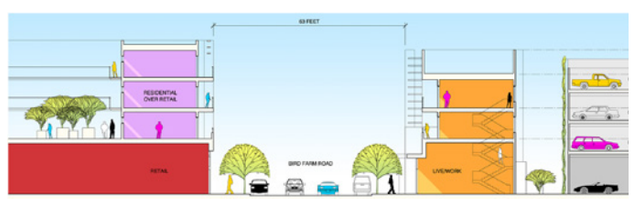
· Live/Work townhouses
· Apartments over retail
· Ground-up apartments

The elevation design shows how the exterior patios provide shading for the windows, further aiding in passing cooling.



APARTMENTS OVER RETAIL

LIVE/WORK TOWNHOUSES

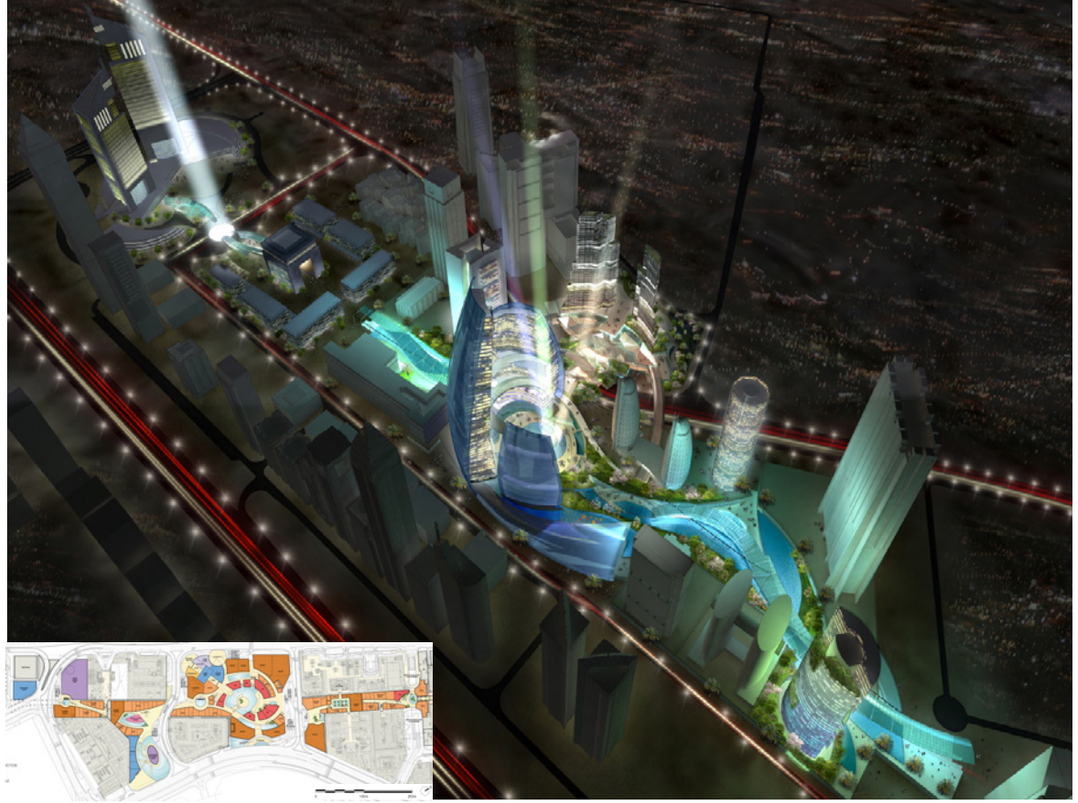


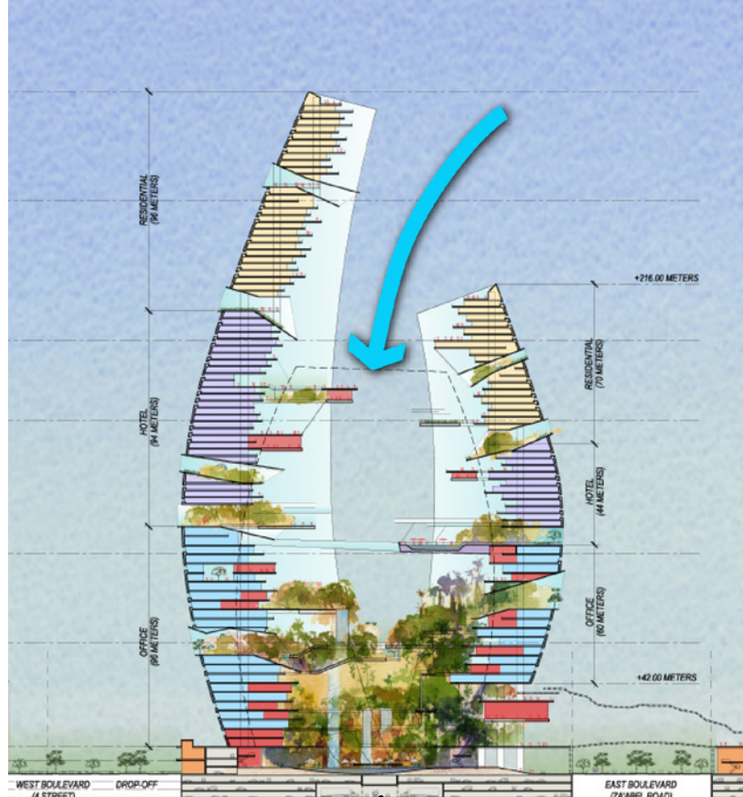










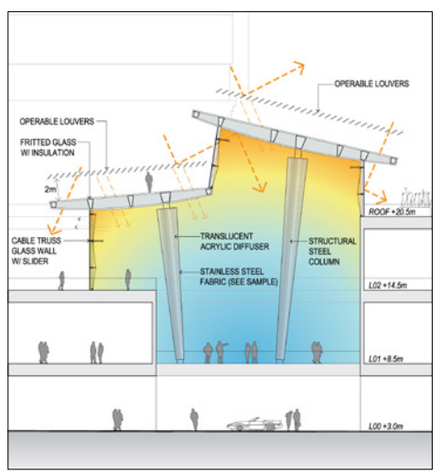


The Woven Gardens

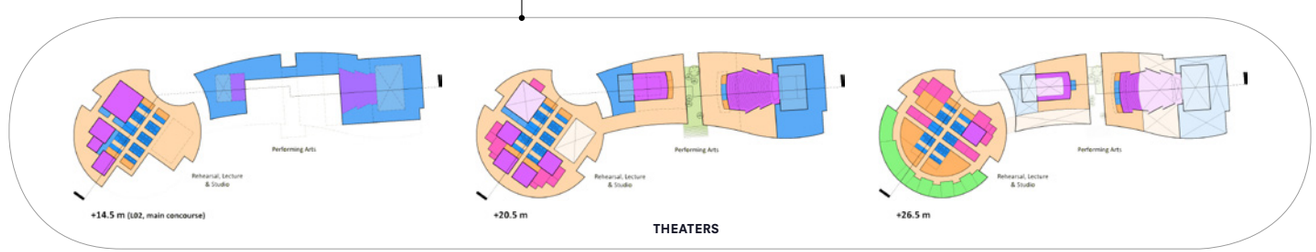
Dubai International Financial Centre, UAE
at: The Jerde Partnership (D. Rogers, DP)

Developed new conceptual (fantasy) competition design for the Dubai Financial Centre district as part of core 3-person design development team.

As an extremely long (1.4km) and tight entertainment retail infill – connecting all the significant financial center high-rise towers, and passing through and under the guarded Stock Exchange to reach the Emirates Towers – this project was logistically very difficult to work on.

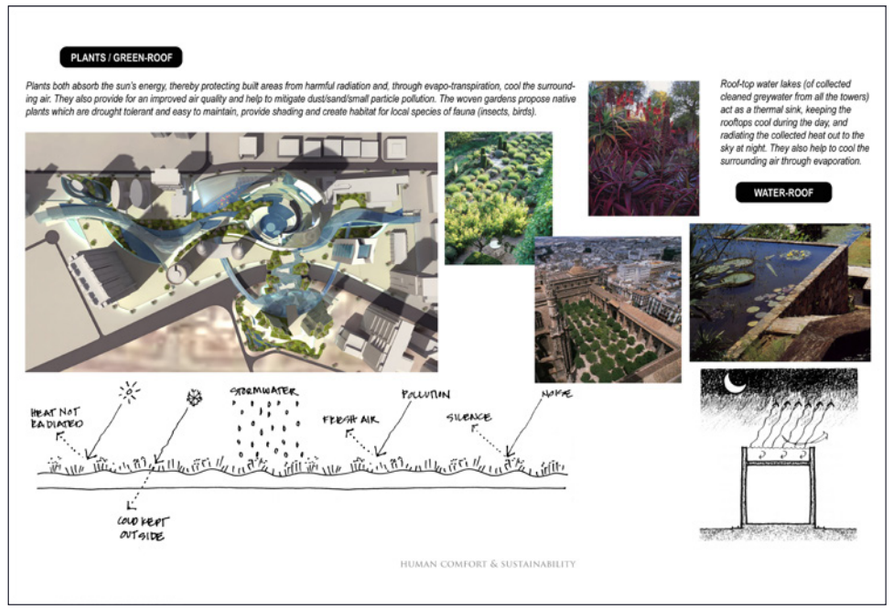




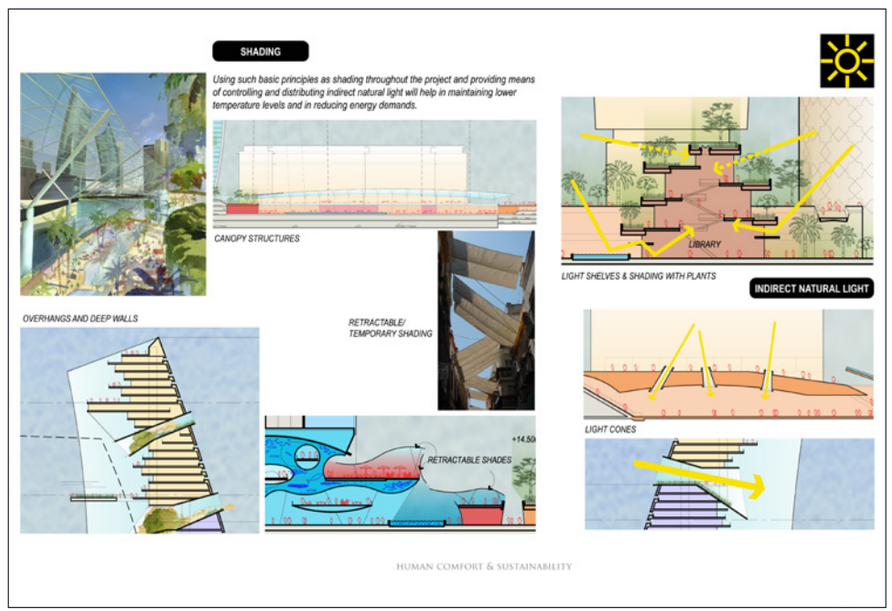


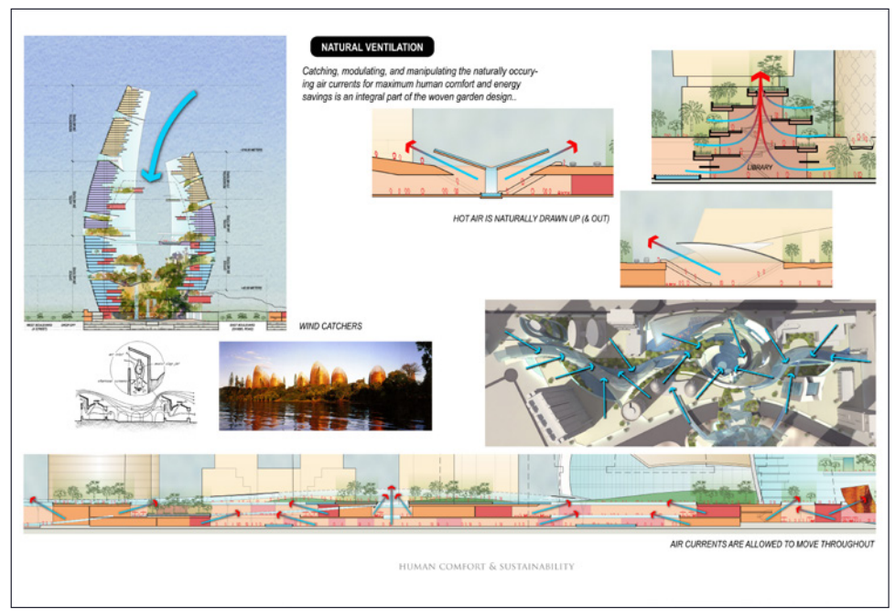
The challenge included locating vehicular entrances and exits off of the freeway-scale one-way roads bordering the district, and trying to come up with innovative edutainment programming, while swimming through complicated existing drawings from tens of architects.

Aside from trying to make this work infrastructurally, developed the project in section, originated and pushed for sustainability concepts, and worked with a theater consultant to develop the central theater district.













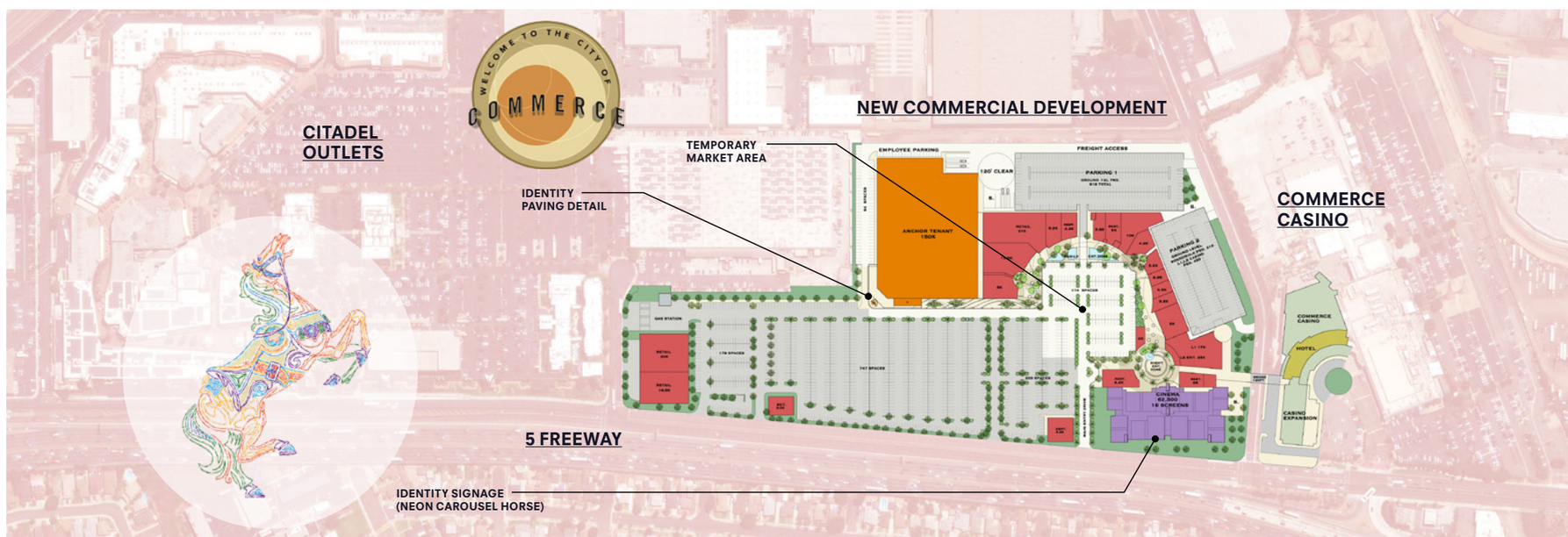
Commerce Boardwalk

Commerce, CA
at: The Jerde Partnership (T. McKerrow, DP)

Developed a conceptual masterplan for a retail + cinema project with public engagement outdoor spaces, sandwiched between the Citadel Outlets and the Commerce Casino.

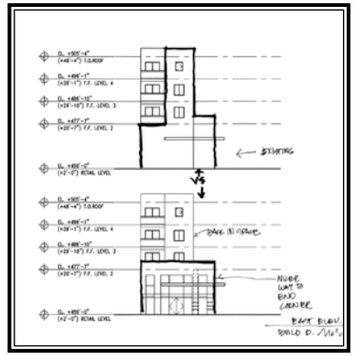
Pushed to make part of the parking able to be transformed into a temporary marketplace, through paving, scale, and the surrounding programmatic + formal design.

The project was designed to connect to an expansion of the existing casino via a proposed bridge over the street.

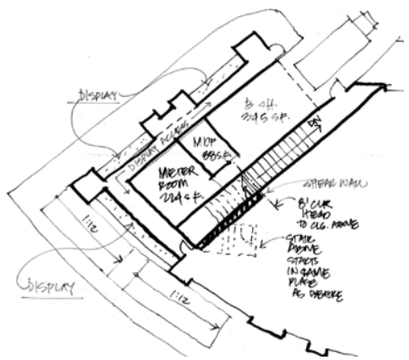
















The Paseo

San Diego State University, CA
at: The Jerde P'ship (D. Moreno & T. McKerrow, DPs)

Managed the development coordination of this mixed-use project, working with the executive and housing architects, the structural engineer, and with an art consultant on integrating public art, and later on the transition from one (exiting) principal's vision to the next, changing the facades to a more contemporary style.

The "collegetown" pedestrian project placed much needed student housing above retail, parking below grade, and included a cinema.





CREDITS

These are team projects to which Ioana Urma contributed significantly, as noted. The only exception are the “South Hills Plaza” designs which Ioana developed entirely on her own.

All 2D drawings – plans, sections, details, diagrams, sketches, redlines, and sustainability concept boards – are by Ioana Urma, except for housing drawings on ‘Timisoara Citywalk,“ which she supervised; and leasing masterplans for “The Paseo,” “The Woven Gardens,” and “Handan Gateway City,” to which she contributed, but are finalized by a team of others.

All 3D renderings are by a team of others, a mix of in-office staff and outside firms.

All watercolor renderings are by Hank Hockenberger, except for the “Noho Commons” elevation which is by Jay Fischer.

All photographs are by others, except for most of the “Urban-Scale Pergolas+” and the “Noho Commons” photos which are by Ioana Urma.

For work in other offices, the Design Principal (DP)’s name is in parentheses.