

OKLAHOMA CITY STREETScape

THE OFFICE OF JAMES BURNETT

- MURASE ASSOCIATES
- SPECK & ASSOCIATES LLC
- LEMKE LAND SURVEYING, INC.
- CARDINAL ENGINEERING
- SMITH ROBERTS BALDISCHWILER, LLC.
- MACARTHUR ASSOCIATED CONSULTANTS, LLC.
- JOHNSON & ASSOCIATES, INC.
- TETRA TECH
- MYERS ENGINEERING
- COON ENGINEERING, INC.
- LEGACY ENGINEERING, INC.



OKLAHOMA CITY STREETScape - PROJECT GOALS

01



“CREATE A COHESIVE CENTRAL BUSINESS DISTRICT.” 21ST CENTURY CITY, MEMORABLE.

02



A STREETScape THAT IS UNIQUE TO “OKLAHOMA CITY” LOCAL CONTEXT.

03



“CREATE A NEW URBAN FABRIC,” THAT ALLOWS FOR FUTURE FLEXIBILITY, GROWTH.

04



“CREATE AN ACCESSIBLE ENVIRONMENT.” AUTOMOBILE, PEDESTRIAN, BICYCLE, ABILITIES.

05



“DEVELOP A NEW SUSTAINABLE SYSTEM.” LEED PRINCIPLES, WATER, LOCAL MATERIALS, SHADE, COMFORT DEFINITION.

OKLAHOMA CITY STREETScape AND STREET IMPROVEMENTS SUMMARY

STREETScape MASTER PLAN (TASKS COMPLETED)

1.	Oklahoma City Streetscape Improvements Plan, Final Plan	November 18, 2008
2.	Review Meeting with Oklahoma City, City Managers Office, Public Works, Devon Management Team, OJB	January 22, 2009
3.	Issue Proposal for Landscape Architectural Consultant Services, Revision #1	January 30, 2009
4.	Meeting with Public Works, Project Kick-Off Meeting	February 10, 2009
5.	Oklahoma City Public Works Department, ADA Contractor Certification Course (3 team members certified)	February 11, 2009
6.	Photo documentation of proposed Downtown Street Improvements Alignments	February 12, 2009
7.	Meeting with Traffic Engineering Consultants to review Oklahoma City Streetscape Improvements Plan	February 12, 2009
8.	Recommendations Report to OKC Engineering, Traffic Engineering Consultants	February 17, 2009
9.	Visit local Civil Firms, Issue Land Surveying Services for the OKC Streetscape and Street Improvements Project	March 31, 2009
10.	Attend City Council Meeting for Walkability Study	March 31, 2009
11.	Award local Land Survey/Civil Contract	April 6, 2009
12.	Include additional scope around the Oklahoma City National Memorial and Museum Site	April 23, 2009
13.	Sign Proposal for Landscape Architectural Consultant Services, Revision #10	May 1, 2009

SCHEMATIC DESIGN (TASKS COMPLETED)

14.	Project Kick-off, Meeting with OKC Public Works	July 1, 2009
15.	Civil/Survey Kick-off Meeting with OKC Public Works, Lemke Land Survey	July 1, 2009
16.	Steering Committee Meeting #1 (Key points, Project Goals, Project Boundary, Traffic Analysis, Site Issues & Opportunities, Key Considerations)	July 14, 2009
17.	Engaged Jeff Speck & Associates	July 24, 2009
18.	Steering Committee Meeting #2 (Key points, Context, Project Priorities, Traffic Study, Overlay Diagrams –CBD, Traffic- Transportation- Bike Routes- Pedestrian Routes, Initial Plans & Ideas)	July 28, 2009
19.	Engaged Glatting Jackson	August 8, 2009
20.	Steering Committee Meeting #3 (Key points, Project Goals, Schedule, Traffic Proposal Option I, Option II, Plan/Diagrams/Sections/Partial Plans)	August 11, 2009
21.	Issued Updated Traffic Plan/Diagram/Sections/Partial Plans	August 26, 2009
22.	Steering Committee Meeting #4 (Key points, Project Goals, Updated Traffic Diagrams, Initial Design Concepts, Methodology, Considerations).	August 26, 2009
23.	Issued Traffic Plan/Diagrams/Sections/Partial Plans, Geometry (Issued for Review by TEC and acceptance by OKC Public Works)	August 26, 2009
24.	Issued Letter, Transportation Planning Approach, Glatting Jackson Kercher Anglin.	August 26, 2009
25.	Traffic Sub-Committee Meeting	August 28, 2009
26.	Traffic Sub-Committee Meeting	September 2, 2009
27.	Steering Committee Meeting #5	September 9, 2009
28.	Public Presentation to Local Design Firms, Utility Companies (Steering Committee Meeting #6)	September 23, 2009
29.	Street Tree Inventory (Sub-Committee)	September 24, 2009
30.	Public Art Inventory and Review (Sub-Committee)	September 24, 2009
31.	Transportation Sub-Committee Meeting	September 24, 2009
32.	Local Design Firm Interviews	October 5, 7, 2009
33.	Issue Schematic Design Drawings Package, (Drawing Package, Streetscape Standardization Reference Manual)	October 9, 2009
34.	Schematic Design Complete	October 15, 2009

DESIGN DEVELOPMENT (TASKS COMPLETED)

35.	Local Design Firm Selection/Award	October 14, 2009
36.	Steering Committee Meeting #7 (Vertical Elements Preliminary)	October 21, 2009
37.	Local Design Firm, Kick-off Coordination Meeting (Project Overview)	October 22, 2009
38.	Steering Committee Meeting #8 (Continued Vertical Elements, Horizontal Elements)	November 4, 2009

Design Development - In Progress - Next Steps (Week 4 of 16)

CURRENT KEY TASKS

1.	Steering Committee Meeting #8 (Horizontal Elements Preliminary)	November 4, 2009
2.	Steering Committee Meeting #9 (Design Presentation, Renderings, Models, Boards)	November 22, 2009

ADDITIONAL CONSIDERATIONS

1.	Maintenance Sub-Committee Meeting, Kick-off	November 5, 2009
2.	Steering Committee Meeting #9 (Design Presentation, Renderings, Models, Boards)	November 18, 2009
3.	Overlay OKC Transportation Plan with Proposed Streetscape Diagram	
4.	Overlay OKC Bike Plan with Proposed Streetscape Diagram	
5.	Present Streetscape Plan to the Design Review Committee	November 19, 2009
6.	Present Streetscape Plan to Oklahoma City Community	

Design Team

The Office of James Burnett, Murase Associates, Speck & Associates LLC, Glatting Jackson Kercher Anglin, Inc. (OJB in-house consultant)

OKLAHOMA CITY

PROJECT AERIAL

9,708,958 ft²

CONSTRUCTION DATA

AREA OF DEMOLITION

2,784,785 SQ FT, 64 ACRES

LANDSCAPE AREA

220,000 SQ FT, 5 ACRES

SIGNAL POLES

172 POLES

STREET LIGHTS

711 LAMPS

STREET TREES

1,970

CURB & GUTTER

80,378 LINEAR FEET

TREE GRATES

322

PROJECT DATA

AREA OF SITE

9,708,958 SQUARE FEET, 222 ACRES +/-

HUMAN POPULATION

CITY 547,274

METRO 1,262,027

CITY BLOCKS

50 BLOCKS

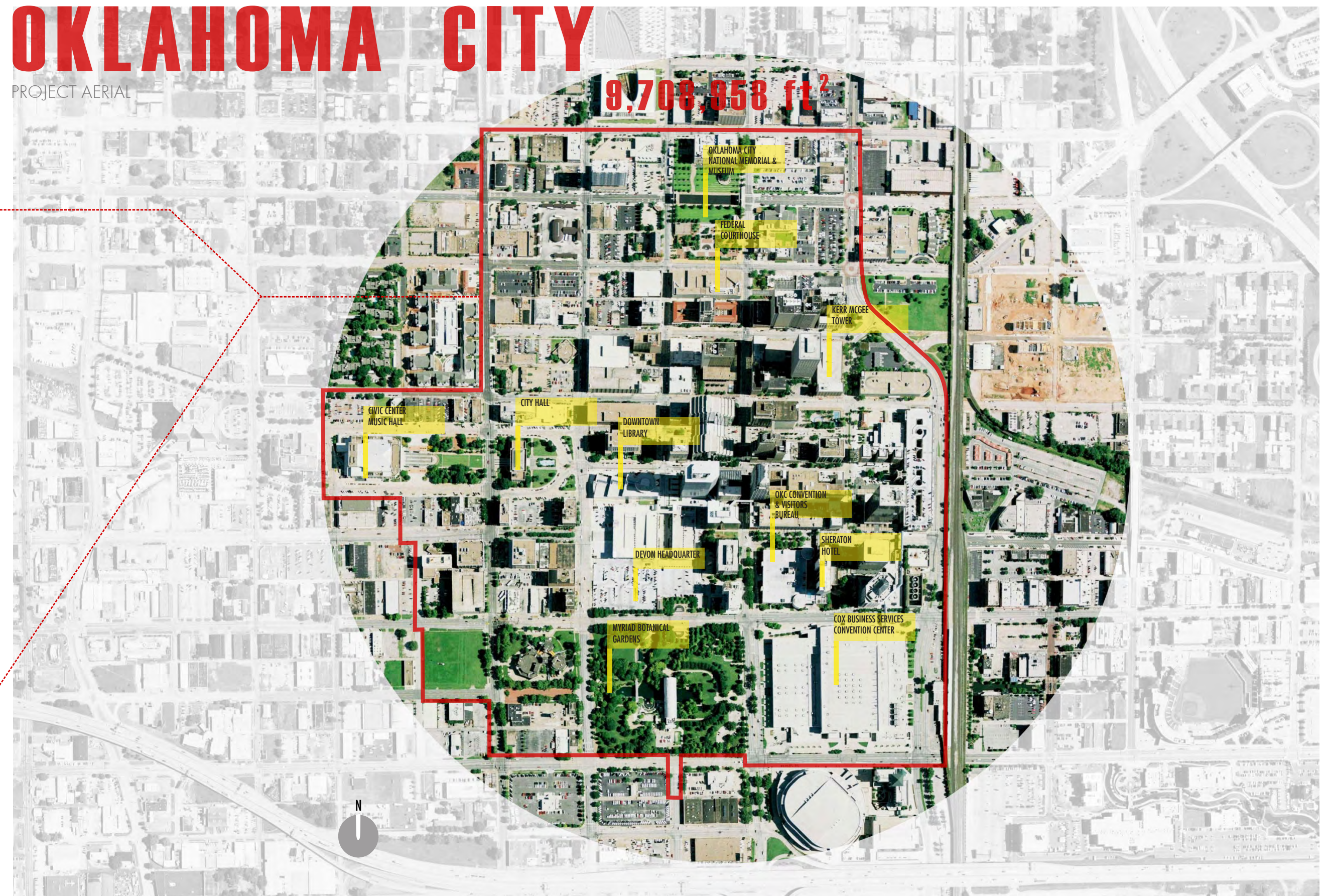
BLOCK FACES 92

49 EAST WEST

43 NORTH SOUTH

INTERSECTIONS

51 INTERSECTIONS

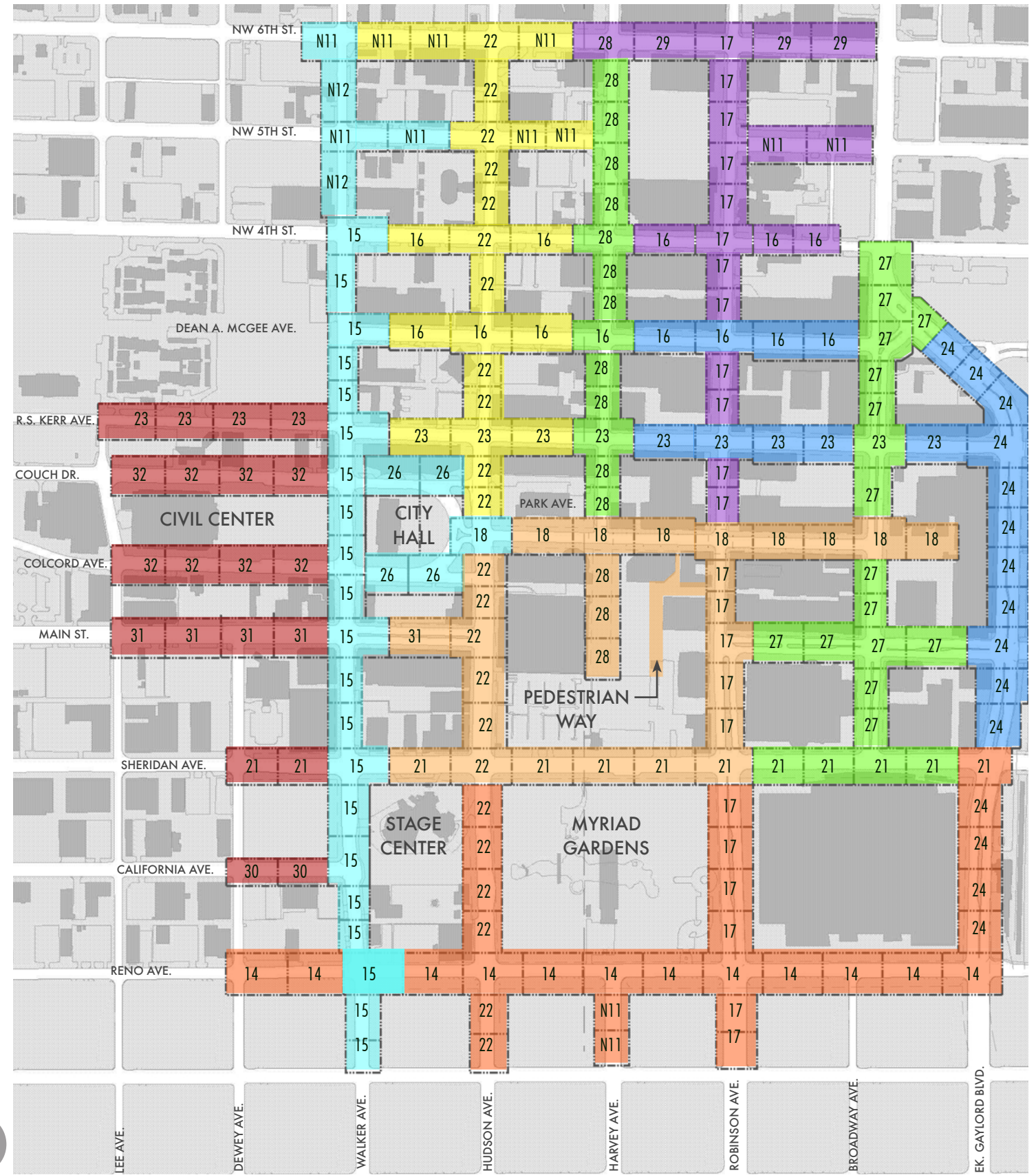


OKLAHOMA CITY

DOWNTOWN STREETScape REDEVELOPMENT
INITIAL PHASING PLAN AS ADOPTED BY COUNCIL, SEPTEMBER 2009

STREETScape PHASING PLAN

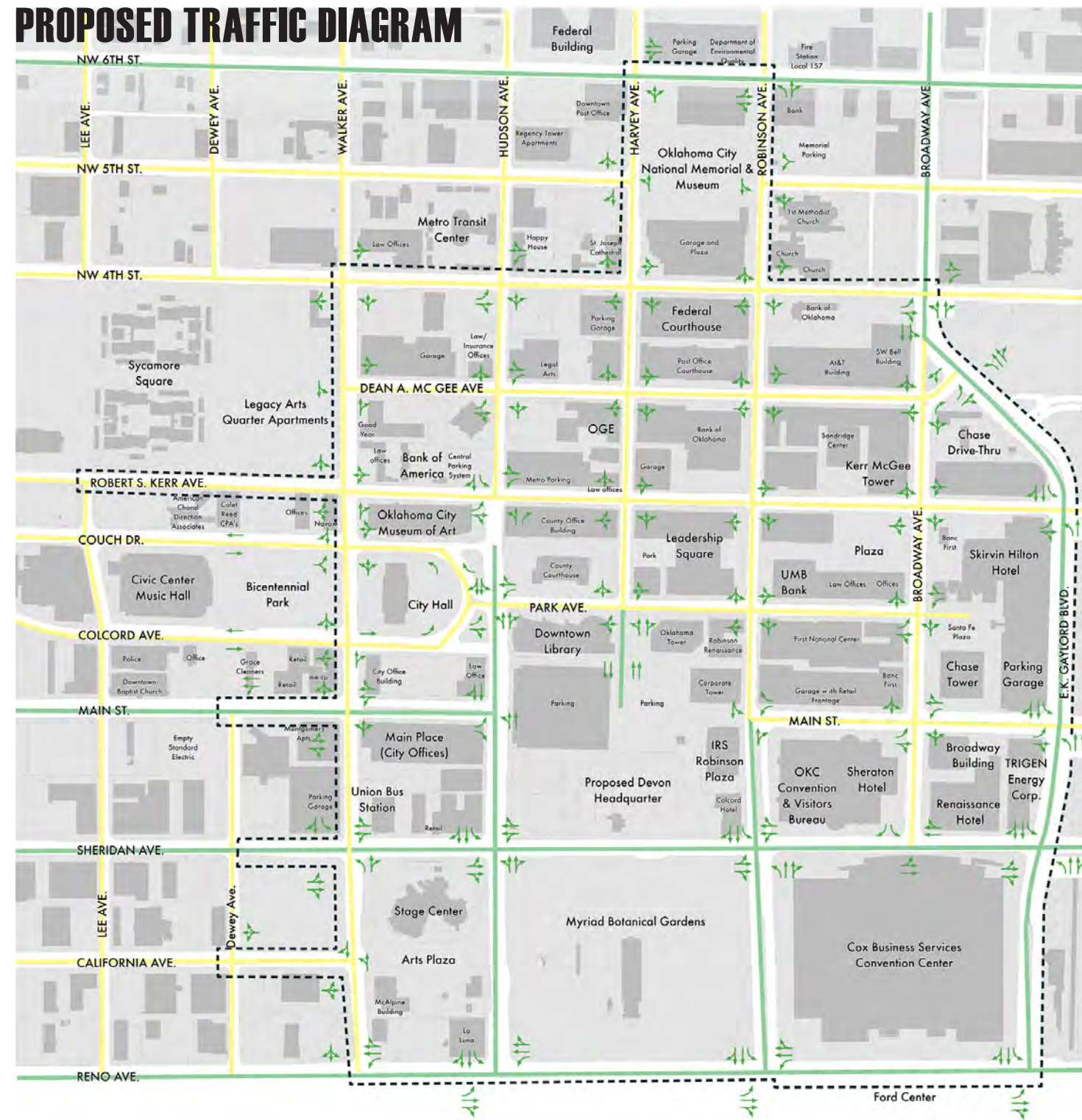
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	MAC +/- 6171 If	MAC ARTHUR ASSOC. CONSULTANTS, LLC
	JA +/- 7410 If	JOHNSON & ASSOCIATES, INC
	TT +/- 7321 If	TETRA TECH.
	MR +/- 4051 If	MYERS ENGINEERING
	CARD +/- 5533 If	CARDINAL ENGINEERING
	COON +/- 4212 If	COON ENGINEERING, INC
	L +/- 4023 If	LEGACY ENGINEERING, INC



1

STREET DIAGRAMS





PROPOSED TRAFFIC DIAGRAM



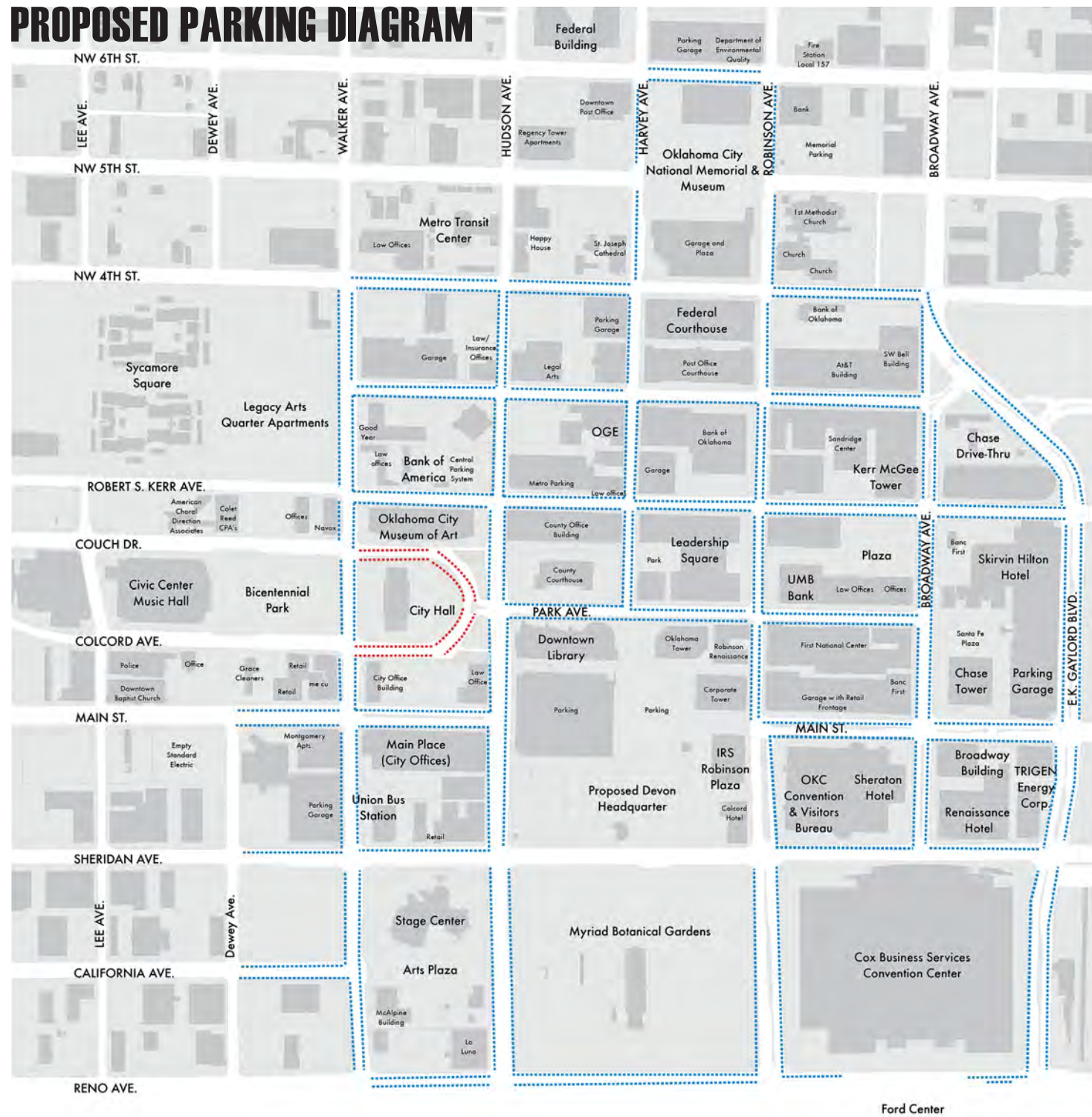
GENERAL RECOMMENDATION

- PROVIDE TWO-WAY TRAFFIC ON ALL STREETS IN THE CENTRAL BUSINESS DISTRICT EXCEPT FOR THE ONE BLOCK SECTION OF COLCORD AND COUCH AVENUES NEAR CITY HALL
- PROVIDE 10 FOOT WIDE VEHICULAR LANES, 11-12' WIDE LANES FOR TRANSIT ROUTES
- PROVIDE AUTOMATIC "WALK" SIGNAL FOR PEDESTRIAN
- MAXIMIZE ON-STREET PARKING SPACES THROUGHOUT THE DISTRICT WITH PARALLEL AND ANGLED PARKING (REFER TO PARKING DIAGRAM)
- INTRODUCE BIKE LANES BETWEEN ON-STREET PARKING SPACES AND VEHICULAR TRAFFIC LANES WHEN STREET WIDTH ALLOWS (REFER TO BIKE ROUTE DIAGRAM)
- CONVERT STRIPED MEDIAN TO PLANTED MEDIAN (REFER TO OPEN SPACE AND MEDIAN DIAGRAM)

LEGEND

	4 THROUGH LANES
	2 THROUGH LANES
	TRAFFIC LANES
	PROJECT LIMIT

PROPOSED PARKING DIAGRAM



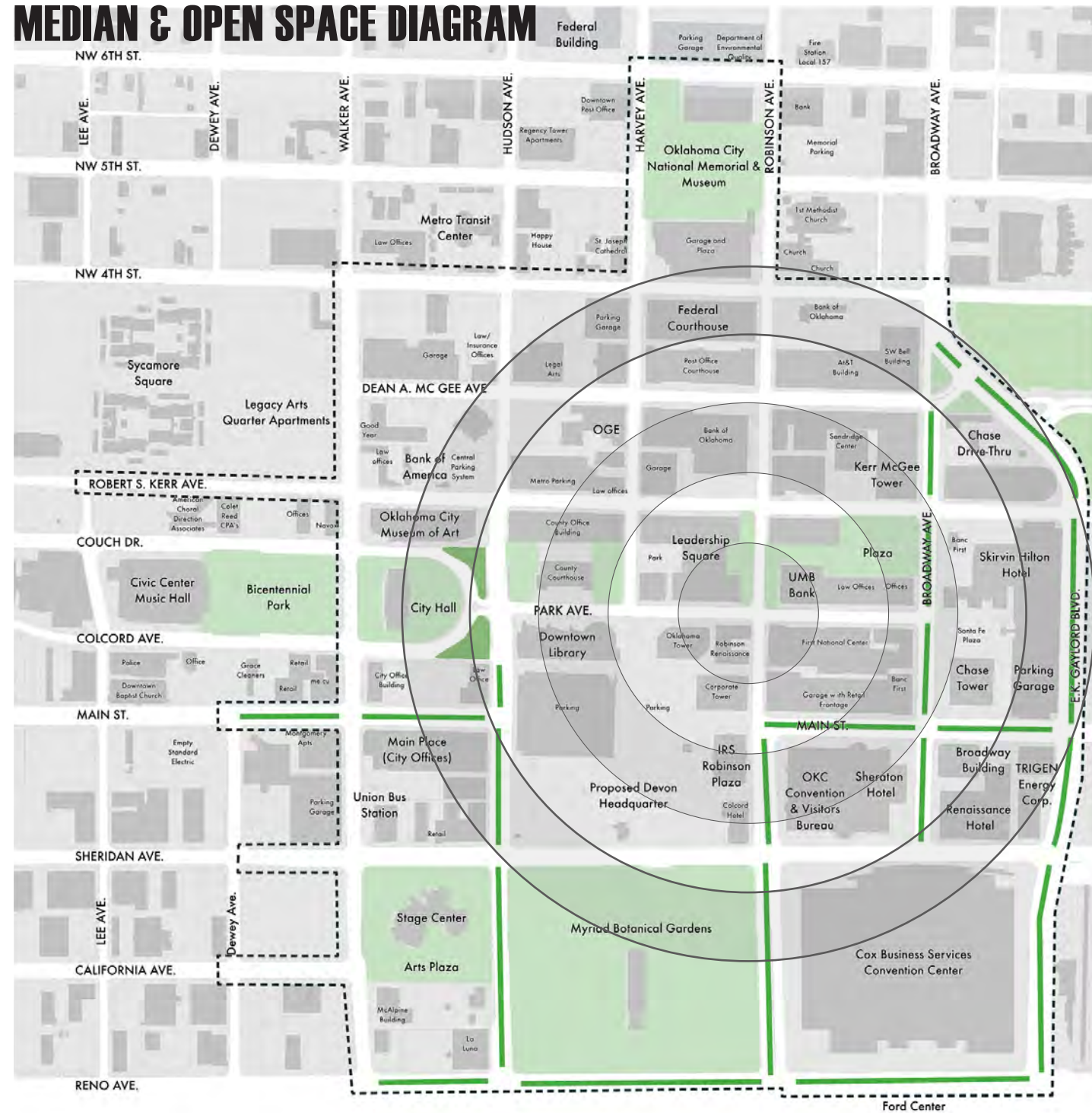
GENERAL RECOMMENDATION

- MAXIMIZE ON-STREET PARKING SPACES THROUGHOUT THE DISTRICT WITH PARALLEL AND ANGLED PARKING SPACES
- PARALLEL PARKING DIMENSION - 8' WIDE BY 22' LONG

LEGEND

- ON-STREET PARALLEL PARKING (DEDICATED LANE)
- ON-STREET ANGLED PARKING
- PROJECT LIMIT

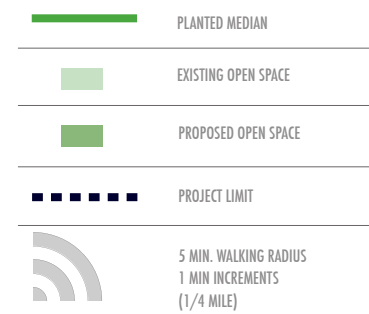
MEDIAN & OPEN SPACE DIAGRAM



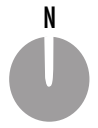
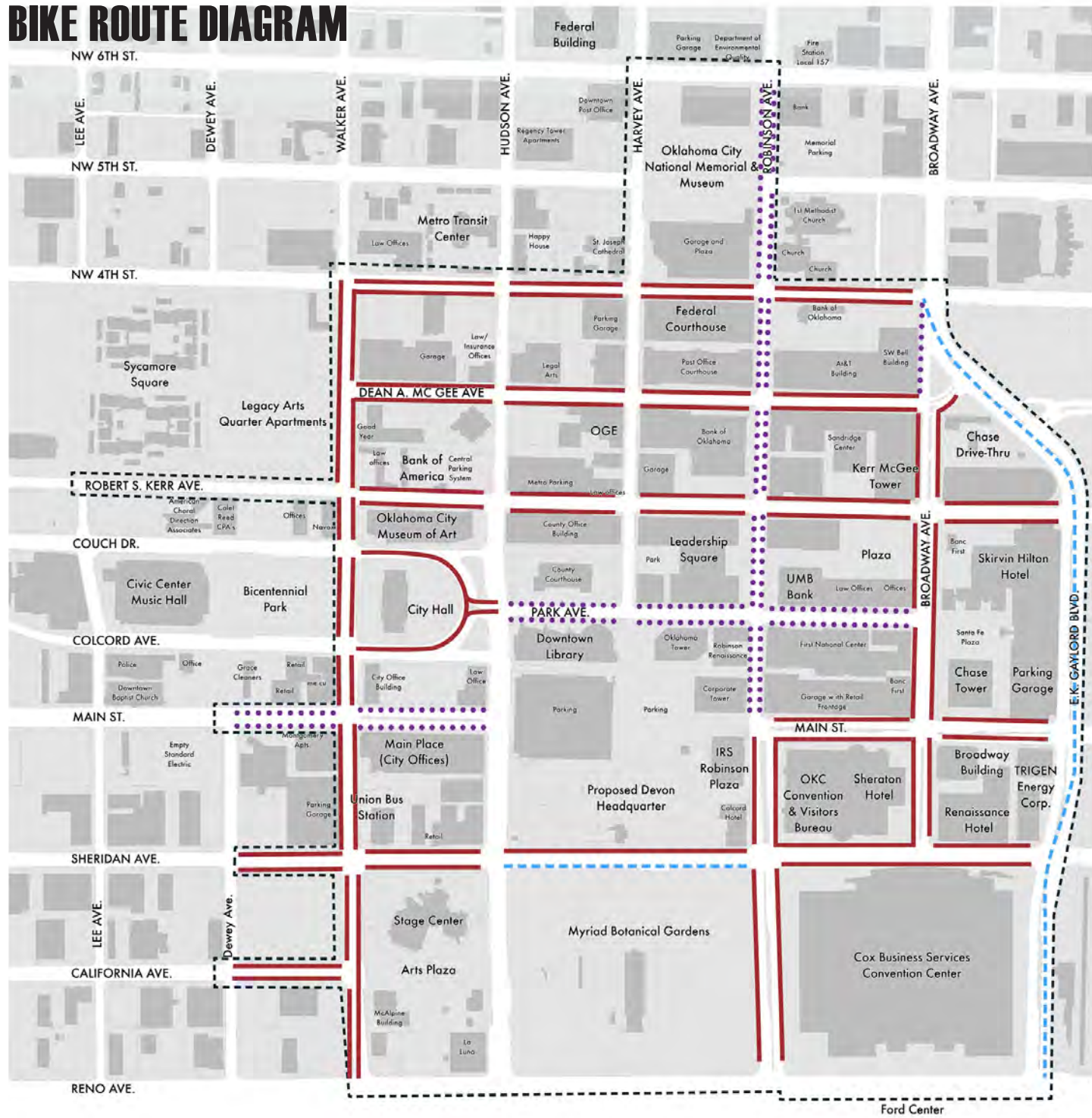
GENERAL RECOMMENDATION

- CONVERT STRIPED MEDIAN ON RENO AVE. AND E.K. GAYLORD TO PLANTED MEDIAN

LEGEND



BIKE ROUTE DIAGRAM



SHARROW LANE MARKING

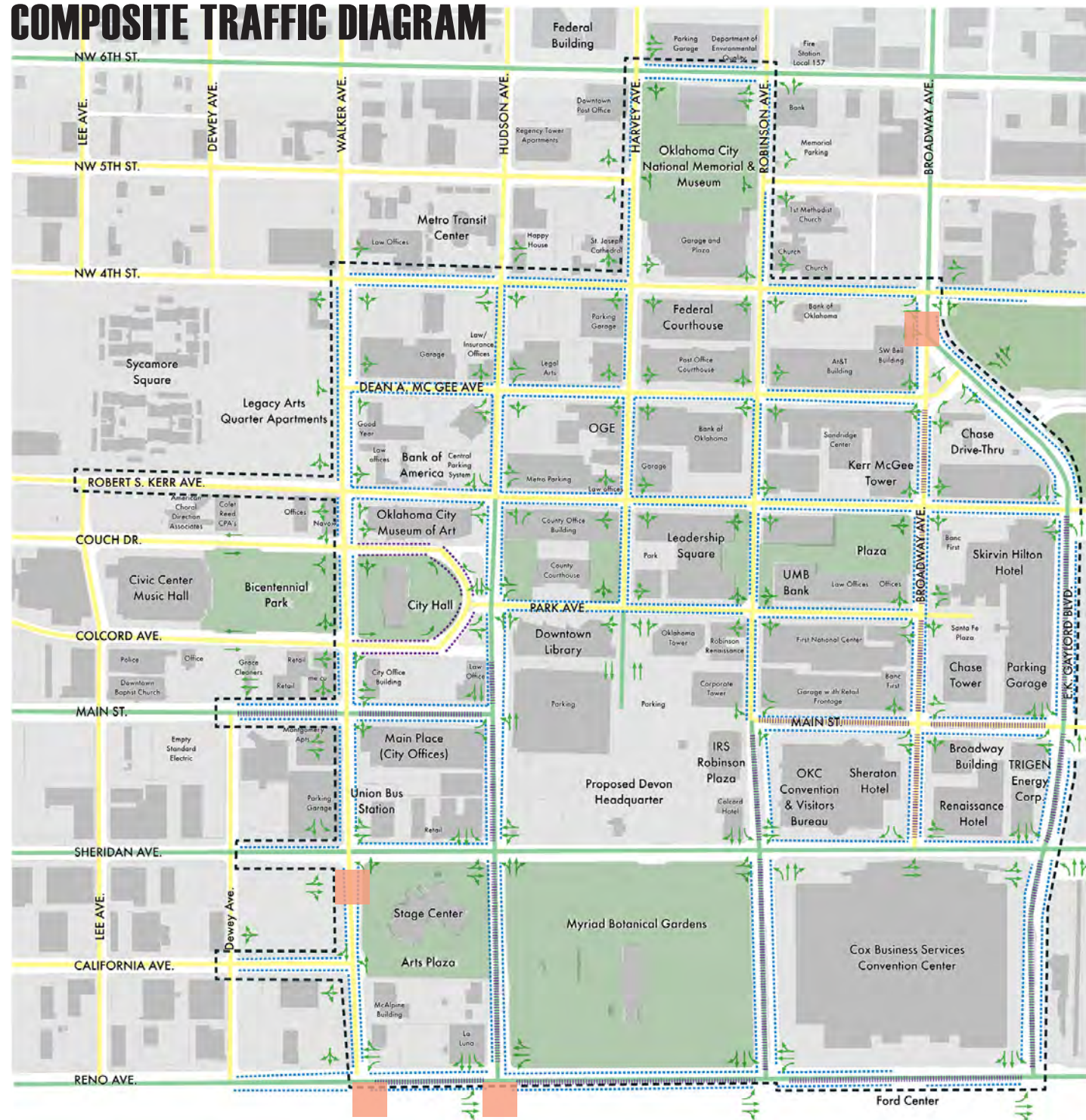
GENERAL RECOMMENDATION

- PROVIDE A COMPREHENSIVE BIKE ROUTE SO THAT MAJOR DESTINATIONS ARE WITHIN 5 MINUTE WALK FROM BIKE ROUTES
- 5' WIDE DEDICATED BIKE LANES ON MAJOR STREETS
- DEDICATED BIKE PATHS ALONG E.K. GAYLORD BETWEEN RENO AVE. AND DEAN A. MCGEE AVE.
- PROVIDE SHARROW MARKING ON TRAFFIC LANES TO INDICATE ROAD SHARING BETWEEN VEHICLES AND BIKES ON STREET WITH NO BIKE LANES OR BIKE PATHS (EXCEPT RENO AVE.)

LEGEND

- SHARROW LANE (MARKED SHARED LANE FOR VEHICLES AND BIKES)
- BIKE LANE (DEDICATED 5 FOOT BIKE LANE ON STREET)
- BIKE PATH (DEDICATED OFF-STREET PATH)
- PROJECT LIMIT

COMPOSITE TRAFFIC DIAGRAM



LEGEND



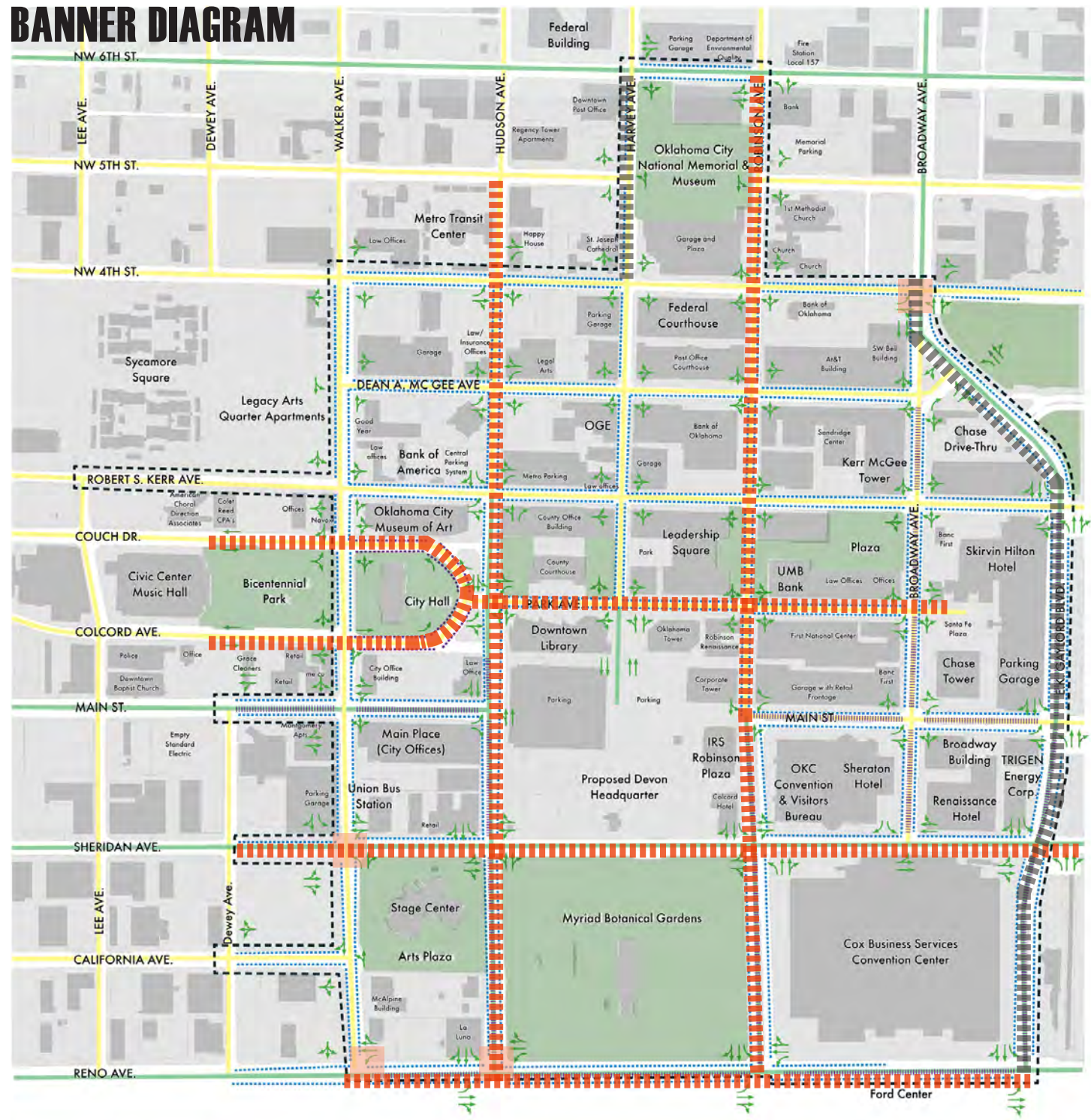
INTERSECTIONS OF STUDY

- 4TH STREET AND BROADWAY AVENUE
- SHERIDAN AVENUE AND WALKER AVENUE
- RENO AVENUE AND WALKER AVENUE
- RENO AVENUE AND HUDSON AVENUE
- THE BOULEVARD AT ROBINSON AVENUE (OFF PLAN)
- THE BOULEVARD AT E.K. GAYLORD BOULEVARD (OFF PLAN)

GENERAL RECOMMENDATION

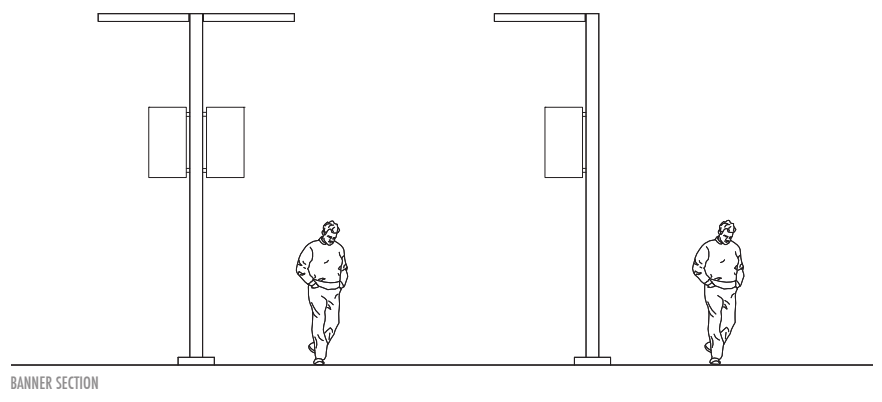
- PROVIDE TWO-WAY TRAFFIC ON ALL STREETS IN THE CENTRAL BUSINESS DISTRICT EXCEPT FOR SOME SECTIONS OF COLCORD AVE. AND COUCH AVE. NEAR CITY HALL
- REDUCE LANE WIDTH TO 10 FEET; 11-12 FEET FOR TRANSIT ROUTES
- PROVIDE AUTOMATIC 'WALK' SIGNAL FOR PEDESTRIAN
- MAXIMIZE ON-STREET PARKING SPACES THROUGHOUT THE DISTRICT WITH PARALLEL AND ANGLED PARKING
- INTRODUCE BIKE LANES BETWEEN ON-STREET PARKING SPACES AND VEHICULAR TRAFFIC LANES ON CERTAIN STREETS
- CONVERT STRIPED MEDIAN ON RENO AVE. TO PLANTED MEDIAN

BANNER DIAGRAM



LEGEND

- 4 THROUGH LANES
- 2 THROUGH LANES
- PLANTED MEDIAN
- TRAFFIC LANE
- ON-STREET PARALLEL PARKING (DEDICATED LANE)
- ON-STREET ANGLED PARKING (DEDICATED LANE)
- PROJECT LIMIT
- GREEN SPACE
- INTERSECTION OF STUDY
- PROPOSED BANNER ALIGNMENT
- EXPANDED BANNER ALIGNMENT



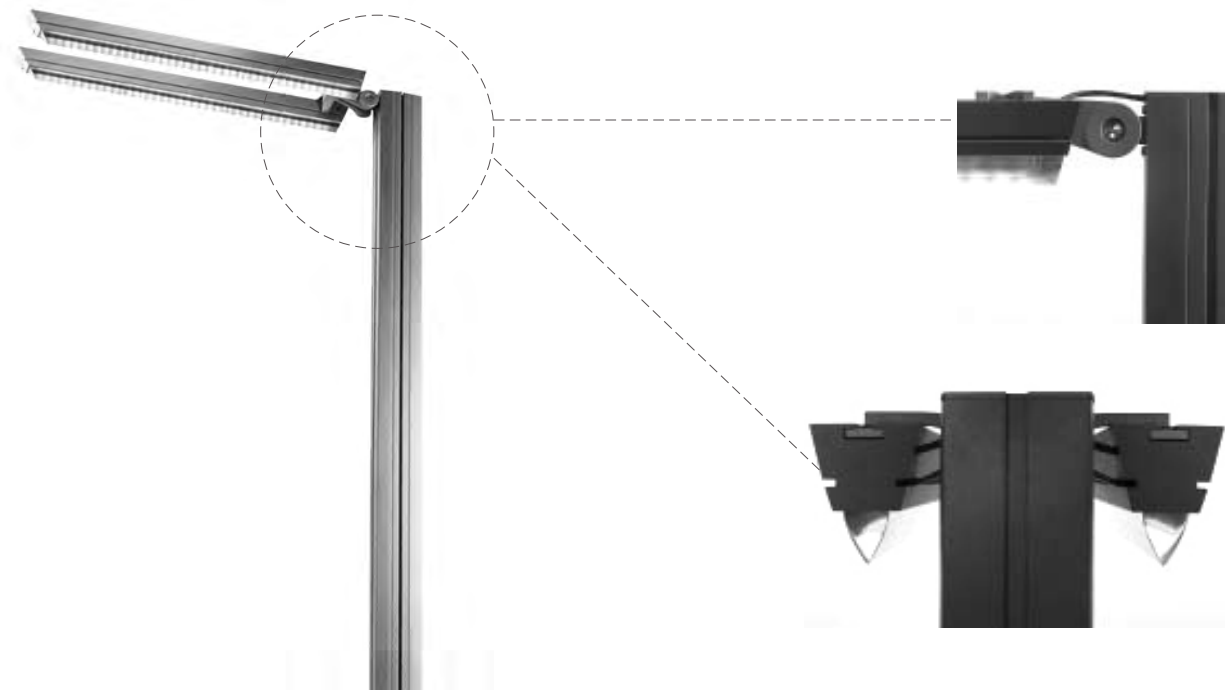
2

DESIGN COMPONENTS - VERTICAL

OKLAHOMA CITY URBAN - STREETLIFE **lighting option A1**

| sleek | linear | futuristic | adjustable | aluminum |



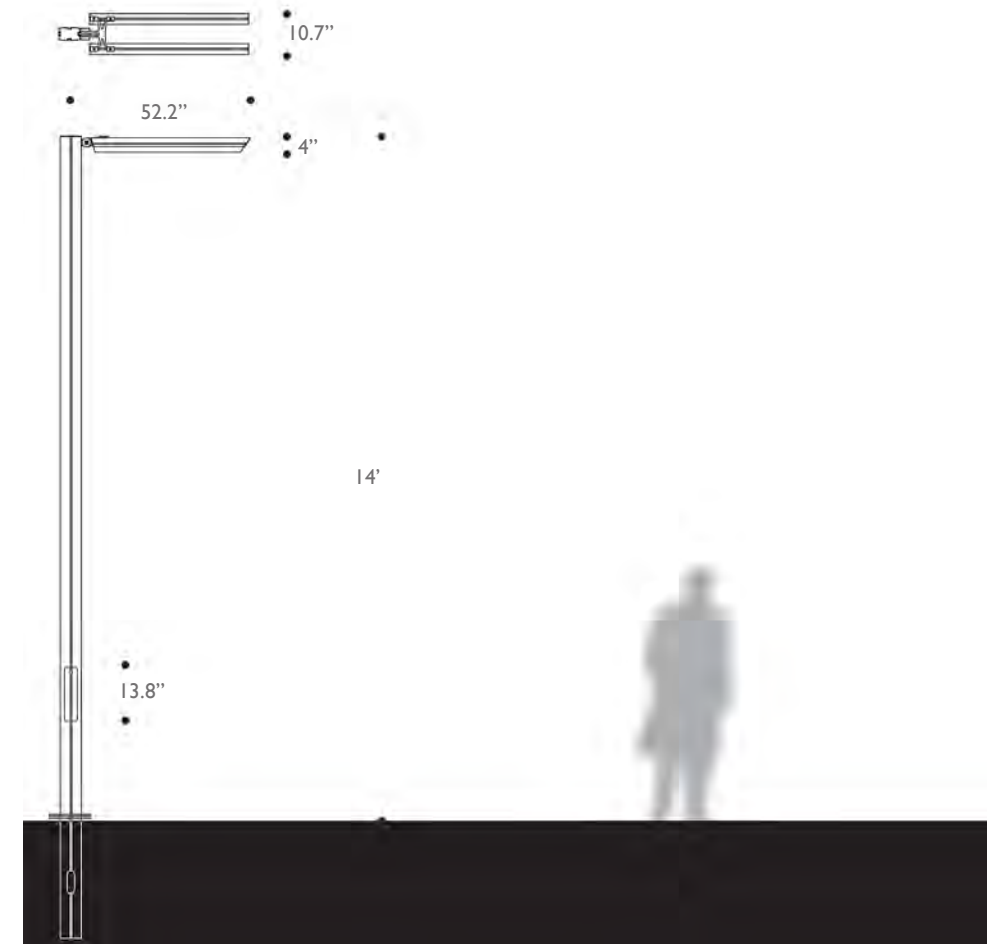
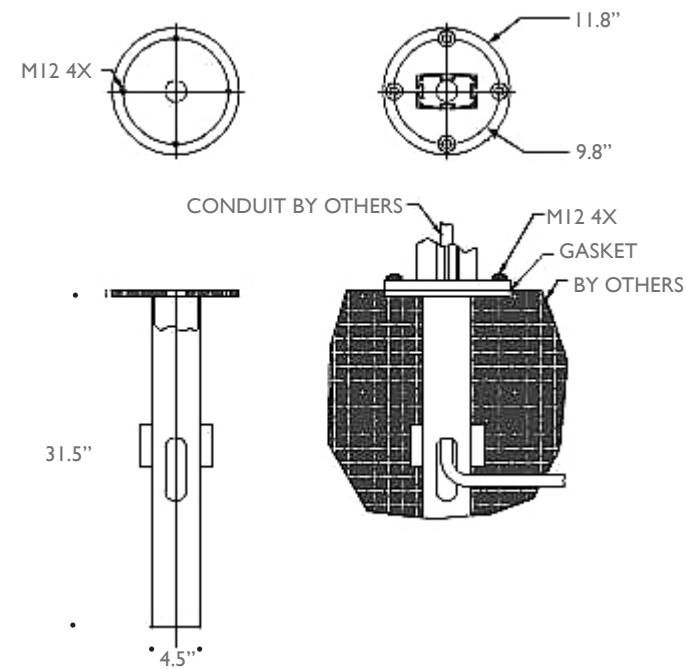


MILLENNIO's futuristic appearance coupled with revolutionary LED illumination embodies the future of pedestrian scale lighting. The sleek linear design of the extruded aluminum housing casts a strikingly simple silhouette. A precision engineered, teardrop shaped acrylic lens projects wide angle illumination in a long narrow beam ideally suited for public pathways or parks. Adjustable fitting allows the fixture to be tilted to increase light projection. Luminaire is available in single or twin mount configurations. Vertical T-slots extruded into the rectangular aluminum pole provide linear shadow lines, while serving as integrated luminaire mounting. MILLENNIO's natural anodized finish personifies its advanced design and technology. All hardware is stainless steel. Requires soil insert.

ME940 POLE MOUNTED LUMINAIRE		
MODEL	HEIGHT	LAMP
ME940	14'	LED

HESS

MILLENNIO - POLE MOUNTED LUMINAIRE



HESS **MILLENNIO - POLE MOUNTED LUMINAIRE**



HESS **MILLENNIO - POLE MOUNTED LUMINAIRE**



OKLAHOMA CITY URBAN - STREETLIFE

signal poles A1

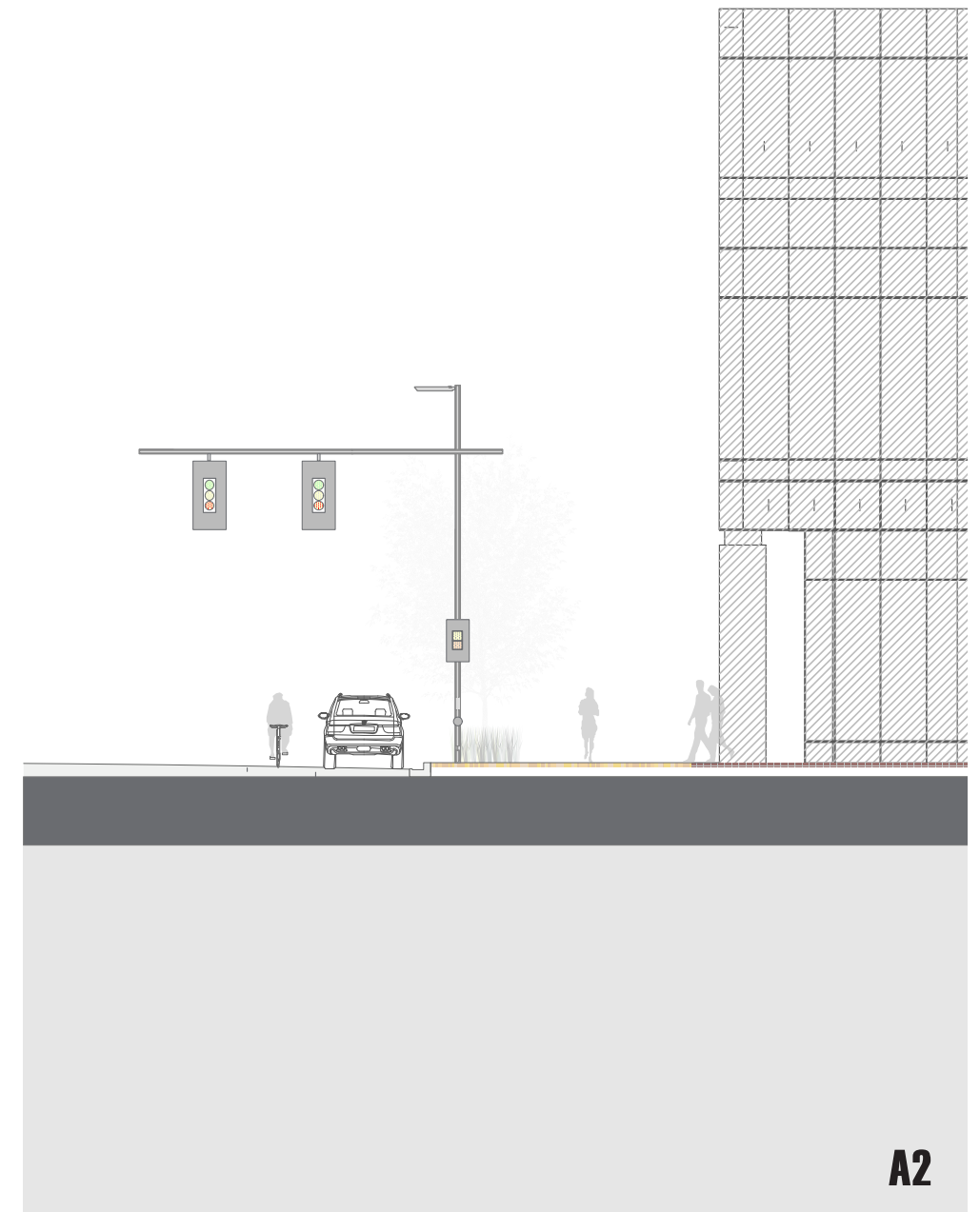
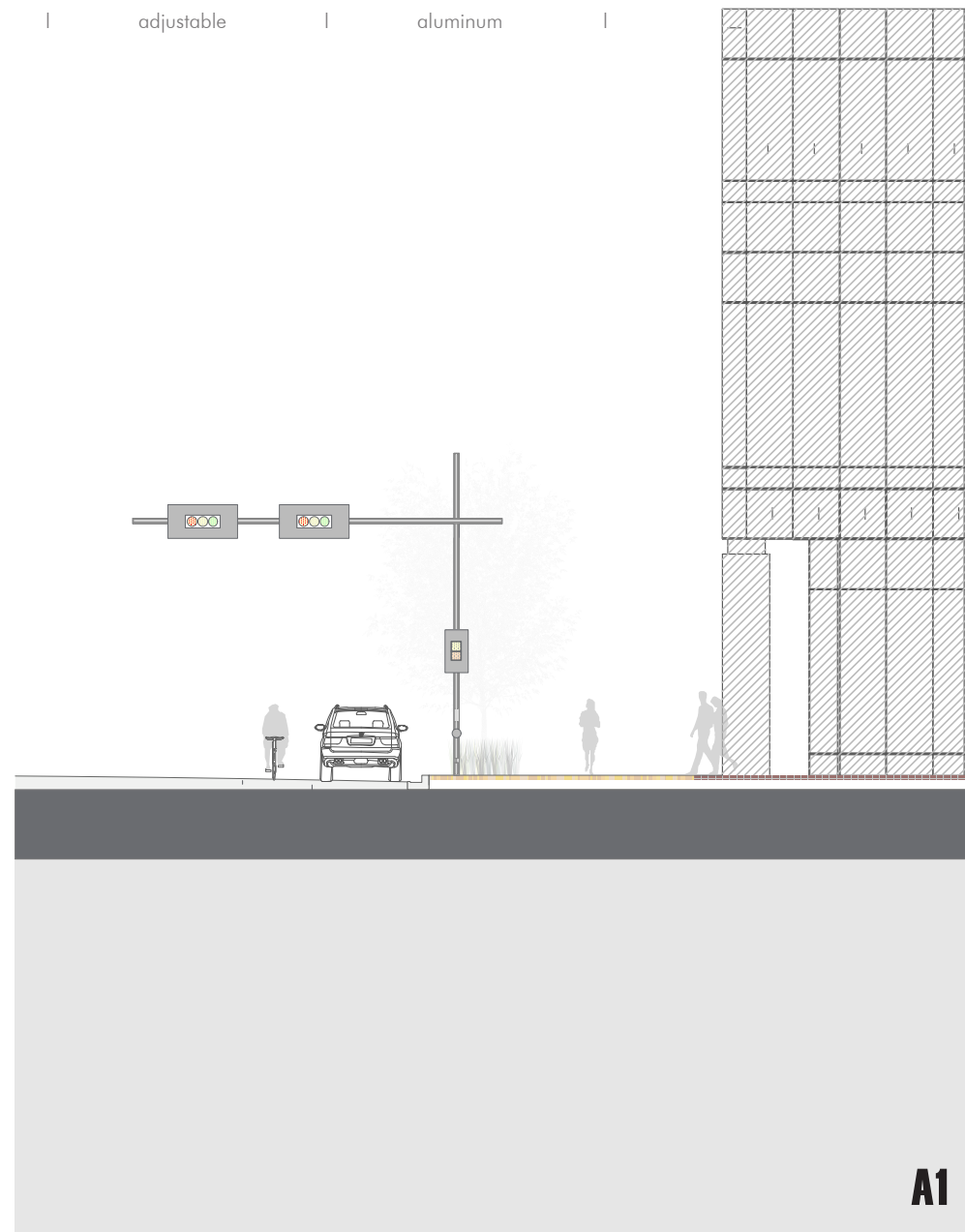
| sleek

| linear

| futuristic

| adjustable

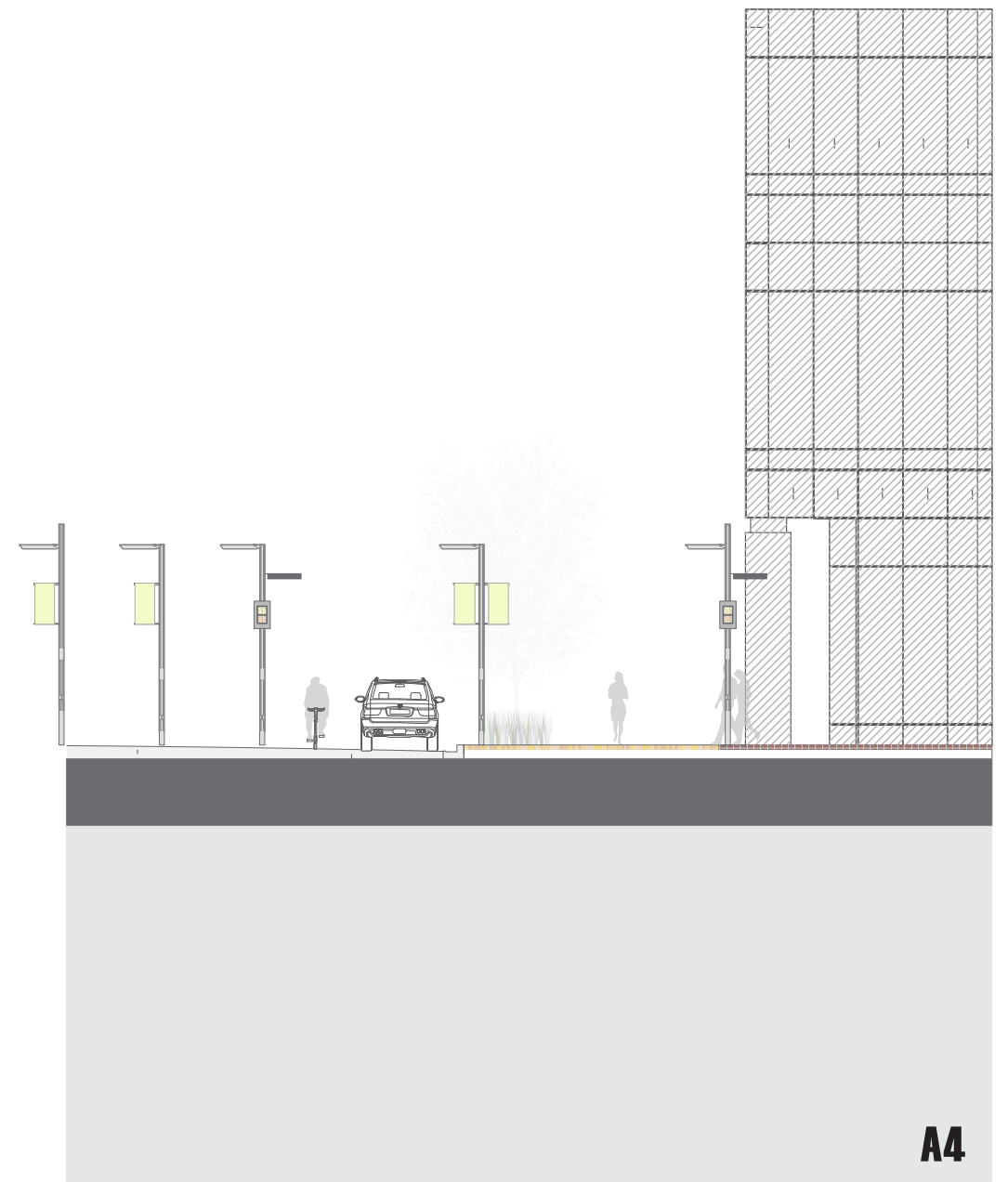
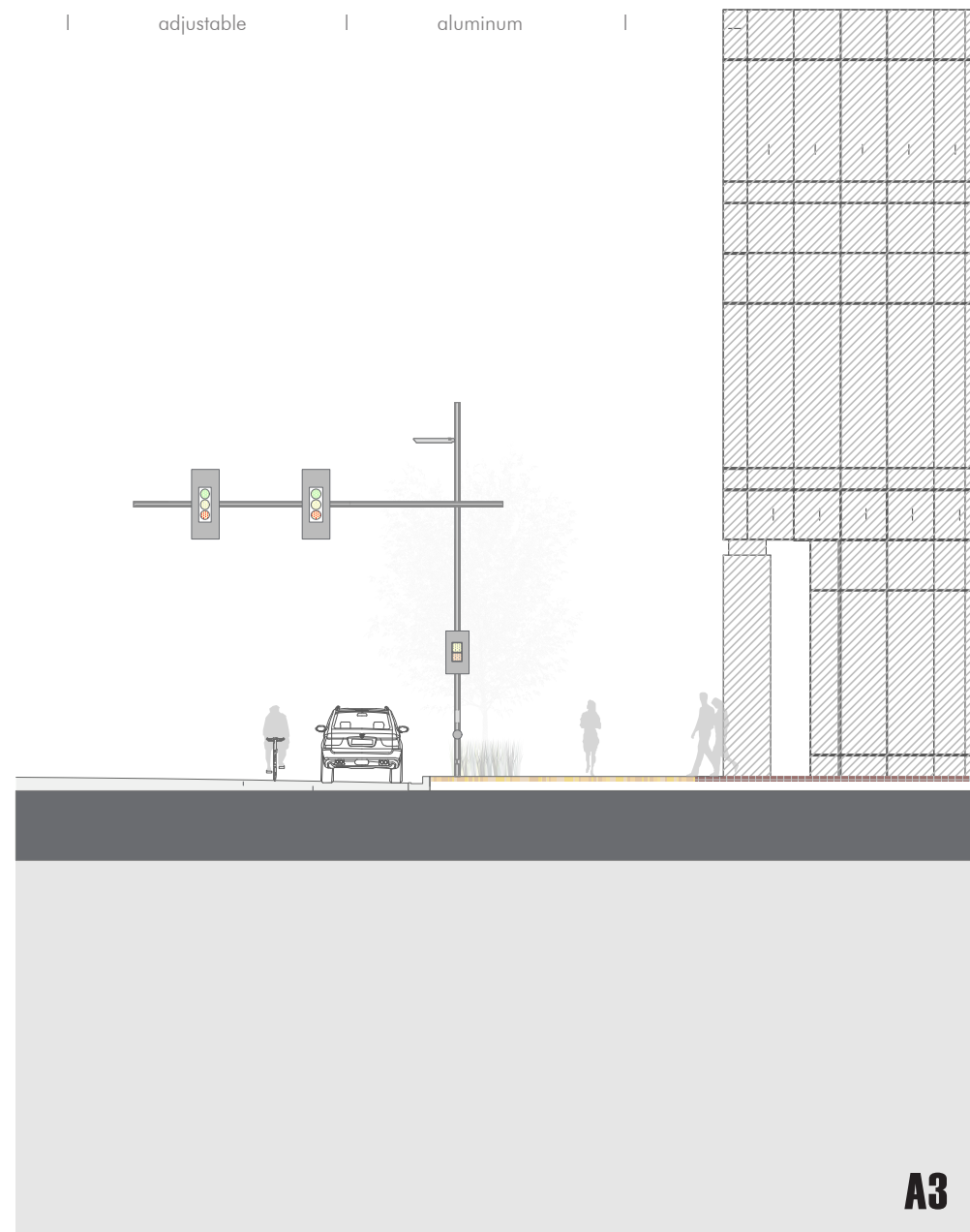
| aluminum



OKLAHOMA CITY URBAN - STREETLIFE

signal poles + banners A1

| sleek | linear | futuristic | adjustable | aluminum |



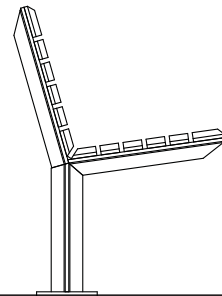
OKLAHOMA CITY URBAN - STREETLIFE

site furnishing family A

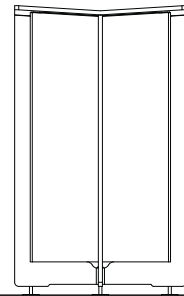
| sleek | linear | futuristic | adjustable | aluminum |



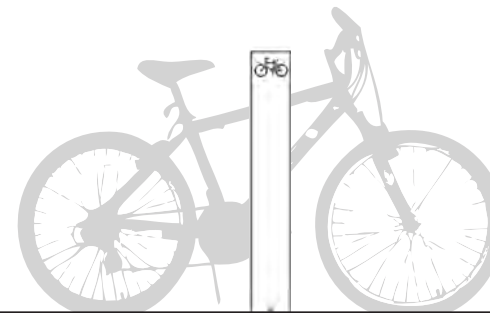
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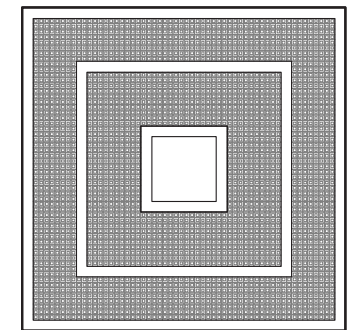
02



03



04



CUSTOM TREE GRATE

01
lighting
HESS
LINEA 450

02
bench
FORMS+SURFACES
KNIGHT

03
waste receptacles
FORMS+SURFACES
KNIGHT

04
bike rack
FORMS+SURFACES
CAPITOL



OKLAHOMA CITY URBAN - STREETLIFE **lighting option A2**

| contemporary | minimalist | elegant | stainless steel | rectangular pole





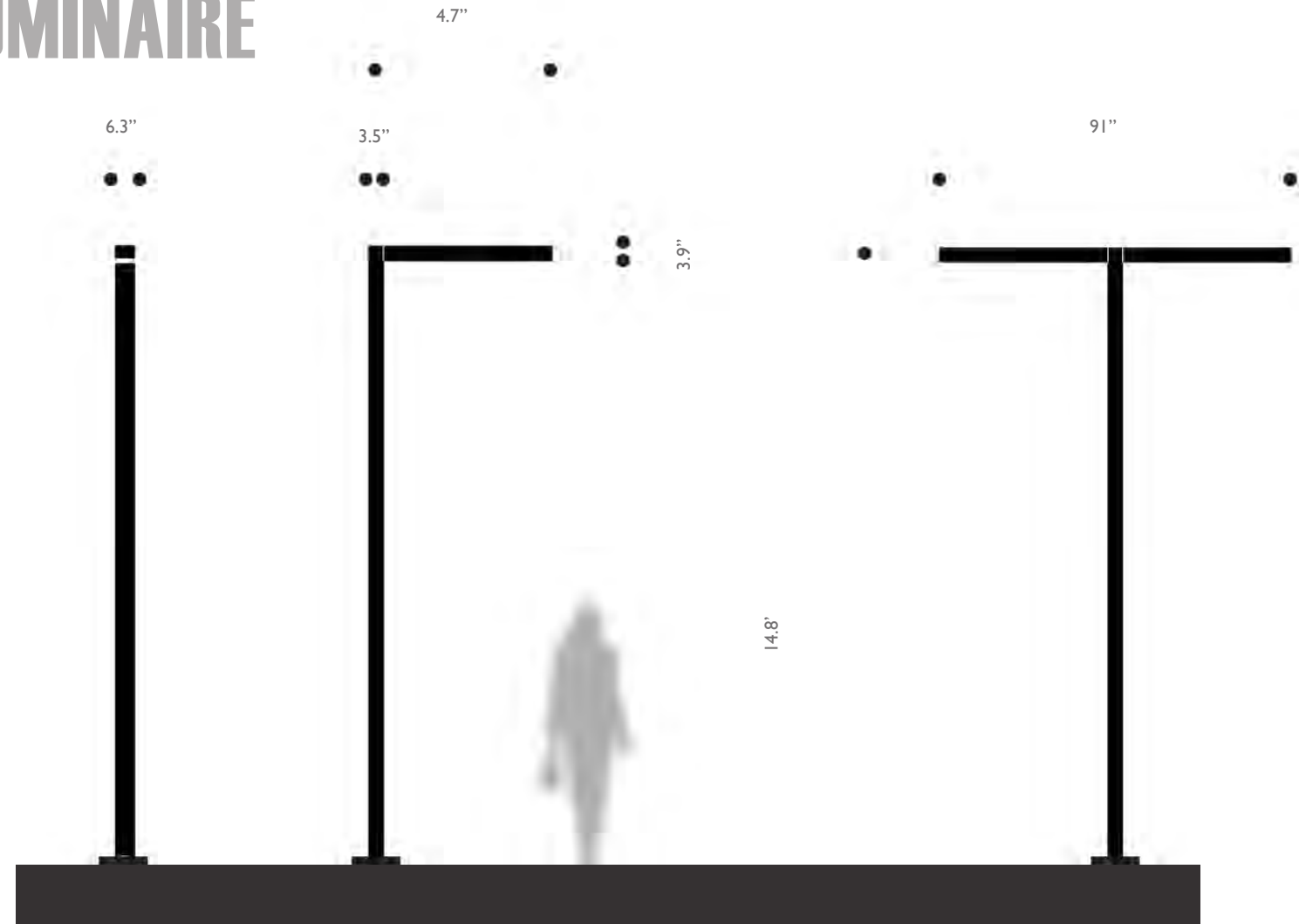
LINEA's minimalist profile adds subtle accent to contemporary architecture. It is available in single or twin mount configurations to meet a variety of site, area, or pathway lighting requirements. Rectangular luminaire constructed of fabricated aluminum transitions seamlessly to the rectangular pole with matching profile. Frameless clear tempered glass lens with single quarter-turn fastener provides tool-less access for relamping. Optional matte glass lens is available on request. Steel pole is hot-dip galvanized prior to being finished in finely textured paint. All hardware is stainless steel. Standard colors; matte silver grey metallic or graphite grey. Special colors available.

450 POLE MOUNTED LUMINAIRE

MODEL	HEIGHT	LAMP
LN450	15' STRAIGHT	RECTANGULAR 150MH/100MH/70MH

HESS

LINEA 450 - POLE MOUNTED LUMINAIRE



OKLAHOMA CITY URBAN - STREETLIFE

signal poles A2

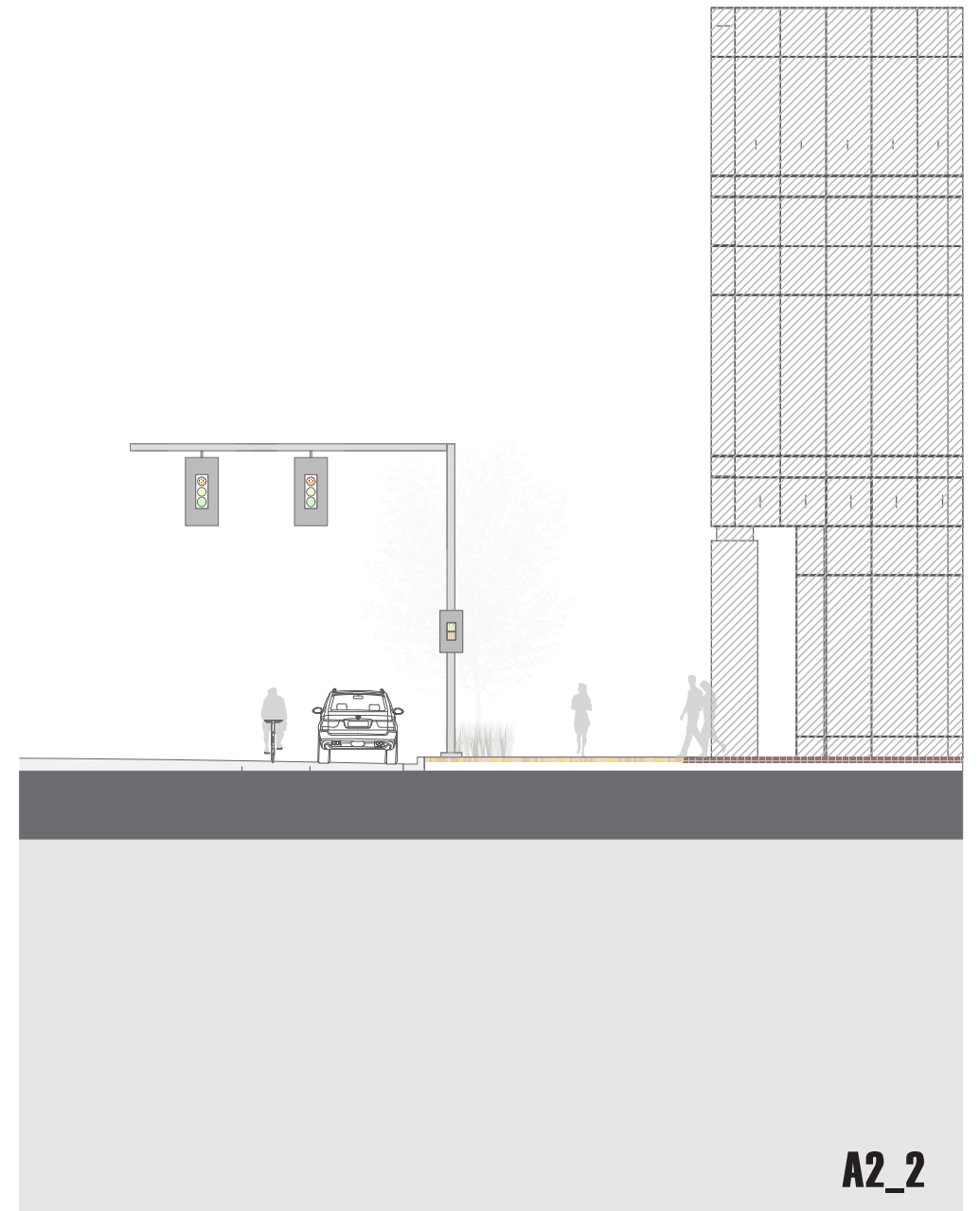
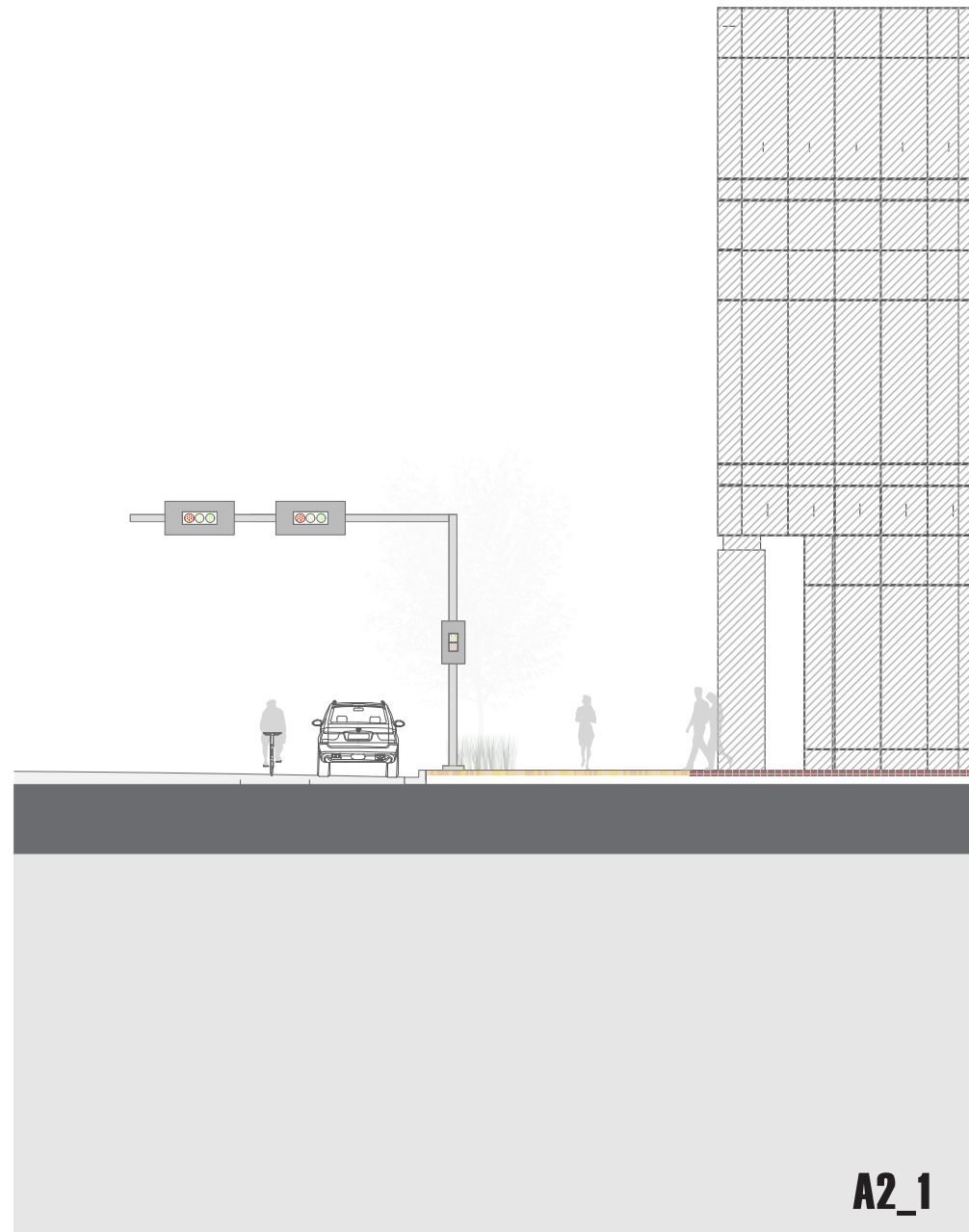
| contemporary

| minimalist

| elegant

| stainless steel

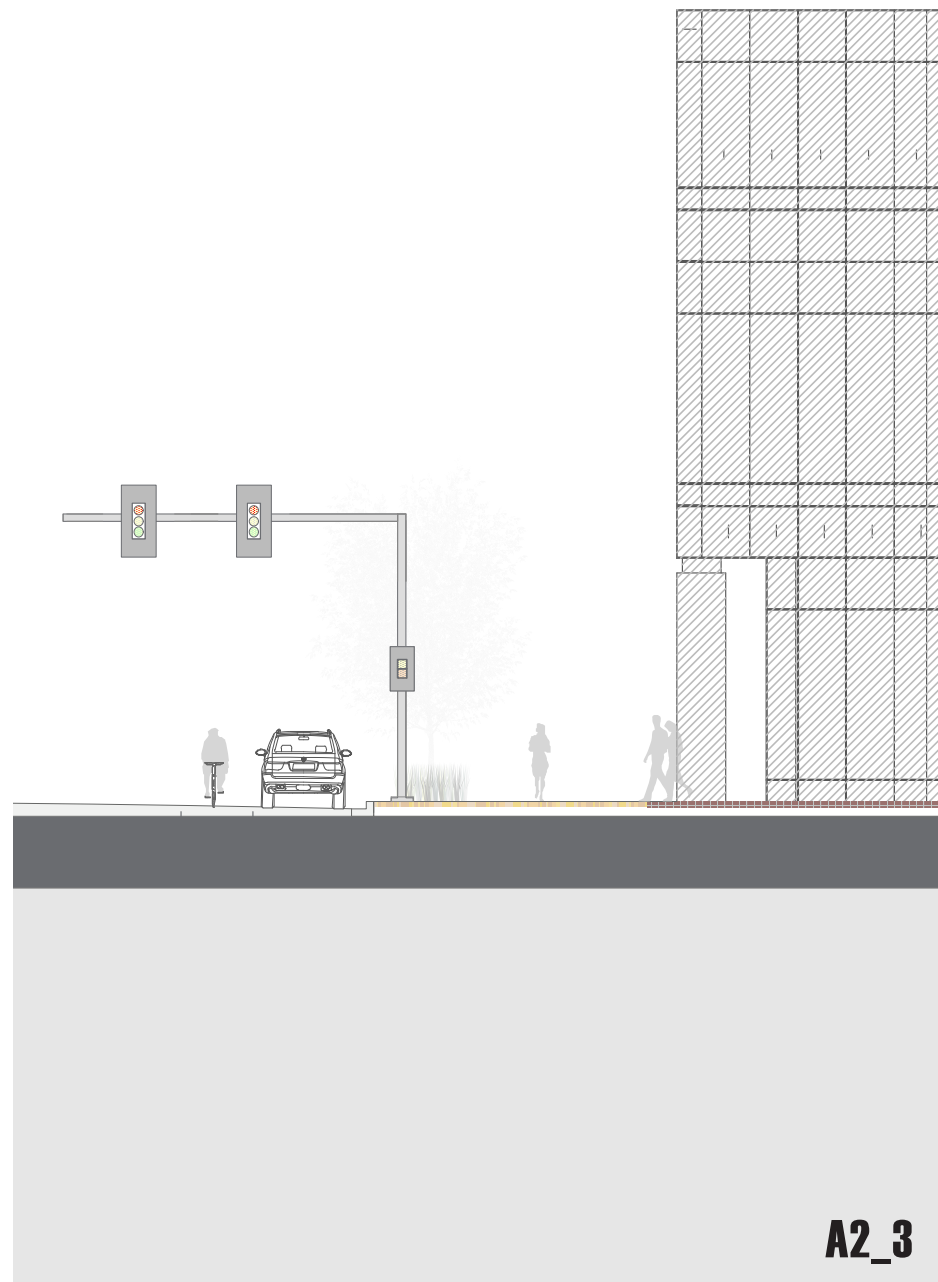
| rectangular pole



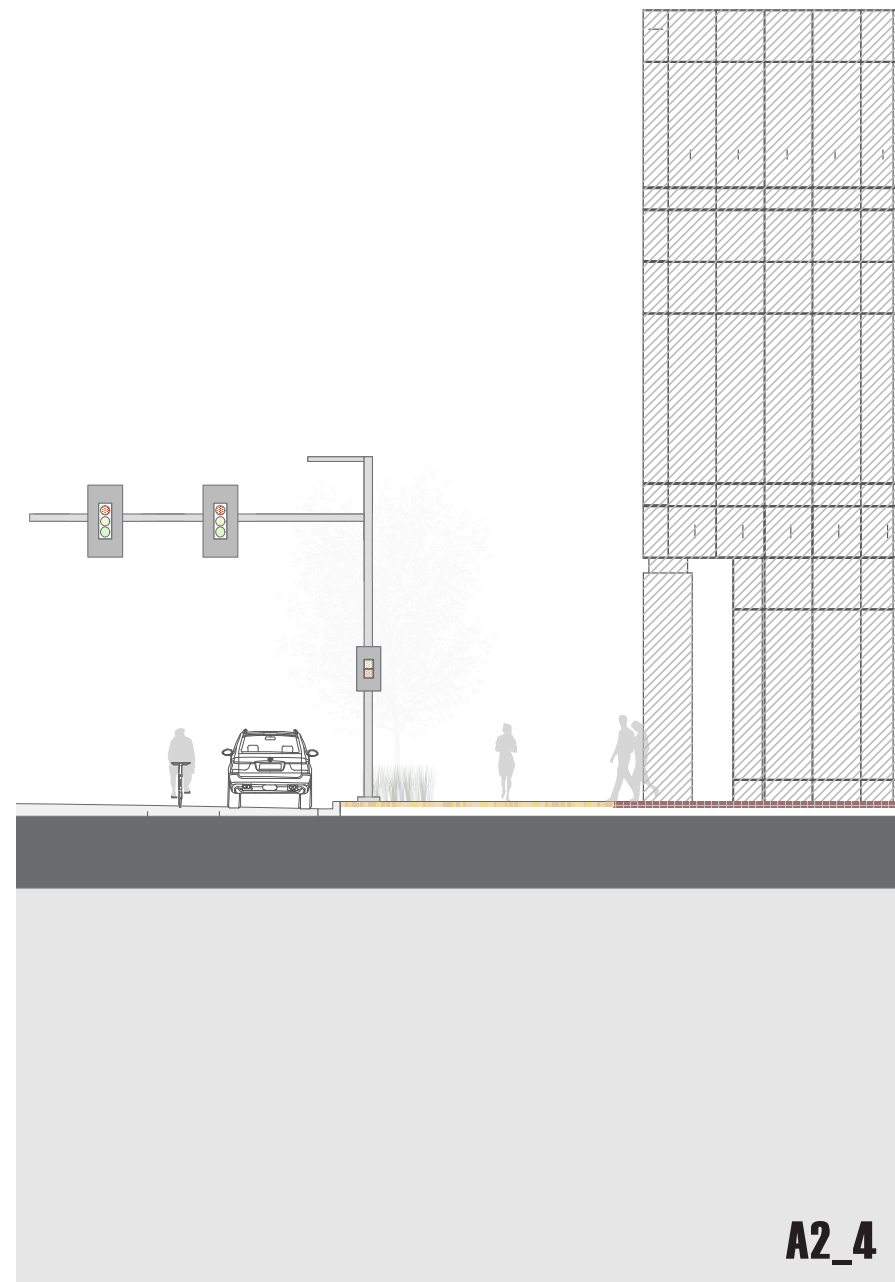
OKLAHOMA CITY URBAN - STREETLIFE

signal poles + banners A2

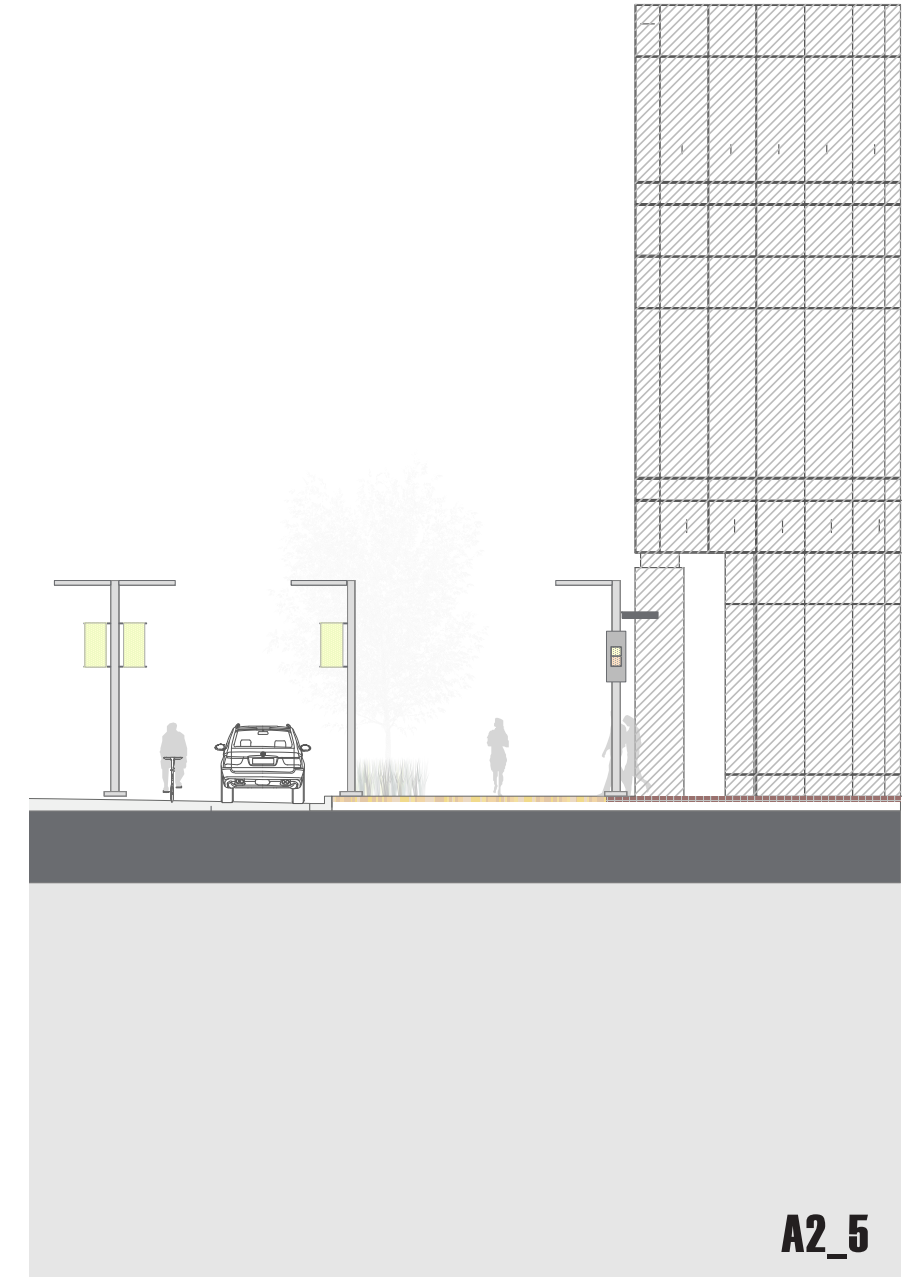
| contemporary | minimalist | elegant | stainless steel | rectangular pole |



A2_3



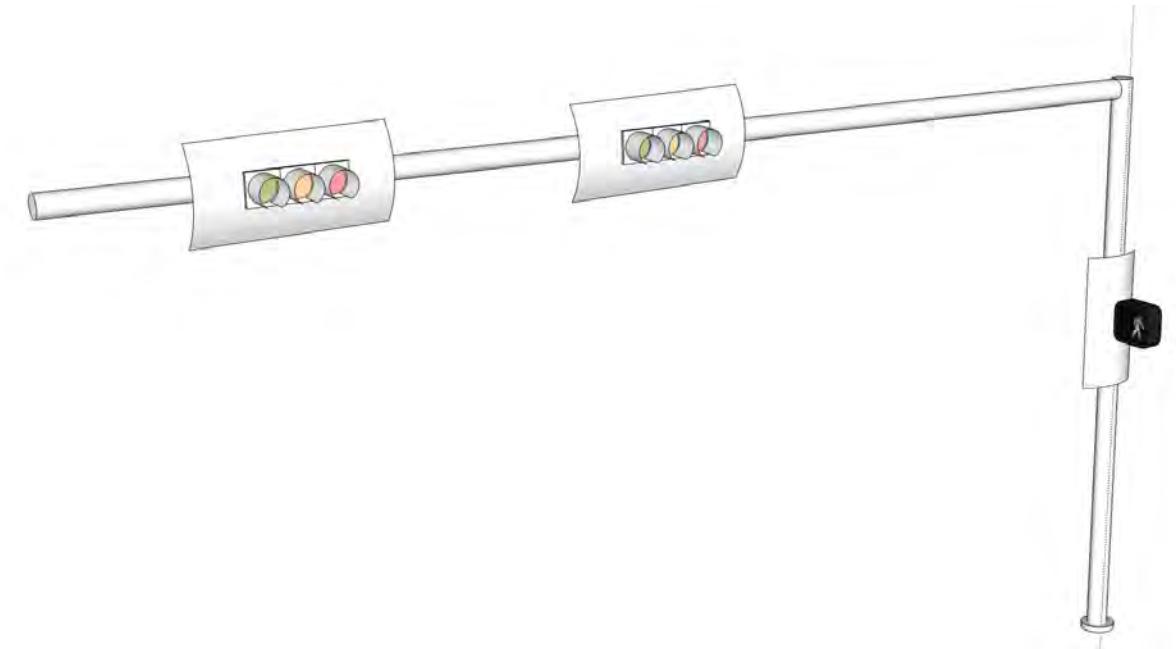
A2_4



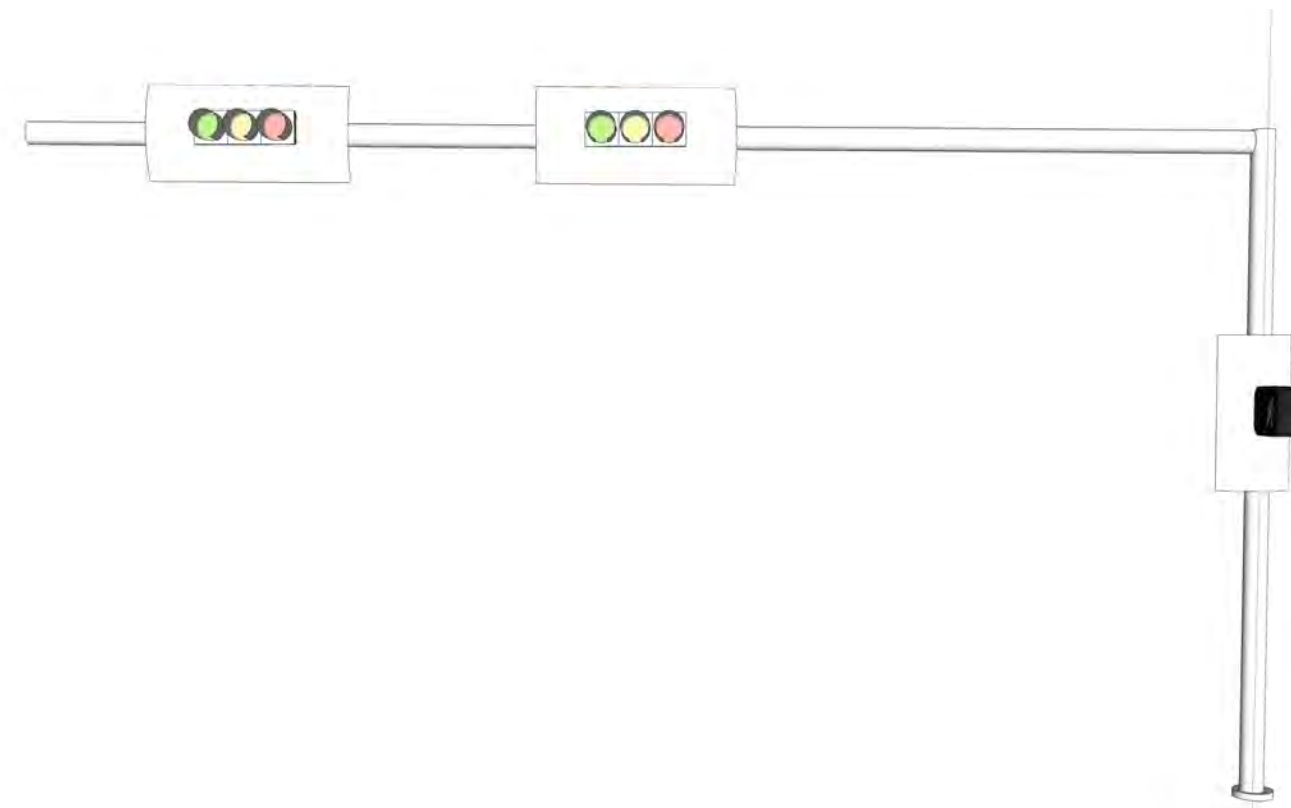
A2_5

OKLAHOMA CITY URBAN - STREETLIFE traffic signal

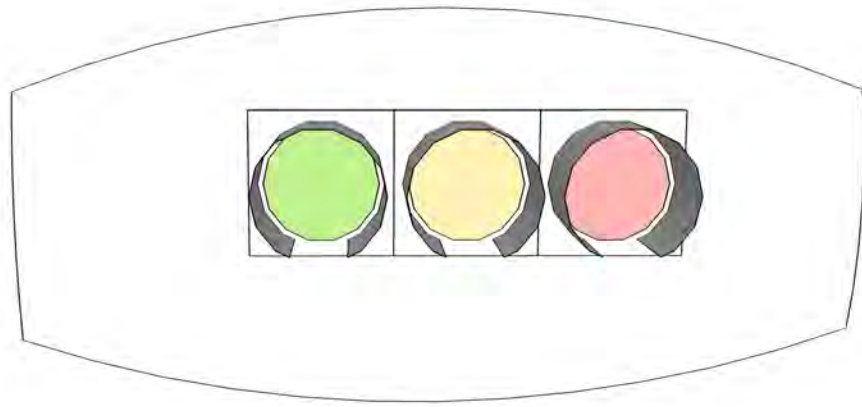
| contemporary | minimalist | elegant | stainless steel | rectangular pole |



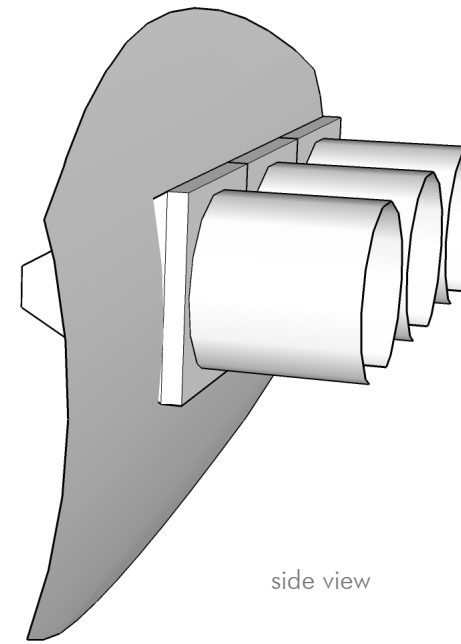
side view



front view



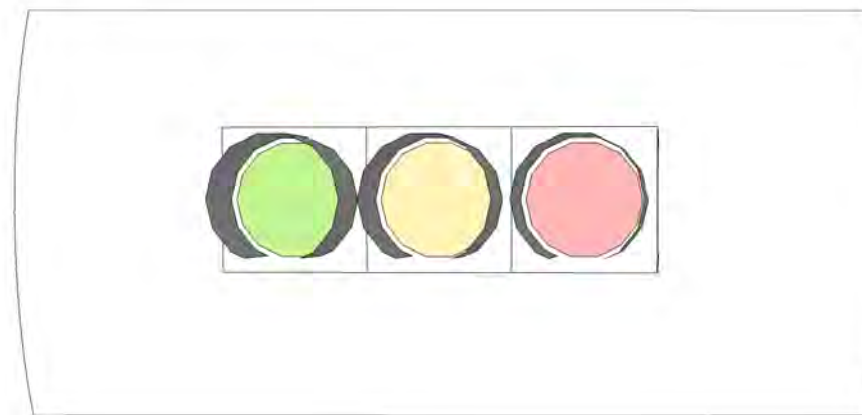
front view option I



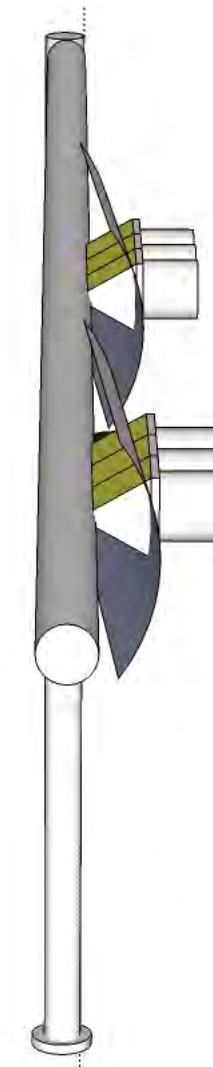
side view

OKLAHOMA CITY URBAN - STREETLIFE traffic signal

| contemporary | minimalist | elegant | stainless steel | rectangular pole |



front view option II



bird's eye view

OKLAHOMA CITY URBAN STREETLIFE

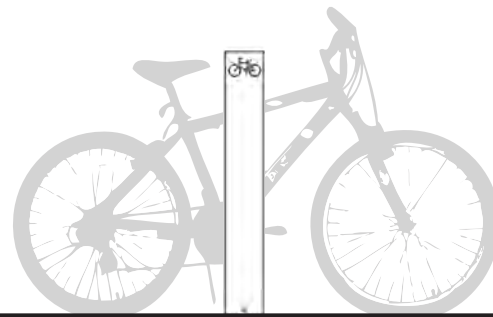
site furnishing family A2



01



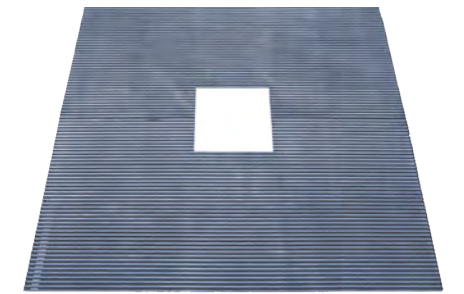
02



03



04



TREE GRATE



05

01
lighting
HESS
LINEA 450

02
bench
HESS
SIDUS E

03
bike rack
FORMS+SURFACES
CAPITOL

04
waste receptacles
LANDSCAPEFORMS
CHASE PARK

05
waste receptacles
CREATIVE PIPE
RETRPOLITIAN



OKLAHOMA CITY URBAN - STREETLIFE

lighting option B

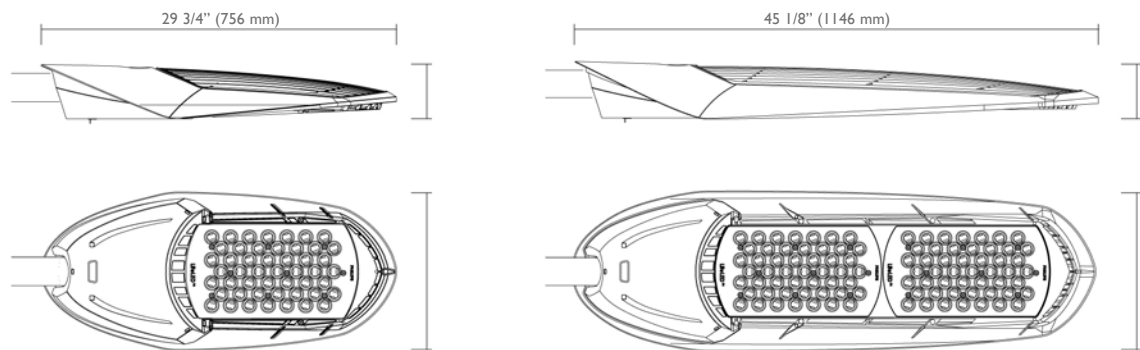
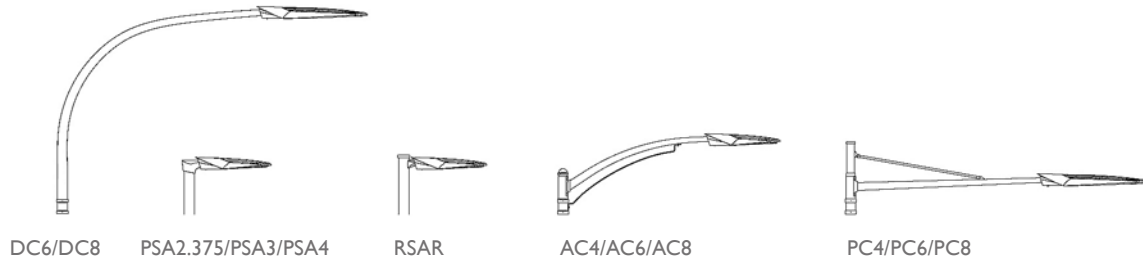
| affordable | clean | energy efficient | LED lighting | high-performance |





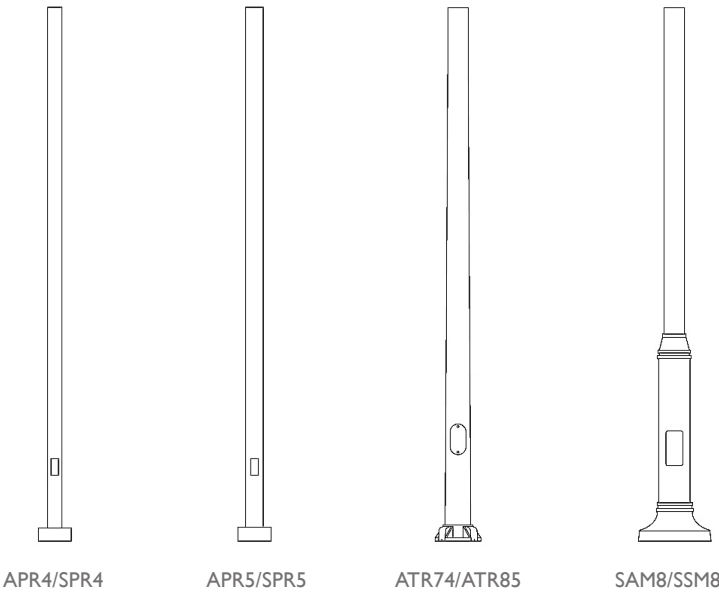
Pure Performance. Built To Last. / The most efficient engine on the eternal road of life. The RoadStar™ luminaire was designed to address a fundamental need in the lighting industry for affordable, high-performance, energy efficient, and long lasting large-area LED lighting that is at once as good for the environment as it is for a project's bottom line. The Road Star™ is dark-sky compliant, will last well over 70,000 hours, casts the perfect amount of uniform light with exactly the desired intensity, and offers pole spacing that is at least as wide as current HID lighting.

LUMEC ROAD STAR SERIES



GPLS
EPA: 0.76 SQ.FT
WEIGHT: 20 LB

GPLM
EPA: 1.10 SQ.FT
WEIGHT: 31 LB



LUMEC ROAD STAR SERIES



LUMEC ROAD STAR SERIES

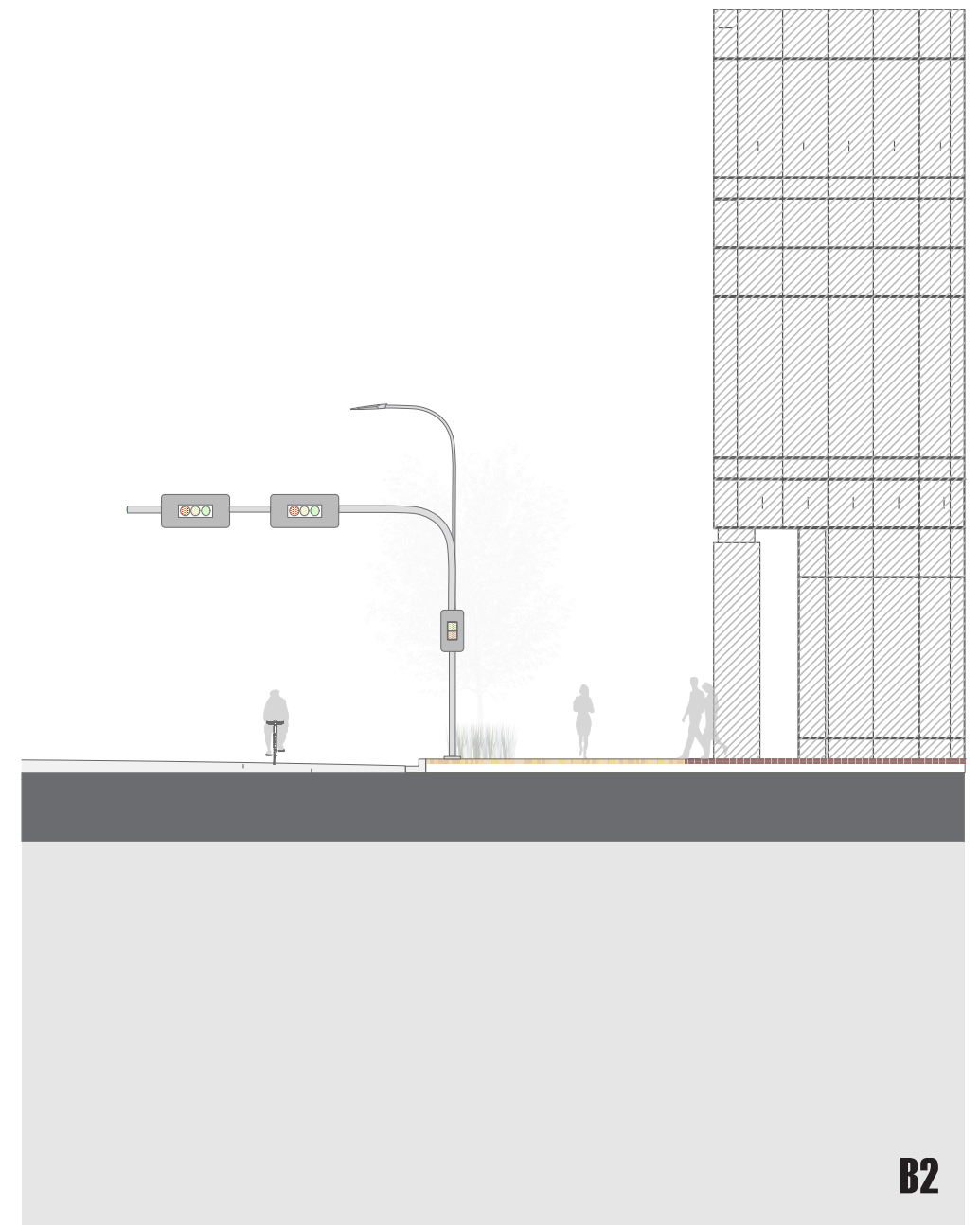
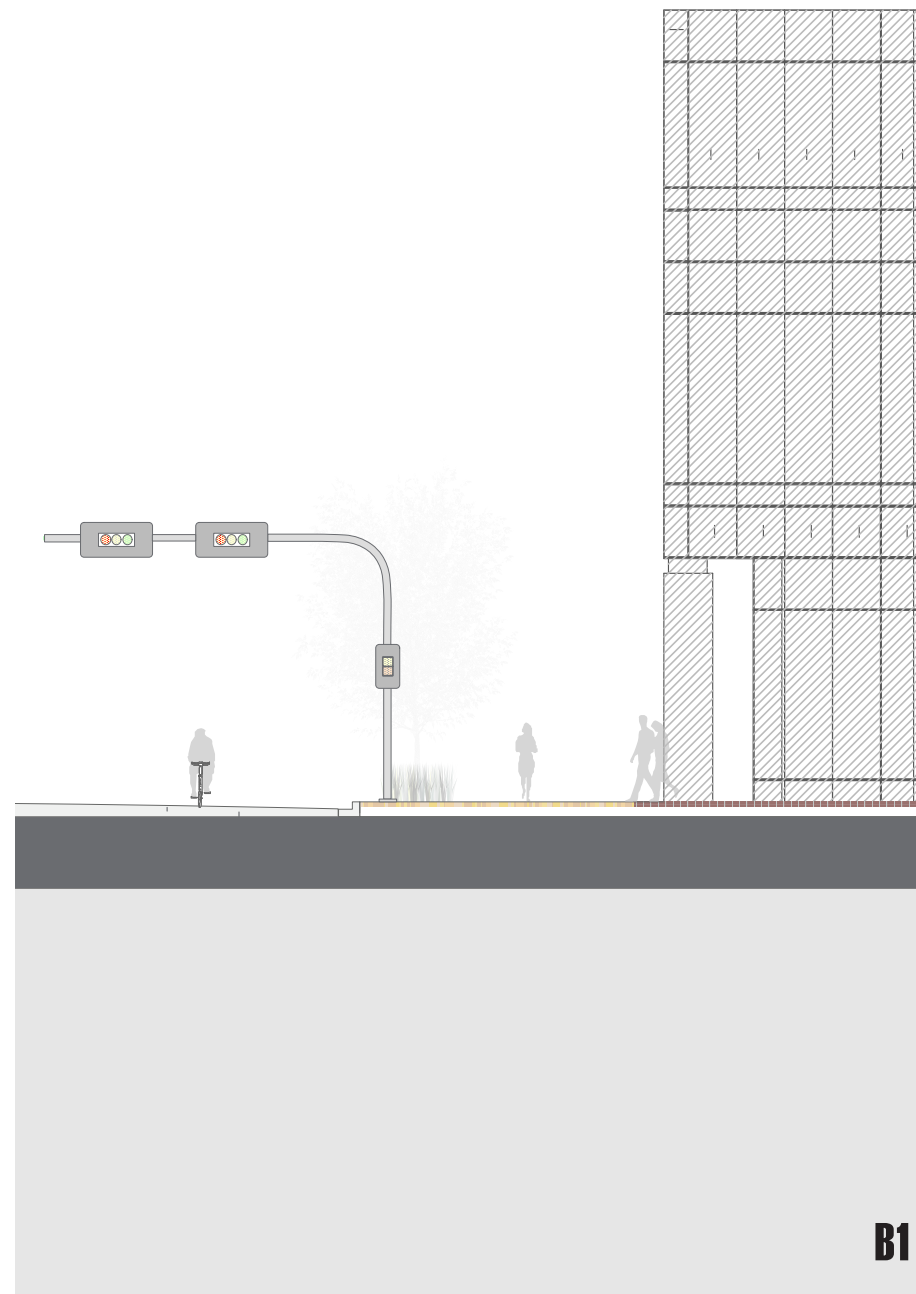




OKLAHOMA CITY URBAN - STREETLIFE

signal poles B

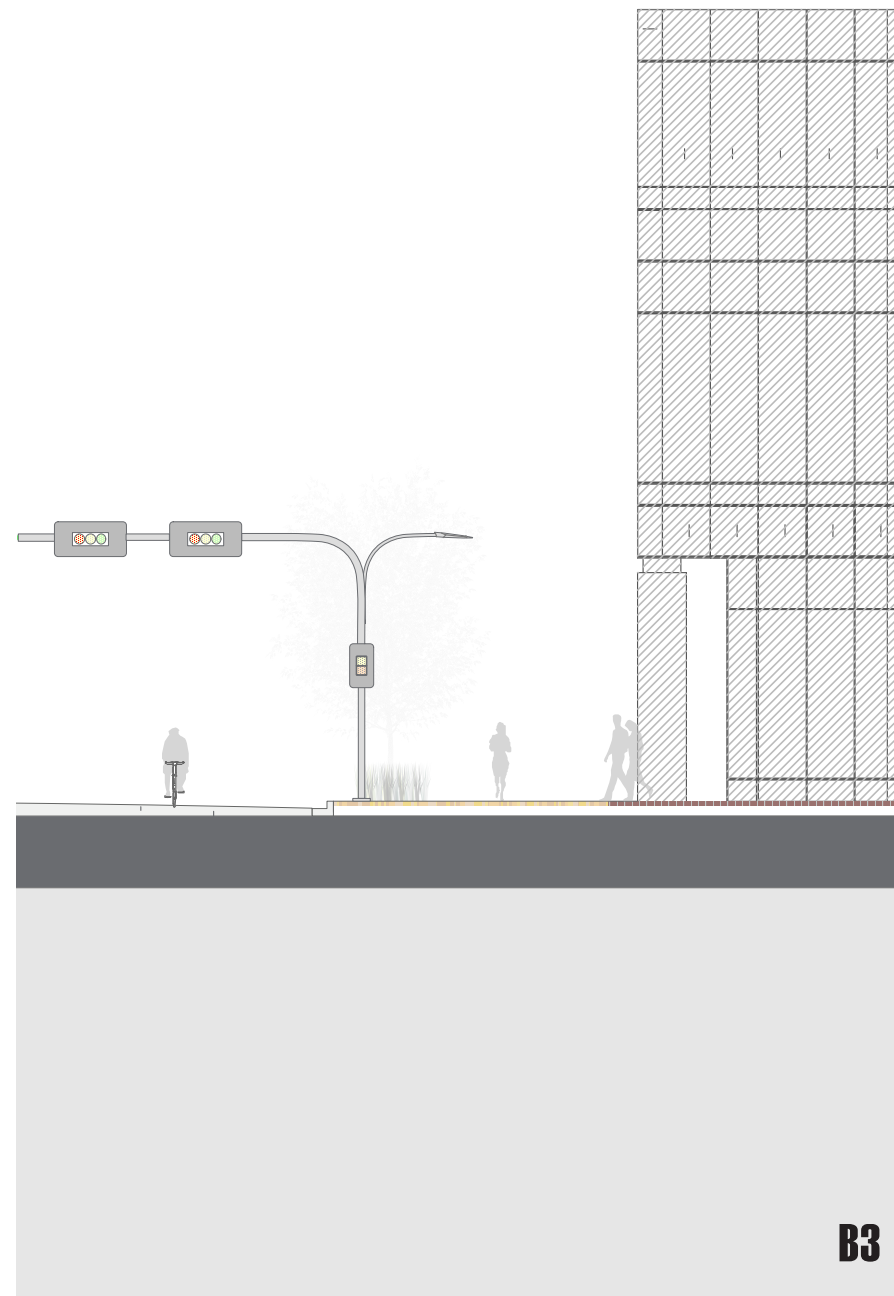
| affordable | clean | energy efficient | LED lighting | high-performance |



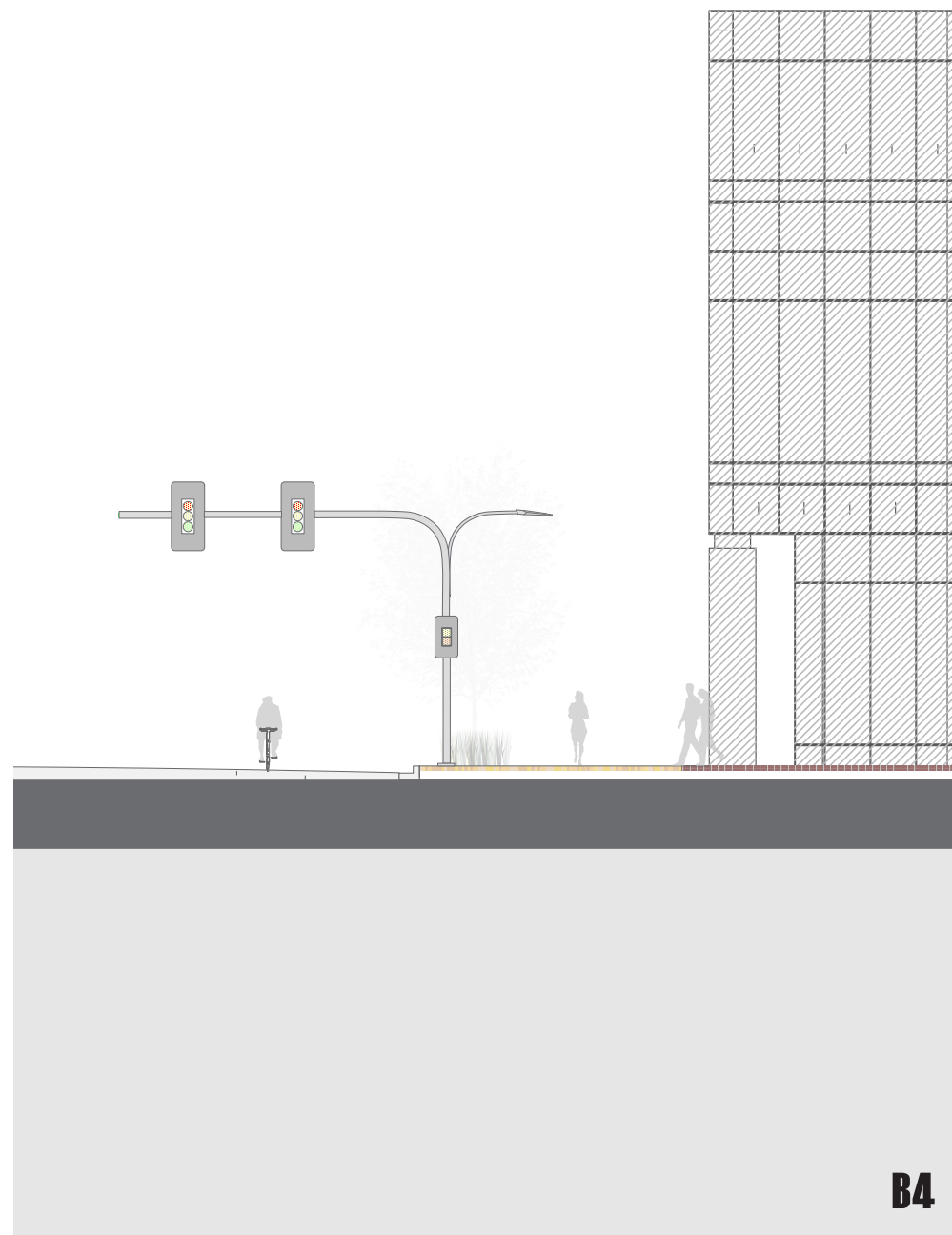
OKLAHOMA CITY URBAN - STREETLIFE

signal poles + banners B

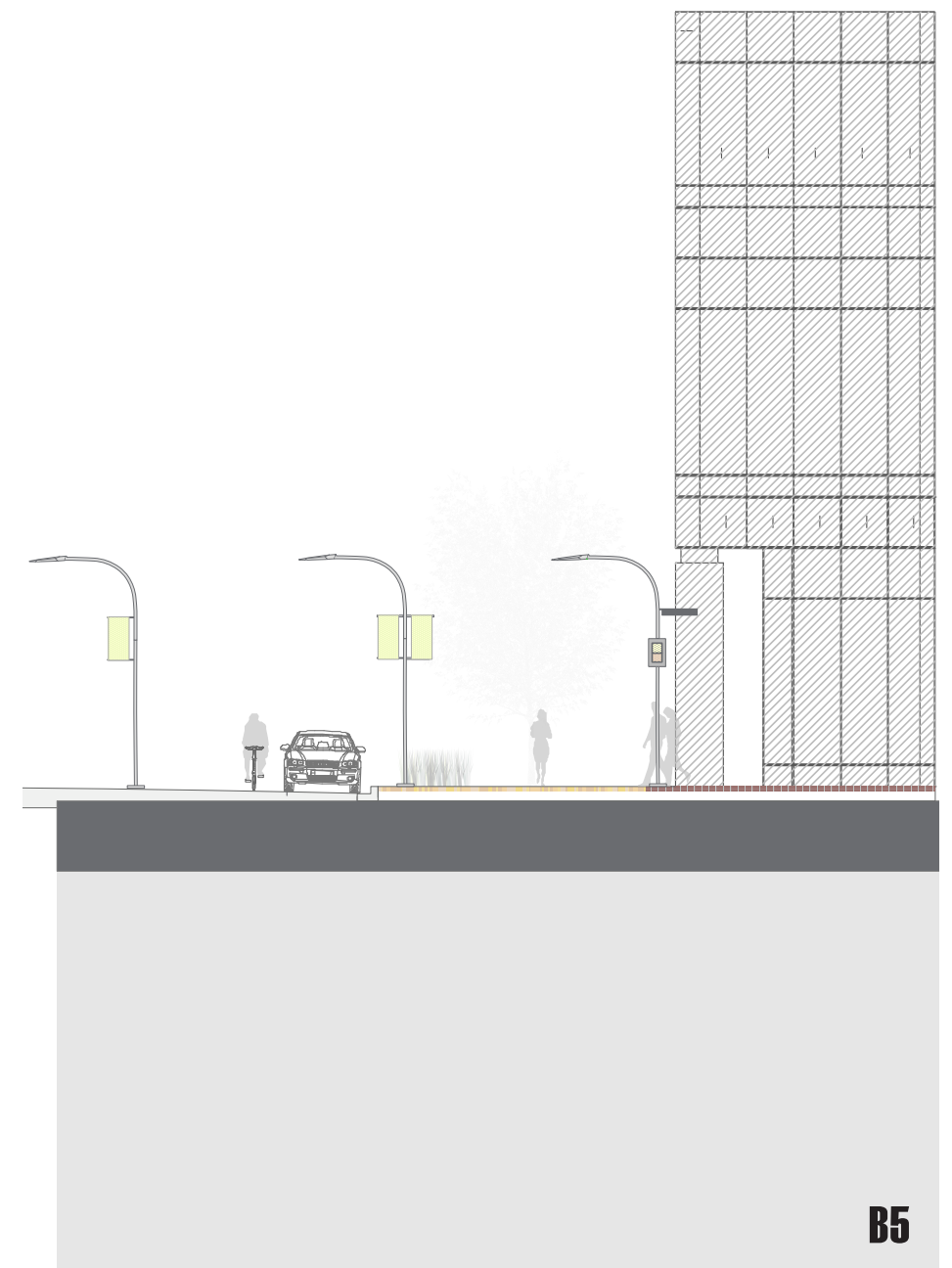
| affordable | clean | energy efficient | LED lighting | high-performance |



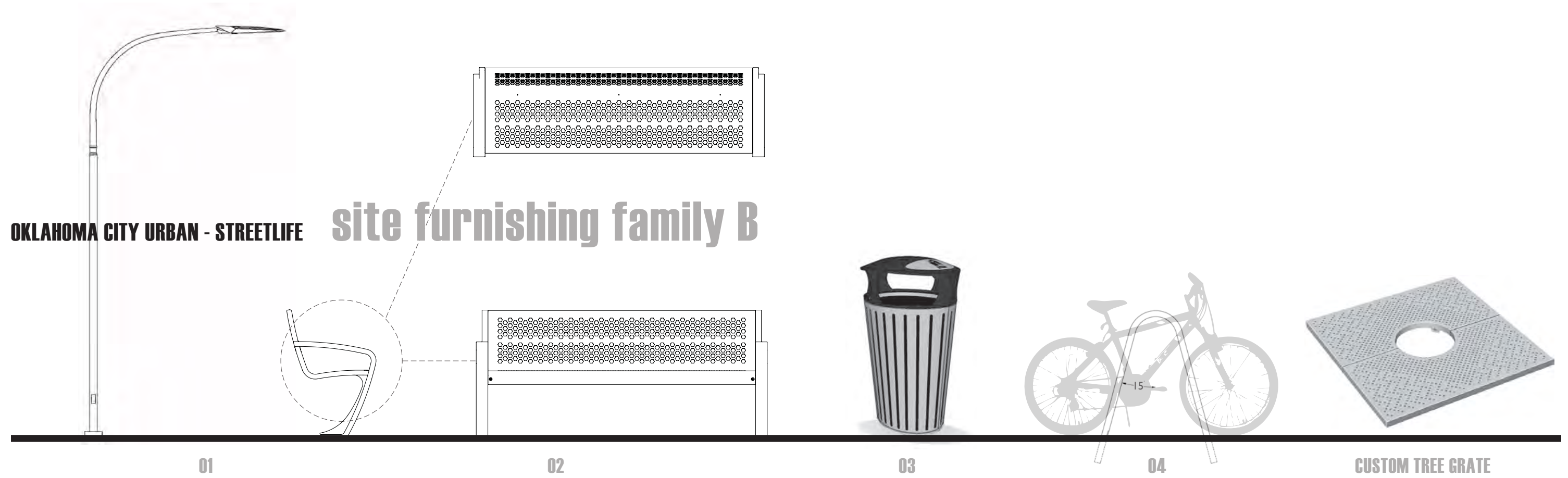
B3



B4



B5



01

lighting
LUMEC
ROAD STAR

02

bench
FORMS+SURFACES
BALANCE

03

waste receptacles
FORMS+SURFACES
DISPATCH LITTER

04

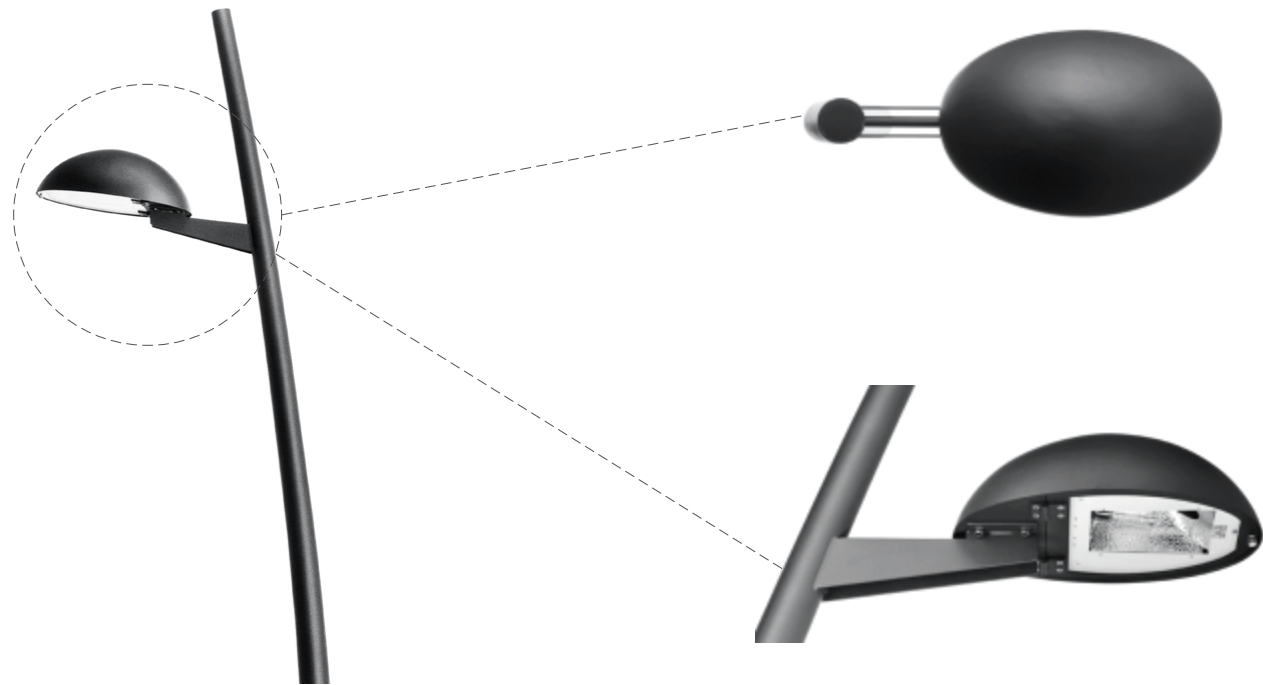
bike rack
LANDSCAPEFORMS
BOLA



OKLAHOMA CITY URBAN - STREETLIFE **lighting option C1**

| graceful | arching | unique | smooth | define |





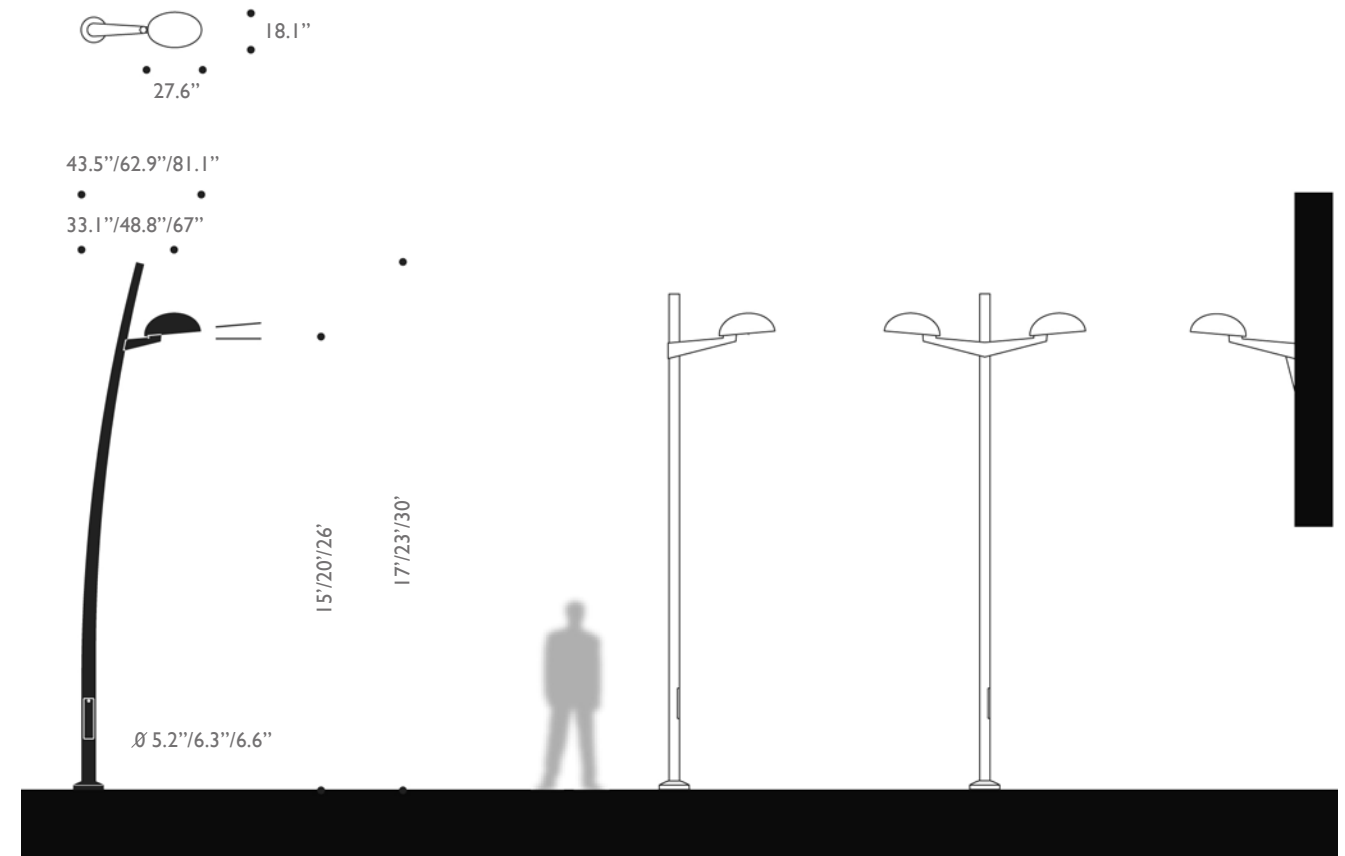
HESS

CANTO G - POLE MOUNTED LUMINAIRE

The smoothly engineered shape of the CANTO combined with its gracefully arching pole creates a uniquely subtle appearance. The gentle curvature allows the pole to spatially define paths or roadways. Two luminaire sizes and three pole heights are available to meet proportional requirements of large or small scale applications. The heavy cast aluminum housing is fitted with a flat tempered glass lens with a quarter-turn fastener for easy relamping. Hinged reflector assembly allows access to the ballast tray. Mounting bracket and steel pole with flush handhole are hot-dip galvanized prior to being finished in high quality, finely textured paint. Base cover is spun aluminum. All hardware is stainless steel. Standard colors; matte silver grey metallic or graphite grey.

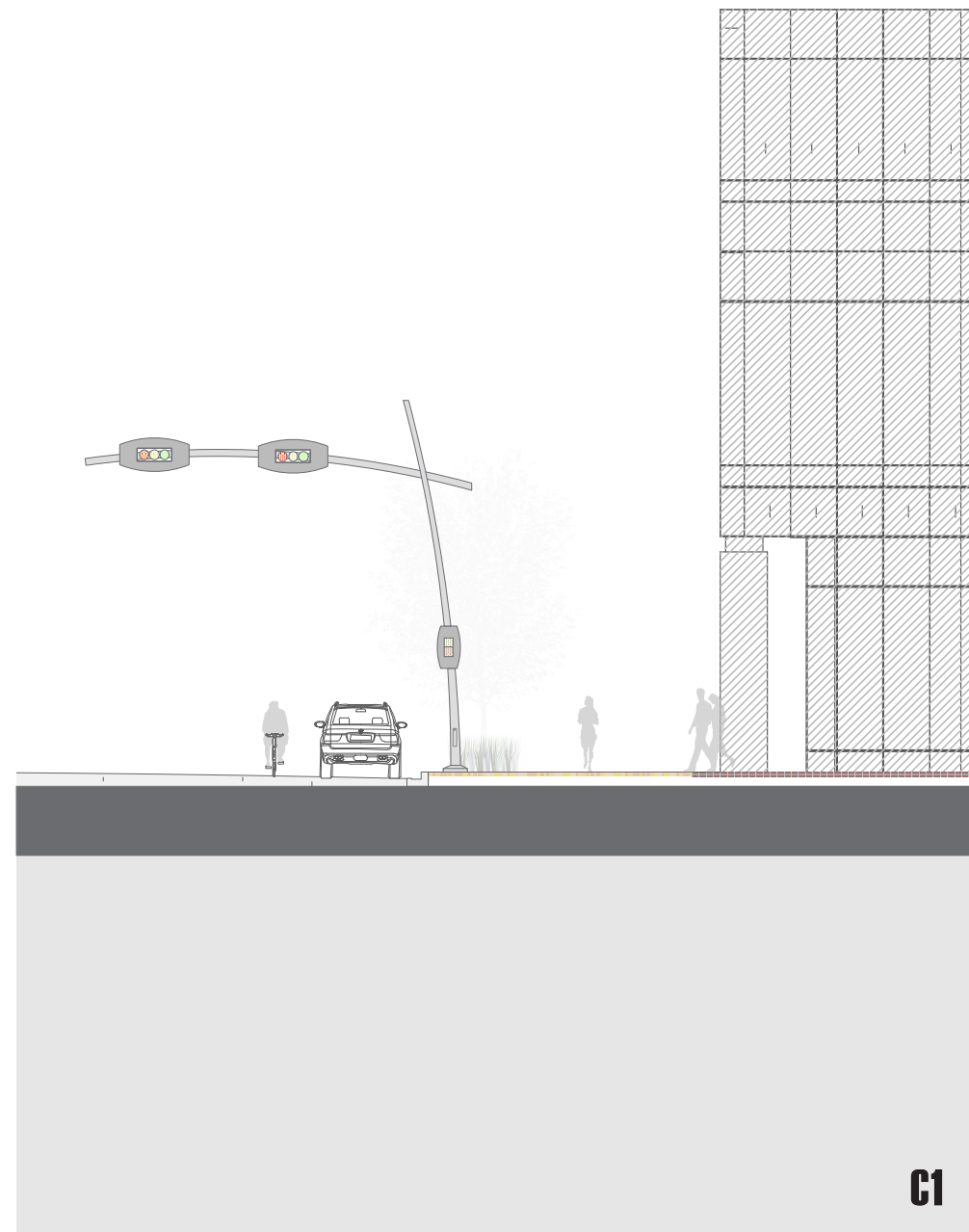
450 POLE MOUNTED LUMINAIRE

MODEL	HEIGHT	LAMP
CC450G	17' RTS	150 MH / 150 HPS
CC600G	23' RTS	250 MH / 250 HPS
CC800G	30' RTS	250 MH / 250 HPS

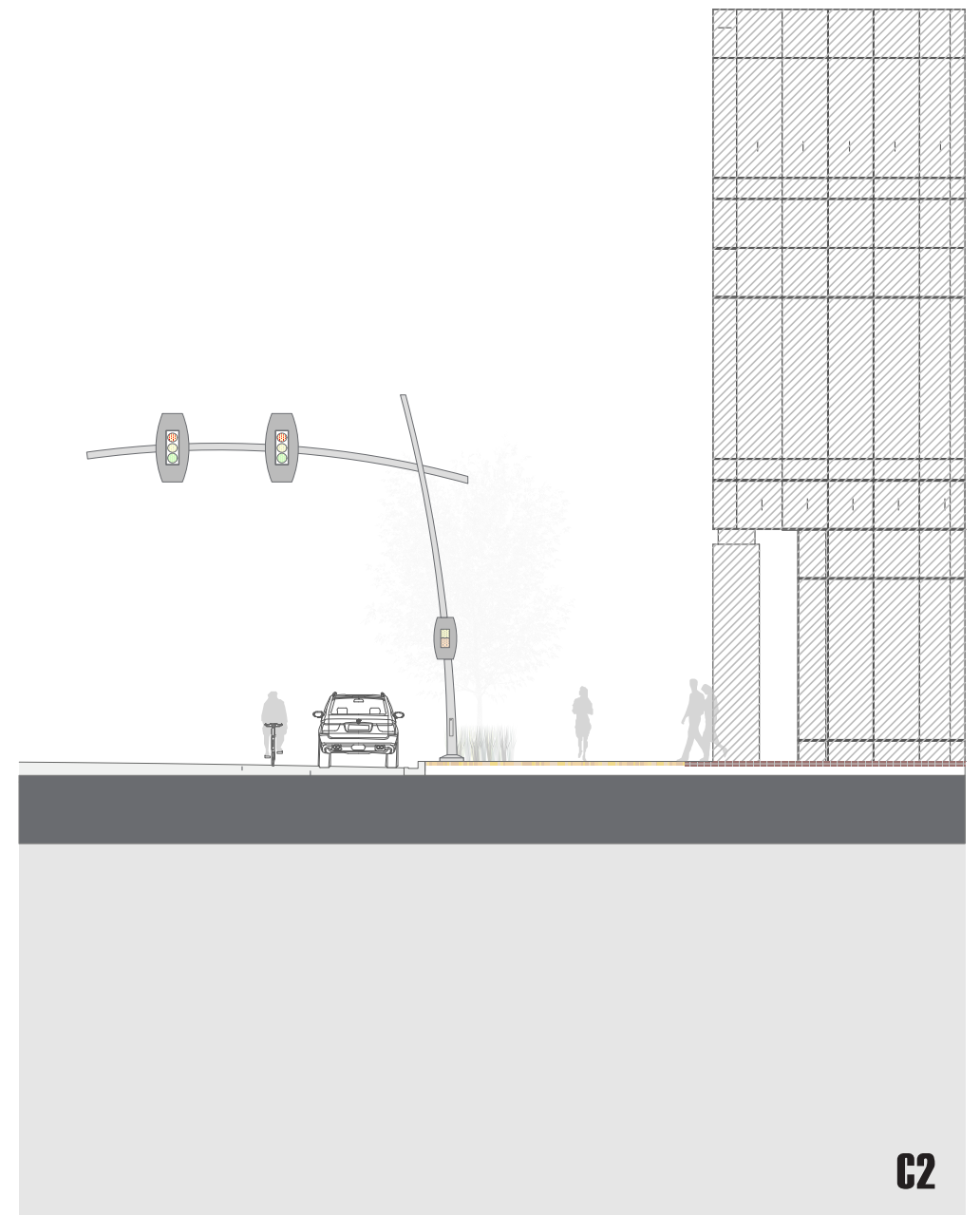


OKLAHOMA CITY URBAN - STREETLIFE **signal poles C**

| graceful | arching | unique | smooth | define |



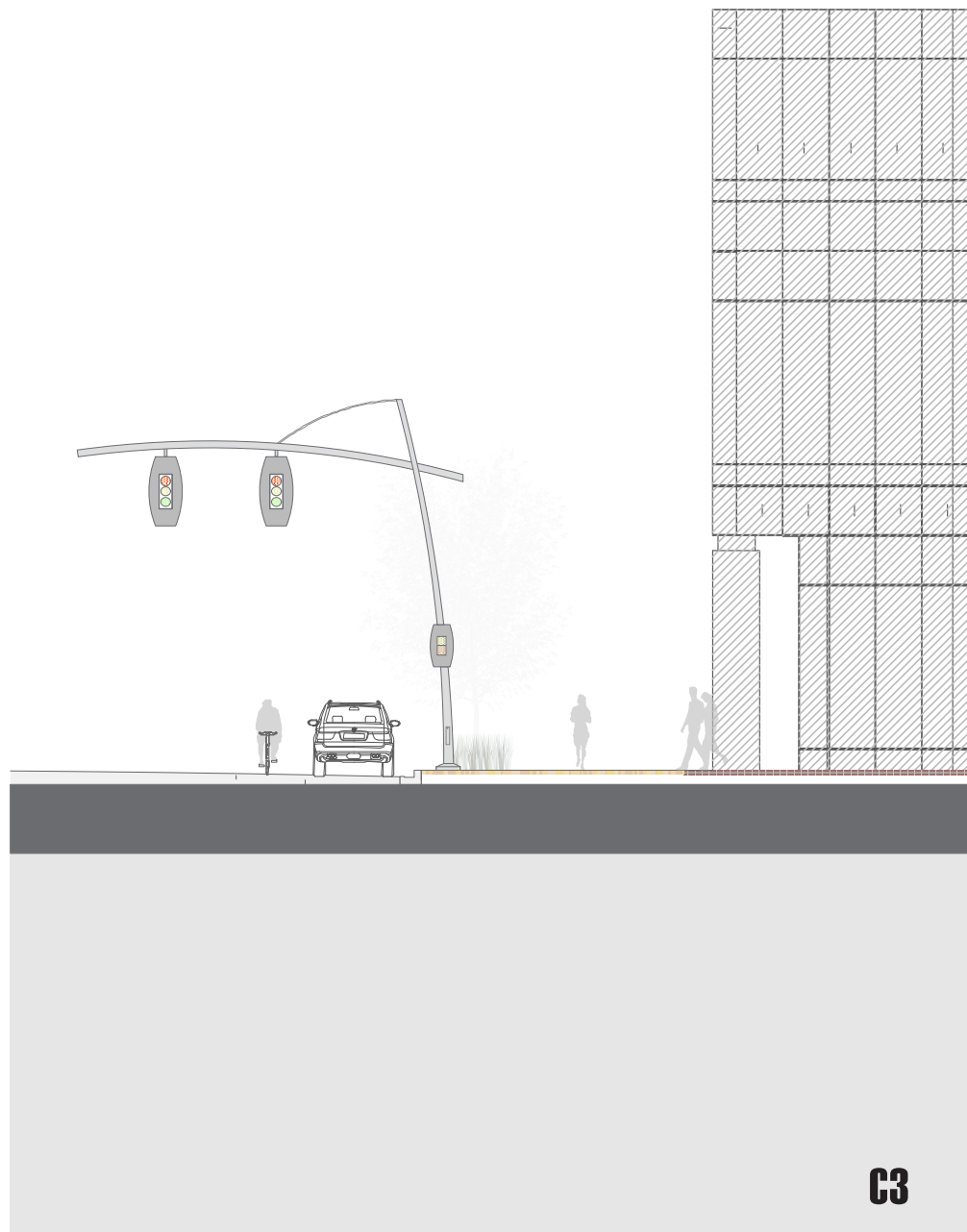
C1



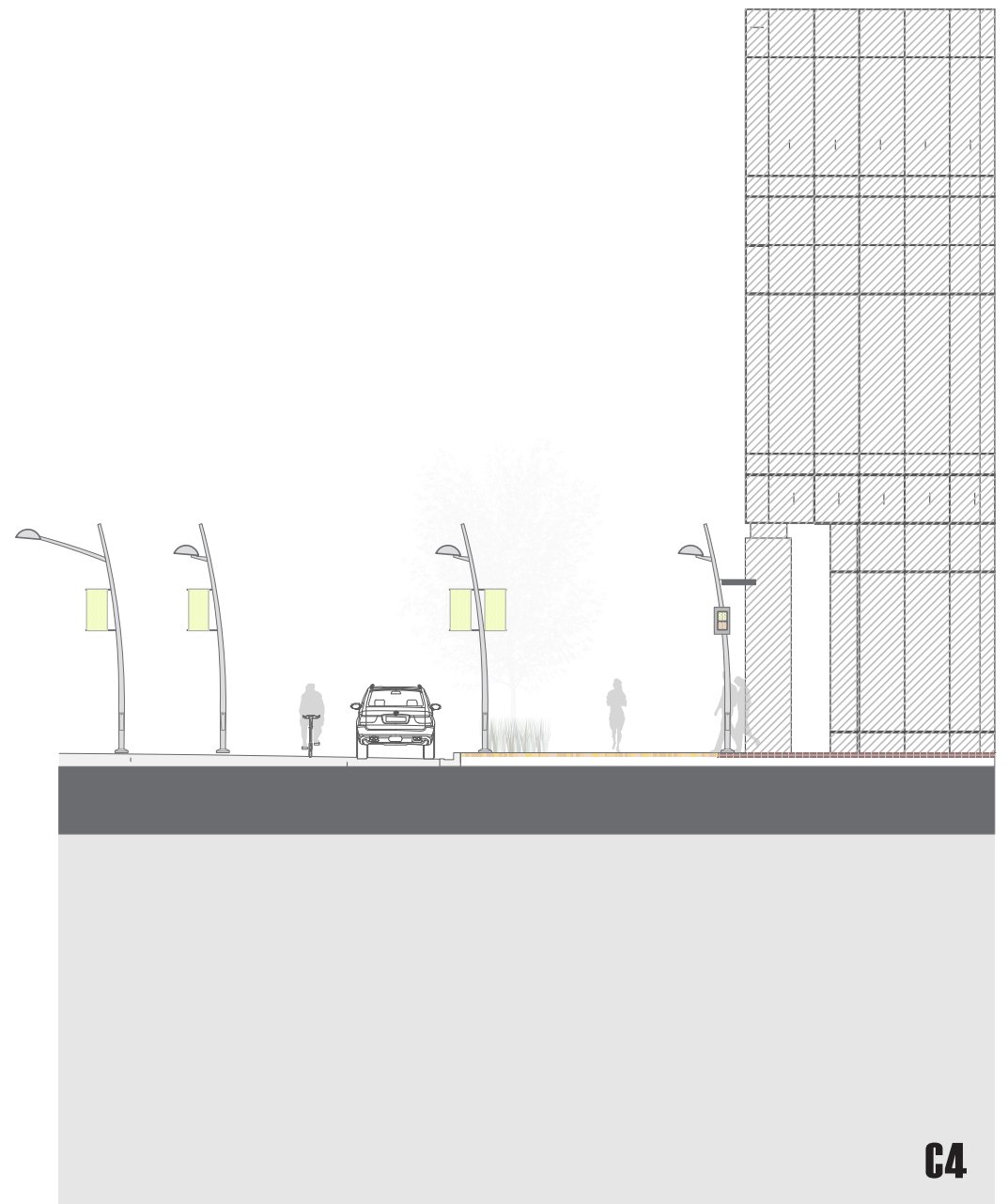
C2

OKLAHOMA CITY URBAN - STREETLIFE signal poles + banners C

| graceful | arching | unique | smooth | define |



C3



C4

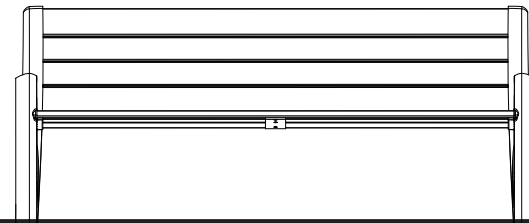
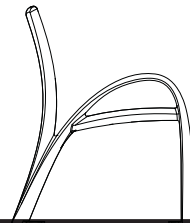
OKLAHOMA CITY URBAN - STREETLIFE

site furnishing family C1

| sculptural | contemporary | elegant | artistic | playful |



01



02



03



04



CUSTOM TREE GRATE

01

lighting
HESS
CANTO G

02

bench
FORMS+SURFACES
CAMBER

03

bike rack
CREATIVE PIPE
HORSESHOE RACK

04

waste receptacles
FORMS+SURFACES
CHASE PARK



OKLAHOMA CITY URBAN - STREETLIFE

lighting option C2

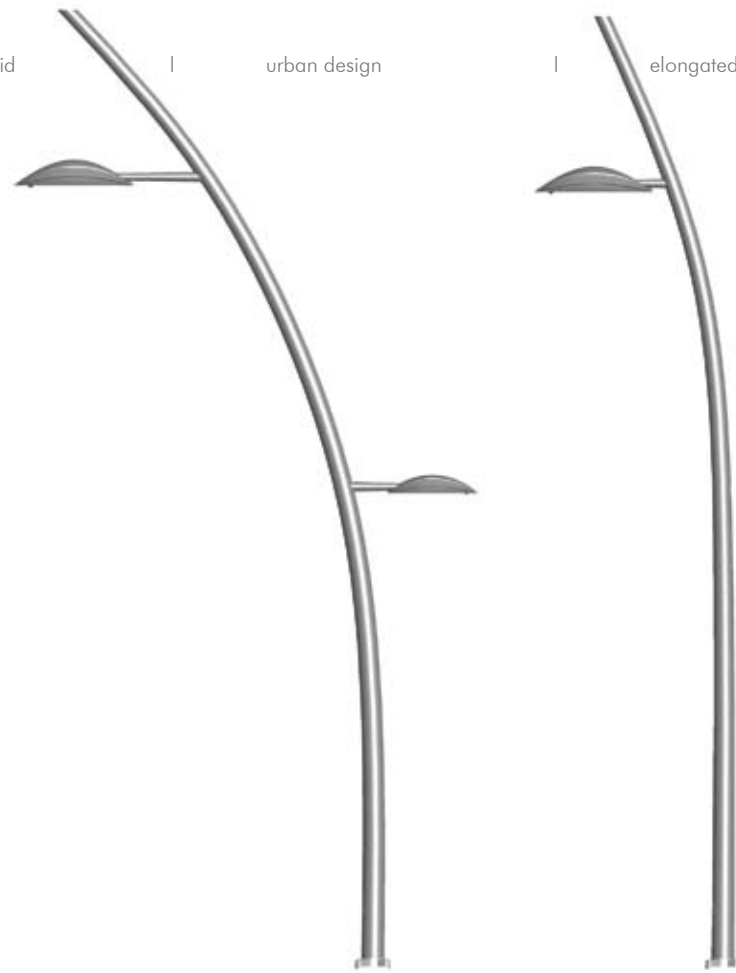
| movement

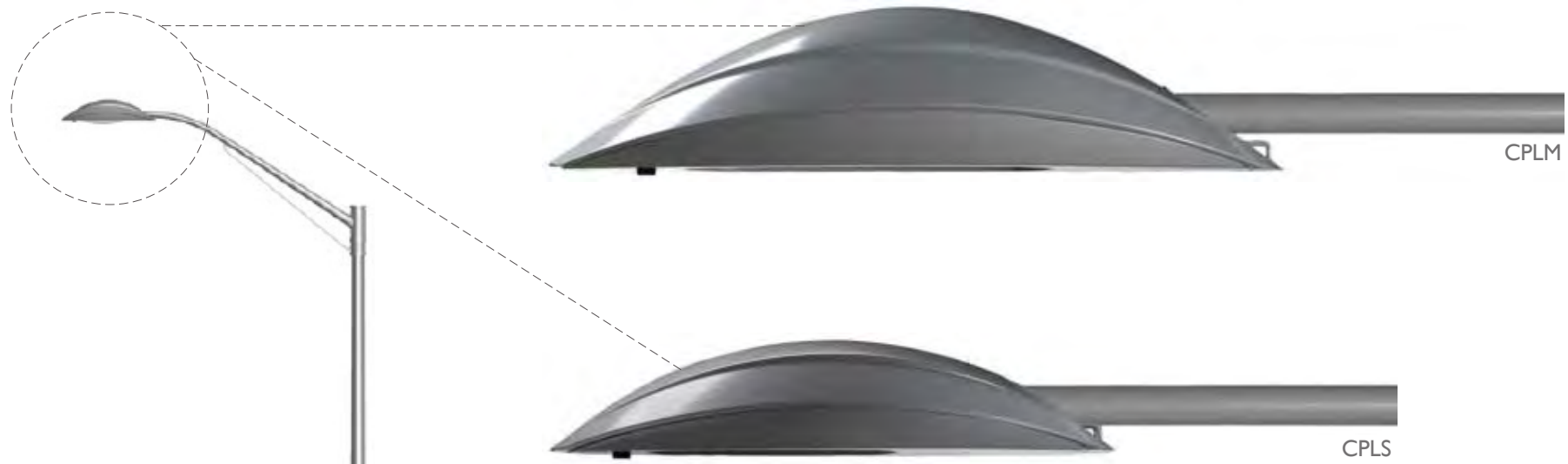
| arching

| fluid

| urban design

| elongated





LUMEC CAPELLA SERIES

Static movement brought to life. Capella is a new series of urban lighting fixtures that brings new shapes inspired by movement. With its fluid lines and dynamic shape, the Capella blends seamlessly into soft architectural surroundings, as well as more rectilinear environments. Its stylish curved design is the perfect accent to refine urban areas and redefines the manner by which it integrates easily into architectural projects. Contoured for maximum appeal in a variety of design environments, the Capella combines bold aesthetics with exceptional photometric performance. The smaller size is ideal for lighting alleyways, pathways, sidewalks and small roadways for an added sense of security, while the larger size provides extra safety on city streets and boulevards.

Forward thinking leads to innovative design

- > Dynamic, fluid shape
- > Pure lines and high visual aesthetics
- > shape that gives the impression of movement
- > Sophisticated yet very simple
- > Urban design

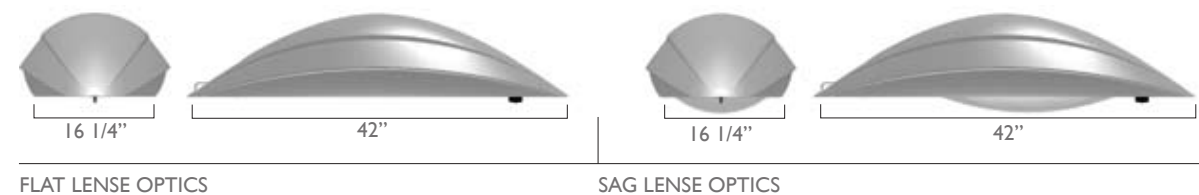
Manufacturing ideas that go the distance

- > Exceptional durability
- > Superior photometric performance
- > Energy efficient
- > Easy maintenance

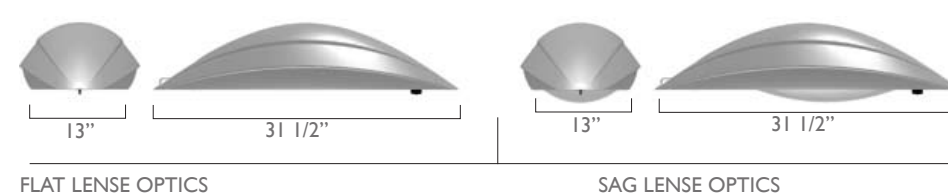
Characteristics

- > Respectful of the environment by offering cutoff and full-cutoff optics
- > Manufactured from die cast aluminum components
- > Toolfree access to the lamp and electrical components
- > Clear tempered glass flat or sag lens on an hinged frame
- > Smartseal™ optical system (IP66 certified) made of anodized aluminum reflector
- > Unitized removable ballast tray

CPLM / E.P.A.: 0.83 sq. ft. / Weight: 55 lbs (25 kg)



CPLS / E.P.A.: 0.47 sq. ft. / Weight: 30 lbs (13.6 kg)



LUMEC CAPELLA SERIES



LUMEC CAPELLA SERIES



OKLAHOMA CITY URBAN - STREETLIFE

| sculptural | contemporary | elegant | artistic | playful |

site furnishing family C2



01



02



03



04



CUSTOM TREE GRATE

CAMEO TRASH CAN - CREATIVE PIPE

01

lighting
LUMEC
CAPELLA

02

bench
LANDSCAPEFORMS
AUSTIN

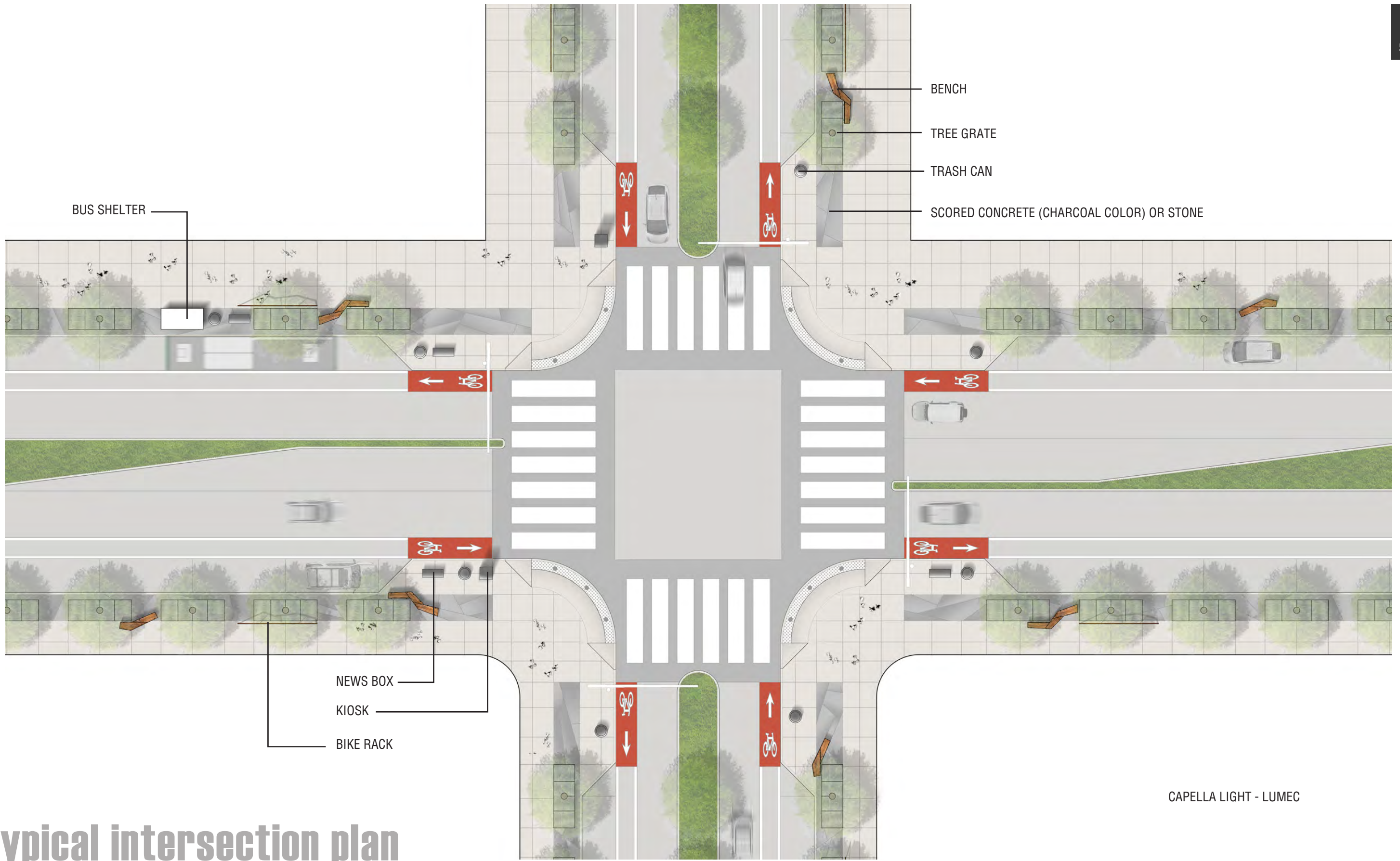
03

bike rack
FORMS+SURFACES
FREMONT

04

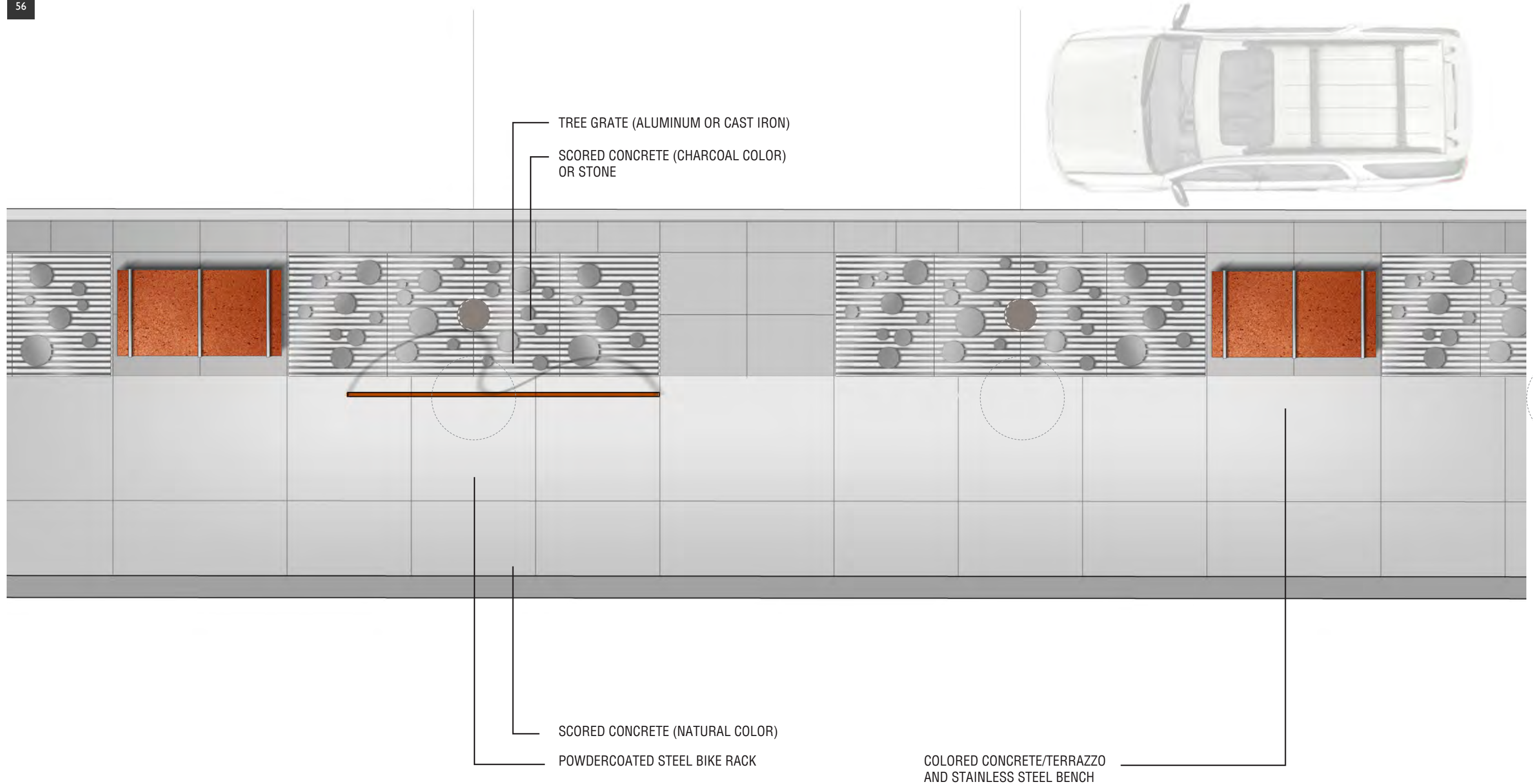
waste receptacles
CREATIVE PIPE
CAMEO



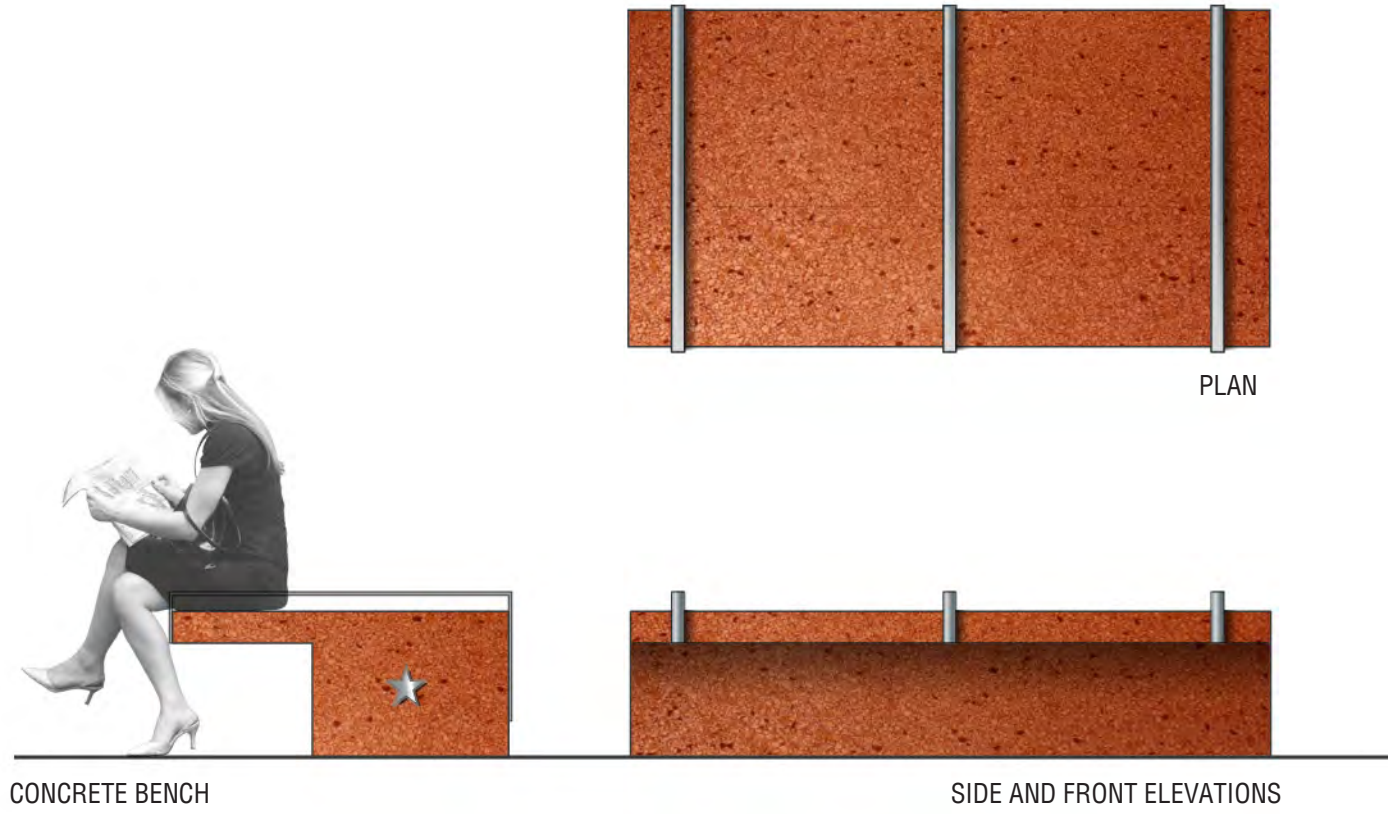


typical intersection plan

CAPELLA LIGHT - LUMEC

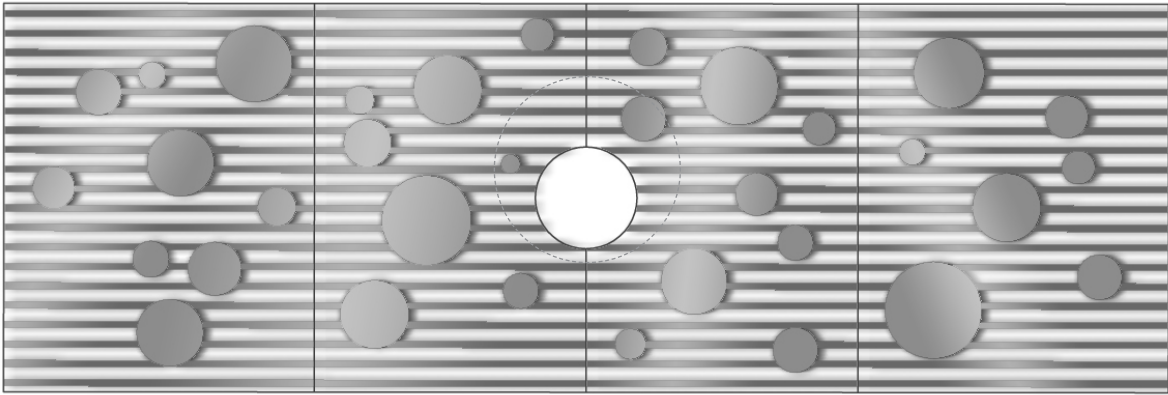


custom site furnishings 1 typical plan

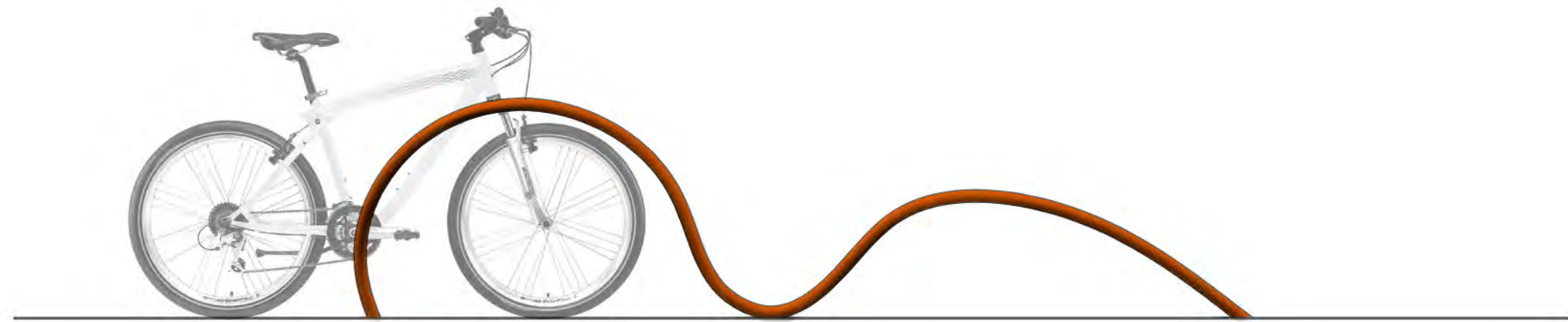


CONCRETE BENCH

SIDE AND FRONT ELEVATIONS

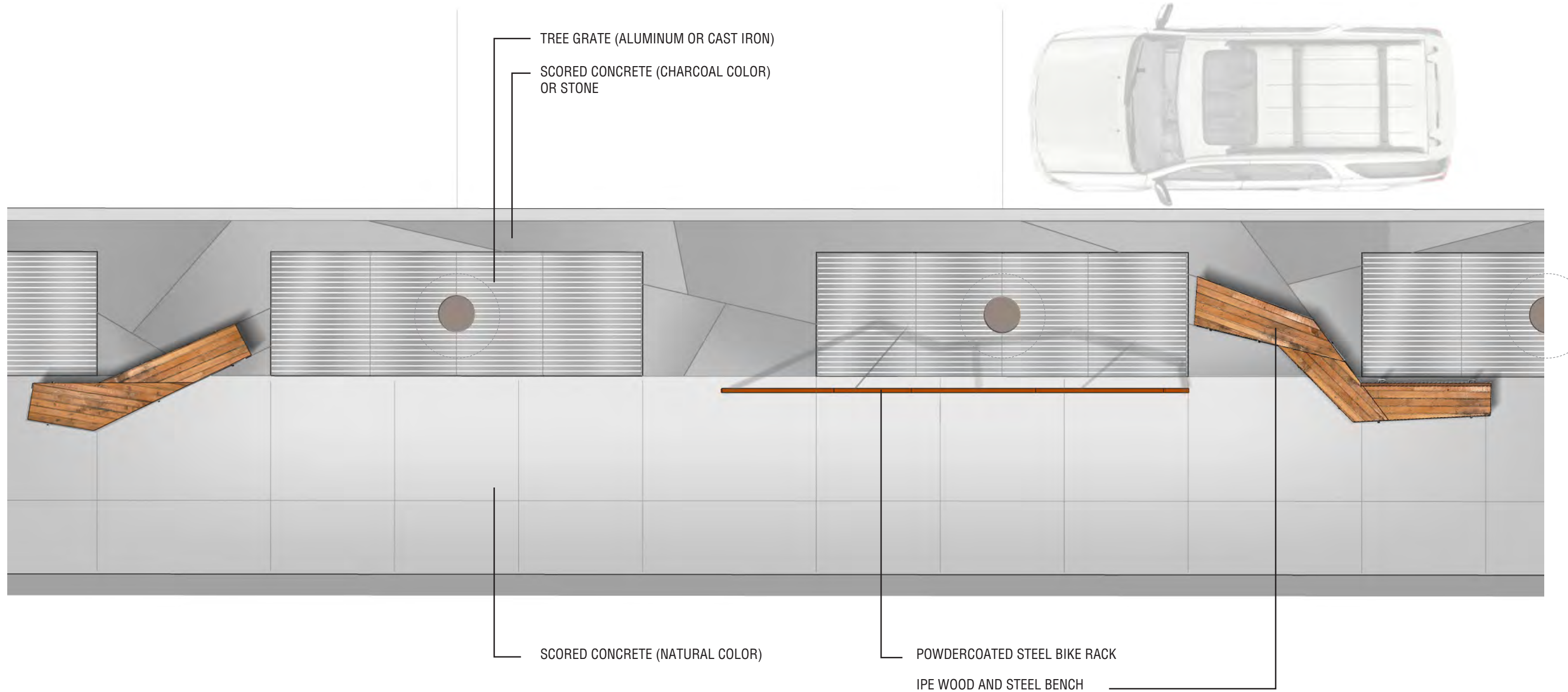


TREE GRATE



POWDERCOATED STEEL BIKE RACK - CUSTOM OPTION

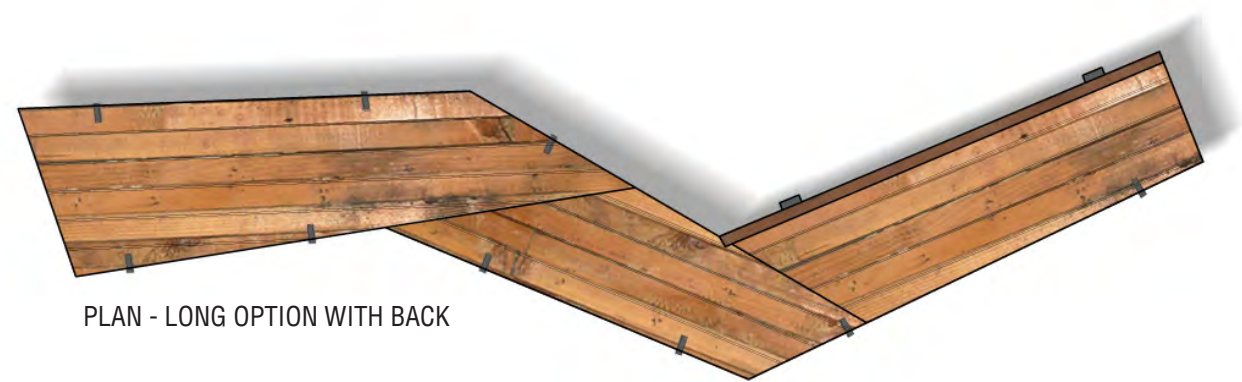
custom site furnishings 1



custom site furnishings 2 typical plan



POWDERCOATED STEEL BIKE RACK



PLAN - LONG OPTION WITH BACK

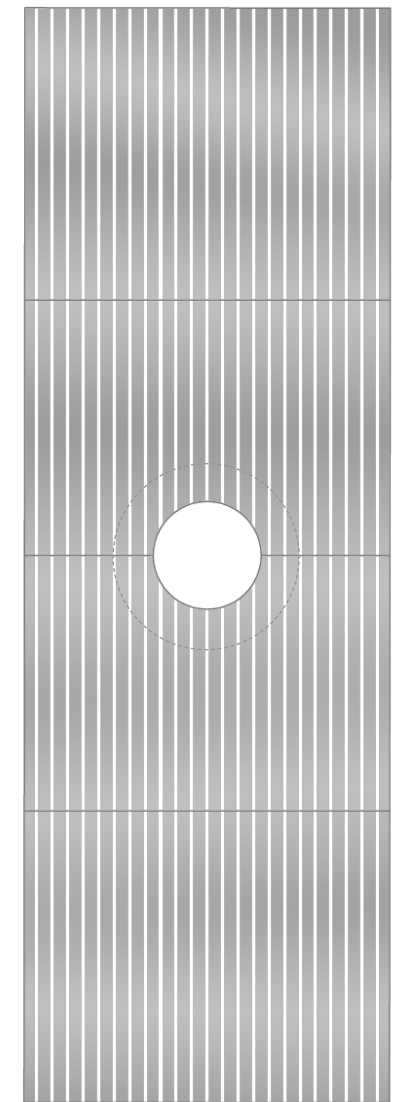


PLAN - SHORT OPTION WITHOUT BACK



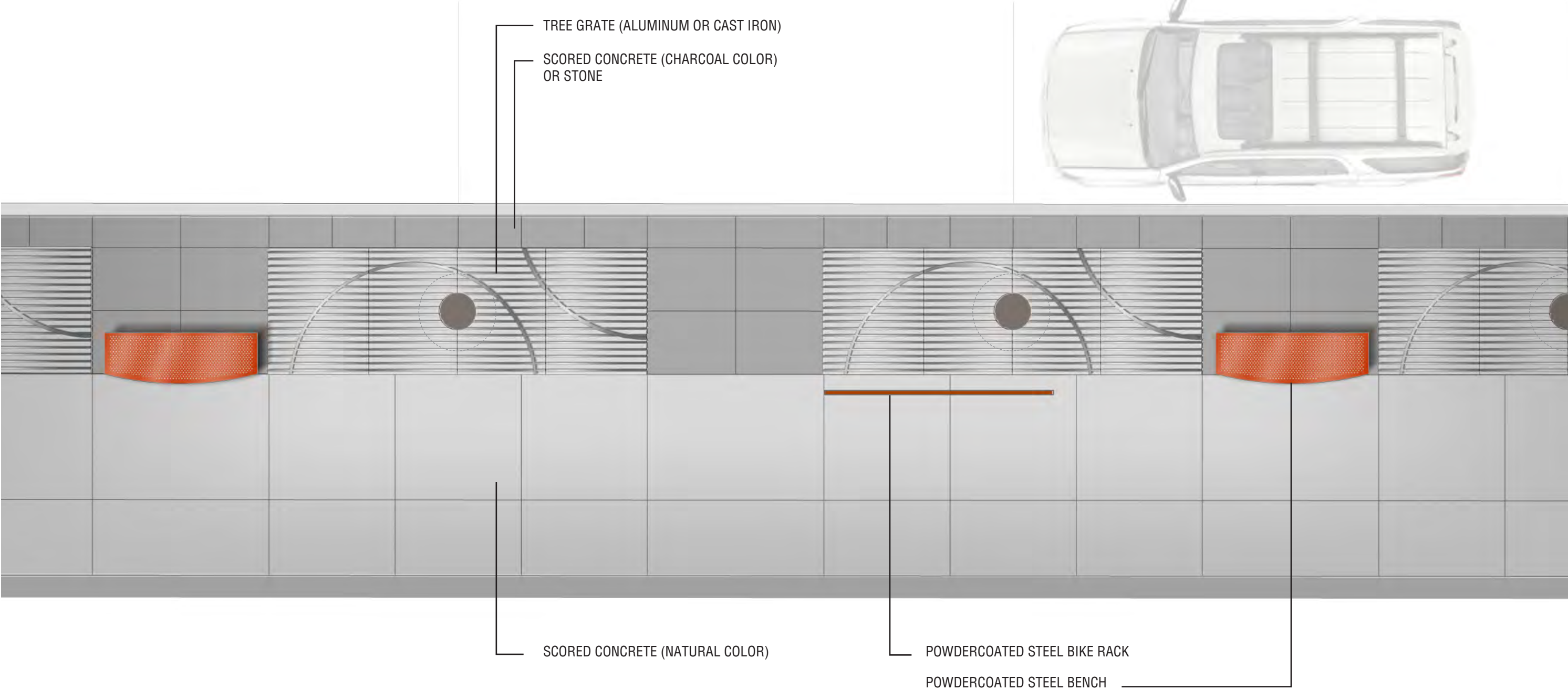
IPE WOOD AND CONCRETE BENCH

SIDE AND FRONT ELEVATIONS

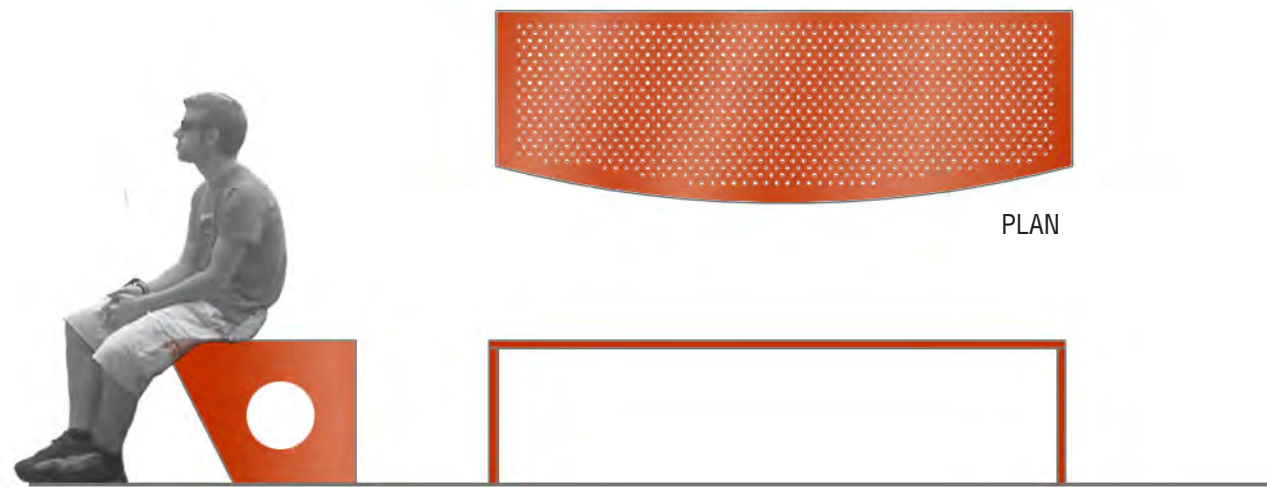


TREE GRATE

custom site furnishings 2

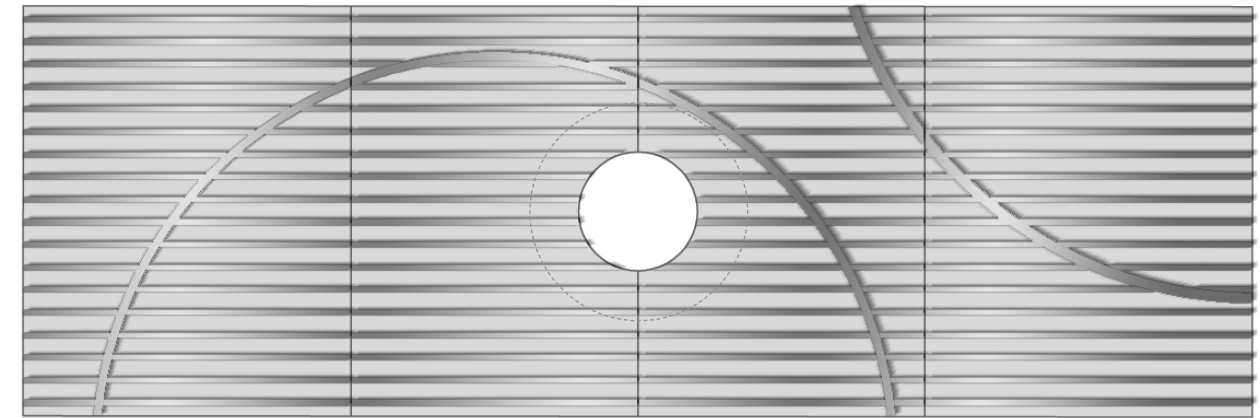


custom site furnishings 3 typical plan



POWDERCOATED PERFORATED STEEL BENCH

SIDE AND FRONT ELEVATION



TREE GRATE



POWDERCOATED BIKE RACK

custom site furnishings 3

1

Option 1



Option 2



Option 1

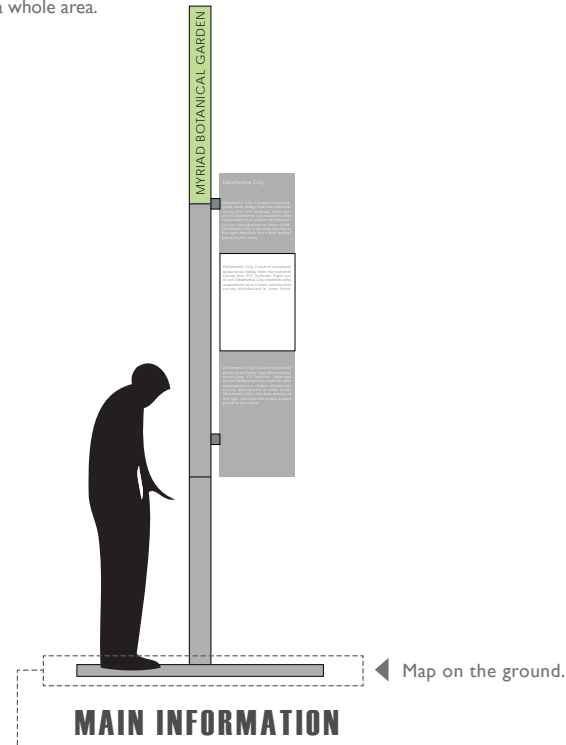
Option 2

OKLAHOMA URBAN - STREETLIFE

signage

2

First Informational level orientation for a whole area.



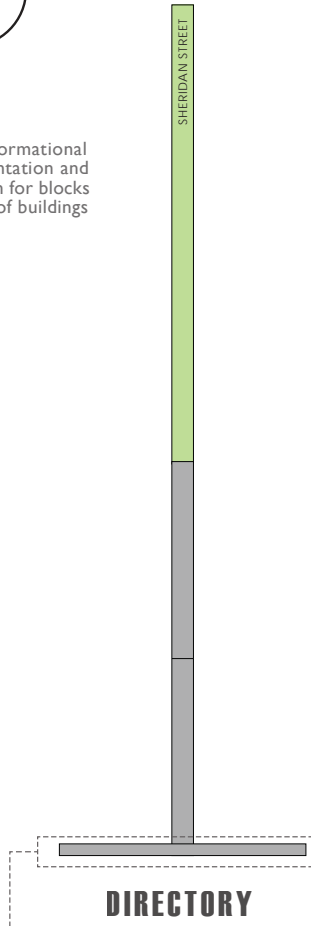
MAIN INFORMATION



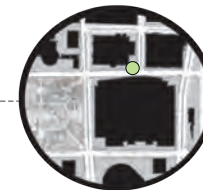
Showing map on the ground.

3

Second Informational level: Orientation and information for blocks or groups of buildings or streets.

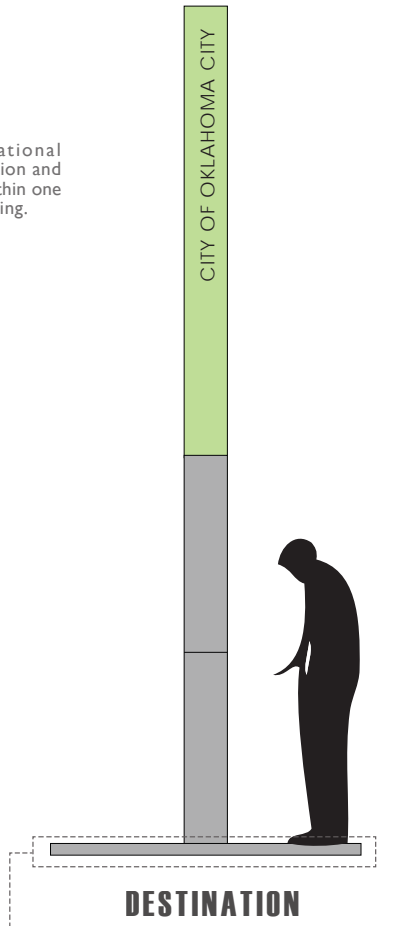


DIRECTORY

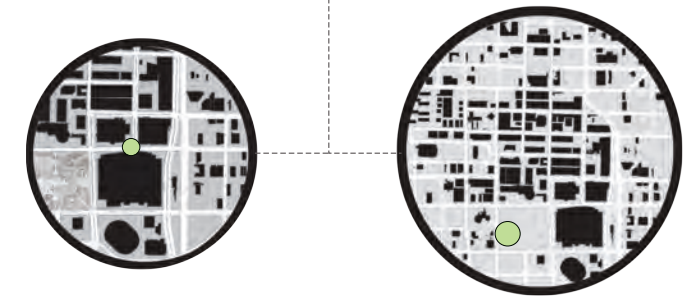


4

Third Informational level: Information and orientation within one block or building.



DESTINATION

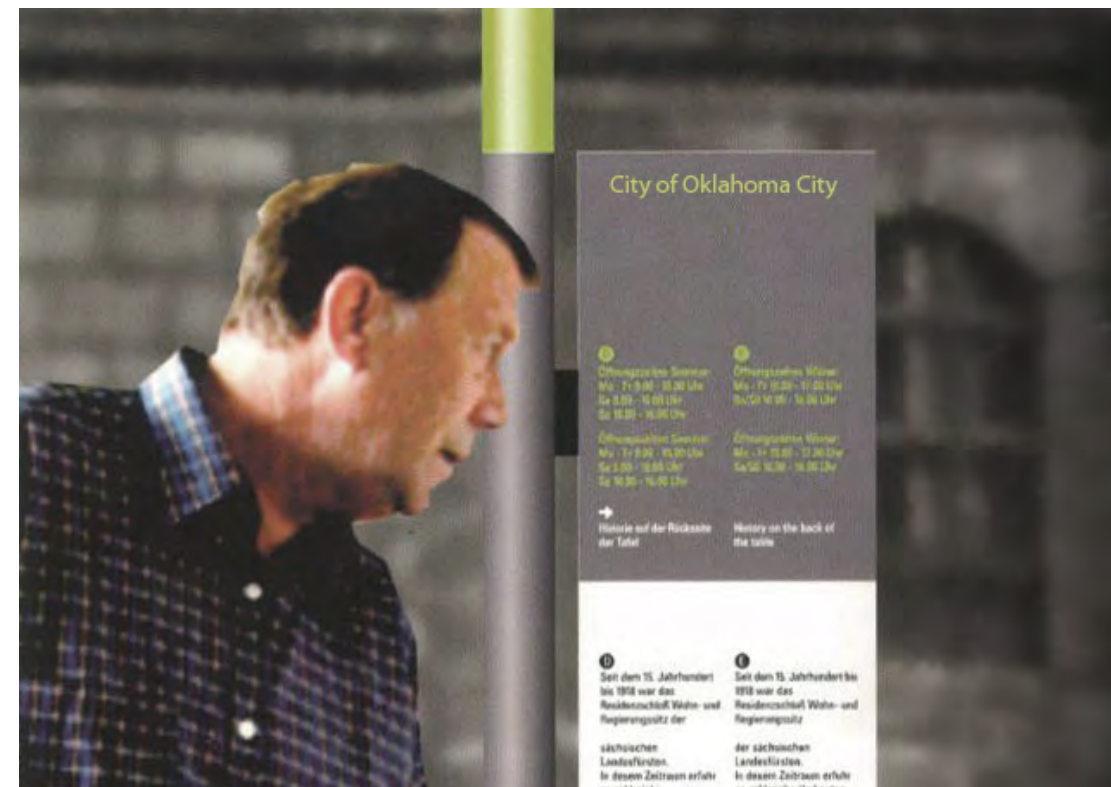




Showing map on the ground.

OKLAHOMA URBAN - STREETLIFE signage

| orientation information | culture | attractive | system |



Written information in the middle.

OKLAHOMA CITY URBAN - STREETLIFE

seating option A

| pure & simple | clean | elegant | attractive | green materials | high performance |





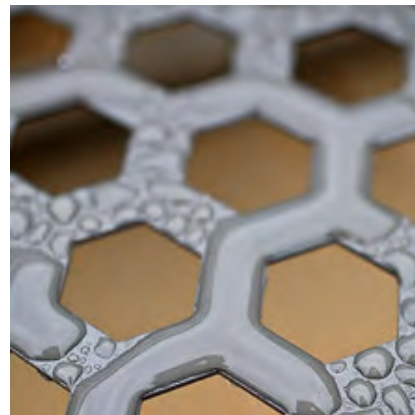
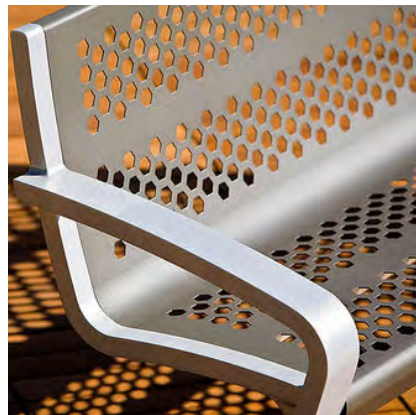
landscapeforms®

AUSTIN BENCH

Austin is a study in beautiful balance. Inspired by architecture of the 20s, and modern furniture of the 50s, it expresses familiar themes in thoroughly contemporary terms.

- + balance of lightness and substance, is relaxed, yet refined, poised but never boring
- + choice of materials and styles provides versatility while offering a common design vernacular
- + suitable for public and private spaces

Available backed or backless
 Selection of interior and exterior woods (see materials link) or aluminum extruded boards
 Interior woods finished with Landscape Forms exclusive LF-80 wood finish, a clear catalyzed lacquer. Custom stain may be specified for maple and red oak for an upcharge. Exterior woods are sanded; no finishing is applied. Exterior woods will weather to soft, pewter gray. This is a natural process that will not affect the structural integrity of the product. Optional cast aluminum arms available for backed or backless benches: End arms only or end arms with center arm. Surface mount cantilever support or free-standing/surface mount support (with glides) All metal is finished with Landscape Forms' proprietary Pangard II® polyester powdercoat, a hard yet flexible finish that resists rusting, chipping, peeling and fading.



FORMS+SURFACES®

BALANCE BENCH

Bold and beautiful in form, the Balance Bench's cantilever frame is constructed of rustproof solid cast aluminum. Seats are made from corrosion-resistant Stainless Steel and may be specified in your choice of Stainless Steel finishes or powdercoat colors. Available in backed and backless versions, the Balance Bench is ideal for transportation centers, campuses, municipal spaces or any setting where robust construction and superb design are priorities.

- Backed and backless benches in standard nominal 6' lengths
- Rustproof cast Aluminum cantilever frame with durable powdercoat finish
- Stainless Steel seats in Sandstone or Satin Stainless Steel finishes or powdercoat colors
- Distinctive hexagonal perforations
- Integral armrests
- Surface mount
- High recycled content / fully recyclable



FORMS+SURFACES®

CAMBER BENCH

A sleek interpretation of the classic park bench, the Camber's smooth lines and broad stance make it a striking and remarkably durable addition to any landscape. With its robust cast aluminum frame and FSC-Certified Ipé Wood or Aluminum slats, Camber is designed to weather the elements and provide many years of welcoming service in any public setting.

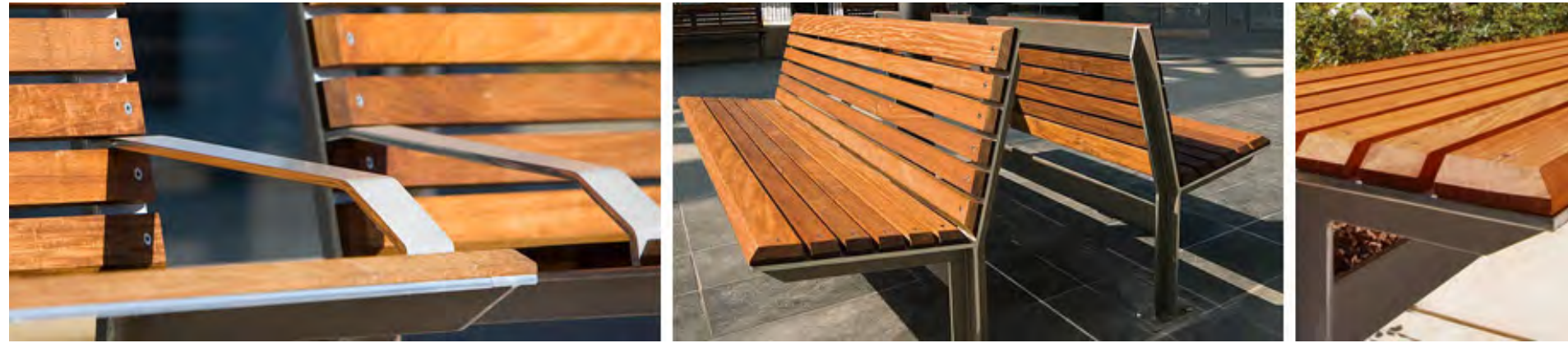
- Frame is made of solid cast Aluminum with Powdercoat finish
- Available with Extruded Aluminum slats or FSC Pure Ipé Wood slats
- Can be freestanding or surface mounted
- Camber™ metal components are up to 95% recycled content and are fully recyclable
- Powdercoat is a no-VOC finish
- All wood is FSC Pure
- Low maintenance
- Easy to disassemble

OKLAHOMA CITY URBAN - STREETLIFE

seating option B

| pure & simple | clean | elegant | attractive | green materials | high performance |





KNIGHT™ BENCH

Pure and simple in form, the Knight Bench combines understated refinement, superb construction and high-performance green materials. The design starts with a seamless all-Aluminum frame with beautifully polished edges. The beveled slats are made from Ipé, a richly colored hardwood whose appearance, strength and sustainability make it the finest wood available for site furnishings.

- + Backed and backless benches in 6' or 8' lengths
- + Solid Aluminum frame with invisible welds and polished edges
- + Powdercoated interior frame surfaces
- + Slats in FSC certified Ipé wood, sustainably produced and carrying the USDA Forest Products Laboratory's highest rating for decay and insect resistance
- + Optional armrests
- + Surface mount
- + High recycled content/fully recyclable
- + Knight design also available in matching litter receptacle, bollard and pedestrian lighting fixtures

FORMS+SURFACES®



SIDUS E BENCH

Model No.
 SS195-E-2-GP (embedded)
 SS195-F-2-GP (flange plate)

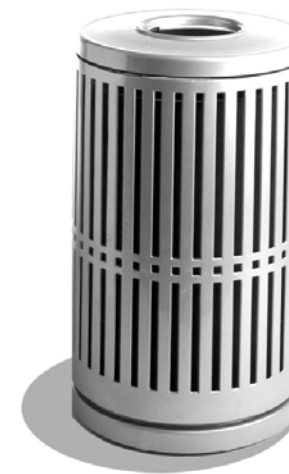
Frame finished in graphite. Ash planking. Galvanized steel frame. Recyclable plastic seats and armrests. Weather resistant. Double planked seat. Finish Frame finished in graphite. Grey engineered plastic planking. Options Frame: Black or classic green powder coating. Planking: Black (RAL 9004) or green.

.hess

OKLAHOMA CITY URBAN - STREETLIFE

waste receptacles

| contemporary | clean lines | organic | superior materials | performance |





FORMS+SURFACES®

DISPATCH LITTER & RECYCLING RECEPTACLE

The Dispatch™ Receptacle combines distinctive design, robust materials and a versatile array of waste stream management options. Available in single-stream and split-stream versions, Dispatch can be configured for litter-only, recycling-only or for combined litter and recycling. Attractive, durable and highly adaptable, the Dispatch Receptacle is an ideal litter and recycling solution for any public space.

- + Rustproof cast Aluminum construction with durable powdercoat finish
- + Hinged side-access door for easy servicing
- + Stainless Steel hinge pins and cam latch
- + Single 45 gal liner for single-stream use or two 20 gal half-liners for split-stream use
- + Recycle inserts available to limit openings to beverage containers or newspaper
- + Standard and custom graphics options
- + Freestanding or surface mount



FORMS+SURFACES®

KNIGHT LITTER RECEPTACLE

The Knight Receptacle combines unique aesthetics, superb construction and high-performance green materials. The finned quadrant frame is seamless Aluminum with beautifully detailed polished edges. Container walls are powder-coated Aluminum with a recyclable polyethylene liner. Distinctive and highly durable, the Knight Receptacle is the perfect accompaniment to Forms+Surfaces' Knight Benches and Lighting fixtures.

- + Heavy plate seamless Aluminum frame and lid with polished outside edges
- + Rustproof Aluminum container walls
- + Choice of powdercoat colors
- + Polyethylene inner liner
- + 30 gallon capacity
- + Freestanding or surface mount
- + High recycled content / all materials fully recyclable
- + Knight design also available in matching benches, bollards and pedestrian lighting fixtures



landscapeforms®

CHASE PARK LITTER & RECYCLING RECEPTACLE

Designed and built to meet the rigors of urban spaces. Chase Park is a refreshing choice for municipalities, transportation hubs, retail areas and college campuses. Add a logo band to portray spirit and branding.

- + Both styles include black, polyethylene liner
- + Features hinged door that swings open for emptying; optional keyed lock for door
- + Optional sand pan, attached with cable, offered for side opening style
- + Optional logo band may be specified for both styles
- + Constructed of cast aluminum sides and door; spun aluminum top; cast iron base
- + Door hinge and latch are stainless steel
- + May be left freestanding or surface mounted on site
- + All metal is finished with Landscape Forms' proprietary Pangard II® polyester powdercoat, a hard yet flexible finish that resists rusting, chipping, peeling and fading

Dimensions
 Top opening 24"dia x 39"h
 Side opening 24"dia. X 40"h

OKLAHOMA CITY URBAN - STREETLIFE

bike rack

| sculptural

| contemporary

| elegant

| artistic

| playful





FORMS+SURFACES®

CAPITOL™ BIKE RACK

The Capitol™ Bike Rack is the ultimate in modern design. Its clean, bold lines are perfect for cityscapes and contemporary architectural settings. The design concept behind this rack is undeniable: less is certainly more. Speaking volumes in its simplicity, this rack will protect your property while showcasing impeccable style.

- + Cast Aluminum body with powdercoat finish
- + Surface mounted only
- + Capitol™ metal components are up to 95% recycled content and are fully recyclable
- + Powdercoat is a no-VOC finish
- + Low maintenance



landscapeforms®



BOLA™ BIKE RACK

Capacity: 2 bicycles
 Supports bike upright by its frame in two places*
 A standard D-shaped bike lock can be placed to secure both a wheel and the frame
 Meets Association of Pedestrian and Bicycle Professionals (APBP) recommendations
 Refer to assembly instructions for suggested spacing on site
 Constructed of 1.5" o.d. x .120" wall tubing
 Powdercoated steel or stainless steel
 Manufactured in Kalamazoo, MI, U.S.A.
 Sustainability and LEED
 Bola bike rack is 100% recyclable.

Dimensions
 Installed: 1-1/2" d x 27-1/2" w x 32" h

3

DESIGN COMPONENTS - HORIZONTAL

SCHEME OKLAHOMA CITY URBAN-STREETLIFE

CLEAN MODERN LINES.

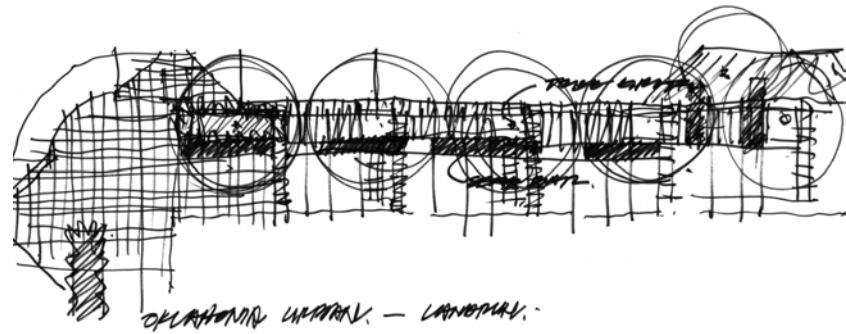
THE LATEST IN MATERIALS AND TECHNOLOGY. GRANITE PAVERS, CONCRETE, METAL, WOOD, GEOMETRIC PLANTING AND STREET TREES.

“ZEITGEIST” THE SPIRIT OF AN AGE. THE VISION FOR THE NEW OKLAHOMA CITY.

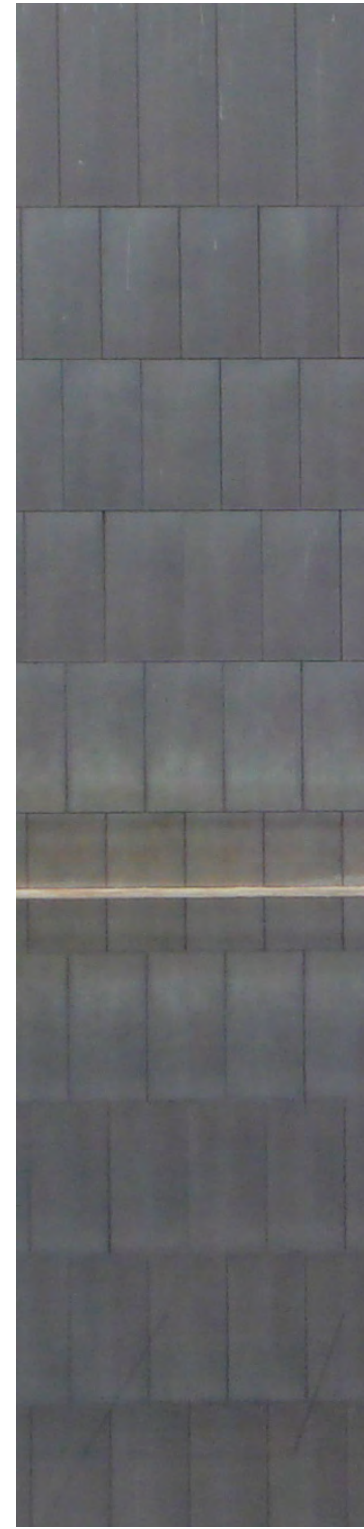
“ALWAYS DESIGN A THING BY CONSIDERING IT IN ITS NEXT LARGER CONTEXT - A CHAIR IN A ROOM , A ROOM IN A HOUSE, A HOUSE IN AN ENVIRONMENT, AN ENVIRONMENT IN A CITY PLAN.”

ELIEL SAARINEN

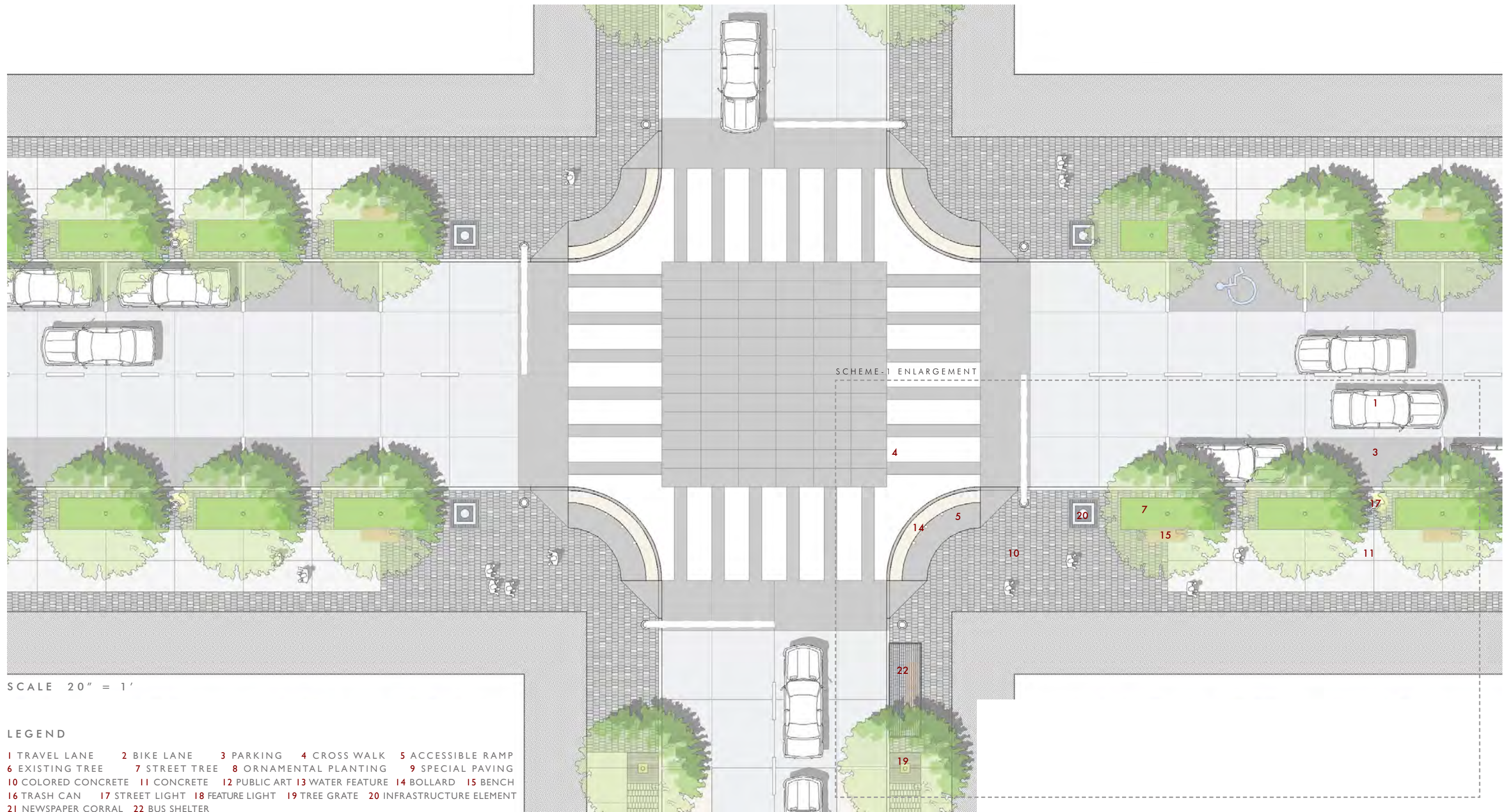
BOOMERS, SOONERS, LANDRUN



SCHEME OKLAHOMA CITY URBAN - STREETLIFE



OKLAHOMA CITY URBAN - STREETLIFE SCHEME - 1



OKLAHOMA CITY URBAN - STREETLIFE SCHEME - 1 ENLARGEMENT

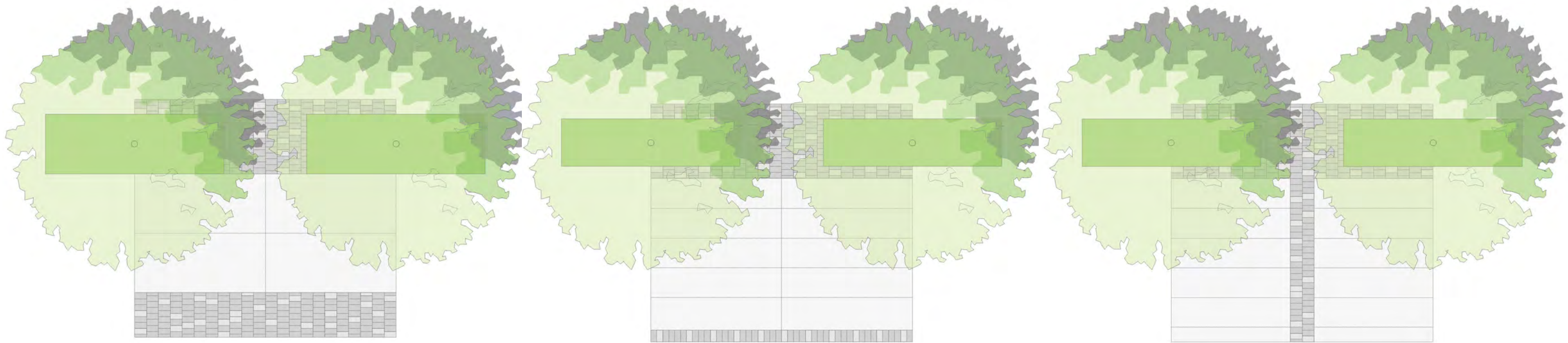


SCALE 10" = 1'

LEGEND

- 1 TRAVEL LANE 2 BIKE LANE 3 PARKING 4 CROSS WALK 5 ACCESSIBLE RAMP
- 6 EXISTING TREE 7 STREET TREE 8 ORNAMENTAL PLANTING 9 SPECIAL PAVING
- 10 COLORED CONCRETE 11 CONCRETE 12 PUBLIC ART 13 WATER FEATURE 14 BOLLARD 15 BENCH
- 16 TRASH CAN 17 STREET LIGHT 18 FEATURE LIGHT 19 TREE GRATE 20 INFRASTRUCTURE ELEMENT
- 21 NEWSPAPER CORRAL 22 BUS SHELTER

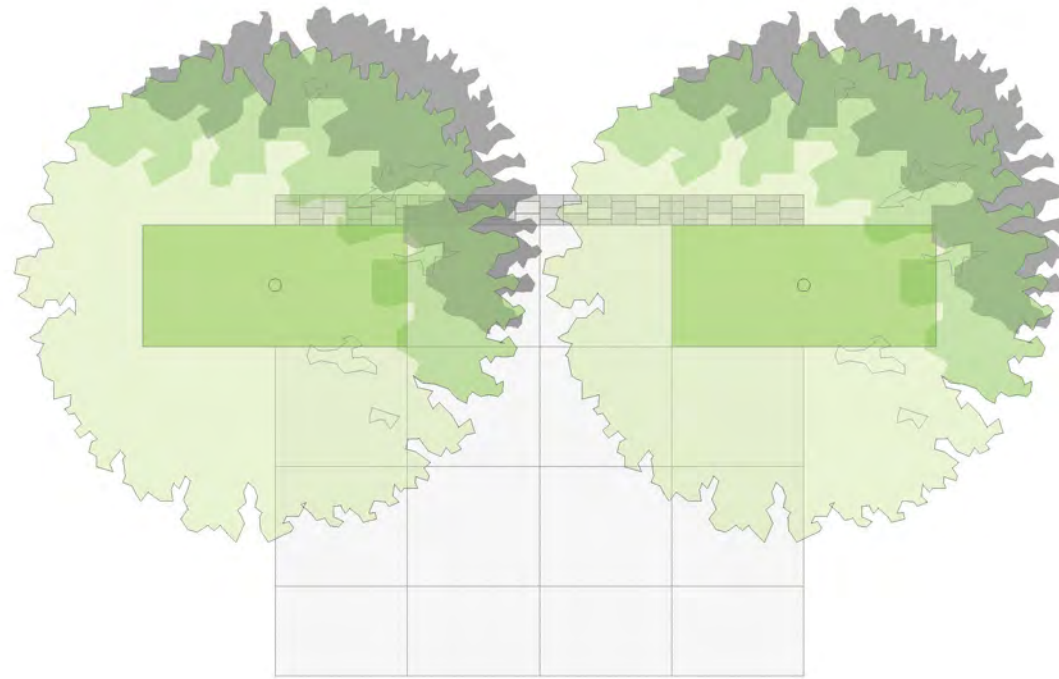
OKLAHOMA CITY URBAN - STREETLIFE **SCHEME - 1 PAVING STUDIES**



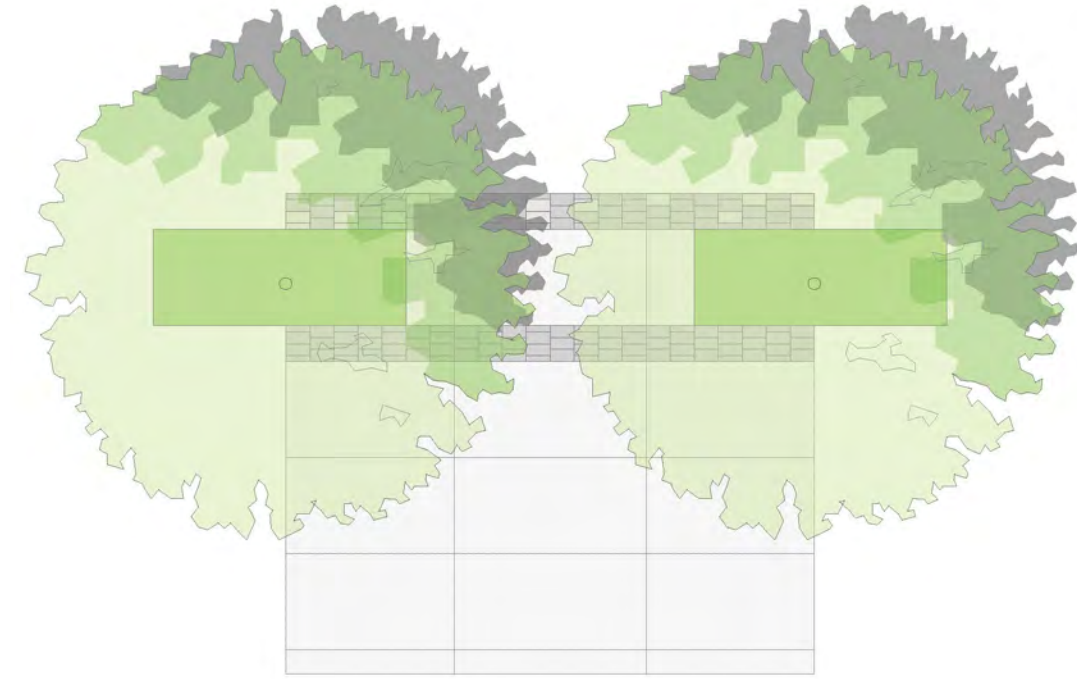
OPTION 1

OPTION 2

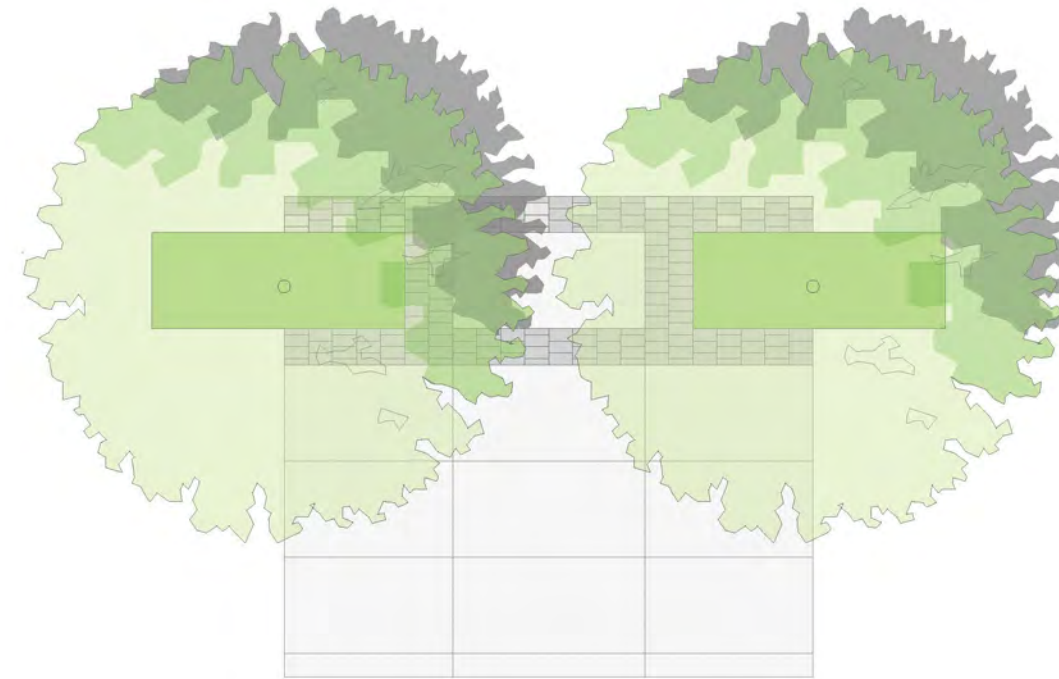
OPTION 3



OPTION 4



OPTION 5

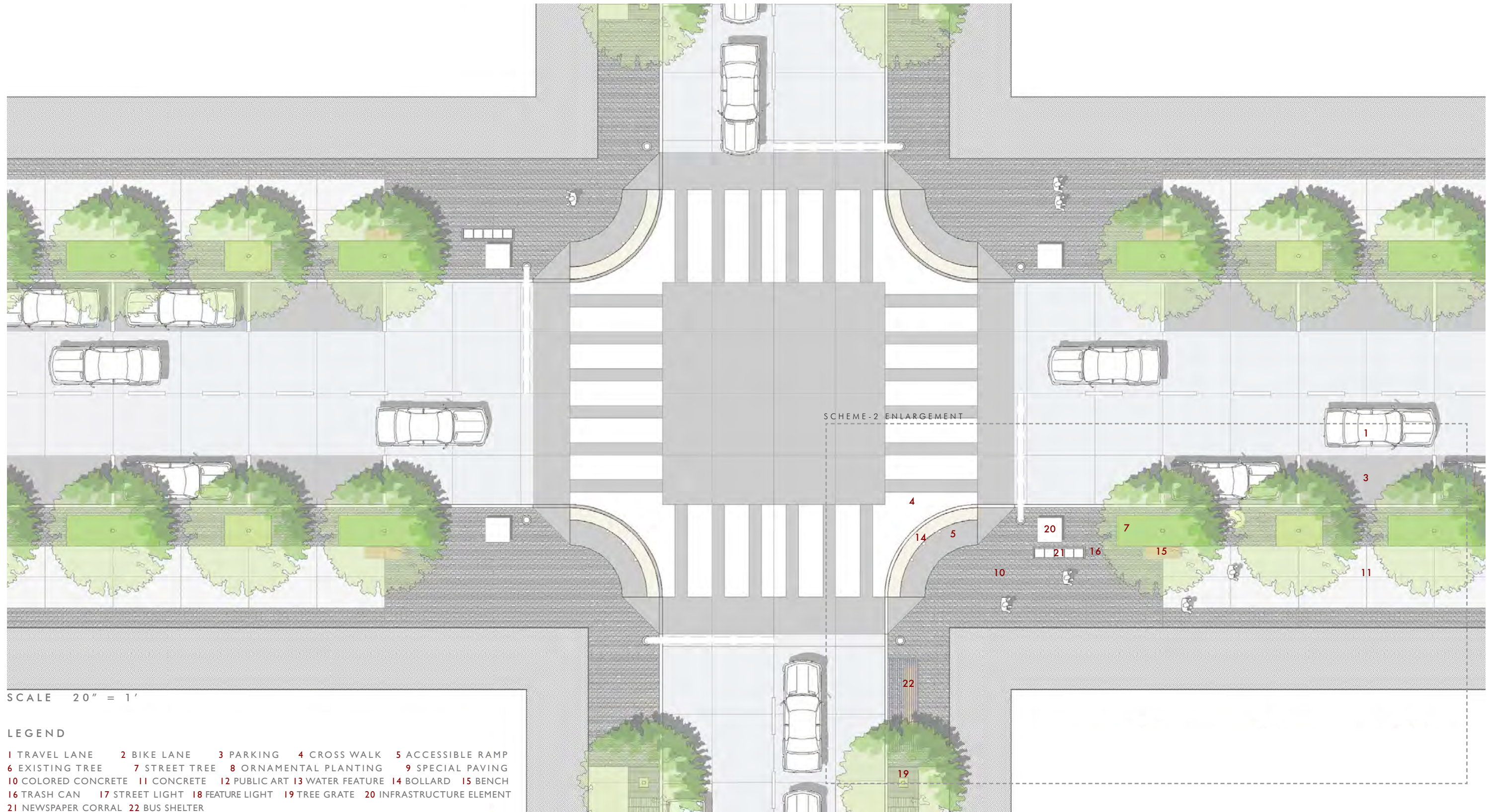


OPTION 6



OPTION 7

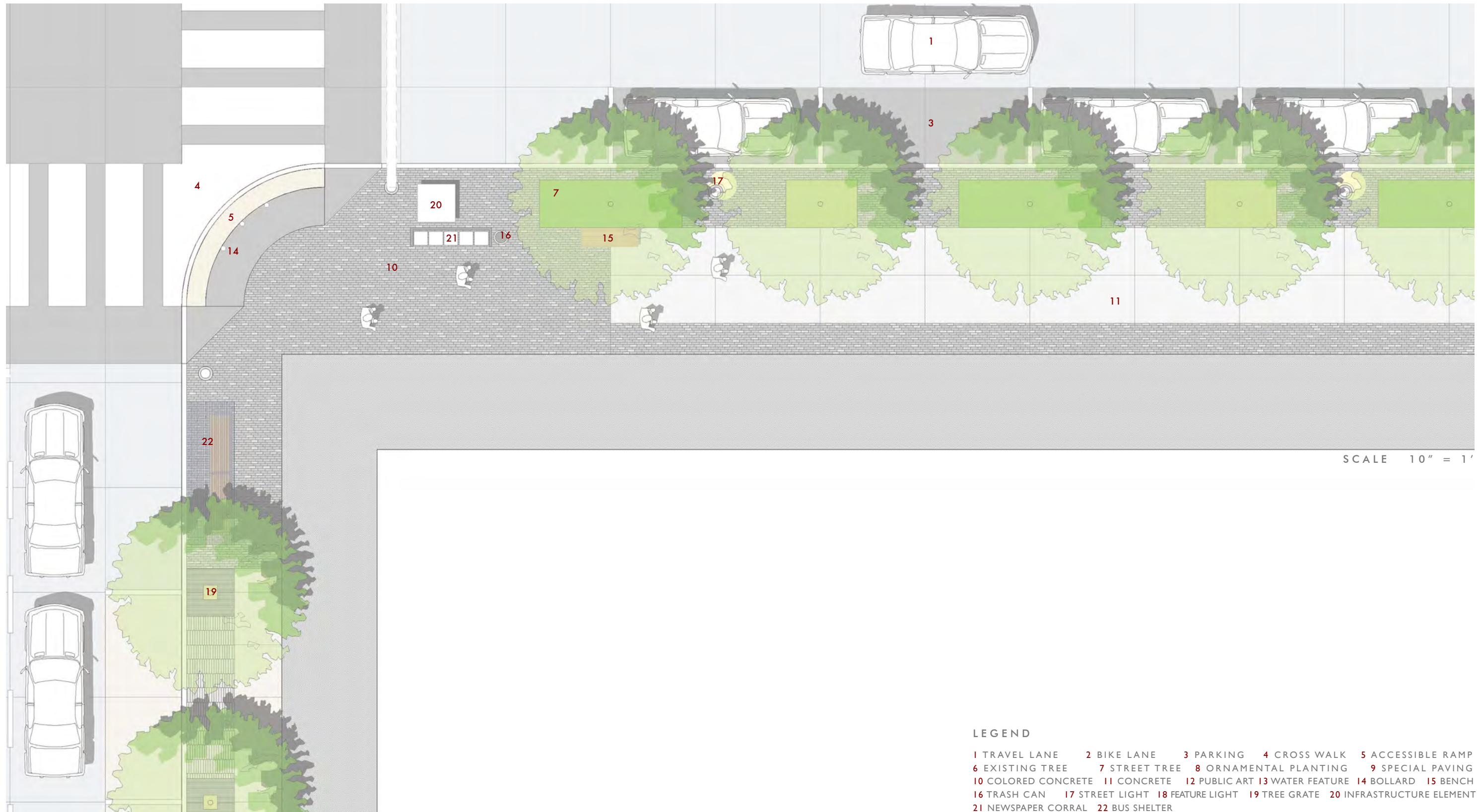
OKLAHOMA CITY URBAN - STREETLIFE **SCHEME - 2**



SCALE 20" = 1'

LEGEND

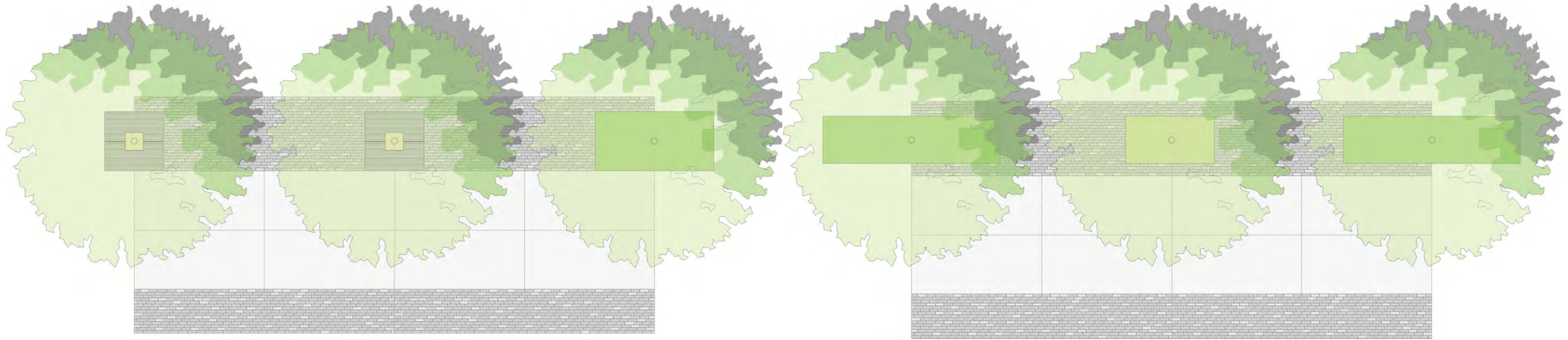
- 1 TRAVEL LANE 2 BIKE LANE 3 PARKING 4 CROSS WALK 5 ACCESSIBLE RAMP
- 6 EXISTING TREE 7 STREET TREE 8 ORNAMENTAL PLANTING 9 SPECIAL PAVING
- 10 COLORED CONCRETE 11 CONCRETE 12 PUBLIC ART 13 WATER FEATURE 14 BOLLARD 15 BENCH
- 16 TRASH CAN 17 STREET LIGHT 18 FEATURE LIGHT 19 TREE GRATE 20 INFRASTRUCTURE ELEMENT
- 21 NEWSPAPER CORRAL 22 BUS SHELTER



LEGEND

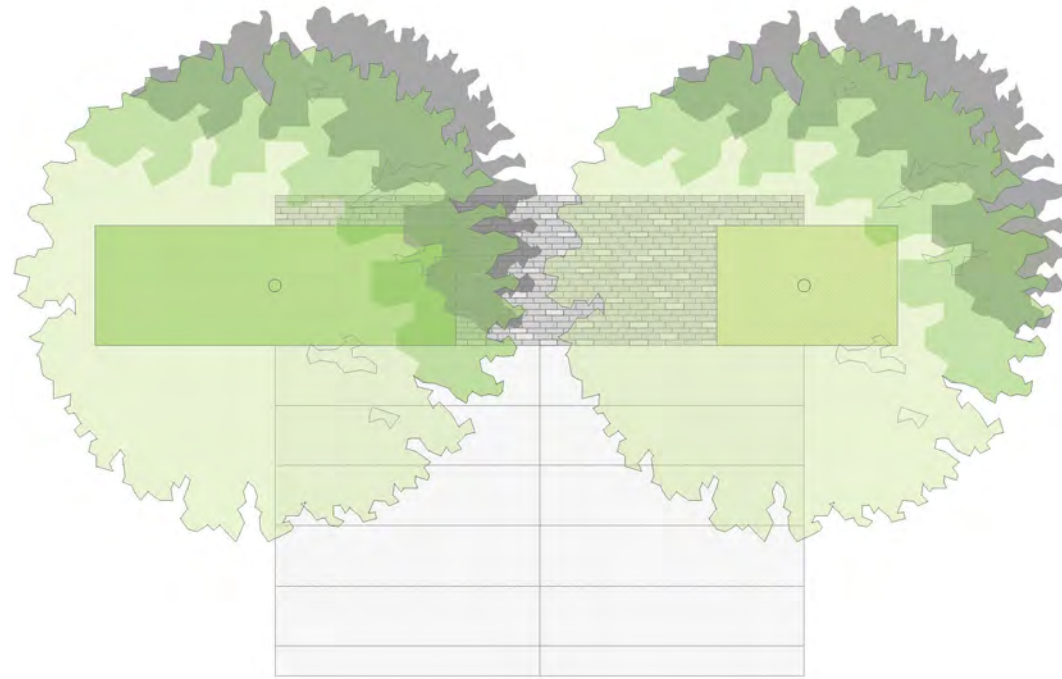
- 1 TRAVEL LANE 2 BIKE LANE 3 PARKING 4 CROSS WALK 5 ACCESSIBLE RAMP
- 6 EXISTING TREE 7 STREET TREE 8 ORNAMENTAL PLANTING 9 SPECIAL PAVING
- 10 COLORED CONCRETE 11 CONCRETE 12 PUBLIC ART 13 WATER FEATURE 14 BOLLARD 15 BENCH
- 16 TRASH CAN 17 STREET LIGHT 18 FEATURE LIGHT 19 TREE GRATE 20 INFRASTRUCTURE ELEMENT
- 21 NEWSPAPER CORRAL 22 BUS SHELTER

OKLAHOMA CITY URBAN - STREETLIFE **SCHEME - 2 PAVING STUDIES**

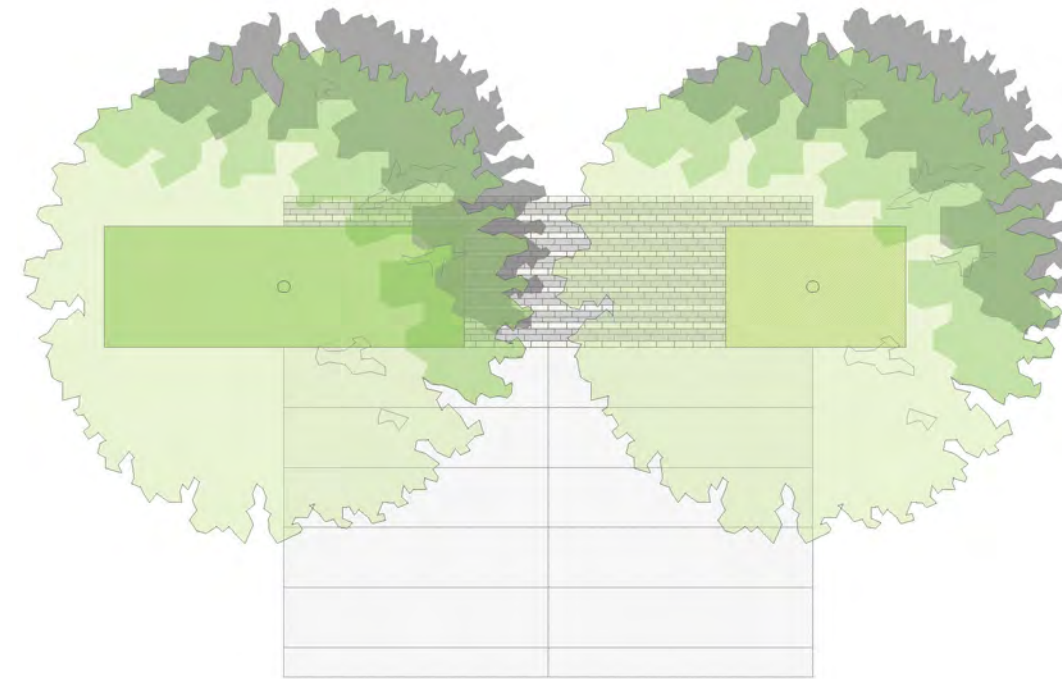


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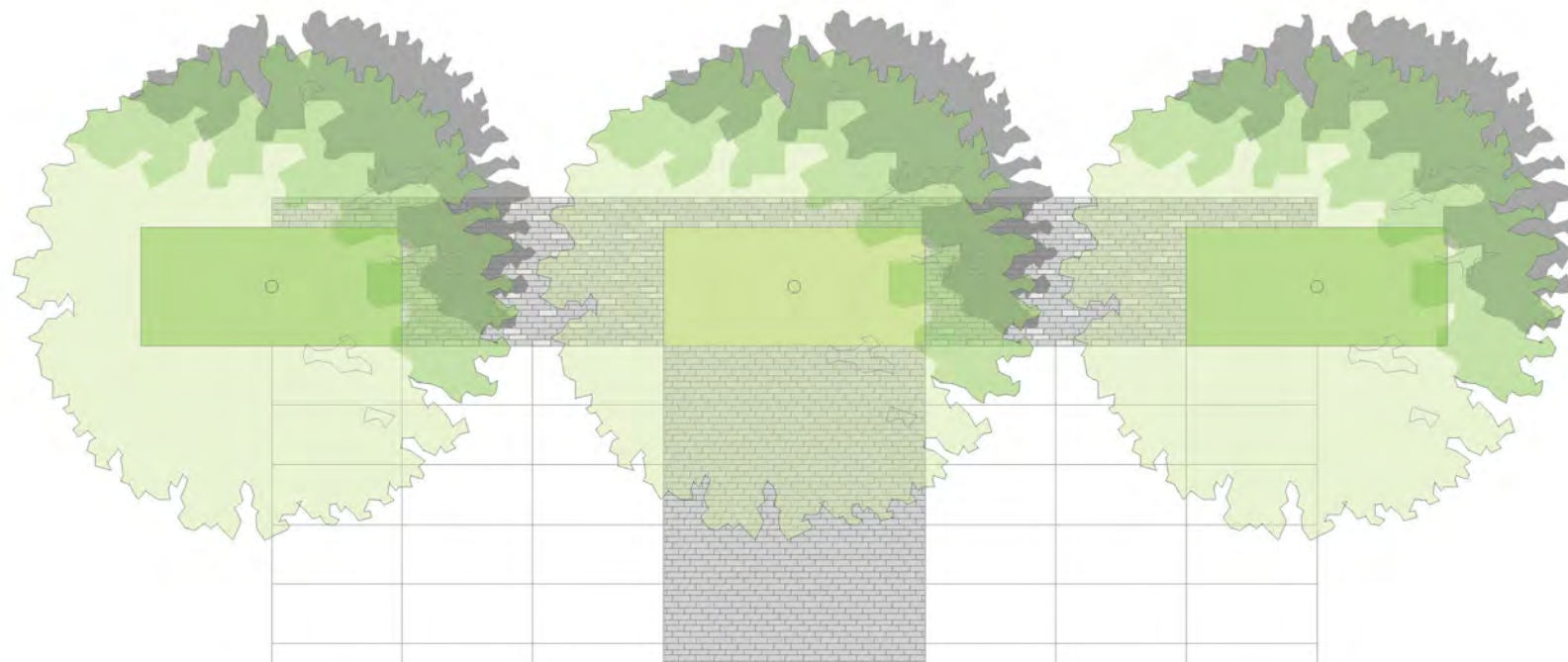
OPTION 2



OPTION 3



OPTION 4



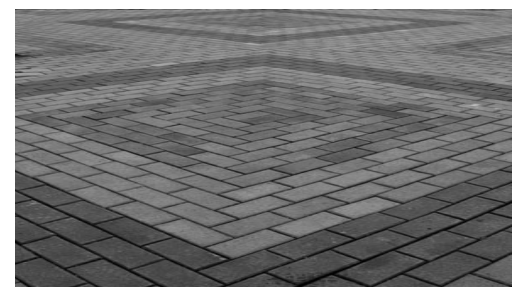
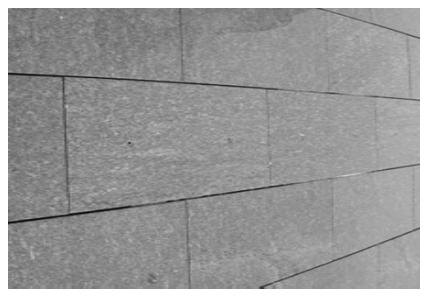
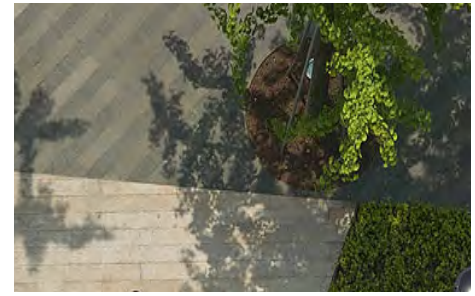
OPTION 5



OPTION 6

OKLAHOMA CITY URBAN - STREETLIFE paving

| unique design | clean | geometric pattern | superior materials | complement |



COLOR PALETTE



STONE FOR CURBS



IRIDIAN



CHARCOAL



ACADEMIC BLACK

CONCRETE UNIT PAVERS



FDX 7008



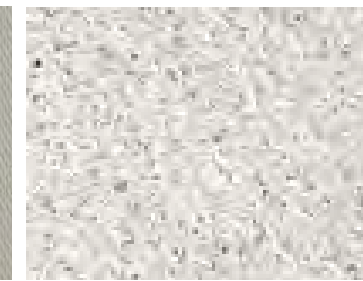
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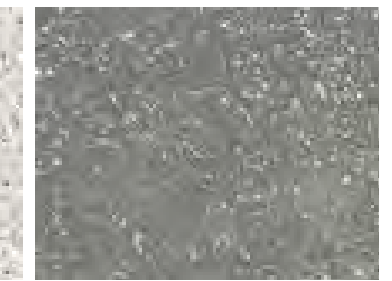
FDX 2008



FD 2008



SX 2418



SX 3418

COLORED CONCRETE



C-31 SHADOW SLATE



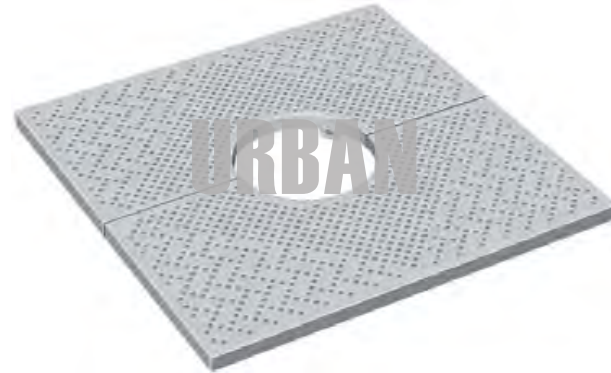
C-27 WESTWOOD BROWN



C-34 DARK GREY



URBAN ACCESSORIES



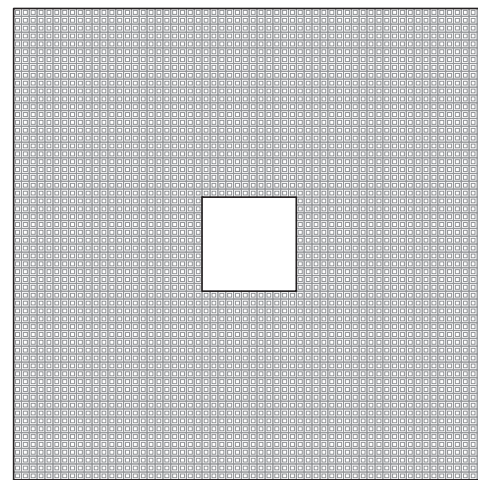
NEENAH FOUNDRY



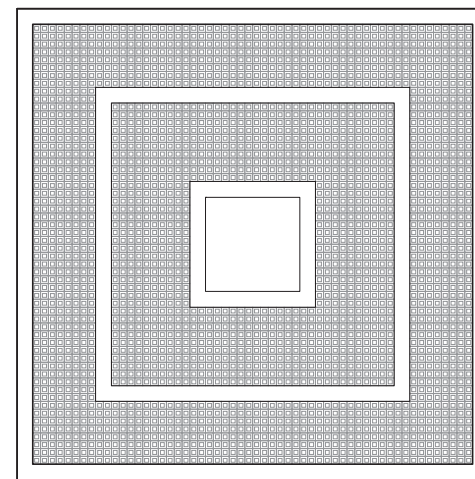
URBAN ACCESSORIES

OKLAHOMA URBAN - STREETLIFE tree grates

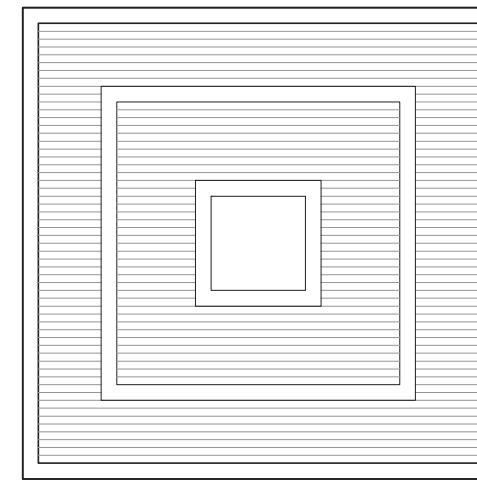
| timeless | clean | attractive | superior materials | performance |



STREET LIFE ART DECO I



STREET LIFE ART DECO II

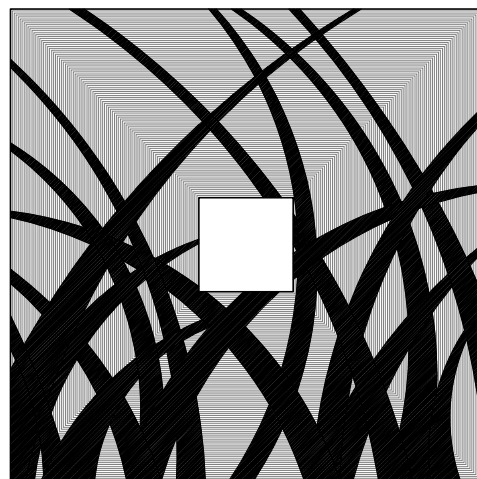


STREET LIFE MODERN

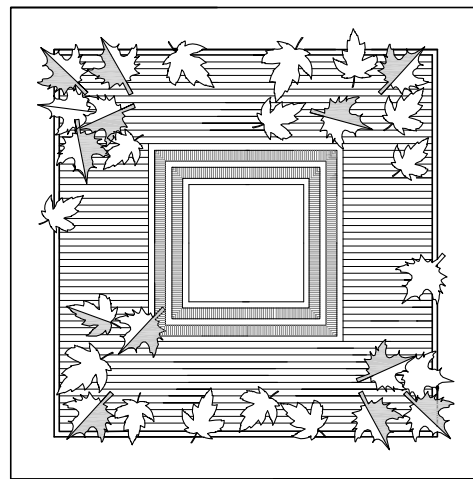


OKLAHOMA URBAN - STREETLIFE customized tree grates

| timeless | clean | attractive | superior materials | performance |



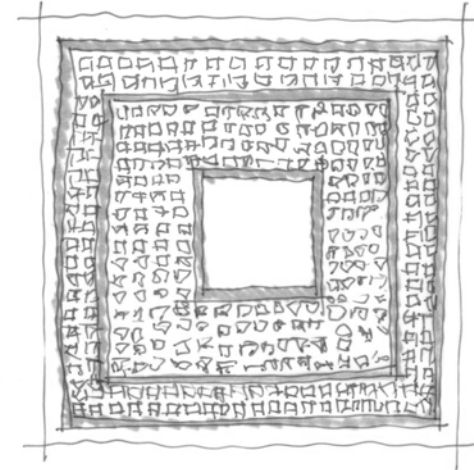
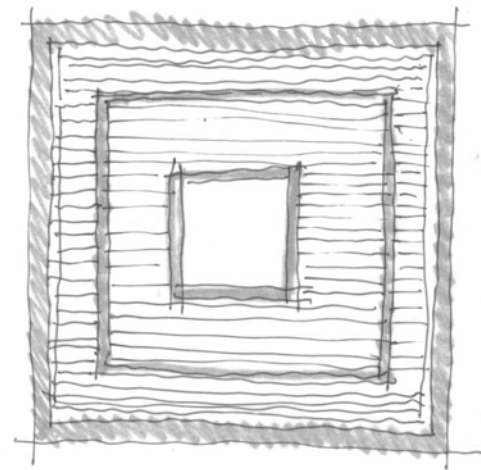
STREET LIFE GRASS



STREET LIFE TREES FLORA



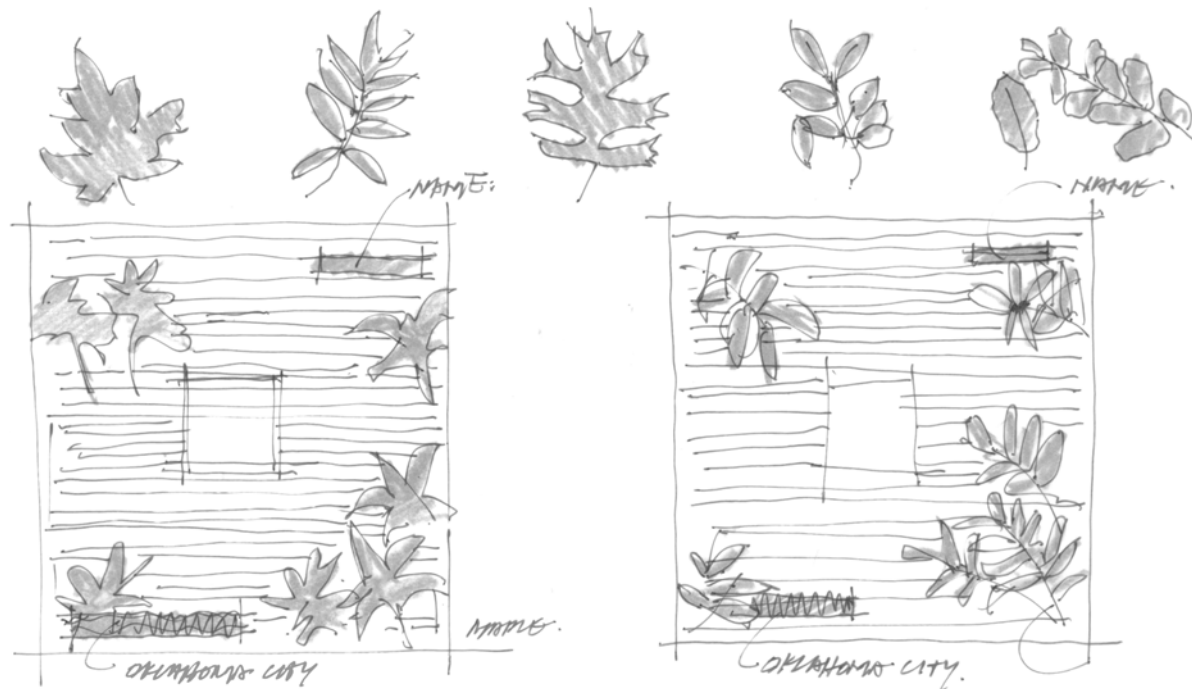
STREET LIFE FLORA



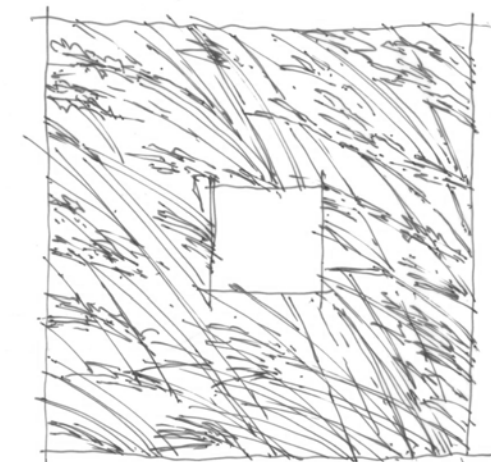
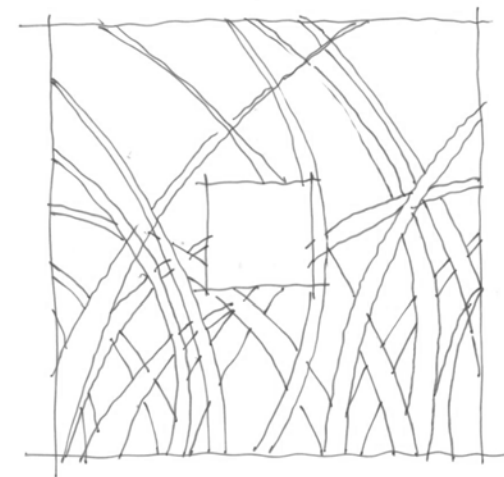
STREET LIFE TREE GRATE.
HISTORIC REFERENCE.

OKLAHOMA URBAN - STREETLIFE customized tree grates

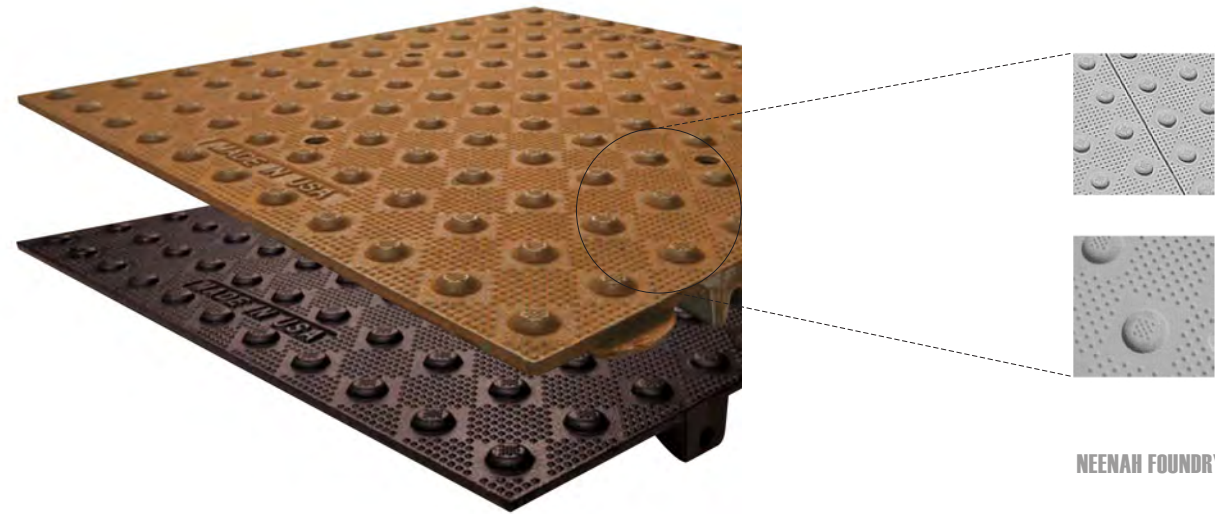
| timeless | clean | attractive | superior materials | performance |



STREET LIFE TREES FLORA.



STREET LIFE TREE GRATE
FLORA REFERENCE



NEENAH FOUNDRY



OKLAHOMA URBAN - STREETLIFE detectable warning plates & manhole covers

| timeless | clean | attractive | superior materials | performance |



STREET LIFE TREES FLORA

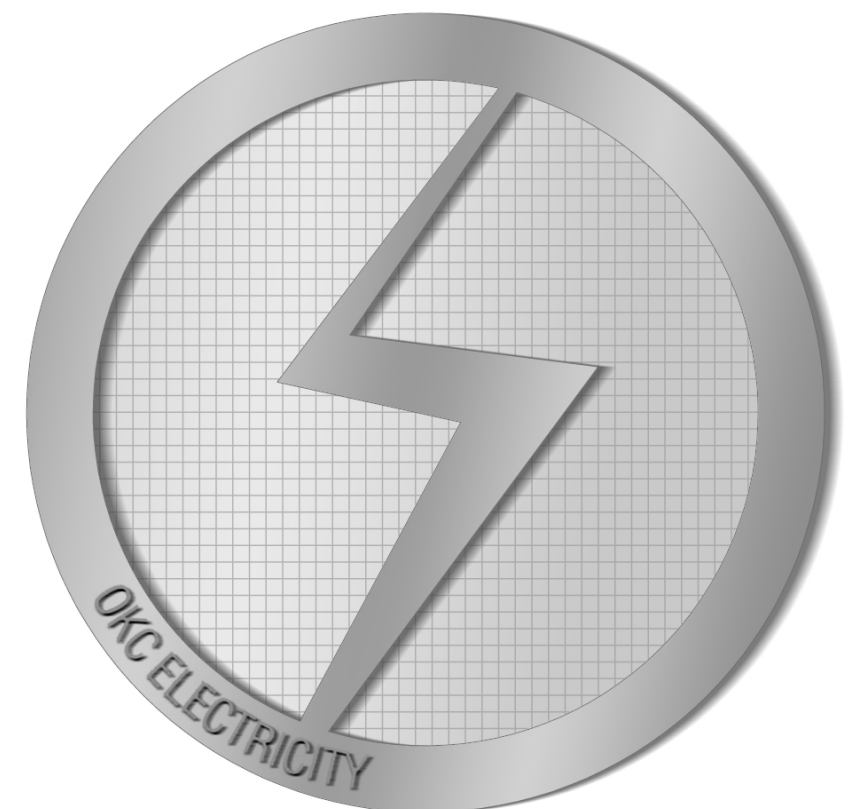
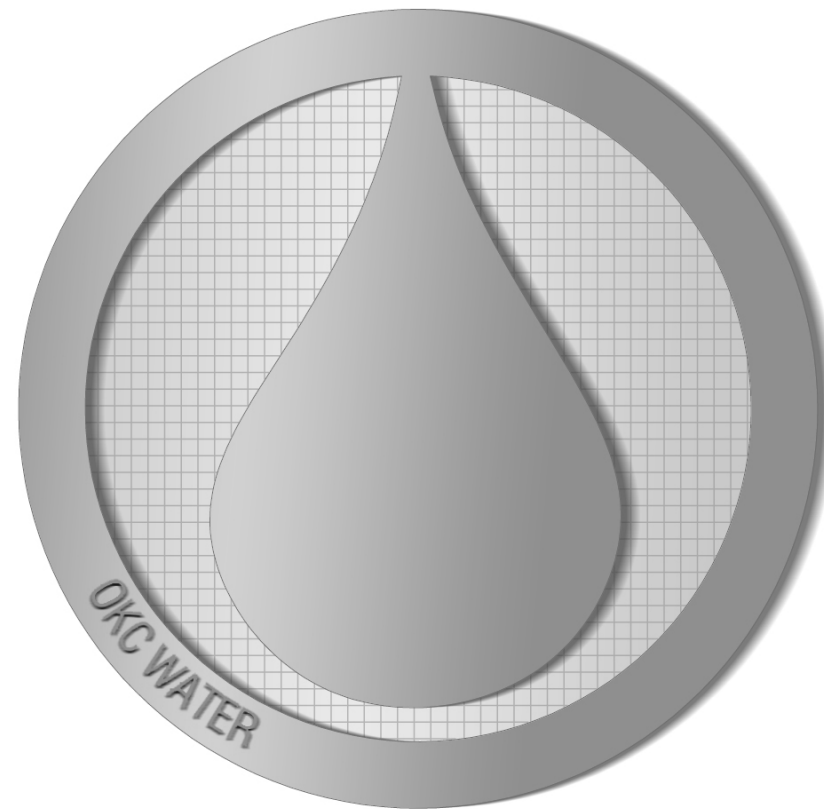


STREET LIFE GRASS

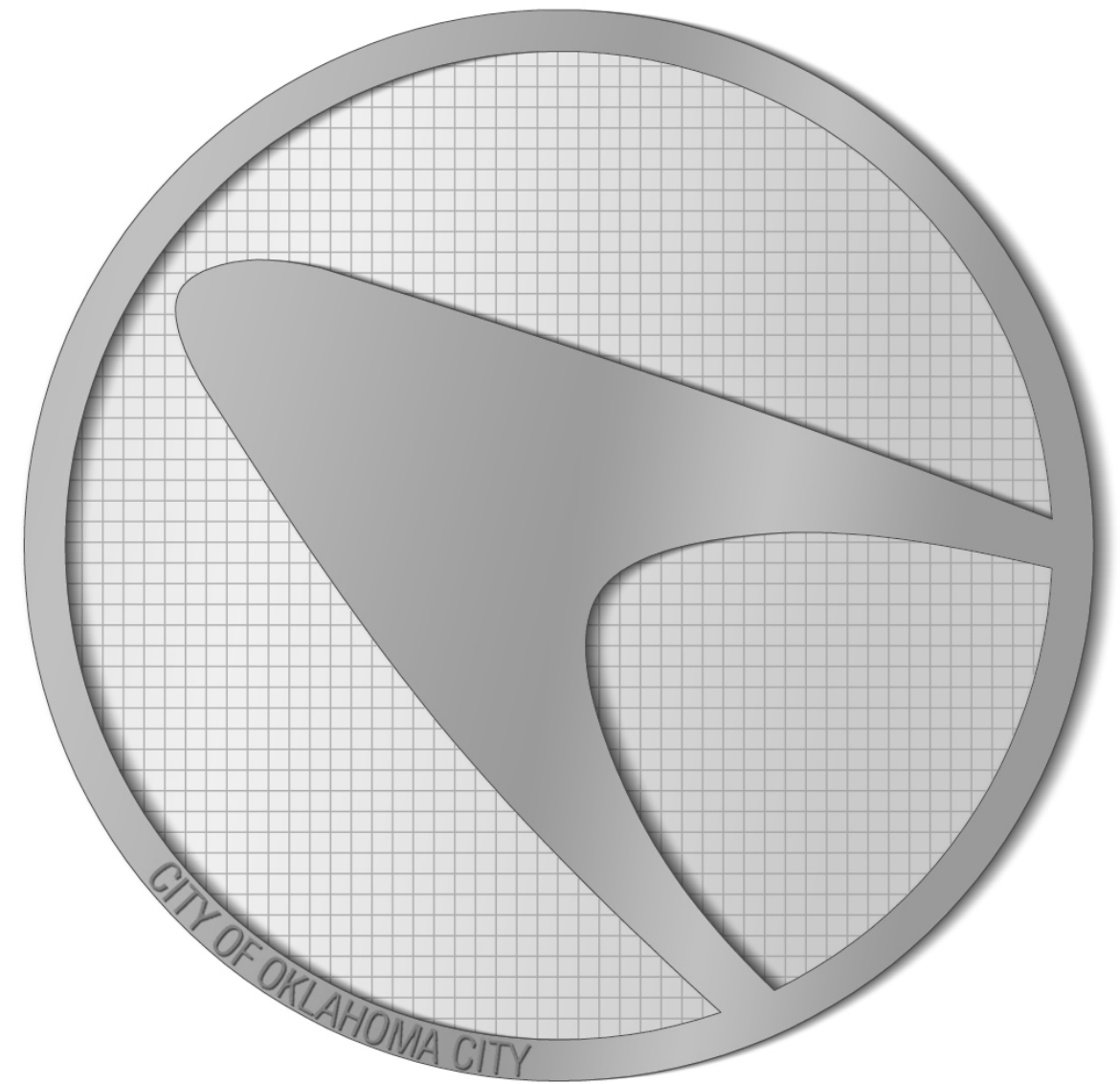
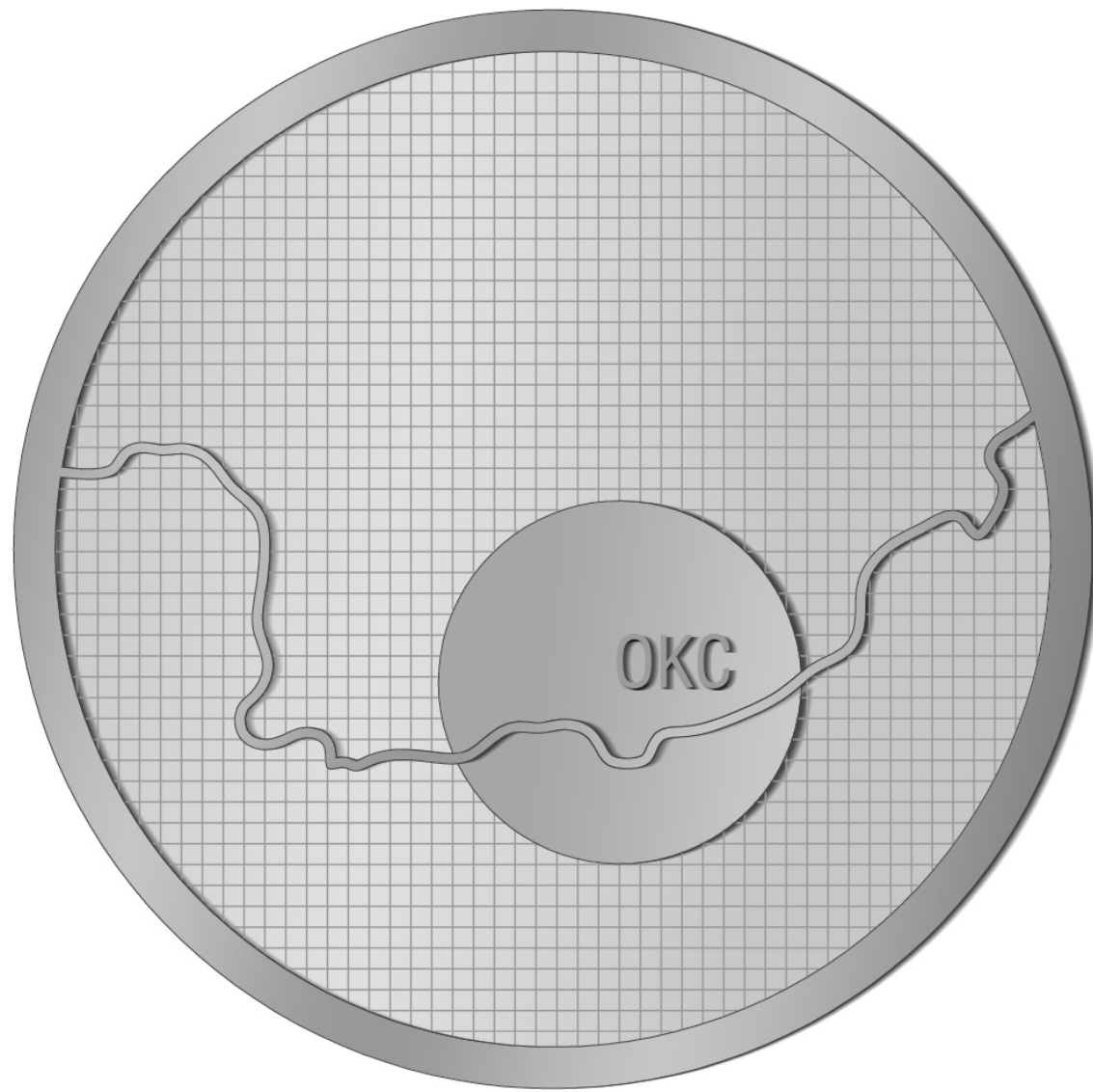


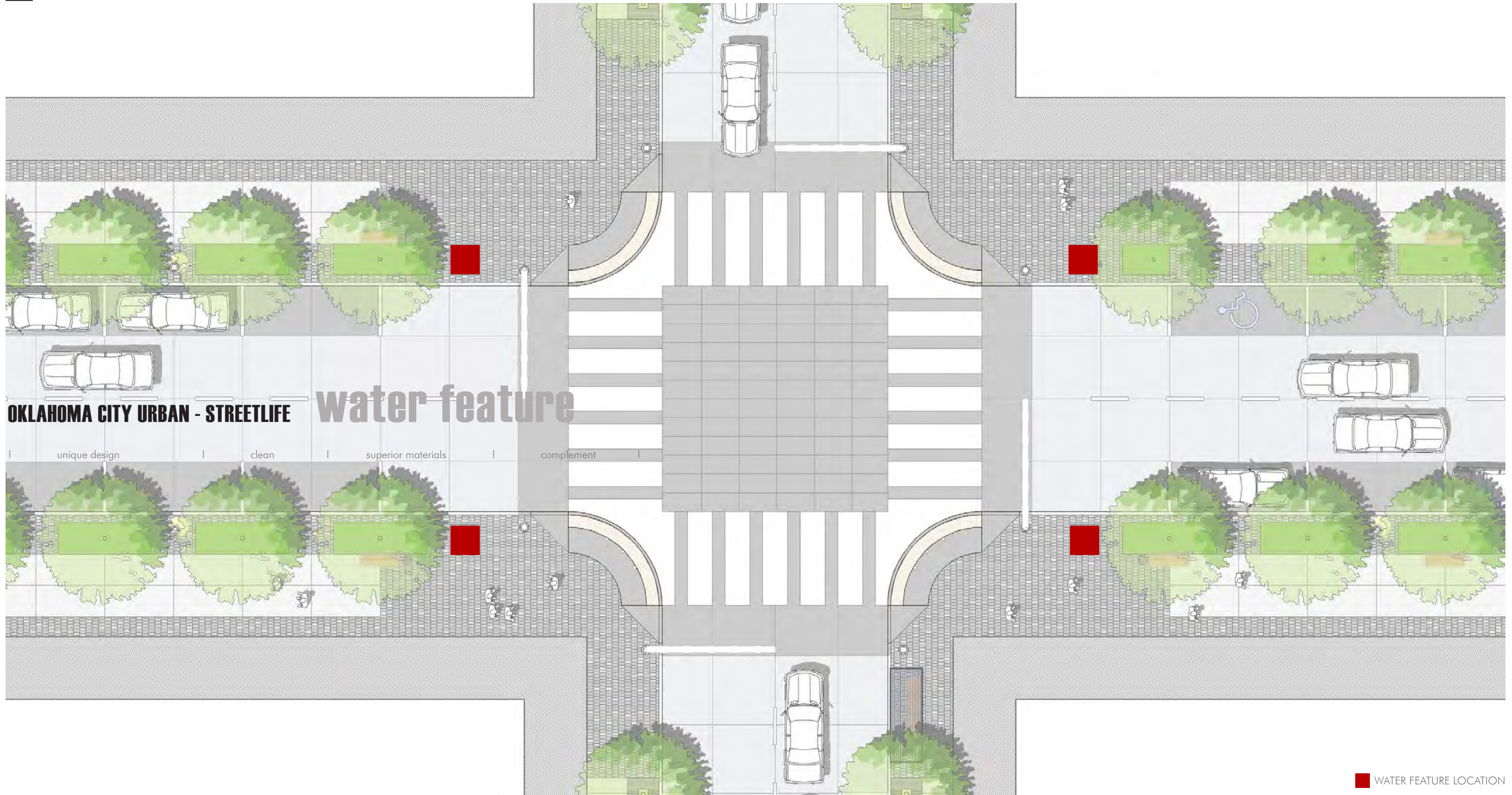
CUSTOMIZED CITY SEAL

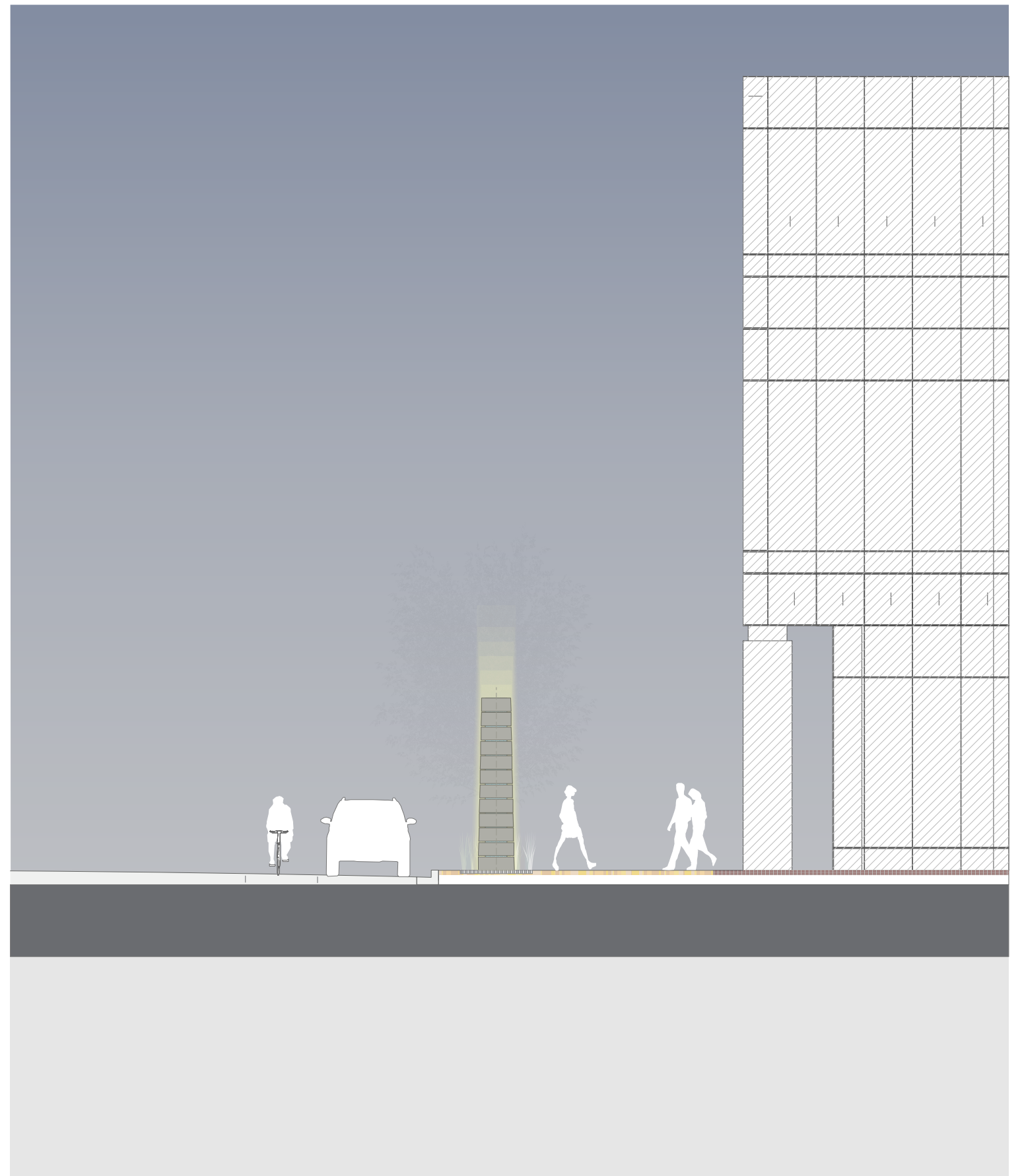
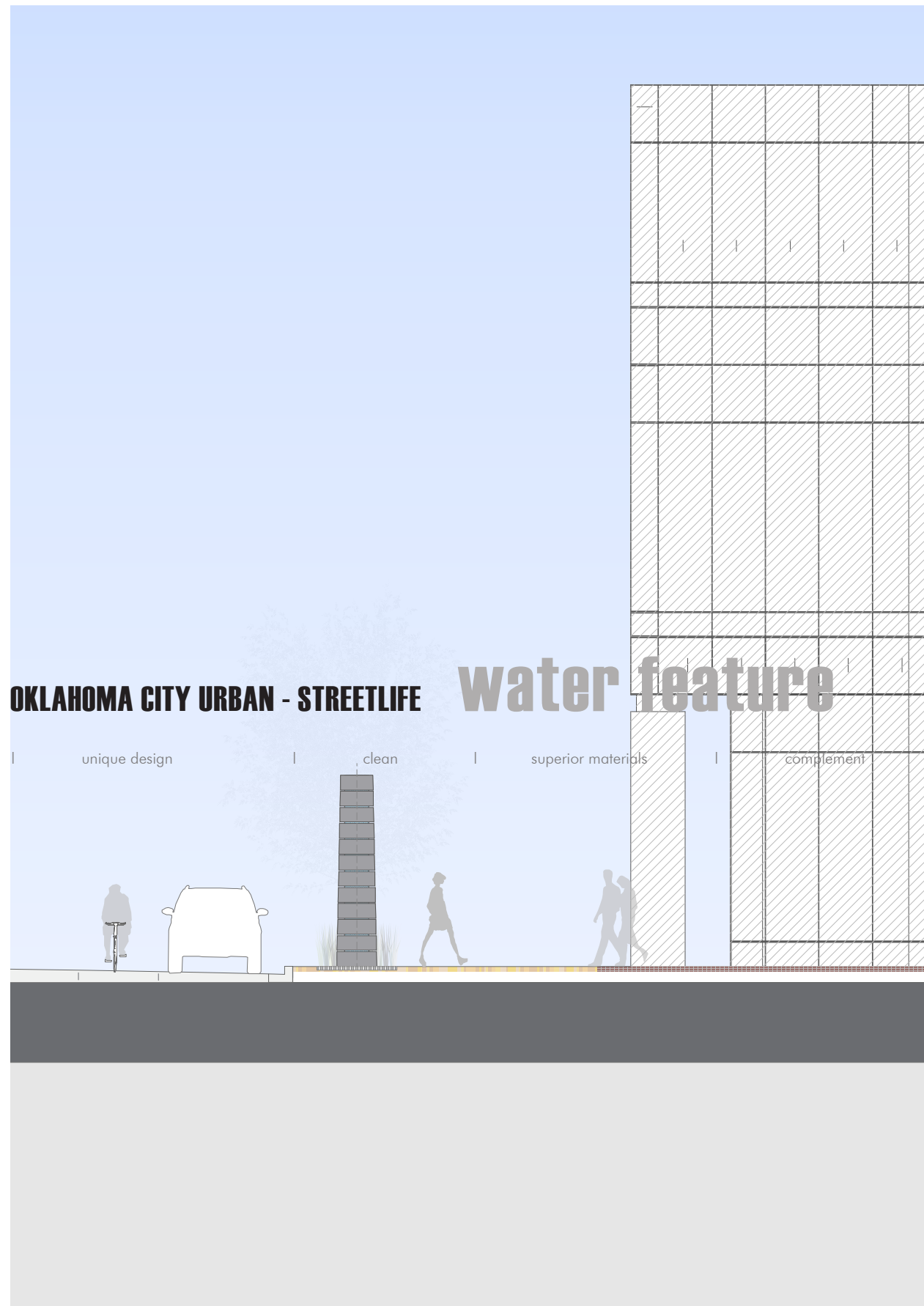
OKLAHOMA URBAN - STREETLIFE utility covers



OKLAHOMA URBAN - STREETLIFE manhole covers



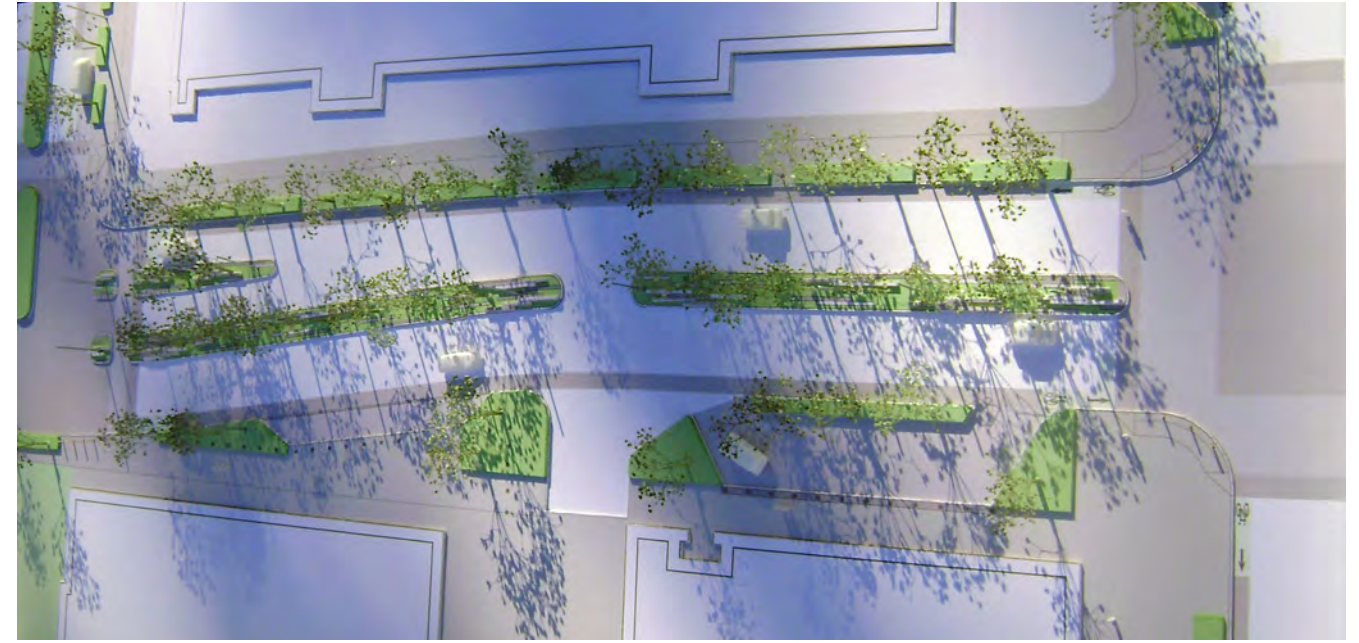




OKLAHOMA CITY URBAN - STREETLIFE Robinson Avenue Median



OKLAHOMA CITY URBAN - STREETLIFE **Robinson Avenue Median**



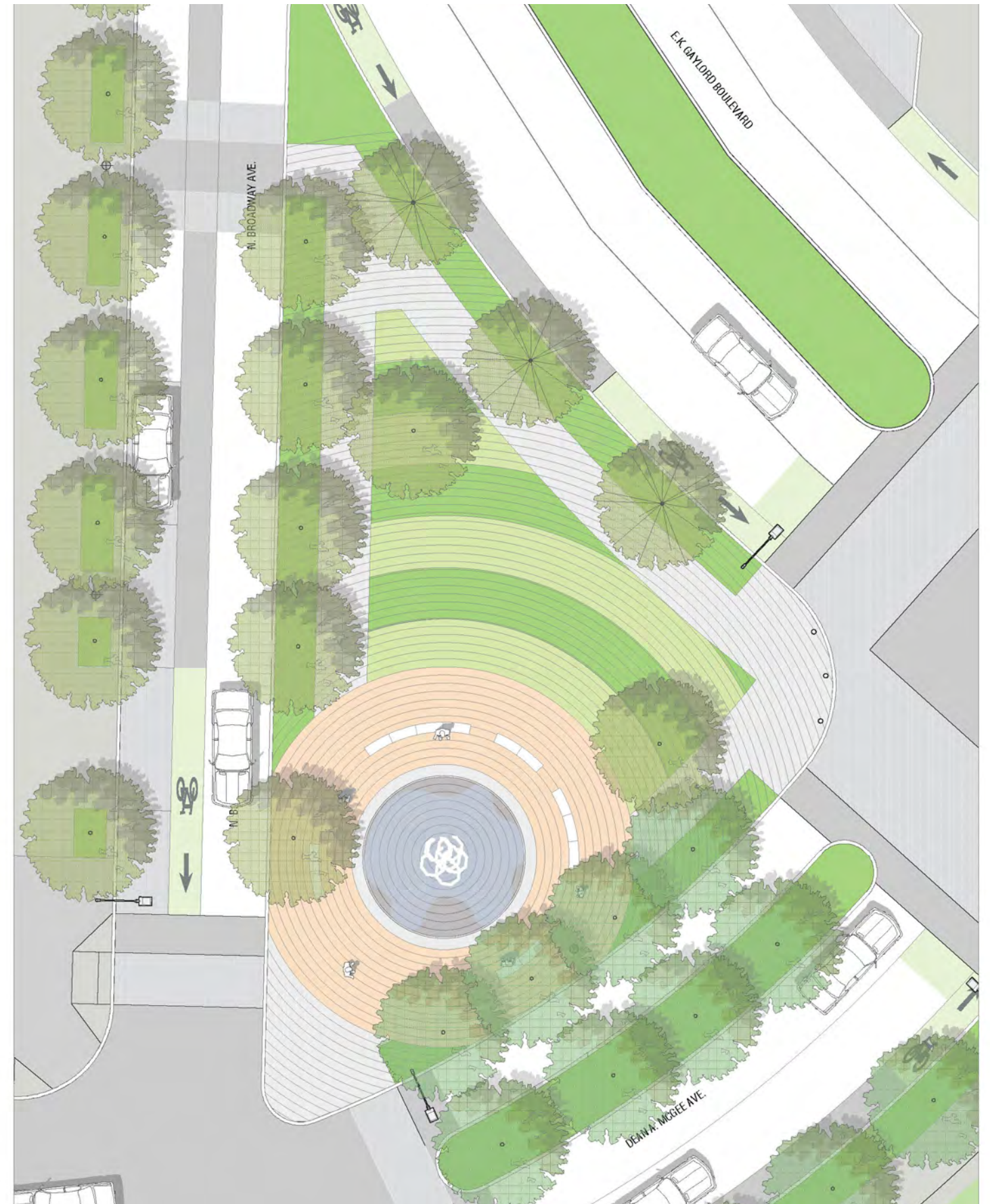


OKLAHOMA CITY URBAN - STREETLIFE park option 1

| gateway | greenspace | historic reference | urban park |

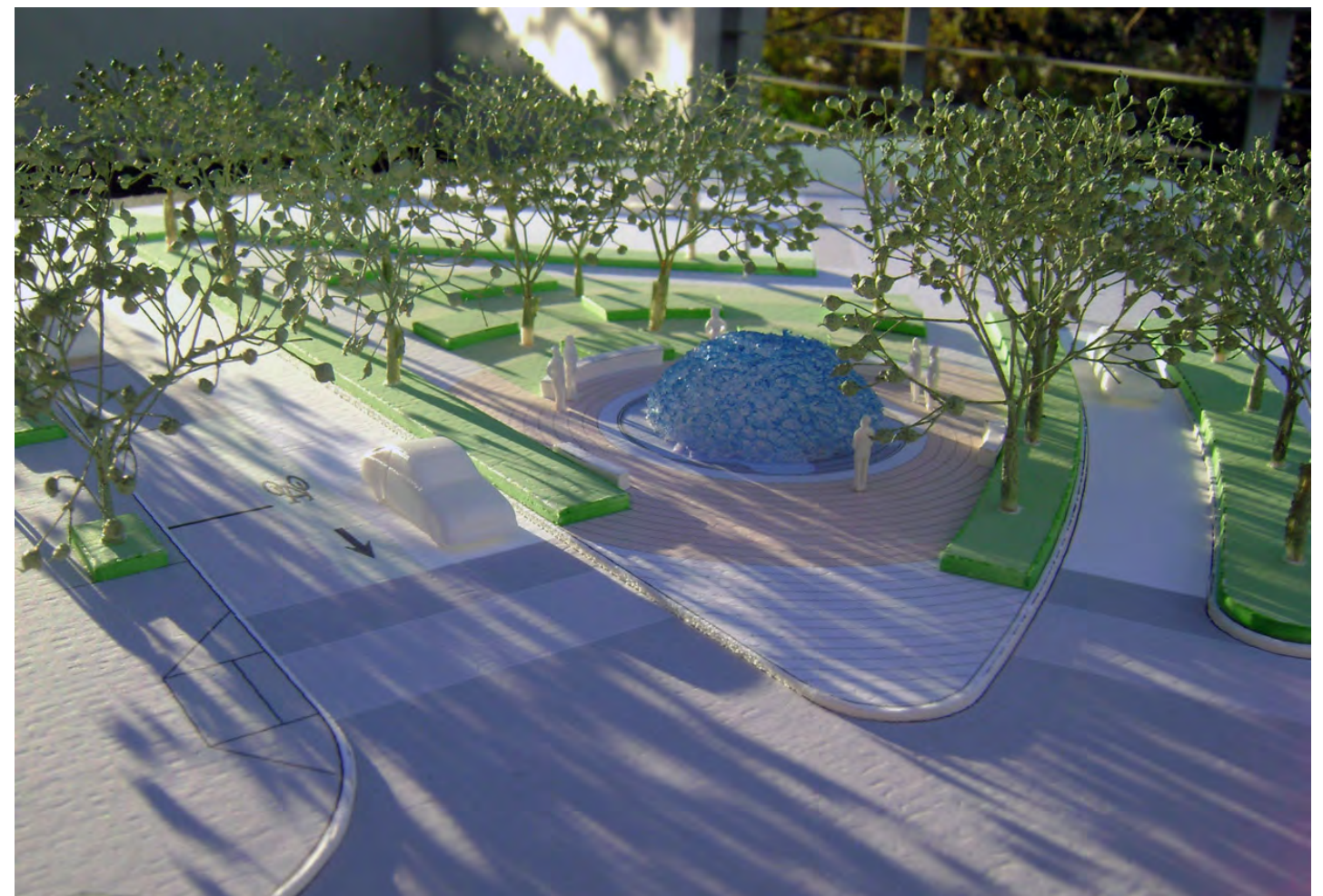
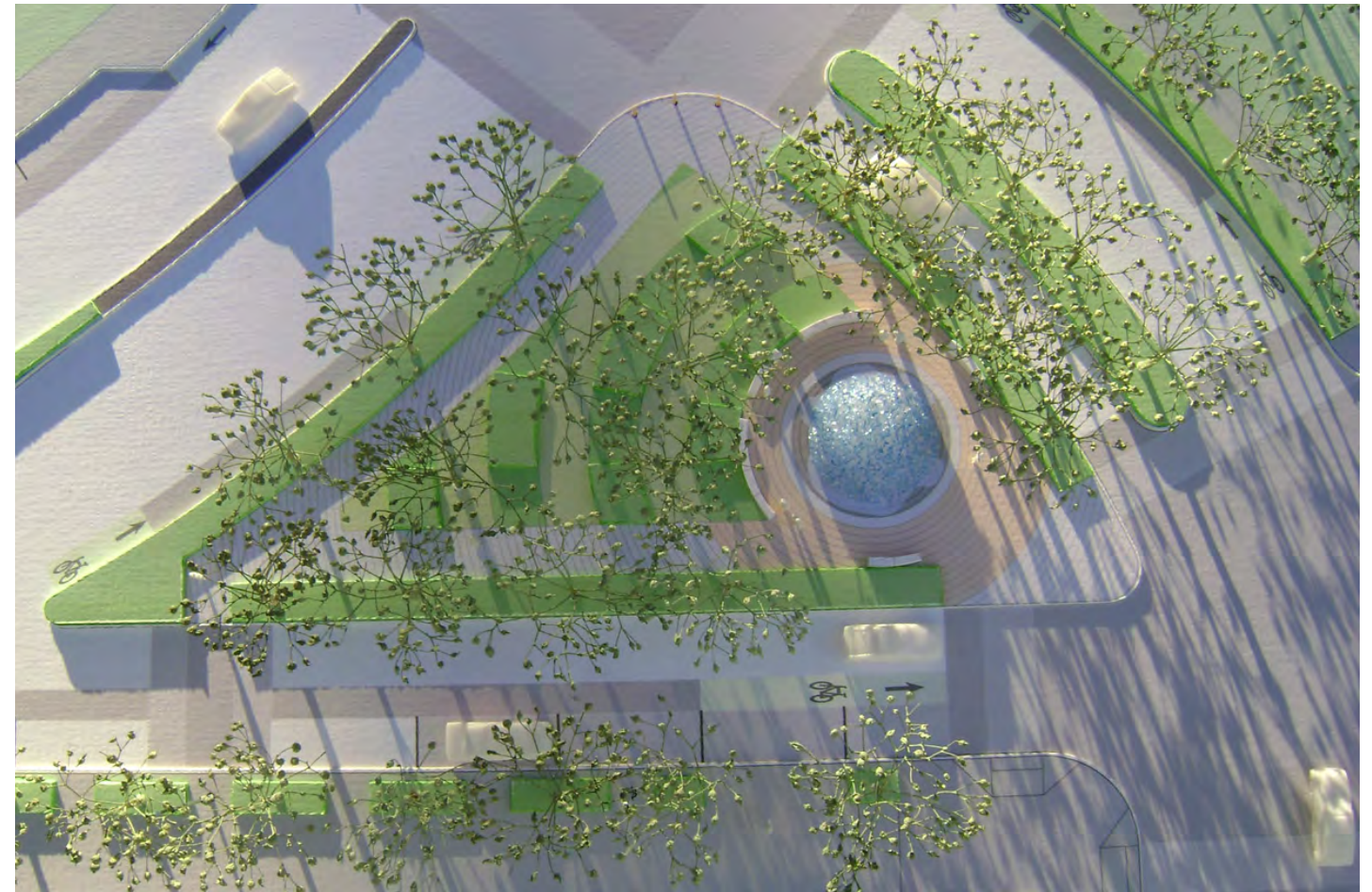


WHITE TEMPLE HISTORIC MARKER



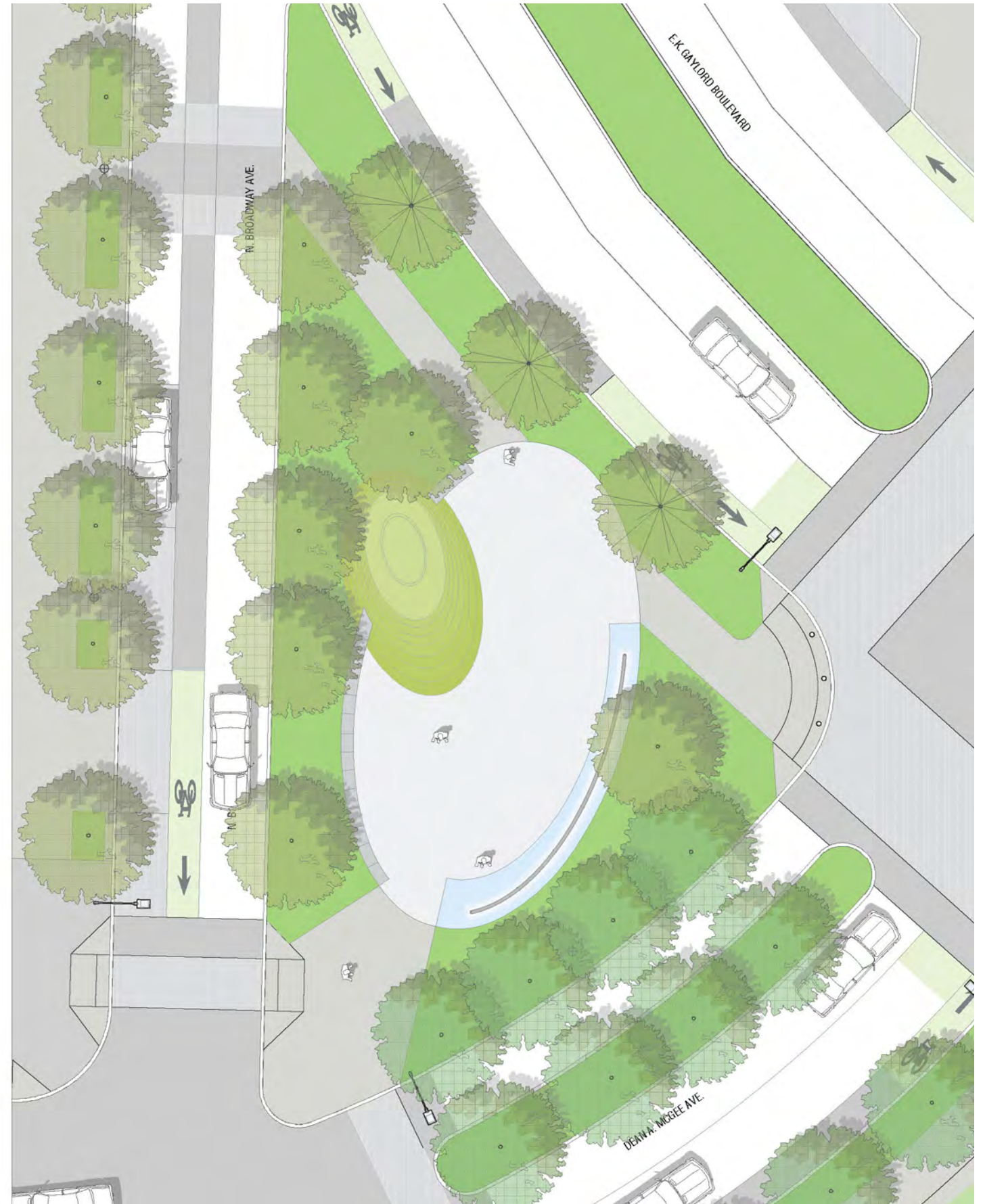
OKLAHOMA CITY URBAN - STREETLIFE park option 1

| gateway | greenspace | historic reference | urban park |



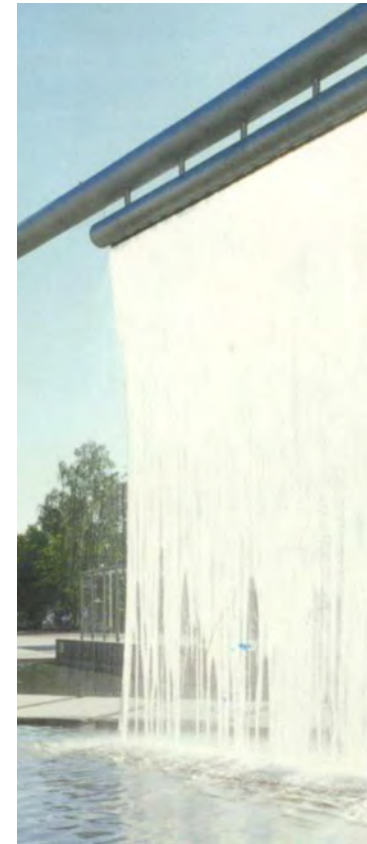
OKLAHOMA CITY URBAN - STREETLIFE park option 2

- | grass mound
- | historic reference
- | waterfall
- | gateway icon



OKLAHOMA CITY URBAN - STREETLIFE park option 2

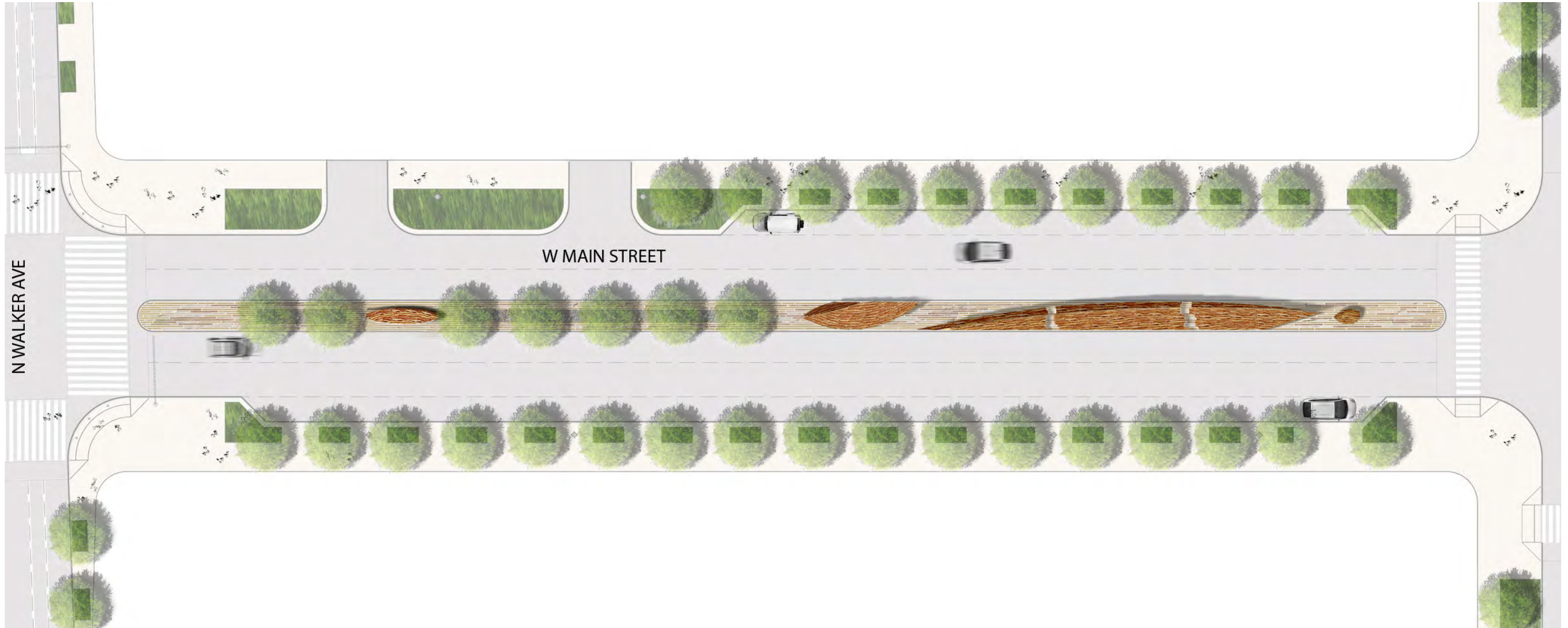
| grass mound | historic reference | waterfall | gateway icon |



OKLAHOMA CITY URBAN - STREETLIFE art masterplan



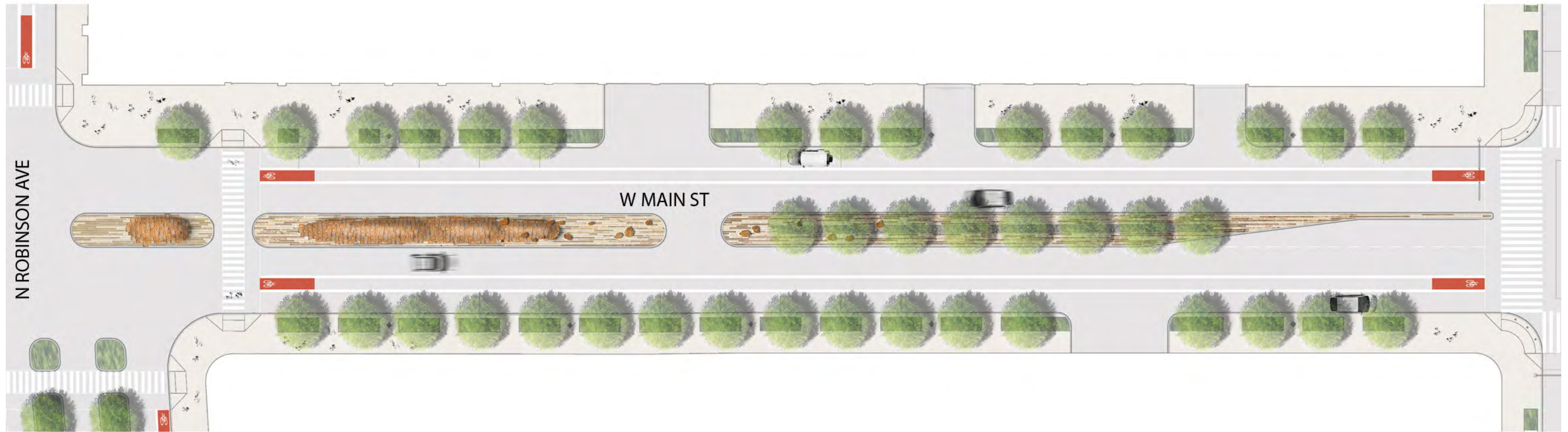
- LEGEND**
- PROJECT BOUNDARY
 - EXISTING OR PLANNED PUBLIC ART
 - OPPORTUNITY FOR PUBLIC ART
 - PROPOSED GATEWAY ART ELEMENT
 - EXISTING ART SPACE
 - OPPORTUNITY FOR ART SPACE
 - ARTS DISTRICT
 - BUSINESS DISTRICT
 - BRICKTOWN
 - DEEP DEUCE
 - AUTOMOBILE ALLEY



median art main street



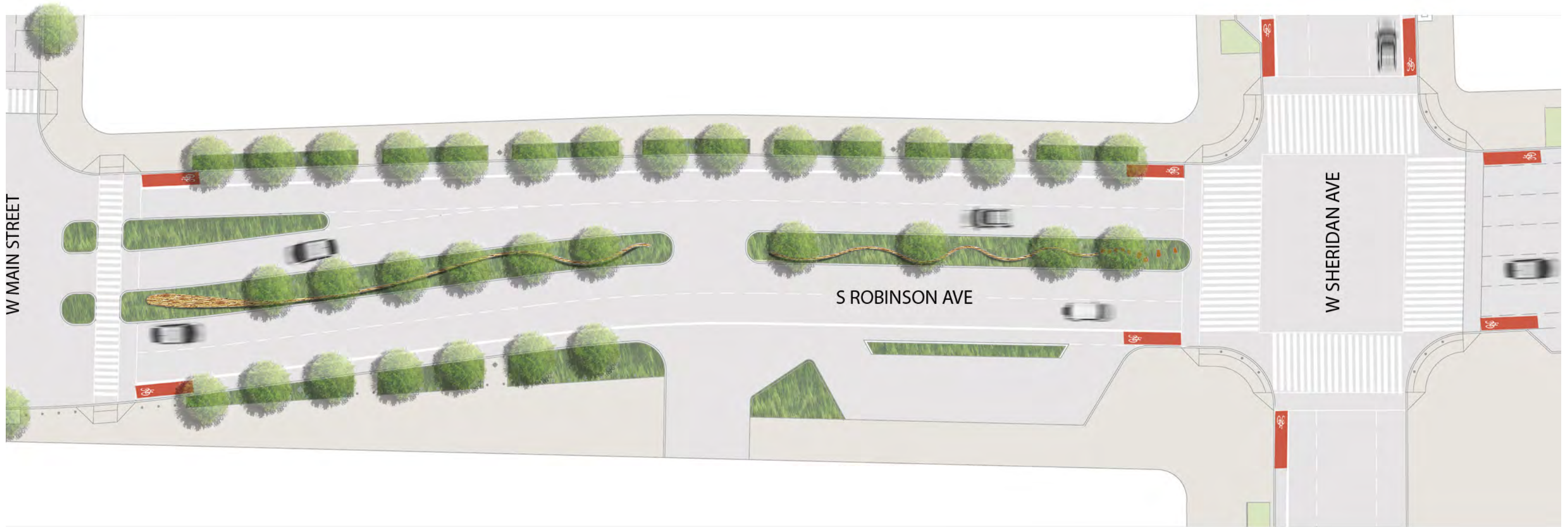
median art main street



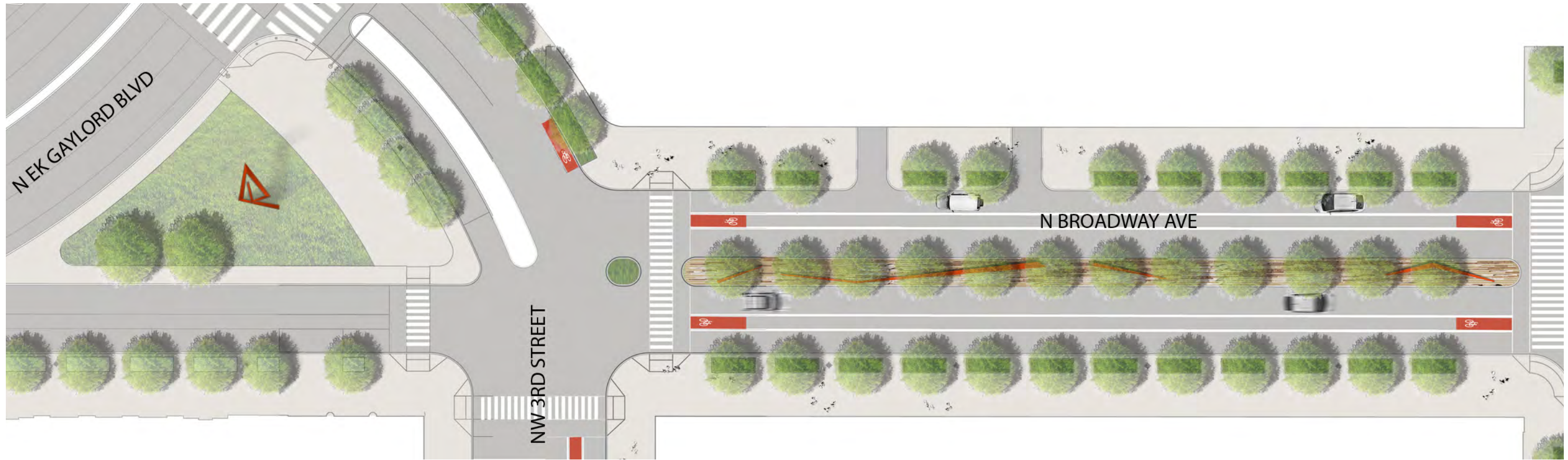
median art main street



median art main street



median art robinson ave



median art triangle park and broadway ave



median art **broadway ave**



vertical marker triangle park



vertical marker triangle park

4

VEGETATION

OKLAHOMA CITY URBAN - STREETLIFE trees

| shade | colorful | sinewy | graceful | arching | bold |



AUTUMN BLAZE MAPLE



CHINESE PISTACHE



SHUMARD RED OAK



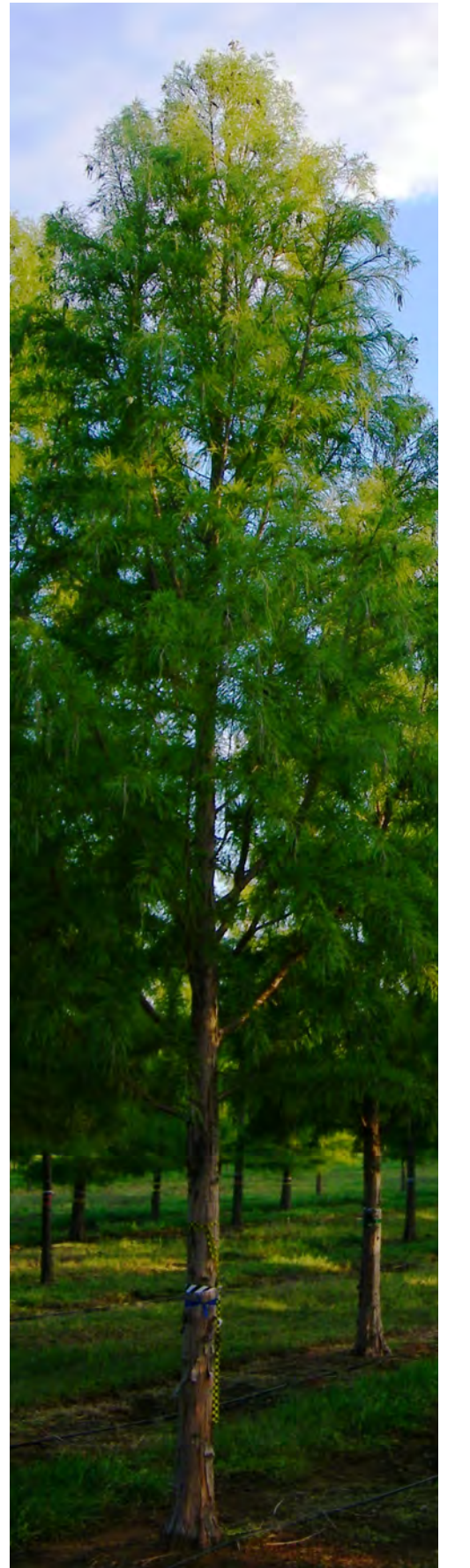
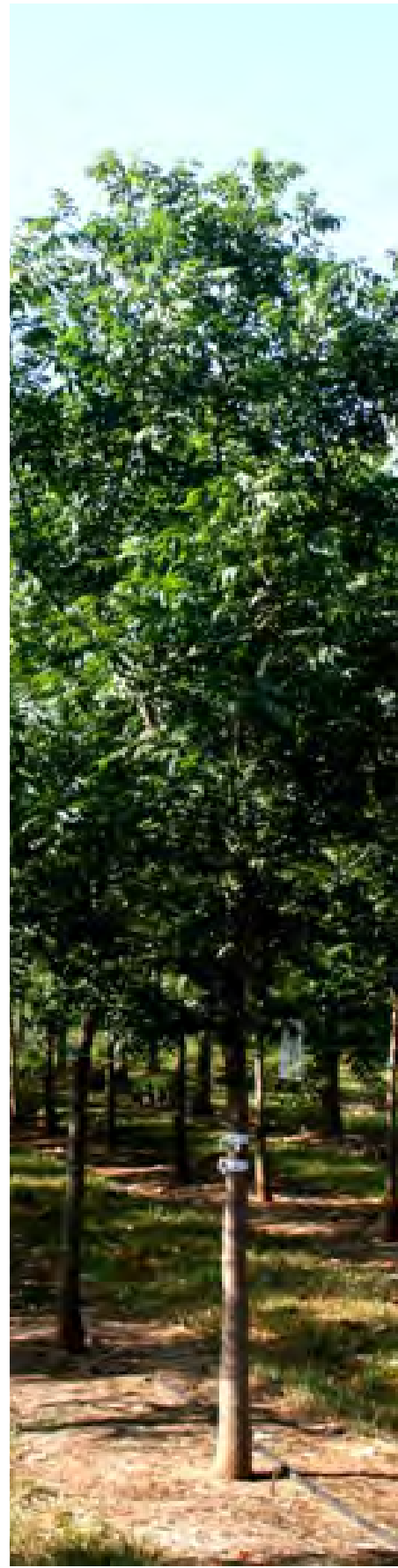
CATHEDRAL LIVE OAK



SHAWNEE BRAVE BALD CYPRESS

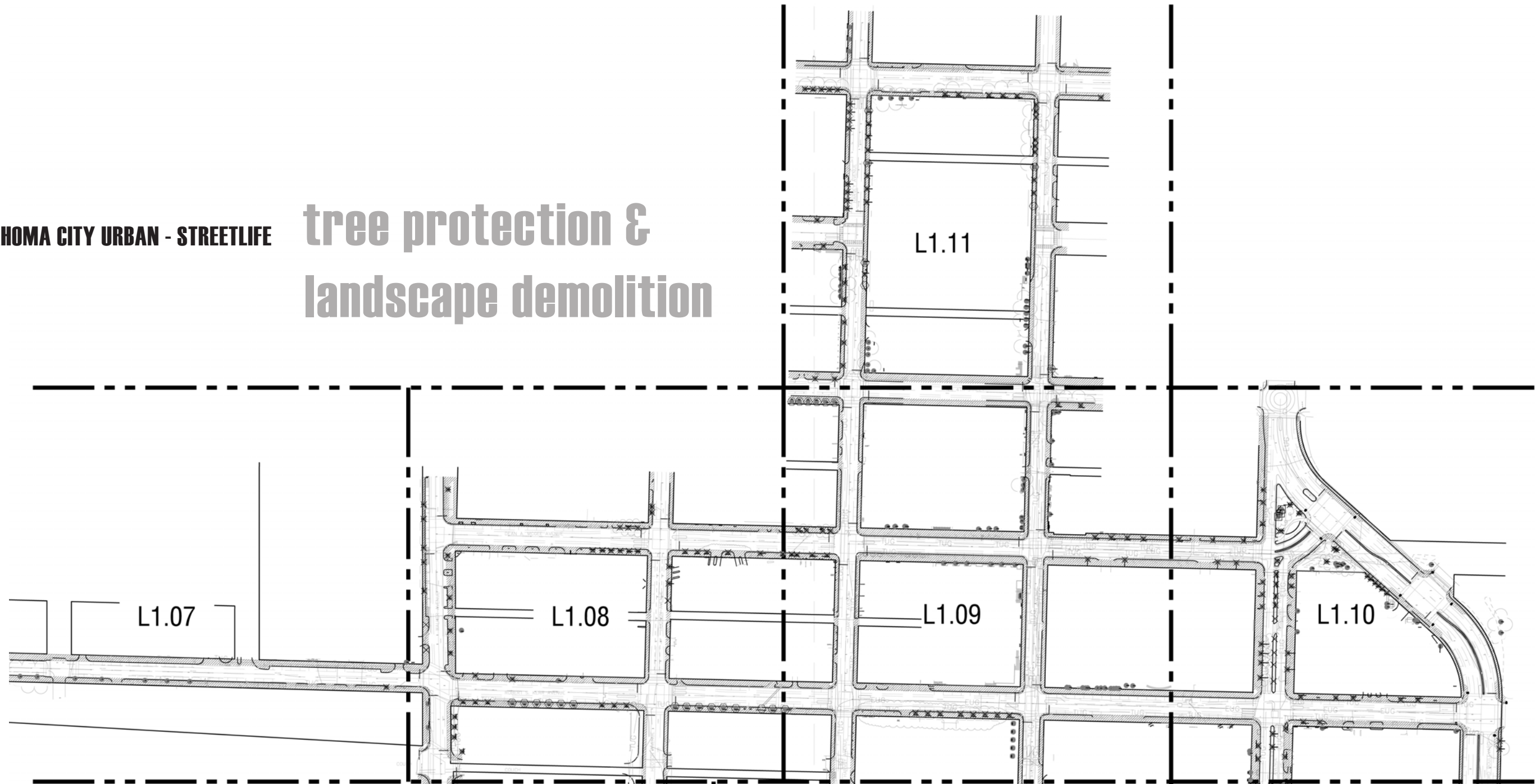


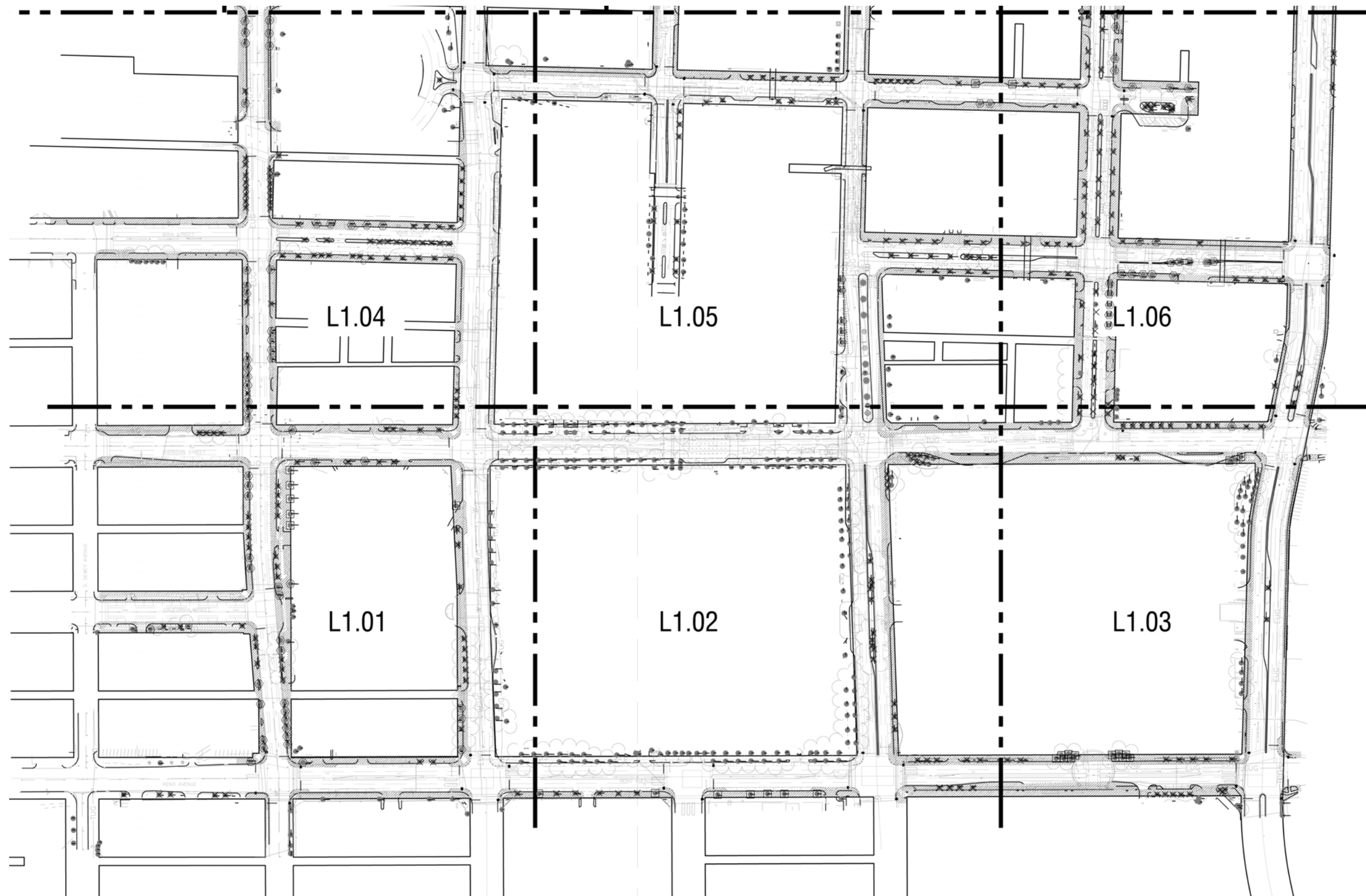
BOSQUE ELM



OKLAHOMA CITY URBAN - STREETLIFE

tree protection & landscape demolition





TREE PROTECTION/DEMO LEGEND

- EXISTING TREE TO BE REMOVED.
- NOTE: CONFIRM ALL TREES TO BE REMOVED WITH ARCHITECT PRIOR TO REMOVAL. DO NOT REMOVE TREES WITHOUT APPROVAL.
- TREE PROTECTION FENCING
- TREE TO BE RELOCATED
- EXISTING BUILDING, PROTECT IN PLACE UNLESS NOTED OTHERWISE
- DEMOLITION AREA

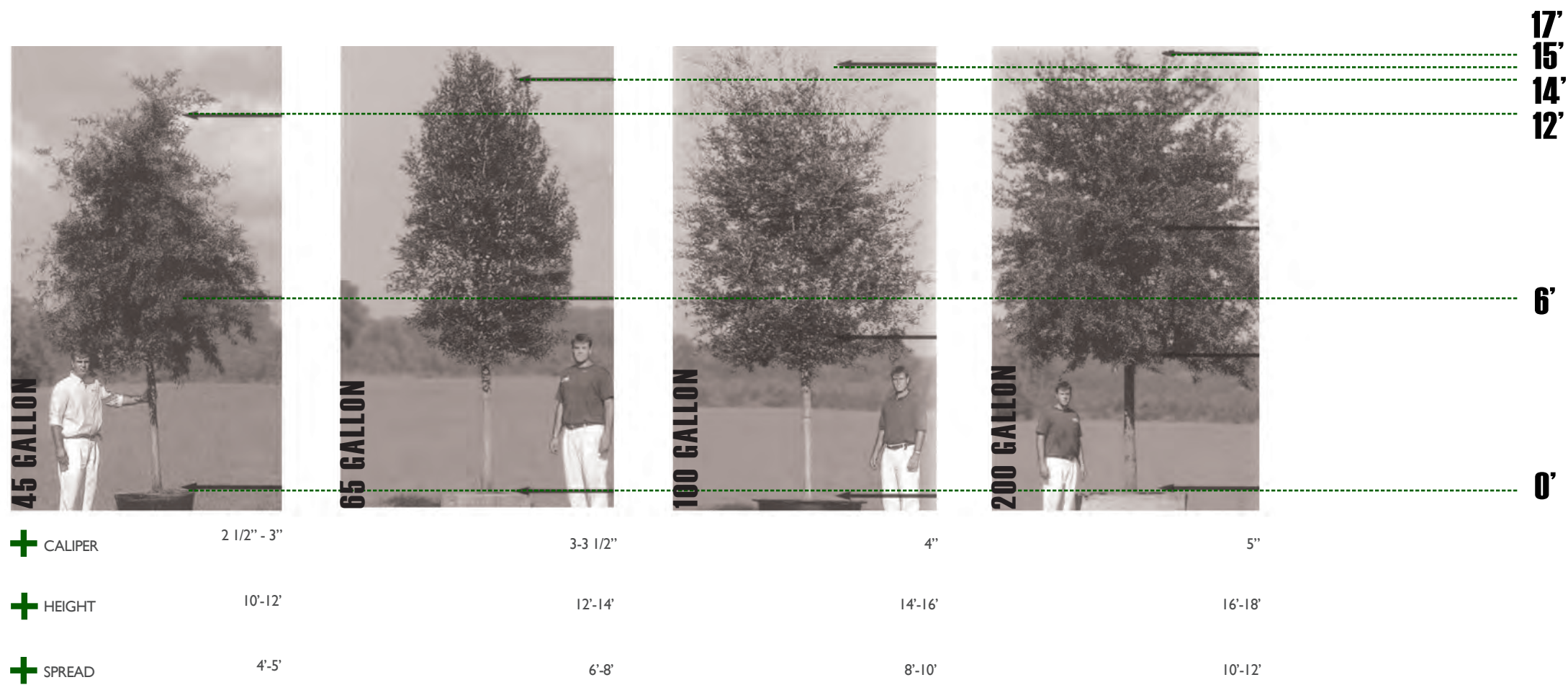
DEMOLITION NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BID WORK.
2. CONTRACTOR RESPONSIBLE FOR COORDINATING, RELOCATING, OR REMOVING ANY ITEMS NOT NOTED ON DRAWINGS TO ACHIEVE DESIGN INTENT OF DRAWINGS.
3. CONTRACTOR TO VERIFY ITEMS TO BE REMOVED WITH THE CITY OF OKLAHOMA CITY. VERIFY ITEMS TO BE SALVAGED AND PROVIDED TO THE CITY OF OKLAHOMA CITY.
4. CONTRACTOR TO REMOVE ALL MATERIAL TO BE DEMOLISHED OFF SITE.
5. CONTRACTOR TO REMOVE EXISTING CONCRETE WALK AS SHOWN. SAW CUT DEMO BREAKS CLEAR.
6. CONTRACTOR RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES.
8. CONTRACTOR RESPONSIBLE FOR PROTECTING ALL EXISTING TREES AS NOTED.
9. RE: LANDSCAPE PLANS FOR SPECIFIC DIMENSIONS FOR PROPOSED WORK AND DEMO COORDINATION.

OKLAHOMA CITY URBAN - STREETLIFE

tree size comparison

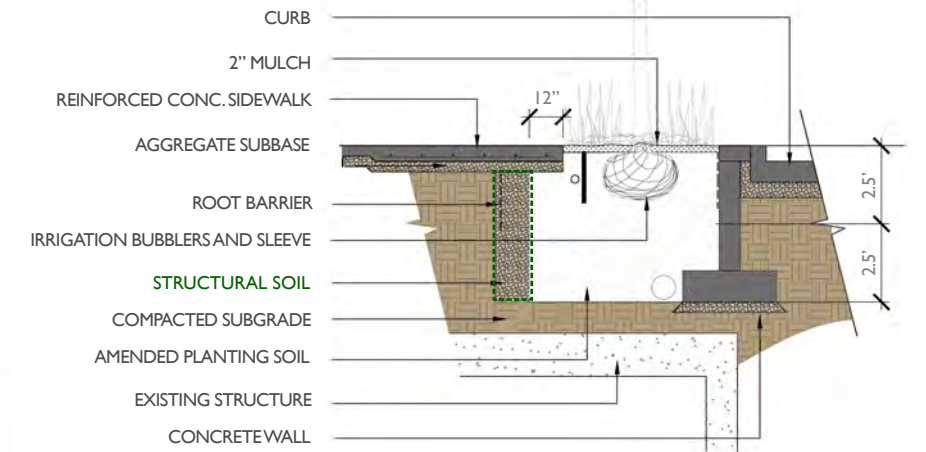
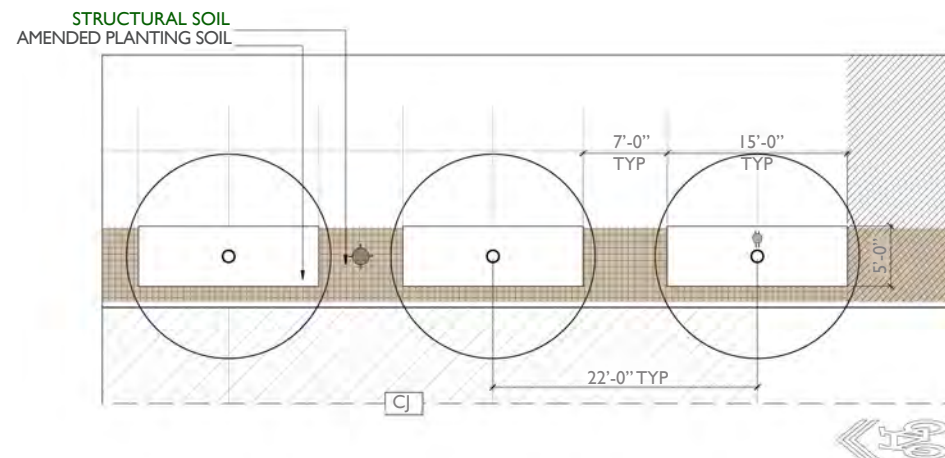
| shade | colorful | sinewy | graceful | arching | bold |



STRUCTURAL SOILS : HOW DO THEY WORK?

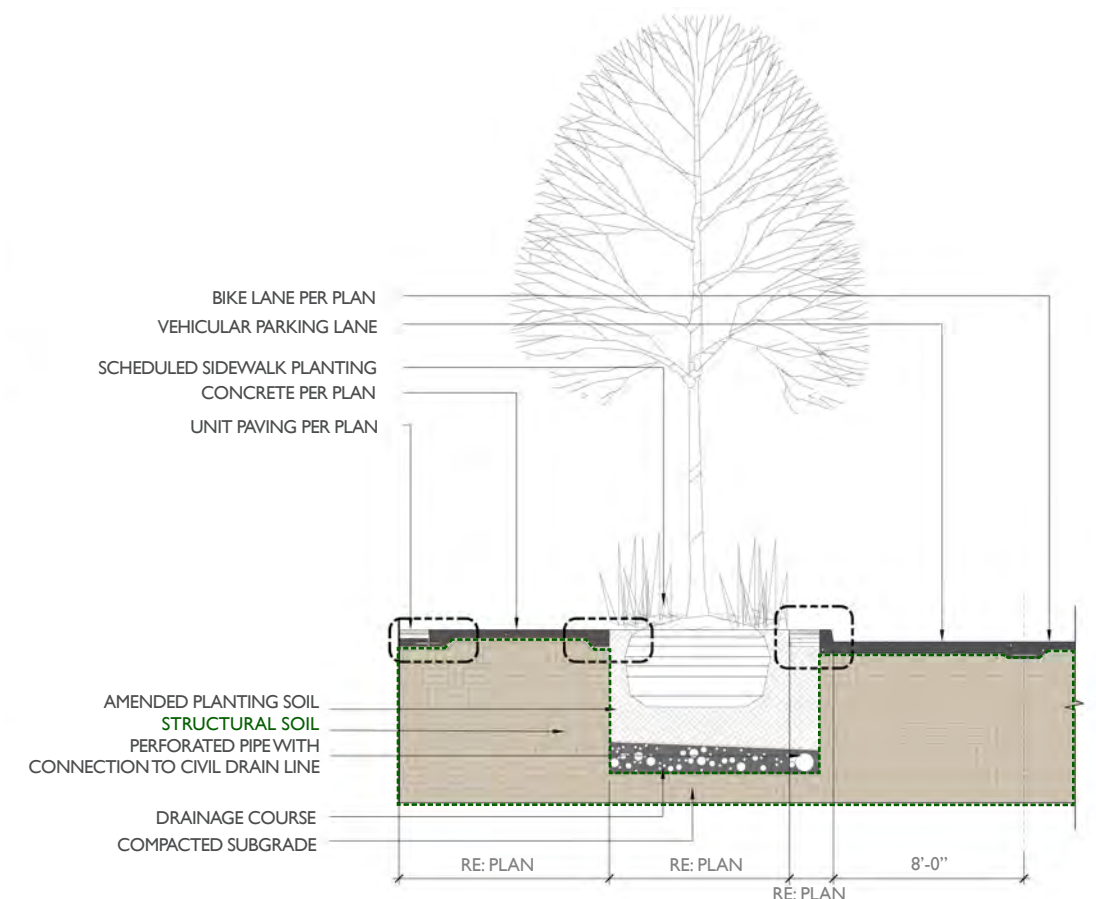
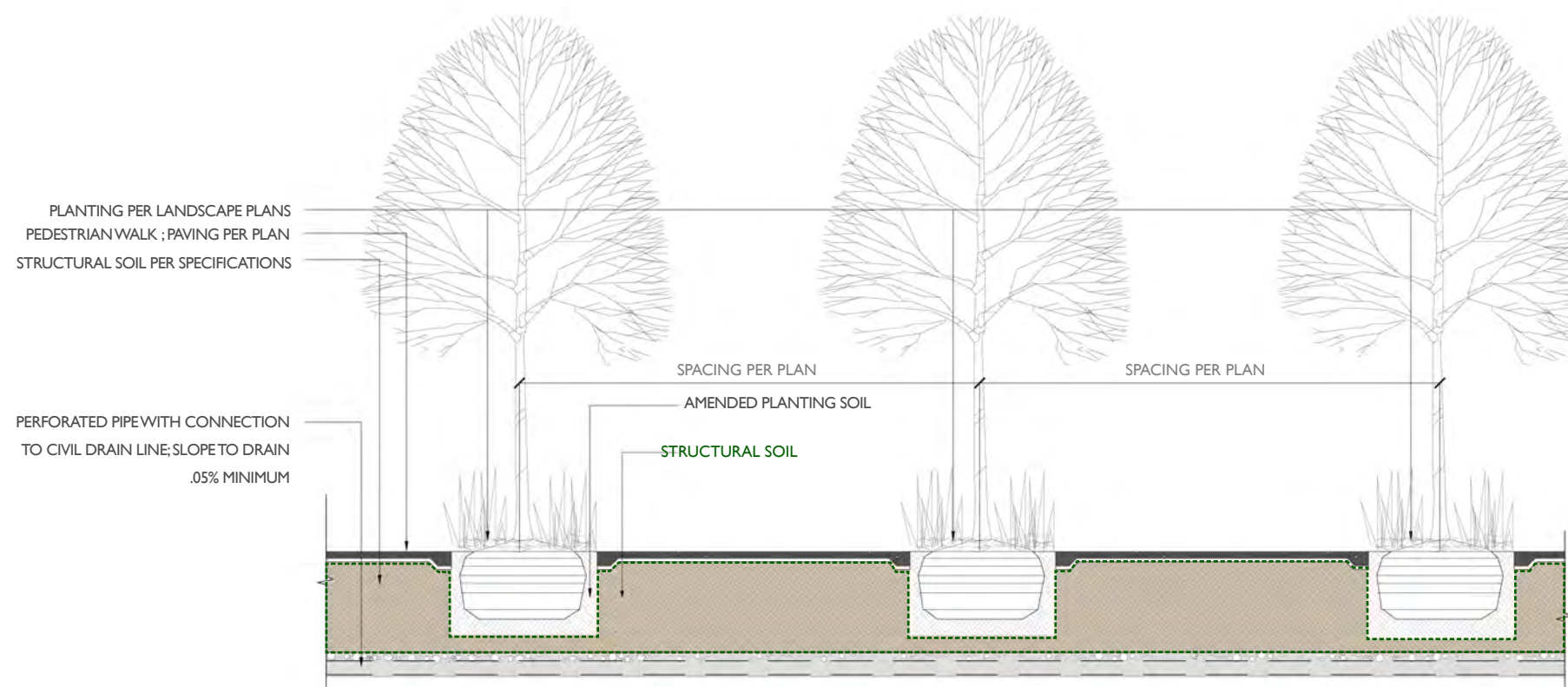
STRUCTURAL SOIL MIXES ARE TWO-PART SYSTEMS COMPRISING A STONE LATTICE FOR STRENGTH AND SOIL FOR HORTICULTURAL NEEDS. STRUCTURAL SOILS DEPEND ON A LOAD-BEARING STONE LATTICE TO SUPPORT THE PAVEMENT. THE LATTICE PROVIDES STABILITY THROUGH STONE-TO-STONE CONTACTS WHILE ALLOWING INTERCONNECTED VOIDS FOR ROOT PENETRATION, AIR, AND WATER MOVEMENT. THE FRICTION BETWEEN THE STONES PROVIDES THE STRENGTH. A NARROW PARTICLE SIZE DISTRIBUTION OF THE STONE IS CHOSEN TO PROVIDE A UNIFORM SYSTEM OF HIGH POROSITY AFTER COMPACTION. THE SYSTEM ASSUMES FULL COMPACTION TO CONSTRUCTION STANDARDS, BUT ANGULAR STONE IS SELECTED TO INCREASE THE POROSITY OF THE COMPACTED STONE LATTICE. AS THE STONE IS THE LOAD-BEARING COMPONENT OF THE SYSTEM, THE AGGREGATES SHOULD MEET REGIONAL STANDARDS FOR AGGREGATE SOUNDNESS AND DURABILITY REQUIREMENTS FOR PAVEMENT BASE AGGREGATES.

TEXT FROM LANDSCAPE ARCHITECTURAL GRAPHIC STANDARDS



PLAN 01 STRUCTURAL SOIL

SECTION 01 STRUCTURAL SOIL



SECTION 02 TYPICAL ROADWAY

SECTION 03 TYPICAL ROADWAY

AUTUMN BLAZE MAPLE

Scientific Name: *Acer x freemanii*
 100 Gallon
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

Oval to rounded.

40 to 60 feet tall and 30 to 40 feet wide.

Deciduous. Deep red fall color. Medium to green leaves with a pale silver underside.

Smooth light gray becoming dark gray and scaly at maturity.

Samara

Medium

A beautiful and elegant tree. Tightly pyramidal with deep, intense fall color, thrives in all soil ph and well drained soils. Many of its features, especially its leaves, are quite variable in form. At maturity it often attains a height of around 15.24 meters (50 ft). Among these features, however, it is best known for its brilliant deep scarlet foliage in autumn.

SPECIES LOCATION



CHINESE PISTACHE

Scientific Name: *Pistacia chinensis* (MALE TREES ONLY)
 100 Gallon
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

FORM Oval to rounded. Unruly growth in youth.

SIZE 30 to 35 feet tall and 20 to 35 feet wide.

LEAVES Deciduous. Deep green in the summer. Variable fall color from yellow to fire red.

BARK Shallow furrows becoming scaly. Exfoliating bark that exposes a pink to orange bark.

FRUIT A cluster of showy red fruit.

GROWTH RATE Medium to fast.

DESCRIPTION Although somewhat awkward in its juvenile form, this tree develops into a handsome and tidy canopy with age. A highly adaptable tree that can withstand the harshest of conditions. Chinese Pistache grows best in full sun, being intolerant of shade; it is the most frost-tolerant species of Pistacia, tolerating temperatures down to about -25°C. Fall color is variable but can be outstanding. It is planted for its impressive fall colors.

SPECIES LOCATION



SHUMARD RED OAK

Scientific Name: *Quercus shumardii*
 100 Gallong
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

Oval to rounded.

82 to 110 feet tall and 39 to 59 feet wide.

Deciduous. Deeply-lobed, Leaves turn brown-red in fall.

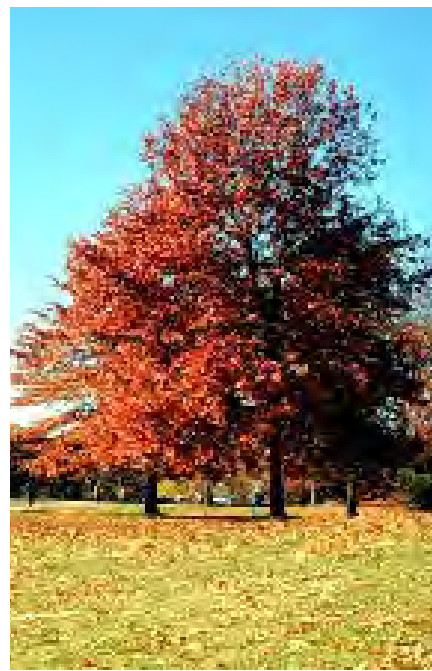
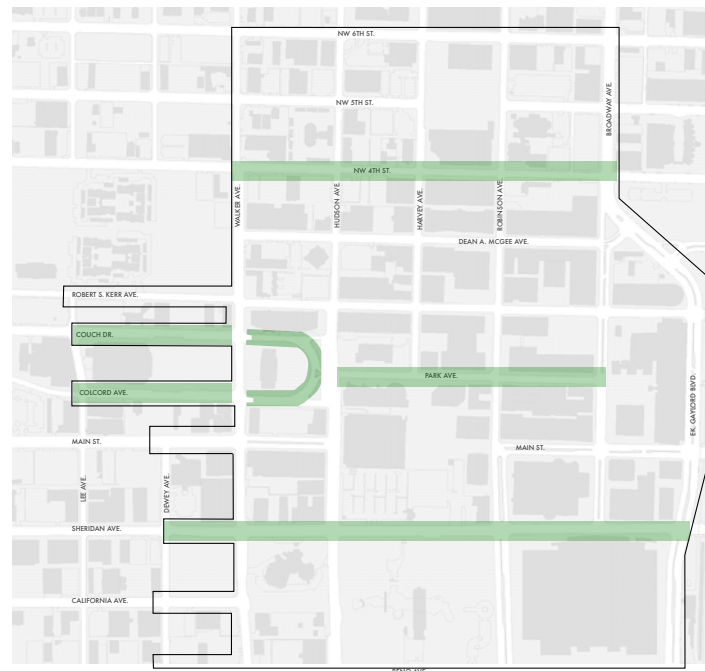
Smoothish when young, then breaking into vertical ridges.

Acorn

Fast

Shumard Oak is valued for commercial use, as a shade tree, and as a food source for various birds and mammals. It is tolerant of wide ranges of pH levels in soil. It is drought-resistant, and prefers partial to full sunlight. Shumard Oaks begin to bear seeds at a minimum of 25 years of age, and the optimum age for seed development is 50 years of age. Shumard Oaks are known to have reached at least 480 years of age. The roots are intolerant to disturbance, so the tree should be planted in its permanent position at an early age.

SPECIES LOCATION



CATHEDRAL LIVE OAK

Scientific Name: *Quercus virginiana* 'CATHEDRAL'

200 Gallon

5"-6" Caliper

15'-17' Height

10'-12' Spread



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

Oval to rounded.

28 to 35 feet tall and 18 to 20 feet wide.

Leaves are strikingly dark green, 2 to 3 inches long, 1/2 to 2-1/2 inches wide, oval to elliptical-shaped, with an obtuse apex. Leaf bases are acutely wedge-shaped.

The bark is dark red-brown, up to 1 inch thick, somewhat furrowed, and separating into small scales.

Fruit is an acorn, usually on long-stalked clusters of 3 to 5. The nut is ellipsoid or ovoid, brownish-black, and 1 inch long.

Medium

A vibrant clonal Live Oak, the Cathedral will provide a consistent uniform look, and will make a wonderful street tree, parking lot tree, or specimen tree whenever a large maturing evergreen shade tree is desired. Cathedral Oak has a full-growth habit that will make it an instant hit and a lasting knockout in the landscape.

SPECIES LOCATION



SHAWNEE BRAVE BALD CYPRESS

Scientific Name: *Taxodium distichum* 'SHAWNEE BRAVE'
 100 Gallon
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

Pyramidal habit.

40 to 60 feet tall and 35 feet wide.

Deciduous. Deep sage green frawns turning orange to brown in the fall.

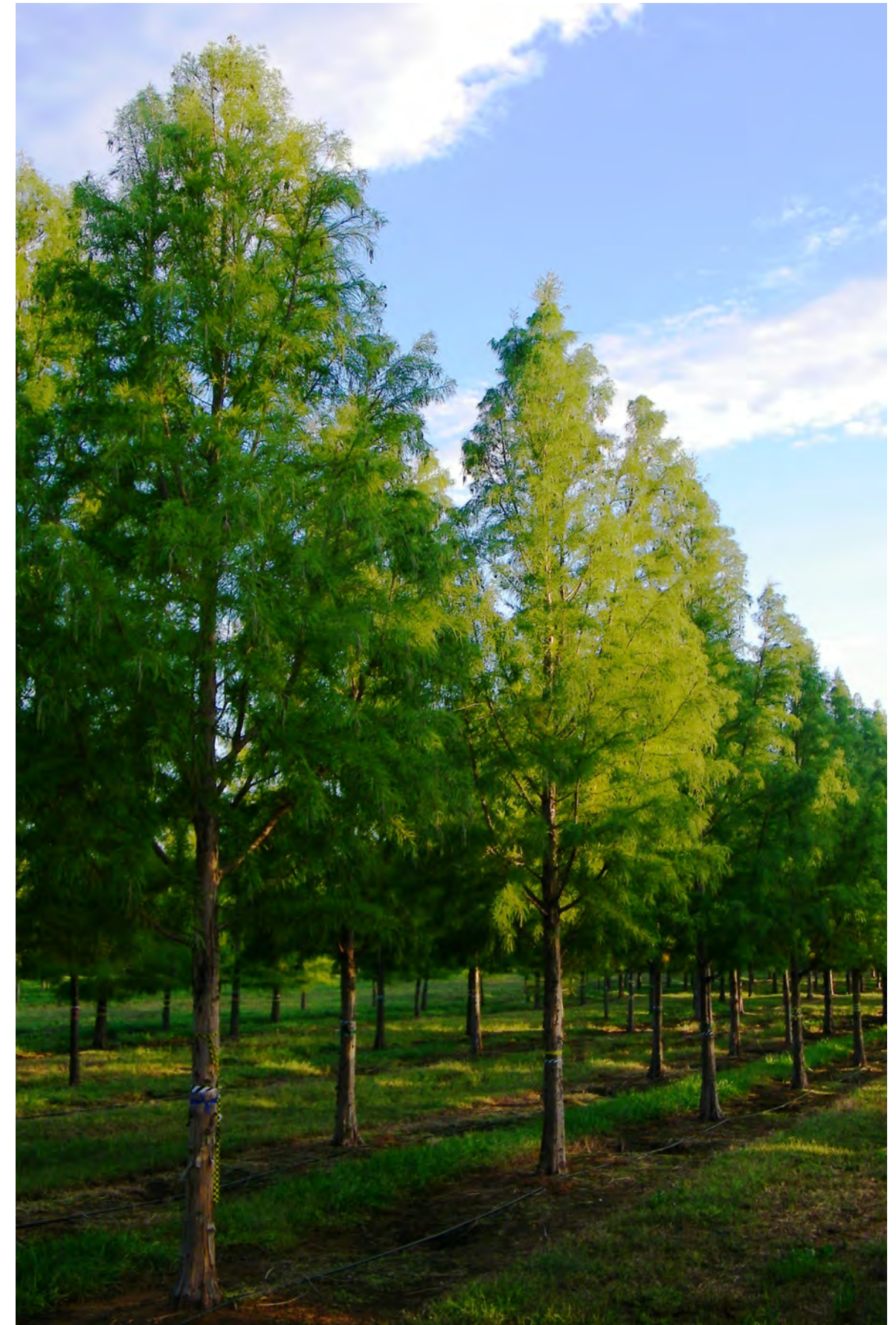
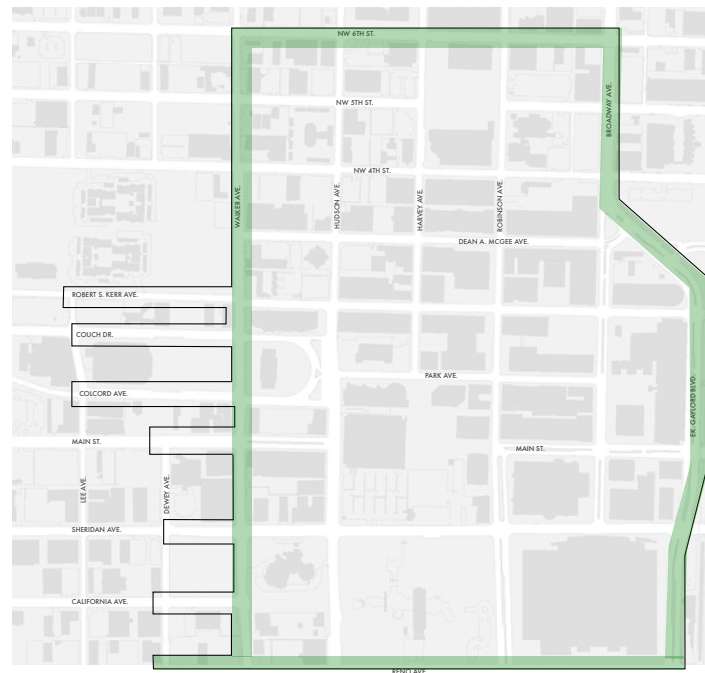
Reddish brown exfoliating in long strips. The trunk becomes buttressed at the base. Develops "knees" in saturated soils. Very distinctive.

Cones, ¾ to 1 ½ across. Green to purple, brown at maturity.

Fast

An upright deciduous conifer that tolerates wet sites. Light feathery needles and exfoliating bark in large longitudinal strips Highly aromatic in the fall during leaf drop.

SPECIES LOCATION



BOSQUE ELM

Scientific Name: *Ulmus parvifolia* 'Bosque'
 100 Gallon
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

Upright and densely spreading.

40 to 50 feet tall and equally as wide.

Deciduous. Lustrous dark green, changing to yellow to purplish-brown in the fall.

Exfoliating. Light gray, orange and brown. Trunk becoming fluted with age.

The fruit of the Bosque Elm is insignificant, but yields a heavy crop of papery.

Medium

Bright green lustrous leaves emerging from upright arching branches. Planting along a street or avenue will develop a cathedral effect. This selection has many exciting attributes; resistance to Dutch Elm Disease, exfoliating bark revealing an orange-brown to tan feature, vase shaped long arching branches, and a tree that can withstand harsh conditions.

SPECIES LOCATION



ROTUNDILOBA AMERICAN SWEETGUM

Scientific Name: *Liquidambar styraciflua* 'Rotundiloba'
 100 Gallon
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

FORM
 Pyramidal, although less uniform than fruiting sweetgum, when young, aging to oval.
 Assumed to be 75 feet tall and up to 50 feet wide.

LEAVES
 Deciduous. Deep red to purple fall color. Dark green, glossy, leathery leaves.

BARK
 Smooth gray becoming dark gray and assumed to be grooved at maturity.

FRUIT
 Fruitless and Seedless

GROWTH RATE
 Medium

DESCRIPTION
 A moderate growing fruitless American sweetgum. Glossy and leathery dark green leaves summer turning deep purplish red in the late fall and lasting several weeks. Due to the size of the sweetgum, its root system can become a nuisance along sidewalks unless properly constructed. Moderately tolerant of alkaline soils, but prefers slightly acid and moist conditions. Plant in full sun.

SPECIES LOCATION



CHINKAPIN OAK

Scientific Name: *Quercus muehlenbergii*
 100 Gallon
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread

FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

FORM
Oval to rounded.

SIZE
40 to 50 feet tall and 35 feet wide.

LEAVES
A medium to large size oak with 4"-6 1/2" glistening dark green leaves in summer turning yellow-orange to orangish-brown in fall.

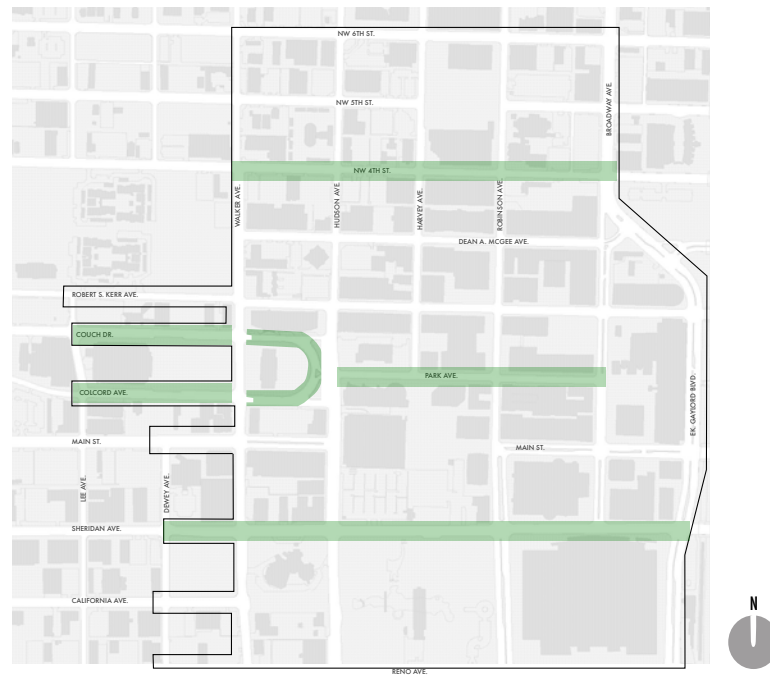
BARK
Reddish brown exfoliating in long strips. The trunk becomes buttressed at the base. Develops "knees" in saturated soils. Very distinctive.

FRUIT
Acorn

GROWTH RATE
Fast

DESCRIPTION
A tree with light gray platy or scaly bark and smooth, gray twigs changing to brown on the current year's leaf-bearing growth. Larger leaves broadly rounded from the widest part to the apex and tapered to the base, the smaller ones narrower, leaf margins shallowly lobed or coarsely toothed, each lobe or tooth with a minute tip; the upper surface smooth, with a sheen, the lower surface dull. Flowers inconspicuous in narrow clusters. Fruit an acorn up to 1 inch long and 3/4 inch wide.

SPECIES LOCATION



ALTERNATIVE 4

ALLEE ELM

Scientific Name: *Ulmus parvifolia* 'ELMER II'
 100 Gallon
 3.5"-4" Caliper
 14'-15' Height
 7'-9' Spread



Upright and spreading.

40 to 50 feet tall and equally as wide.

Deciduous. Lustrous dark green, changing to yellow to purplish-brown in the fall.

Exfoliating. Light gray, orange and brown. Trunk becoming fluted with age.

The fruit of the Allee Elm is insignificant, but yields a heavy crop of papery.

Medium

Bright green lustrous leaves emerging from upright arching branches. Planting along a street or avenue will develop a cathedral effect. This selection has many exciting attributes; resistance to Dutch Elm Disease, exfoliating bark revealing an orange-brown to tan feature, vase shaped long arching branches, and a tree that can withstand harsh conditions.



FORM
SIZE
LEAVES
BARK
FRUIT
GROWTH RATE
DESCRIPTION

SPECIES LOCATION



JAPANESE PLUM YEWE

Scientific Name: *Cephalotaxus harringtonia*
 5 Gallon
 1.5' - 2' Height
 3' - 4' Spread

Low spreading, evergreen conifer with strong texture and arching branches. The green needles of this shrub are soft to the touch. Needs regular water through establishment, then moderate water requirements.



ROCK COTONEASTER

Scientific Name: *Cotoneaster horizontalis*
 5 Gallon
 1.5' - 2.5' Height
 3' - 4' Spread

Low spreading, deciduous shrub with tiny dark green leaves on strong arching branches. White flowers in spring are followed by an abundance of red fall berries that cling to the branches following leaf drop. Needs moderate water for establishment then very drought tolerant.



DWARF YAUPON HOLLY

Scientific Name: *Ilex vomitoria 'Nana'*
 5 Gallon
 1.5' - 2.5' Height
 1.5' - 2.5' Spread

Low, densely branching evergreen shrub with tiny reddish new growth followed by dark green oval-shaped leaves. Often pruned into small balls, but this shrub looks much better in its natural, un-pruned form. Needs regular water through establishment, then very drought tolerant.



GULF STREAM NANDINA

Scientific Name: *Nandina sp. 'Gulf Stream'*
 5 Gallon
 1.5' - 2.5' Height
 1.5' - 2' Spread

Slowly spreading upright evergreen shrub with pink or purple new foliage followed by light green foliage. Very textural with brilliant red and purple fall color. Needs moderate water through establishment, then very drought tolerant.



CARISSA HOLLY

Scientific Name: *Ilex cornuta* 'Carissa'

5 Gallon

3' - 4' Height

3' - 4' Spread

Pointed leaf evergreen shrub that is durable and less spiny than other hollies. Tiny white flowers in the spring. Needs regular water through establishment, then moderate water requirements.



CHINESE FRINGE FLOWER

Scientific Name: *Loropetalum chinensis* 'Purple Pixie'

5 Gallon

1' - 2' Height

4' - 5' Spread

Low spreading, semi-deciduous shrub with stringy fuchsia early spring blooms followed by intensely purple new foliage, turning to dark purplish green by the heat of summer. Needs moderate water for establishment and continual growth.



PERENNIALS

PREFERRED

AFRICAN IRIS

Scientific Name: *Morea iriodes*

5 Gallon

2' - 3' Height

2' - 3' Spread

Upright evergreen grass-like perennial with occasional white blooms with purple centers throughout the warm months. Low maintenance, requiring only occasional cleaning and dead-heading. Needs moderate water for establishment and continual growth.



GROUNDCOVERS

PREFERRED

BIG BLUE LIRIOPE

Scientific Name: *Liriope muscari 'Big Blue'*

1 Gallon

1' Height

1' Spread

Low, evergreen grasslike groundcover with purple flower spikes during cooler periods. The clumping quality of this textural plant looks good year round. Needs moderate water through establishment, then very drought tolerant.



PURPLE WINTERGREEPER

Scientific Name: *Euonymus fortunei 'Coloratus'*

1 Gallon

1' - 1.5' Height

5' - 6' Spread

Low, branching semi-evergreen groundcover with dense dark green leaves followed by purple fall color. This groundcover will need occasional trimming. Needs moderate water through establishment, then fairly drought tolerant.



BLUE PACIFIC SHORE JUNIPER

Scientific Name: *Juniperus conferta 'Pacific Shore'*

1 Gallon

1' Height

4' - 5' Spread

Slowly spreading evergreen conifer with delicate, but spiny blue-green foliage. Needs moderate water through establishment, then fairly drought tolerant.



PREFERRED ORNAMENTAL GRASSES

FEATHER REED GRASS

Scientific Name: *Calamagrostis x acutiflora* 'Karl Foerster'
 5 Gallon
 2' - 3' Height
 1.5' - 2.5' Spread

Green arching ornamental grass with very rigid bloom spikes in late summer, remaining structural through winter. Will require yearly cut back in March. Needs regular water through establishment, then low water requirements.



ADAGIO MAIDEN GRASS

Scientific Name: *Miscanthus sinensis* 'Adagio'
 5 Gallon
 2' - 3' Height
 3' - 4' Spread

Mounding ornamental grass with sprays of yellow blooms in early fall that keep their structure through winter. Will require yearly cut back in March. Needs regular water for establishment then fairly drought tolerant.



MEXICAN FEATHER GRASS

Scientific Name: *Nassella tenuissima*
 1 Gallon or Hydroseed
 1' - 1.5' Height
 1' - 1.5' Spread

Low, extremely fine-textured ornamental grass with feathery blooms that appear from spring through fall, and wave gracefully in the wind. This ornamental grass is semi-evergreen and does not require much maintenance at all. Needs low water through establishment, then very drought tolerant.



LITTLE BLUESTEM

Scientific Name: *Schizachyrium scoparium*
 1 Gallon or Hydroseed
 2.5' - 3.5' Height
 1' - 2' Spread

Very upright blue-green native prairie grass and proven ornamental grass. The noted vertical structure turns reddish yellow and remains strong through the winter. Will require yearly cut back in March. Needs low water through establishment, then very drought tolerant.



WEeping LOVE GRASS

Scientific Name: *Eragrostis curvula*

1 Gallon or Hydroseed

1.5' - 2' Height

1.5' - 2' Spread

Very fine-textured prairie grass that flows in the wind. Will require yearly cut back in March or earlier, as it does not keep its structure during the winter. Needs low water through establishment, then very drought tolerant.



FOUNTAIN GRASS

Scientific Name: *Pennisetum alopecuroides 'Hameln'*

5 Gallon

1.5' - 2.5' Height

2' - 3' Spread

Low clumping ornamental grass with catpillar-like blooms in mid-summer through fall. Much of the structure remains through the winter. Will require yearly cut back in March. Needs moderate water for establishment then fairly drought tolerant.





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