



February 16, 2018

Kristen Zaremba
Cultural Affairs Division, Economic and Workplace Development
City of Oakland
1 Frank Ogawa Plaza, 9th Floor
Oakland, CA 94612

RE: Supplemental Packet Checklist – Public Art for Private Development

Dear Ms. Zaremba,

In preparation for the Public Art Advisory Committee (PAAC) Meeting on March 8, 2018 please find an introduction to a proposed public art project and the Supplemental Packet of Checklist Items attached as required and in compliance with City Ordinance No. 13443 O.M.S. Public Art Requirements for Private Development.

The Madison Street I-880 underpass adjacent to Carmel Partners' Jack London 4th & Madison project is a primary means of connection between the Jack London district and Chinatown, Lake Merritt, and the Lake Merritt BART Station. Throughout the day and night, residents and employees of the Jack London district walk and bike through this tunnel to get into and out of the district. During the approvals process for the project, a number of community members, neighbors, members of the Planning Commission, and elected representatives all encouraged Carmel Partners to find a way to enhance the adjacent underpass. What was described as a "tunnel of yuck" by Mayor Libby Schaaf provides a unique opportunity to use public art to create broad community benefit by humanizing the space. Carmel Partners has embraced this opportunity to make it's project's public art contribution have a broader community impact that just enhancing its own property, and seeks to take advantage of the new provision of the City's art ordinance to allow the art to transform the daily experience of the broader Jack London, Chinatown, and Oakland community.

I have attached the following information and documents for your review:

- Checklist Item #1 – Project Address and Applicant Details
- Checklist Item #2 – Updated Construction Valuation and Art Allocation
- Checklist Item #3 – Preliminary Art Budget, Phase I
- Checklist Item #4 – Value of Artwork

- Checklist Item #5 – Artist Resume
- Checklist Item #6 – Artist Contract Design Development
- Checklist Item #7 – Visual Proposal
- Checklist Item #8 – Project Site Plan etc.
- Checklist Item #9 – Artist Statement, Description of Proposed Artwork
- Checklist Item #10 – Materials and Methods
- Checklist Item #11 – Maintenance Plan
- Checklist Item #12 – Planning and Building Documentation
- Checklist Item #13 – Community Outreach
- Checklist Item #14 – Timeline

Required documents pertaining to projects proposed for right of way will be submitted

Please contact me with any questions and thank you for your assistance.

Sincerely,



FOR CP ✓ JLS LLC

Checklist #1: Project Address and Carmel Partners Details

Project Name: JLS 4th and Madison

Project Address: 150 and 155 4th street.

Art Project Address: 500 block of Madison Street (between 5th and 6th, beneath I-880)

Project Carmel Partners: CP V JLS, LLC

Checklist #2: Updated Construction Evaluation and Art Allocation

Updated Construction Evaluation:

- Building A: \$49,765,812
- Building B: \$23,743,966

Art Allocation:

- 0.5%: \$367,549

See Attachment A (Project Worksheets for verification of above figures)

Checklist #3: Updated Working Budget Including Consultant Fees

Project Budget Summary	
Consultant Fees	\$67,535 (CD+A, Helene Fried Associates)
Public Art Selection Process (Artist Finalist Honoraria)	\$10,000 (5-Artist Finalists honoraria \$2,000.each)
Artist Fee for Design, Fabrication, and Installation	Total \$290,000 (see following page for additional detail)
GRAND TOTAL	\$367,535

See following page for additional budget details related to the Design, Fabrication and Installation of the proposed art project.

FUTURE CITIES LAB

2/16/2018

Artist: Future Cities Lab (prepared by Jason Kelly Johnson & Nataly Gattegno)
JLS 4th and Madiscon Underpass Public Art, Oakland, CA

WORKING BUDGET FOR PUBLIC ART

Total Artwork Budget	\$ 290,000.00
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All Project Phases	% per task	Budget
(Task 1) Artist Fee - Concept Design	3.00%	\$ 8,700.00
(Task 2) Artist Fee - Artist Schematic Design	4.00%	\$ 11,600.00
(Task 3) Artist Fee - Artist Design Development	4.00%	\$ 11,600.00
(Task 4) Artist Fee - Construction Documents	4.00%	\$ 11,600.00
(Task 5) Fabrication	34.00%	\$ 98,600.00
(Task 6) Site Foundation & Electrical	17.00%	\$ 49,300.00
(Task 7) Installation & Close-out	13.00%	\$ 37,700.00
(Task 8) Operational / Close-out	3.00%	\$ 8,700.00
Engineering, Electrical Subcontractors	3.00%	\$ 8,700.00
Contingency	15.00%	\$ 43,500.00
Grand Total	100.00%	\$ 290,000.00

Artist Fees (Task 1-4)	15%	\$ 43,500.00
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Checklist #4: Value of Artwork (sited per Public Art Ordinance)

Artist fee and artwork value: \$290,000.

Checklist #5: Artist Resumes

Future Cities Lab is an Experimental Art and Design Studio operating globally.

Since 2005, founders Jason Kelly Johnson and Nataly Gattegno have collaborated on a range of cutting-edge projects exploring the intersections of art and design with public space, performance, advanced fabrication technologies, robotics, and responsive building systems. Future Cities Lab is an award-winning interdisciplinary studio employing an adventurous team of interaction designers, architects, technologists, lighting designers, digital craftspeople, urban ecologists and more.

Also see Attachment B.

Checklist #6: Artist Contract

For the mobilization and concept development phase of the art project Carmel Partners has taken Future Cities Lab under contract through Carmel's current contract for consulting services on this project with Community Design + Architecture (CD+A). The contract that committed the necessary funds for this first phase of the project was added to CD+A's amended contract and was signed on 1/18/2018.

When the proposed art project moves into the final design, fabrication, and installation phases, Carmel Partners is committed to entering into a direct contract with Future Cities Lab.

Checklist #7: Visual Proposal

See Attachment C – Sheets A-002 and A-101

Checklist #8: Proposed Site Plan, Site Photos, and Project Mock-Up

See Attachment C – Sheets A-010, A-011, and A-900

Checklist #9: Artist Statement and Description of Proposed Artwork

See Attachment C – Sheet A-002

Roles and Responsibilities: Future Cities Lab (Artist) will be responsible for all work on the conceptual and final design of the artwork. Future Cities Lab will also be responsible for the complete fabrication of the proposed artwork, site preparation, and transportation of the artistic elements to the site.

Checklist #10: Materials and Methods Plan

See Attachment C – Sheet A-50

Checklist #11: Maintenance Plan

See Attachment D (Commitment Letter from Carmel Partners and Artists' Maintenance Plan)

Checklist #12: Planning and Building Documentation Requirements

NOTE: This information will be provided as supplemental to this submittal as it becomes available later in the project.

Caltrans Documentation: Some modifications were made to the initial design of the project presented at the January PAAC meeting based on comments provided by Caltrans during an informational pre-application meeting with the agency. Caltrans staff input included guidance on required clearances related to access hatches and other openings at the bottom of the bridge deck, the space between the top of the art fixtures and the bottom of the bridge deck, and the space between overpass support columns and art fixture foundations as well as the color of the lights used in the art project (no colors that resemble the colors used in traffic lights).

See Attachment C – Sheet A-50

Checklist #13: Community Outreach Documentation

Carmel Partners invited neighbors, business owners, and artists to a community outreach meeting that was held on January 25, 2017. In addition, Carmel Partners invited the staff and board of the Jack London Business Improvement District, the Jack London district arts advisory committee, the Chinatown Chamber staff and board, and the Home Owners Association, as well as others.



Following is an excerpt of some of the comments made and questions posed during the meeting that have and will continue to inform the design development of the art project:

- A representative from Chinatown reported that an increase in the overall lighting level is important to the communities Neighborhood Crime Prevention Council.
- Lighting during the day is important as well.
- Understand the different qualities and characteristics of lighting, illumination levels, and rendering of color.
- Coordinate the quality and brightness of light coming from the new fixtures with that from the existing light fixtures.
- Wondering about the possibility of replacing the existing fixtures with the new ones?
- The quality of light from the existing fixtures is not pleasing.
- Design for making the pathway a passage through the underpass without inviting lingering under the freeway structure.
- Question about who will take on the on-going maintenance.
- General support for the proposed art project and appreciation of Carmel having taken on such a complex undertaking.

Also see Attachment E (List of Attendees)

Checklist #14: Timeline

See Attachment F

ATTACHMENT A

Checklist #2: Updated Construction Evaluation and Art Allocation

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.



CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department
www.oaklandnet.com

PH: 510-238-3891
FAX: 510-238-2263
TDD: 510-238-3254

Permit No: B1604005 Non-Residential Building - New **Filed Date:** 8/23/2016
Job Site: 180 4TH ST **Schedule Inspection by calling:** 510-238-3444
Parcel No: 001 016100100
District:
Project Description: Construction of a new 238 apt for a new residential development located on the corner of 4th St and Jackson St
Related Permits: GR1600105

	<u>Name</u>	<u>Applicant</u>	<u>Address</u>	<u>Phone</u>	<u>License #</u>
Owner:	CP V JLS LLC		1000 SANSOME ST 180 SAN FRANCISCO, CA		
Owner-Agent:	CP V JLS LLC	X	1000 SANSOME ST 180 SAN FRANCISCO, CA	415-231-0221	

PERMIT DETAILS: Building/Non-Residential/Building/New

General Information

Green Code Checklist: 2	Sets Of Plans: 3	Report - Soil/Geotech: 2
Surveys: 4	Structural Calculations: 2	Energy Calculations (T24): 2

Building Information

Building Use: Parking Garage	Number Of Stories: 7	Fire Sprinklers: Yes
Occupancy Group: S-2 Storage / Low Hazard	Number Of Units: 238	Floor Area (sq ft): 347443
Construction Type: IA - Noncombustible construction; 3 Hour Fire Rating	No. of Bedrooms: 295	Conditioned Floor Area (sq ft): 255746

Work Information

Job Value: \$49,765,182.00	Occupied Floor Area (Non-Res)(sq ft): 95803
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TOTAL FEES TO BE PAID AT FILING: \$2,079,464.64

Address Fee	\$135.00	Application Fee	\$70.00	Bedroom Tax	\$29,500.00
CBSC	\$1,791.00	CITY CBSC	\$199.00	CITY SMIP	\$696.71
Certificate of Occupancy/Permit Related	\$705.00	Construction Site Monitoring	\$400.00	General Plan Surcharge	\$213,990.28
Inspection Fee	\$287,440.25	Parking Review	\$462.00	Plan Check - Routed	\$359,293.13
Process Coordination	\$8,622.98	Records Management Fee	\$172,156.11	SMIP	\$13,237.54
School Tax	\$841,229.33	School Tax - City	\$26,017.40	Site Plan Review - Plot Plan	\$658.00
Technology Enhancement Fee	\$95,138.91	Zoning Conditions of Approval	\$17,640.00	Zoning Inspection	\$10,082.00

APPLICANT
COPY

Record ID: B1604005

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Fee Calc. Factor: Job Value(Contractor)\$49,765,182.00 Fee Total \$2,079,464.64

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<input type="checkbox"/> 2175943	Application Fee	\$70.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	CBSC	\$1,791.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	CITY CBSC	\$199.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	CITY SMIP	\$696.71	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Certificate of Occupancy/Permit Related	\$705.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Construction Site Monitoring	\$400.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	General Plan Surcharge	\$213,990.28	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Inspection Fee	\$287,440.25	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Parking Review	\$462.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Plan Check - Routed	\$359,293.13	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Records Management Fee	\$172,156.11	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	SMIP	\$13,237.54	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Site Plan Review - Plot Plan	\$658.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Technology Enhancement Fee	\$95,138.91	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Zoning Conditions of Approval	\$17,640.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Zoning Inspection	\$10,082.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Address Fee	\$135.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Bedroom Tax	\$29,500.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	Process Coordination	\$8,622.98	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	School Tax	\$841,229.33	INVOICED	08/23/2016
<input type="checkbox"/> 2175943	School Tax - City	\$26,017.40	INVOICED	08/23/2016

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Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.



CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department
www.oaklandnet.com

PH: 510-238-3891
FAX: 510-238-2263
TDD: 510-238-3254

Permit No: B1604010 Non-Residential Building - New

Filed Date: 8/23/2016

Job Site: 431 MADISON ST

Schedule Inspection by calling: 510-238-3444

Parcel No: 001 016100707

District:

Project Description: New construction for a 92 unit apartment complex, along with 2 retail spaces

Related Permits:

	<u>Name</u>	<u>Applicant</u>	<u>Address</u>	<u>Phone</u>	<u>License #</u>
Owner:	CP V JLS LLC		1000 SANSOME ST 180 SAN FRANCISCO, CA		
Owner-Agent:	Greg Pasquali	X	1000 Sansome St San Some, CA	415 231-0221	

PERMIT DETAILS: Building/Non-Residential/Building/New

General Information

Green Code Checklist: 2	Sets Of Plans: 3	Report - Soil/Geotech: 2
Surveys: 4	Structural Calculations: 2	Energy Calculations (T24): 2

Building Information

Building Use: Parking Garage	Number Of Stories: 7	Fire Sprinklers: Yes
Occupancy Group: S-2 Storage / Low Hazard	Number Of Units: 92	Floor Area (sq ft): 171879
Construction Type: IA - Noncombustible construction; 3 Hour Fire Rating	No. of Bedrooms: 168	Conditioned Floor Area (sq ft): 124875

Work Information

Job Value: \$23,743,966.00	Occupied Floor Area (Non-Res)(sq ft): 47004
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TOTAL FEES TO BE PAID AT FILING: \$1,026,356.52

Address Fee \$135.00	Application Fee \$70.00	Bedroom Tax \$16,800.00
CBSC \$854.10	CITY CBSC \$94.90	CITY SMIP \$332.42
Certificate of Occupancy/Permit Related \$705.00	Construction Site Monitoring \$400.00	General Plan Surcharge \$102,099.05
Inspection Fee \$137,813.75	Parking Review \$462.00	Plan Check - Routed \$172,260.00
Process Coordination \$4,134.18	Records Management Fee \$84,970.69	SMIP \$6,315.90
School Tax \$410,864.88	School Tax - City \$12,707.16	Site Plan Review - Plot Plan \$658.00
Technology Enhancement Fee \$46,957.49	Zoning Conditions of Approval \$17,640.00	Zoning Inspection \$10,082.00

APPLICATION ONLY: Not a permit.

APPLICANT COPY

Record ID: B1604010

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Fee Calc. Factor: Job Value(Contractor)\$23,743,966.00 Fee Total \$1,026,356.52

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<input type="checkbox"/> 2175953	Application Fee	\$70.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Bedroom Tax	\$16,800.00	INVOICED	08/23/2016
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<input type="checkbox"/> 2175953	CITY CBSC	\$94.90	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	CITY SMIP	\$332.42	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Certificate of Occupancy/Permit Related	\$705.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Construction Site Monitoring	\$400.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	General Plan Surcharge	\$102,099.05	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Inspection Fee	\$137,813.75	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Parking Review	\$462.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Plan Check - Routed	\$172,260.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Process Coordination	\$4,134.18	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Records Management Fee	\$84,970.69	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	SMIP	\$6,315.90	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	School Tax	\$410,864.88	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	School Tax - City	\$12,707.16	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Site Plan Review - Plot Plan	\$658.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Technology Enhancement Fee	\$46,957.49	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Zoning Conditions of Approval	\$17,640.00	INVOICED	08/23/2016
<input type="checkbox"/> 2175953	Zoning Inspection	\$10,082.00	INVOICED	08/23/2016

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ATTACHMENT B

Checklist #5: Artist Resumes

FUTURE CITIES LAB

Nataly Gattegno + Jason Kelly Johnson

2325 3rd St. #229, San Francisco, CA 94107

t: 415.255.4879, c: 434.466.6507, e: nataly@future-cities-lab.net, e: jason@future-cities-lab.net

w: www.future-cities-lab.net

+ Education

Nataly Gattegno:

- 2002 Master of Architecture, MArch, Princeton University
- 2000 Master of Arts, MA, Cambridge University, St Johns College, UK
- 1998 Bachelor of Arts, BA Honors, Cambridge University, St Johns College, UK

Jason Kelly Johnson:

- 2001 Master of Architecture, MArch, Princeton University
- 1995 Bachelor of Sciences, BSc, University of Virginia

+ Current / Forthcoming Public Art Installations

- 2020 St. James Park Levitt Pavilion, San Jose, CA [forthcoming]
- 2018 Lightstreams, MTA Arts + Design, Sea Beach Line Station Public Art, New York, NY [forthcoming]
- 2017 Chronosphere, Seoul Biennale of Architecture and Urbanism, Seoul, South Korea [currently on view]
- 2017 Lightweave: Interactive Public Art Installation, North Union Station Underpass, Washington DC [forthcoming]
- 2017 Hyposwarm: Graphic Crosswalk, Yerba Buena Community Benefit District, San Francisco, CA [forthcoming]
- 2015 Murmur Wall: Interactive Public Art Installation, Palo Alto City Hall, Palo Alto, CA [currently on view]

+ Recent Public Art Commissions

- 2017 Waveform, Metropolitan State University of Denver, Aerospace & Engineering Sciences Denver, CO
- 2017 Anemone: Sculptural Shade Canopy, Albany, CA
- 2016 Chronoscope 1, Soundwave Art Festival, Fort Mason, San Francisco, CA
- 2015 Data Lanterns: Interactive Public Art Installation, Market Street Prototyping Festival, San Francisco, CA
- 2014 Lightswarm: Interactive Façade Installation, Yerba Buena Center for the Arts, San Francisco, CA
- 2014 Datasprayer, Swiss Pavilion, Venice Biennale, Italy
- 2013 Hydraspan, Yerba Buena Center for the Arts, San Francisco, CA
- 2012 Datagrove, ZERO1 Biennial, San Jose, CA and artMRKT, Fort Mason, San Francisco, CA
- 2012 Hydramax, San Francisco Museum of Modern Art, San Francisco, CA
- 2011 Trilux Pavilion, Museum of Craft and Design, Hayes Valley, San Francisco, CA
- 2010 Xeromax Envelope, Pratt Gallery, New York, NY
- 2010 AURORA, Van Alen Institute, New York, NY

+ Recent Private Art Commissions

- 2016 4480 Pixels In Space, Survey Monkey, San Mateo, CA
- 2015 Bitstream, Bitly, New York, NY

+ Recent Public Art Finalists

- 2016 Pomerene Hall Public Art, Ohio State University, Columbus, OH [finalist, ongoing]
- 2016 Assen Railway Integrated Public Art, Assen, Netherlands [finalist, ongoing]
- 2016 Montgomery Street Public Art, Fort Worth, TX [finalist, ongoing]
- 2016 Uber Mission Bay Headquarters Public Art, Uber, San Francisco, CA [finalist]
- 2016 Clemson University Lee III Interior Public Art, Clemson, SC [finalist]

+ Artist Pools

- 2017 2017 Seattle Office of Arts and Culture Public Artist Roster, WA
- 2017 2017/18 Prequalified Artist Pool: San Francisco Arts Commission, CA
- 2017 2017 Prequalified Artist Pool: Houston Art Alliance's, TX
- 2016 2016-2019 Art in Public Places Roster: Oregon Regional Arts & Culture Council, OR
- 2016 2016/2017 Prequalified Artist Pool: City of Palo Alto Public Art Program, Palo Alto, CA

+ Recent Community Engagement / Thought Leadership

- 2017 Association for Computer Aided Design in Architecture, President and Editorial Board
- 2016 Our City: Oakland, Oakland, CA: Advisory Committee
- 2015 Market Street Prototyping Festival, San Francisco, CA: Planning Committee / Neighborhood Captain
- 2014 Audi Innovation Research/California College of the Arts: Beyond Mobility Workshop, San Francisco, CA: Organizers

+ Solo Exhibitions

- 2010 The Aurora Project, Van Alen Institute, NY, curator: Jessica Blaustein
- 2007 Vivisys, Extension Gallery, Chicago IL, curator: Paola Palombo

+ Group Exhibitions

- 2017 Architectural Pavilions: Experiments and Artifacts, Museum of Craft and Design, San Francisco, CA, Curator: Mariah Nielson
- 2017 Luminairy, Art, Tech + Music Festival, San Francisco, CA
- 2015 Blueprint, Storefront for Art + Architecture, New York, NY, Curator: Sebastiaan Bremer & SO-IL 2015
Data Clay, Musuem of Craft and Design, San Francisco, CA, Curators: Joshua G. Stein & Del Harrow
- 2014 Blueprint, Kunsthal KAdE, The Netherlands, Curator: Sebastiaan Bremer & SO-IL
- 2014 Bi-City Biennale of Urbanism / Architecture, Hong Kong, Curator: Colin Fournier
- 2013 Dissident Futures, Yerba Buena Center for the Arts, Curator: Betti-Sue Hertz
- 2012 Hydramax, in Utopian Impulse, San Francisco Museum of Modern Art, Curator: Jennifer Fletcher
- 2011 Aurora, in EcoRedux2: Design Manuals for a Dying Planet, Barcelona Design Museum, Curator: Lydia Kallipolitis
- 2011 Supergalaxy, in Architecture Models, Museum of Craft and Design, San Francisco, Curator: Mariah Nielson 2010
Xeromax Air, in BIODIVERCITY: 47 Important Ideas and Technologies for the Urban Environment,
The Australian Embassy Gallery, Washington DC, curator: Natalie Jeremijenko

+ Group Exhibitions (cont.)

- 2010 Xeromax Envelope, in Envelope, Pratt Gallery, New York, Curator: Christopher Hight
- 2010 Aurora, in Research Through Making, University of Michigan, TCAUP
- 2010 Glaciarium, in Hong Kong / Shenzhen Biennale of Architecture and Urbanism, Curator: Marisa Yiu
- 2009 Desert Prototype, in PROTOTYPES, ROBOTS, DESERT ECOLOGIES, University of Michigan, TCAUP 2008
GROW:DC, City of the Future Challenge, Union Station, Washington DC, curator: Cassey Jones 2006
Energy Farm, in Build Boston Exhibition, Boston Society of Architects, Boston, MA
- 2005 Landscape of Variation, in Gallery Kwang, Seoul, S. Korea

+ Fellowships / Awards

- 2016 SXSW Eco Place By Design Interactive Art Award Finalist for Lightswarm
- 2016 Americans for the Arts 'Top 50 Public Artworks' for Murmur Wall
- 2016 Community Contribution Award, Robots in Architecture, Sydney, Australia
- 2016 Fast Company 2016 Innovation By Design Award: Spaces, Places & Cities Honorable Mention for Murmur Wall
- 2014 Smart City Award for Hydramax, Milan Design Week, Italy
- 2013 Emerging Architect, Monterey Design Conference, CA
- 2013 Americans for the Arts 'Top 50 Public Artworks' for Datagrove
- 2011 New York Prize, The Architectural League of New York
- 2010 Van Alen NY Prize Fellowship, Van Alen Institute, New York
- 2009 Muschenheim + Oberdick Fellowships, University of Michigan, TCAUP, Ann Arbor, MI

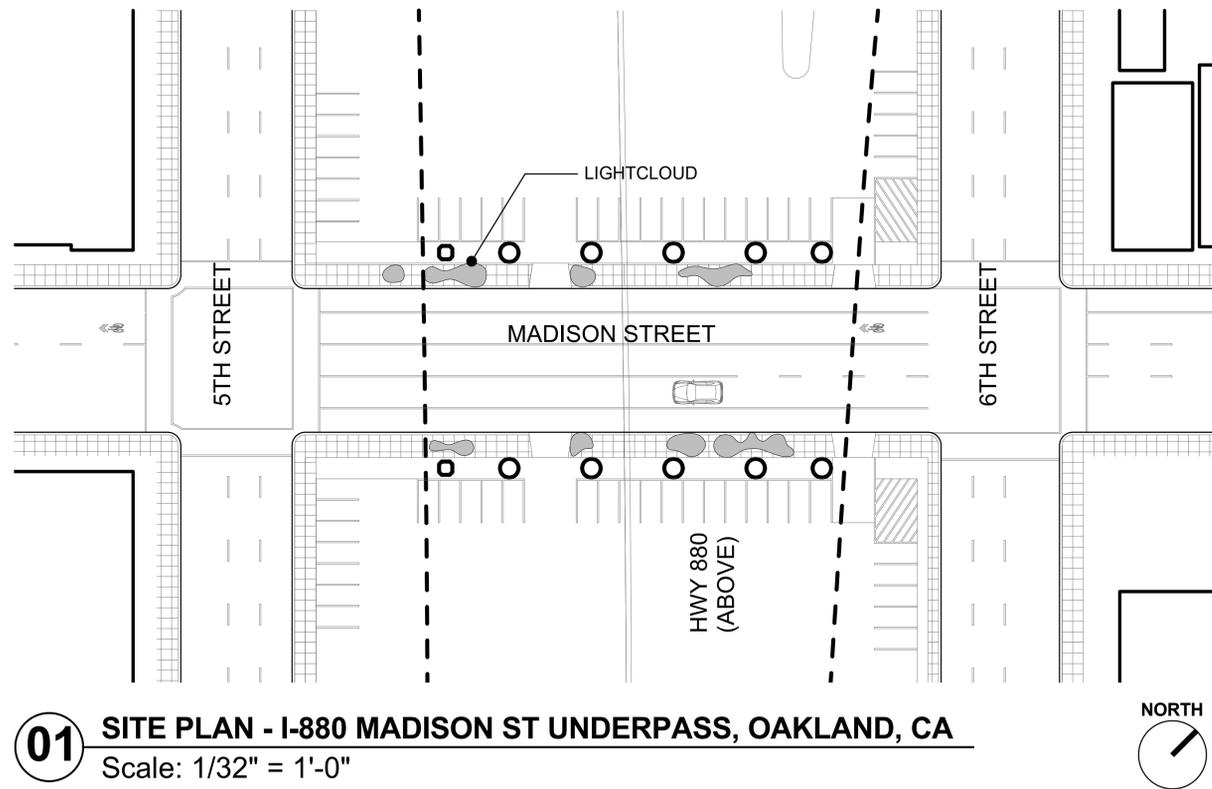
+ Select Lectures/Presentations/Conferences

- 2017 Machines of Loving Grace, Guest Speaker, UCLA, CA
- 2017 Primer Conference, Guest Speaker, Gray Area for the Arts, San Francisco, CA
- 2016 Meeting of the Minds, Invited Speaker, Richmond, CA
- 2016 Meeting of the Minds with Mayor Sam Liccardo, Invited Panelist, Cisco, San Jose, CA
- 2016 Designing For What We Don't Know Yet, Invited Speaker, SPUR, San Francisco, CA 2016
Arup San Francisco Office 30th Anniversary, Invited Speaker, Arup, San Francisco, CA
- 2016 Rob|Arch 2016, Keynote Speaker, Robots in Architecture, Sydney, Australia
- 2015 Wired City Conference Keynote, Wired Magazine, Tokyo, Japan
- 2015 INST-INT Conference, Invited Speaker, Walker Art Center, Minneapolis, MN
- 2015 TYPO International Design Talks, Invited Speaker, San Francisco, CA
- 2015 Internet of Things Summit, San Francisco, CA
- 2014 A City of Intelligent Machines, lecture at Designers + Geeks, CA
- 2012 Association for Computer Aided Design in Architecture [ACADIA] Conference and Exhibition Chairs
- 2012 TEDx, Los Angeles, Fowler Museum, UCLA
- 2012 Ecologics: Praxis Symposium, Storefront for Art+Architecture, NY

Future Cities Lab has lectured at: Princeton University; Architectural Association DRL, London; Cornell University; Illinois Institute of Technology; University of Pennsylvania; CalPoly; UC Berkeley among others.

ATTACHMENT C

Proposed Art Project



01 SITE PLAN - I-880 MADISON ST UNDERPASS, OAKLAND, CA
Scale: 1/32" = 1'-0"



LIGHTCLOUD

CONCEPTUAL DESIGN SET

TABLE OF CONTENTS

A-000 Cover & Table of Contents

DESIGN

- A-001 Artist Information
- A-002 Project Concepts
- A-010, 011 Proposed Site Plans and Elevations
- A-050 Axon - Typical, Proposed Materials
- A-100 Foundation Plan - Typical, Sidewalk Plan - Typical
- A-101 Reflected Ceiling Plan - Typical, LED Color Possibilities
- A-102 Framing Plan - Typical, Roof Plan - Typical
- A-201 Section - Typical
- A-501 Foundation Detail - Typical
- A-900 Site Photos

ELECTRICAL

E-101 Site Electrical Diagram

GENERAL NOTES

1. Where the terms "approval equal", "equal to," or other general qualifying terms are used in these notes, it shall be understood that reference is made to the ruling and judgment of the architect.
2. The general contractor shall verify all dimensions and job conditions and shall report to the architect any discrepancies or omissions which would interfere with satisfactory completion of the project.
3. Unless otherwise noted, all dimensions shown are from centerline to centerline, centerline to face of the wall, or face of wall to face of wall.
4. Electrical, mechanical, (and) plumbing, and structural drawings are supplementary to the architectural drawings. Mechanical and electrical fixtures, fittings, outlets, etc. when shown on the architectural drawings are for location information only.
5. It shall be the responsibility of each contractor to check with the architectural drawings before the installation of their work. Any discrepancy between the architect and consulting engineer's drawings shall be brought to architect's attention.
6. Any work installed in conflict with the architectural drawing shall be corrected by the contractor at his expense and no expense to the owner.
7. The construction notes and/ or drawings are supplied to illustrate the design and general type of construction desired and are intended to imply the finest quality of construction, material and workmanship throughout. All errors, omissions and clarifications must be brought to the attention of the architect.
8. The general contractor shall maintain a current and complete set of construction drawings on site during all phases of construction for the use of trades.
9. The general contractor shall notify the architect of any discrepancies between the drawings, these notes, and field conditions before commencing any work and request clarification.
10. The location of the utilities shown on these plans are based on field observation and/or record drawings. The information shown is not necessarily complete and the location of the utilities shown in approximate. The contractor will verify the existence of all utilities in advance of conducting construction operations that could damage these utilities.
11. In the areas where proposed construction may conflict with existing utilities, the contractor will take all necessary precautions to avoid damage to the utilities.
12. Stated amounts are indicative and may be an approximate, and not exact amount. Determining amounts is the responsibility of the contractor.
13. In the technical description are generally known products. The contractor must take account of auxiliary equipment, finishes and neat connections.
14. The contractor must provide samples of all image-defining materials.
15. All steel structure that comes into view is to be held to high aesthetic requirements. All steel structure that comes into view is to be galvanized and painted.
16. All wiring and installation should be in accordance with either National Electric Code (NEC) or the NEPA 70.
17. The building/artwork/design shall be constructed in full compliance with all applicable codes, ordinances, and regulations as well as the drawings and specifications. Any code deficiencies in the drawings recognized by the contractor should be brought to the attention of the architect for clarification.

GENERAL NOTES

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LEAD ARTIST

FUTURE CITIES LAB
2325 3rd Street, Suite 229
San Francisco, CA 94107
Contact: Jason K Johnson
<info@future-cities-lab.net>
Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
benjamin@daringacorotis.com
(510) 604-6059

FABRICATOR

MACHINIC
2325 3rd Street
San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
610 16th Street, Ste 420
Oakland, CA 94612
(510) 839-4568

Thomas Kronenmeyer
thomas@community-design.com

Helene Fried
hfassoc@earthlink.net

REVISION NOTES

PAAC MEETING #2
(03/16/2018)

PROJECT NAME

LIGHTCLOUD SCULPTURAL STREET LIGHTING

I-880 Madison St Underpass
Oakland, CA

SHEET TITLE

COVER

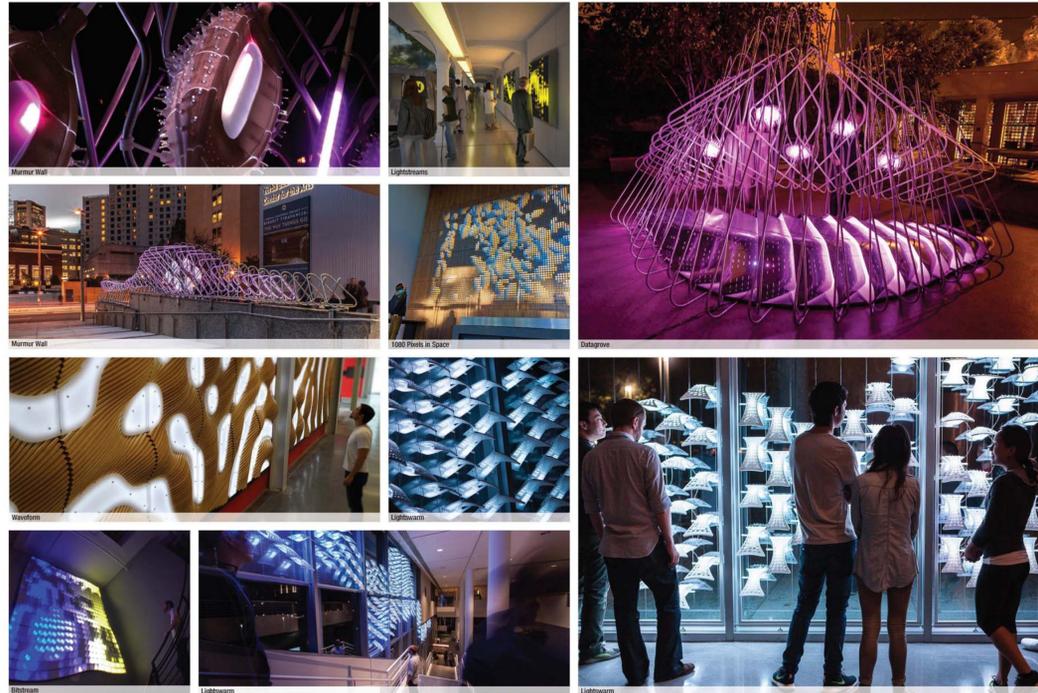
DRAWING SCALE

As noted on drawings
Sheet size: 24" X 36"

DATE ISSUED

18.02.16

A-000



A1 SELECTION OF PREVIOUS PROJECTS BY ARTIST
Scale: N/A

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LEAD ARTIST
FUTURE CITIES LAB
1000 Market St, Suite 229
San Francisco, CA 94102
Contact: Jason K Johnson
Phone: (415) 255-4879

CONSULTING STRUCTURAL ENGINEER

CONSULTING ELECTRICAL ENGINEER

METAL FABRICATION
Machinic
1000 Market St, Suite 229
San Francisco, CA 94102
Phone: (415) 255-4879

LED ELECTRONICS
Machinic
1000 Market St, Suite 229
San Francisco, CA 94102
Phone: (415) 255-4879

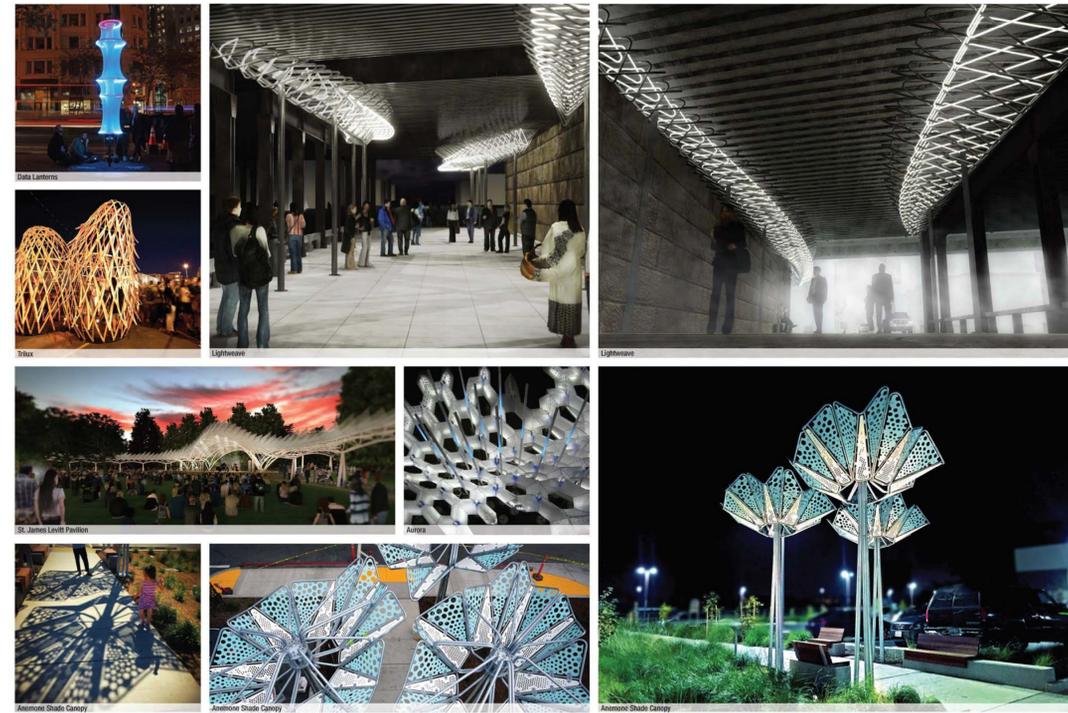
REVISION NOTES
PROPOSED ARTWORK - NOT FOR PUBLIC DISTRIBUTION

PROJECT NAME
LIGHT CLOUD

SHEET TITLE
FUTURE CITIES LAB AND CONSULTANTS

DRAWING SCALE
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DATE ISSUED
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1000 Market St, Suite 229
San Francisco, CA 94102
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METAL FABRICATION
Machinic
1000 Market St, Suite 229
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Phone: (415) 255-4879

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San Francisco, CA 94107
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<info@future-cities-lab.net>
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STRUCTURAL ENGINEER

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Oakland, CA 94612
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**LIGHTCLOUD
SCULPTURAL STREET LIGHTING**

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Oakland, CA

SHEET TITLE
ARTIST INFORMATION

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A-001

ARTIST INFORMATION

FUTURE CITIES LAB IS AN EXPERIMENTAL ART AND DESIGN STUDIO OPERATING GLOBALLY OUT OF SAN FRANCISCO, CA.

Since 2005, founders Jason Kelly Johnson and Nataly Gattegno have collaborated on a range of cutting-edge projects exploring the intersections of art and design with public space, performance, advanced fabrication technologies, robotics, and responsive building systems. Future Cities Lab is an award-winning interdisciplinary studio employing an adventurous team of interaction designers, architects, technologists, lighting designers, digital craftspeople, urban ecologists and more.



A1 ILLUMINATING THE SIDEWALK AND UNDERPASS IN THE EVENING
Scale: N/A

LIGHT CLOUD CREATES AN INTERACTIVE AND IMMERSIVE VISUAL EXPERIENCE FOR PEDESTRIANS WALKING ALONG MADISON ST BOTH DAY AND NIGHT

GENERAL NOTES
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FUTURE CITIES LAB
2325 3rd Street, Suite 229
San Francisco, CA 94107
Contact: Jason K Johnson
jason@future-cities-lab.net
Phone: (415) 255-4879

CONSULTING STRUCTURAL ENGINEER

CONSULTING ELECTRICAL ENGINEER

METAL FABRICATION
Machinic
2325 3rd Street
San Francisco, CA 94107

LED ELECTRONICS
Machinic
2325 3rd Street
San Francisco, CA 94107

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LIGHT CLOUD

SHEET TITLE
CONCEPT RENDERING

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DATE ISSUED:
15 Dec 2017

A011



A1 NIGHT TIME VIEW OF MADISON STREET
Scale: N/A

VARIABLE INTENSITIES OF ILLUMINATION CREATE A MEDITATIVE, INTERACTIVE AND PLAYFUL EXPERIENCE FOR PEDESTRIANS.

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San Francisco, CA 94107
Contact: Jason K Johnson
jason@future-cities-lab.net
Phone: (415) 255-4879

CONSULTING STRUCTURAL ENGINEER

CONSULTING ELECTRICAL ENGINEER

METAL FABRICATION
Machinic
2325 3rd Street
San Francisco, CA 94107

LED ELECTRONICS
Machinic
2325 3rd Street
San Francisco, CA 94107

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SHEET TITLE
CONCEPT RENDERING

DRAWING SCALE
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DATE ISSUED:
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A02

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<info@future-cities-lab.net>
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STRUCTURAL ENGINEER

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benjamin@daringacorotis.com
(510) 604-6059

FABRICATOR

MACHINIC
2325 3rd Street
San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
610 16th Street, Ste 420
Oakland, CA 94612
(510) 839-4568

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REVISION NOTES

PAAC MEETING #2
(03/16/2018)

PROJECT NAME

LIGHTCLOUD
SCULPTURAL STREET LIGHTING

I-880 Madison St Underpass
Oakland, CA

SHEET TITLE
PROJECT CONCEPTS

DRAWING SCALE

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DATE ISSUED
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A-002



A1 VIEW DRIVING ON MADISON STREET WITH STREET EVENT
Scale: N/A

THE ARTWORK WILL SERVE AS A CATALYST FOR UTILIZING THE UNDERPASS IN NEW WAYS. IT WILL ALSO CONTRIBUTE TO IMPROVE THE OVERALL LIGHTING QUALITY OF THE SPACE.

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FUTURE CITIES LAB
2325 3rd Street, Suite 229
San Francisco, CA 94107
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jason@future-cities-lab.net
Phone: (415) 255-4879

CONSULTING STRUCTURAL ENGINEER

CONSULTING ELECTRICAL ENGINEER

METAL FABRICATION
Machinic
2325 3rd Street
San Francisco, CA 94107

LED ELECTRONICS
Machinic
2325 3rd Street
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PROJECT NAME
LIGHT CLOUD

SHEET TITLE
CONCEPT RENDERING

DRAWING SCALE
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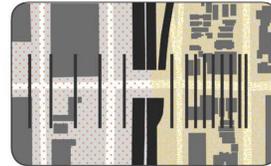
A013



EXISTING URBAN FABRIC DIVIDED BY I-880



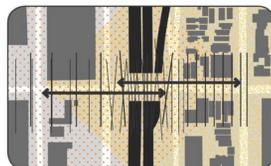
EXISTING SITE PHOTO



BOTH SIDES HAVE THEIR OWN UNIQUE RHYTHMS



UNDERPASS PHOTO



HOW COULD THE UNDERPASSES SERVE TO WEAVE THE TWO COMMUNITIES TOGETHER



OAKLAND'S RICH STREET ART, PUBLIC MURALS, BODY-ART



LIGHT CLOUD - PERMANENT ART INSTALLATION
Proposal for the Madison Street I-880 Underpass.

Light Cloud animates the underpass with variable intensities of illumination and creates a meditative, interactive and playful experience for pedestrians. We believe that a walk through an underpass could be as extraordinary as visiting a botanical garden, art museum, or cathedral.

The installations translate sounds from the highway underpass into unique formations of dynamic patterned light. Slowly changing ambient effects are triggered by the sound of passing people, cyclists and cars from the two neighborhoods and I-880 above.

The artwork serves as catalyst for neighborhood interaction across the I-880 divide. It is a first step towards weaving the neighborhood together. Similar to the dancing motion of a Chinese celebration dragon, waves of light oscillate through Light Cloud. The quality and placement of lighting elements will also enhance safety and comfort. Ambient light levels can also be increased during the evening and will enhance the overall ambience of the area to ensure visibility and safety of pedestrians by motorists.

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San Francisco, CA 94107
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jason@future-cities-lab.net
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CONSULTING STRUCTURAL ENGINEER

CONSULTING ELECTRICAL ENGINEER

METAL FABRICATION
Machinic
2325 3rd Street
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LED ELECTRONICS
Machinic
2325 3rd Street
San Francisco, CA 94107

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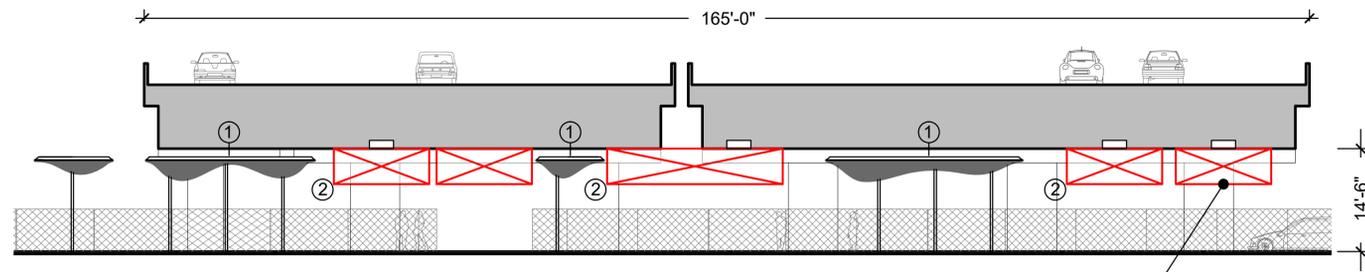
PROJECT NAME
LIGHT CLOUD

SHEET TITLE
GENERAL CONCEPT

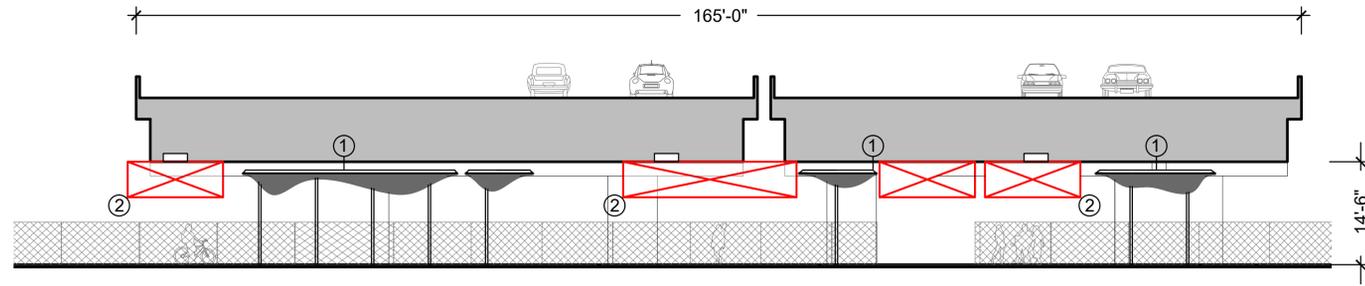
DRAWING SCALE
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DATE ISSUED:
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A03



03 WEST SITE ELEVATION SHOWING LIGHTCLOUD
Scale: 1" = 12'-0"

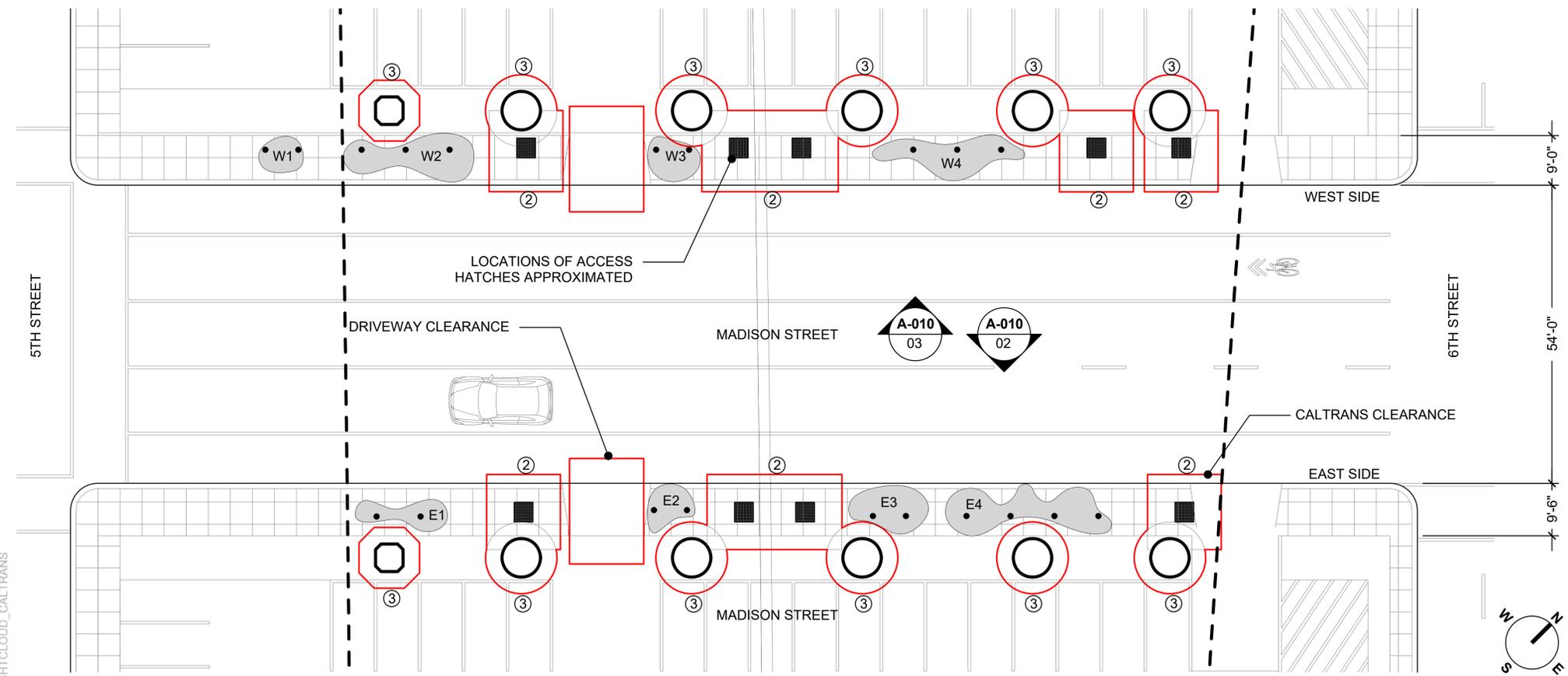


02 EAST SITE ELEVATION SHOWING LIGHTCLOUD
Scale: 1" = 12'-0"

CALTRANS NOTES:

- ① Maintain 12" clearance from bottom of bridge soffit.
- ② Maintain a minimum 5'-0" clearance from any maintenance access hatch and opening
- ③ The light standard must be at least 16" from bent beam and footing must be at least 3'-0" away from column.

Maintain a minimum of 8'-0" clearance above the sidewalk



01 SITE PLAN SHOWING LIGHTCLOUD
Scale: 1" = 12'-0"

GENERAL NOTES

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FUTURE CITIES LAB
2325 3rd Street, Suite 229
San Francisco, CA 94107
Contact: Jason K Johnson
<info@future-cities-lab.net>
Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
benjamin@darlingacorotis.com
(510) 604-6059

FABRICATOR

MACHINIC
2325 3rd Street
San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
610 16th Street, Ste 420
Oakland, CA 94612
(510) 839-4568

Thomas Kronenmeyer
thomas@community-design.com

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hfassoc@earthlink.net

REVISION NOTES

PAAC MEETING #2
(03/16/2018)

PROJECT NAME

LIGHTCLOUD
SCULPTURAL STREET LIGHTING

I-880 Madison St Underpass
Oakland, CA

SITE ELEVATIONS AND PLAN

DRAWING SCALE

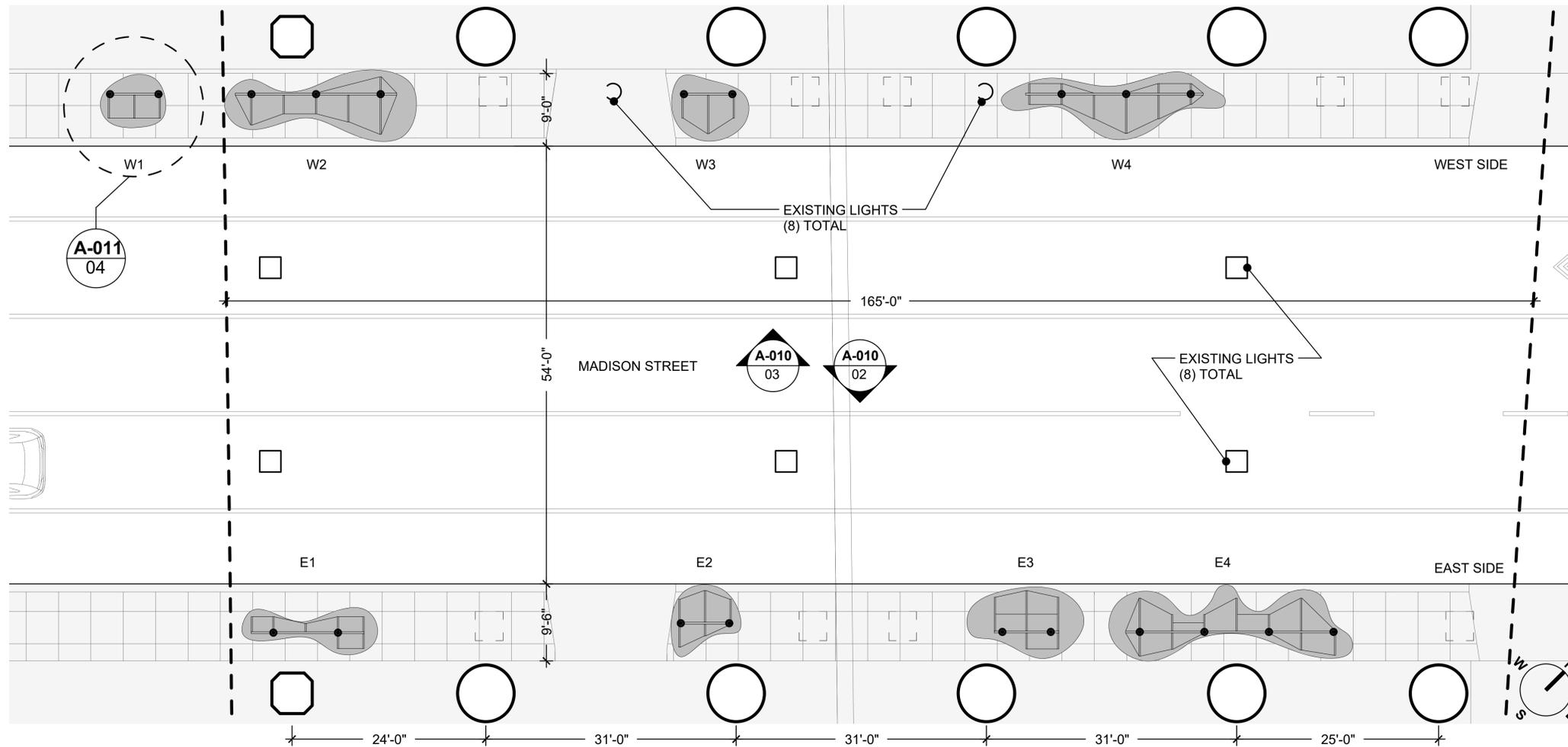
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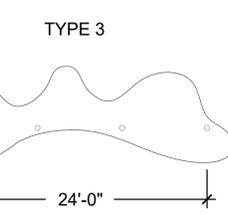
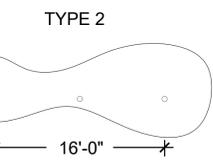
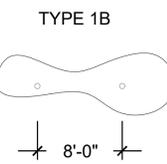
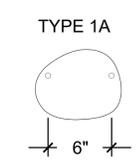
18.02.16

A-010

180215_LIGHTCLOUD_CALTRANS



01 FRAMING PLAN
Scale: 1" = 8'-0"



02 TYPOLOGY
Scale: 1" = 8'-0"

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PROJECT NAME

LIGHTCLOUD
SCULPTURAL STREET LIGHTING

1-880 Madison St Underpass
Oakland, CA

SITE FRAMING PLAN, TYPOLOGY,
AND FRAMING SCHEDULE

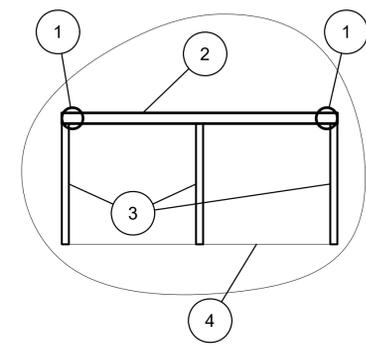
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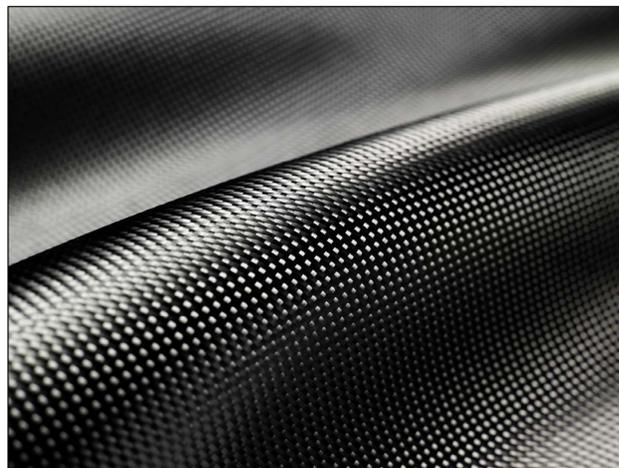
- 1 - ROUND HSS 6x0.312 COLUMN
- 2 - HSS 6x3x3/8 BEAM
- 3 - HSS 4x2x1/4 CROSS BEAM
- 4 - L2x2x3/16 FRAMING

SECTION	TYPE	SPREAD FOOTING	LED PANEL SQ. FT.	COLUMNS ROUND HSS 6x0.312 COLUMN	BEAMS						CROSS BEAMS						FRAMING L2x2x3/16 TYP. LINEAR FEET
					6'-6" HSS 6x3x3/8 BEAM	8'-0" HSS 6x3x3/8 BEAM	14'-0" HSS 6x3x3/8 BEAM	20'-0" HSS 6x3x3/8 BEAM	22'-0" HSS 6x3x3/8 BEAM	26'-0" HSS 6x3x3/8 BEAM	1'-6" HSS 4x2x1/4	2'-6" HSS 4x2x1/4	2'-10" HSS 4x2x1/4	3'-6" HSS 4x2x1/4	4'-0" HSS 4x2x1/4	4'-10" HSS 4x2x1/4	
W1	1A	2	43	2	1												6
W2	2	3	139	3					1				3		1	2	36
W3	1A	2	61	2	1								2				7
W4	2	3	125	3						1				1			40
E1	1B	2	61	2			1				1	6					16
E2	1A	2	53	2	1						1		3		1		13
E3	1B	2	94	2		1						2			2	1	19
E4	3	4	169	4								5	2		3		51
TOTALS		20	745	20	3	1	1	1	1	1	9	16	11	2	8	3	188

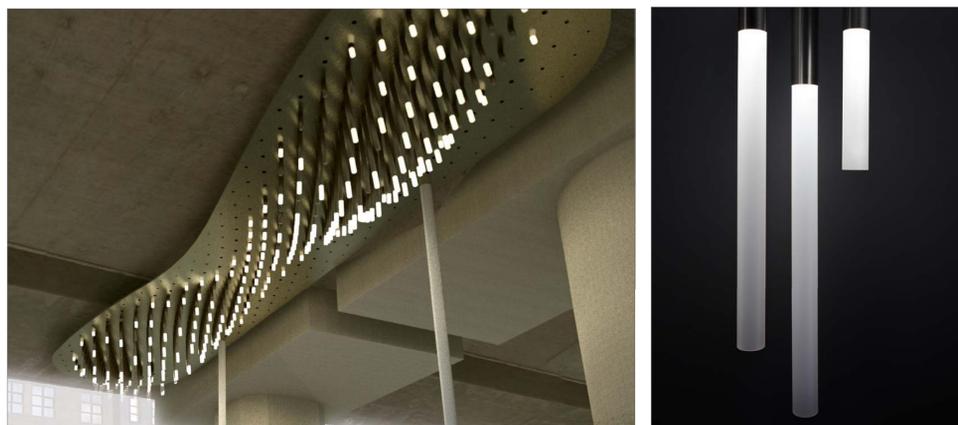
03 STEEL MEMBER SCHEDULE

04 FRAMING CALLOUT

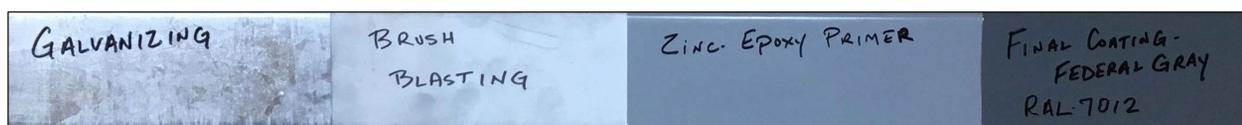
180215_LIGHTCLOUD_CALTRANS



A. GFRP FINISH



B. LED DIFFUSERS



C. PHYSICAL EXAMPLE OF THE STEEL FINISH PROCESS (FINAL EPOXY COATING)

02 MATERIALS & METHODS

A: GFRP: Glass Fiber Reinforced Panel, polished smooth and painted with a clear coat.

B: LED DIFFUSER: Custom cast frosted acrylic tip to both diffuse light and conceal the RGB LED diodes.

C: STEEL FINISH: Four part epoxy based process: Galvanizing, brush blasting, zinc epoxy primer, epoxy coating (Federal Grey RAL 7012).

01 SCHEDULE OF MATERIAL FINISHES

GLASS FIBER REINFORCED PANEL (GFRP)
WITH POLISHED FINISH

BEAM [HSS 6x3x3/8]

GLASS FIBER REINFORCED PANEL (GFRP)
WITH POLISHED FINISH

STRUCTURAL STEEL COLUMN
[ROUND HSS 6x0.312]

CONCRETE CAP TO MATCH
EXISTING SIDEWALK

RAISED CONCRETE PLINTH

SPREAD FOOTING
(CONCRETE FOUNDATION)

ELECTRICAL AND DATA CONDUIT

CROSS BEAM [HSS 4x2x1/4]

FRAMING
[L2x2x3/16 TYP
AT EDGES]

MADISON STREET

SIDEWALK

03 AXON - TYPICAL 2 COLUMN ASSEMBLY

Scale: 1" = 2'-0"



GENERAL NOTES

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LIGHTCLOUD SCULPTURAL STREET LIGHTING

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AXON AND
PROPOSED MATERIALS & METHODS

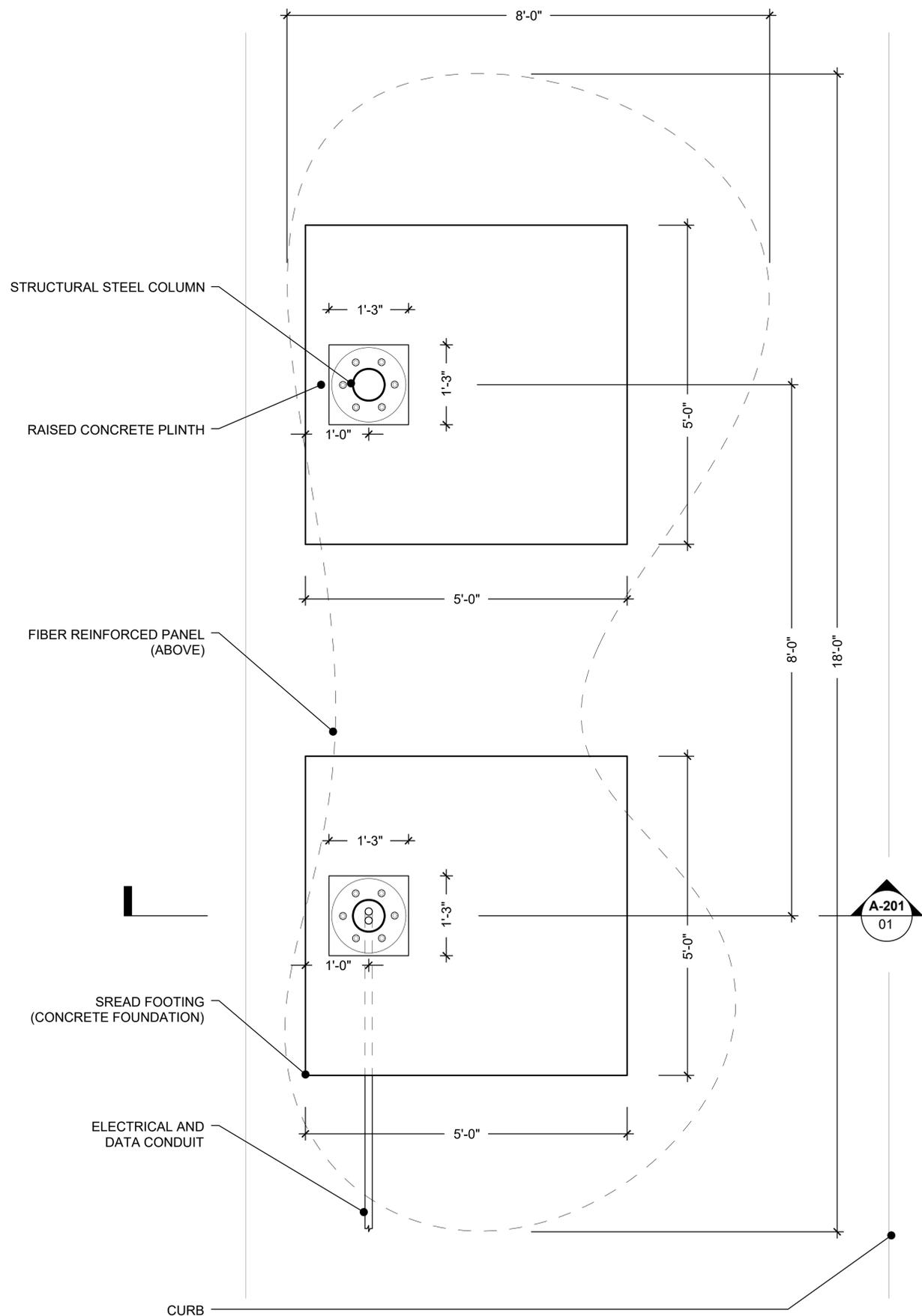
DRAWING SCALE

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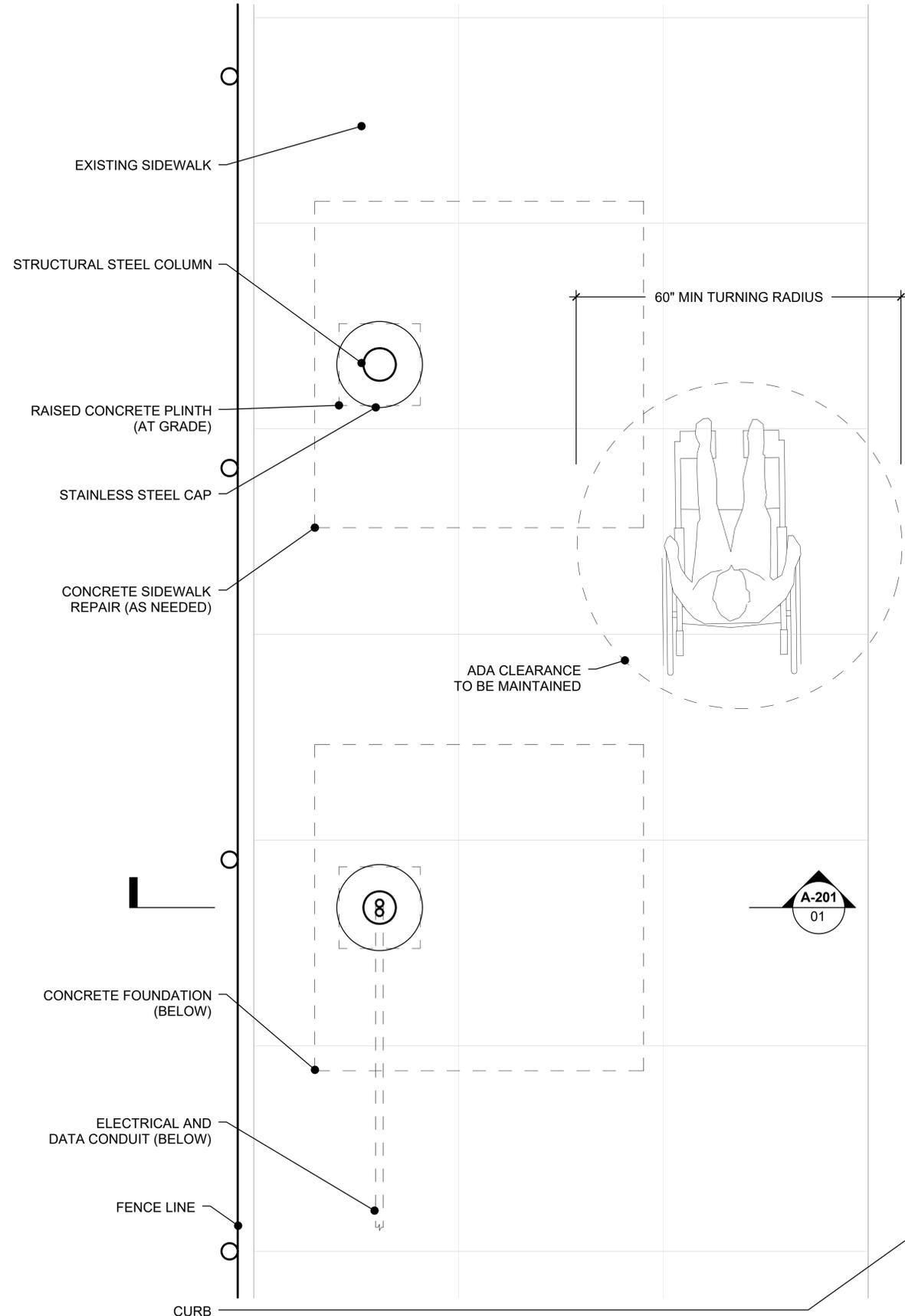
DATE ISSUED

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A-050



01 FOUNDATION PLAN - TYPICAL
Scale: 1" = 1'-0"



02 SIDEWALK PLAN - TYPICAL
Scale: 1" = 1'-0"



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San Francisco, CA 94107
Contact: Jason K Johnson
<info@future-cities-lab.net>
Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
benjamin@darincorotis.com
(510) 604-6059

FABRICATOR

MACHINIC
2325 3rd Street
San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
610 16th Street, Ste 420
Oakland, CA 94612
(510) 839-4568

Thomas Kronenmeyer
thomas@community-design.com

Helene Fried
hfassoc@earthink.net

REVISION NOTES

PAAC MEETING #2
(03/16/2018)

PROJECT NAME

LIGHTCLOUD
SCULPTURAL STREET LIGHTING

1-880 Madison St Underpass
Oakland, CA

FOUNDATION PLAN AND
SIDEWALK PLAN

DRAWING SCALE

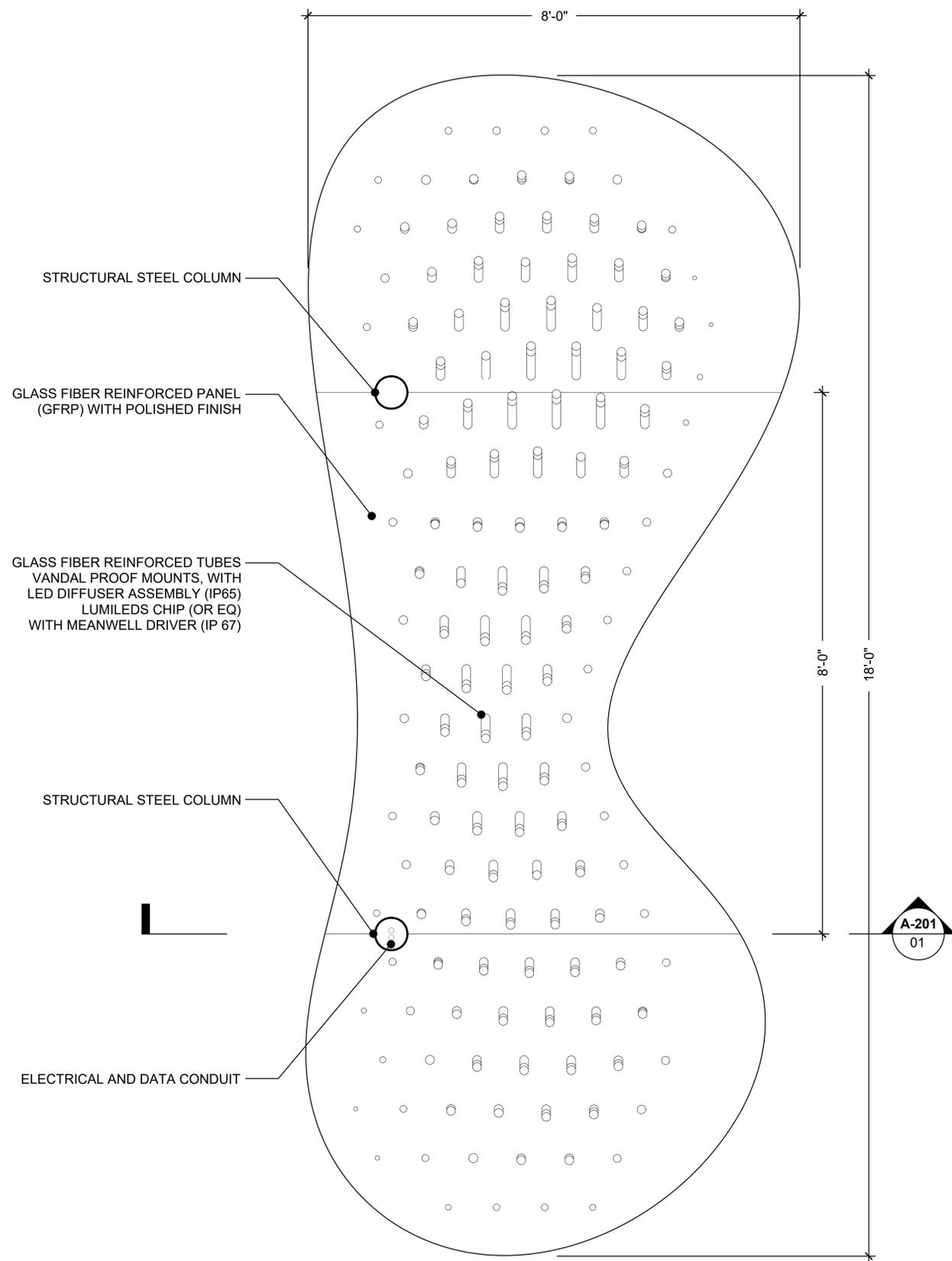
As noted on drawings
Sheet size: 24" X 36"

DATE ISSUED

18.02.16

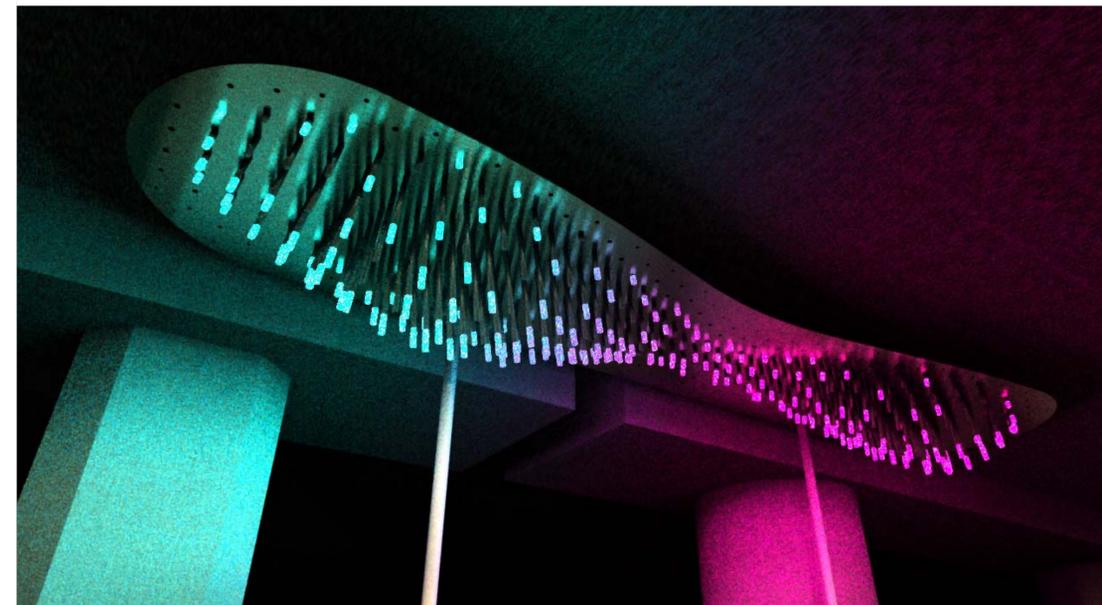
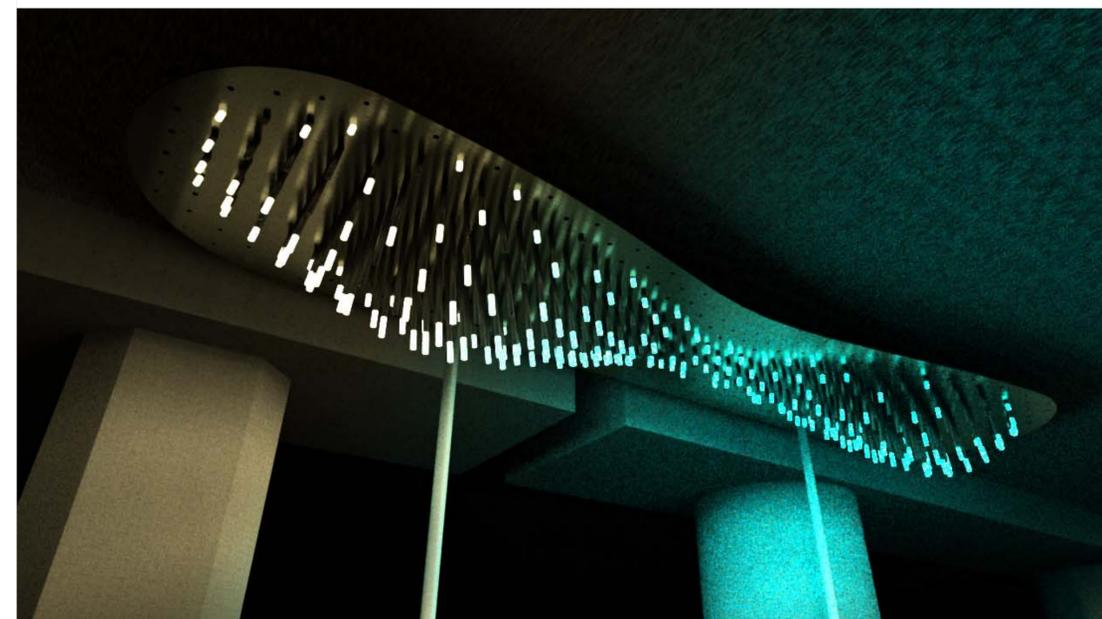
A-100

180215_LIGHTCLOUD_CALTRANS



180215_LIGHTCLOUD_CALTRANS

01 REFLECTED CEILING PLAN - TYPICAL
Scale: 1" = 1'-0"



02 LED COLOR POSSIBILITIES
*NO RED, YELLOW, OR GREEN

GENERAL NOTES

1. VERIFY ALL DIMENSIONS AND SITE DETAILS IN THE FIELD.
2. SHOP DRAWINGS SHOULD BY SUBMITTED BY CONTRACTOR FOR ALL TRACES INCLUDED BUT NOT LIMITED TO STRUCTURAL, ELECTRICAL AND DATA.

LEAD ARTIST

FUTURE CITIES LAB
2325 3rd Street, Suite 229
San Francisco, CA 94107
Contact: Jason K Johnson
<info@future-cities-lab.net>
Phone: (415) 255-4879



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Benjamin Corotis
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(510) 604-6059

FABRICATOR

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2325 3rd Street
San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
610 16th Street, Ste 420
Oakland, CA 94612
(510) 839-4568

Thomas Kronenmeyer
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Helene Fried
hfassoc@earthink.net

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(03/16/2018)

PROJECT NAME

**LIGHTCLOUD
SCULPTURAL STREET LIGHTING**

I-880 Madison St Underpass
Oakland, CA

REFLECTED CEILING PLAN AND
LED COLOR POSSIBILITIES

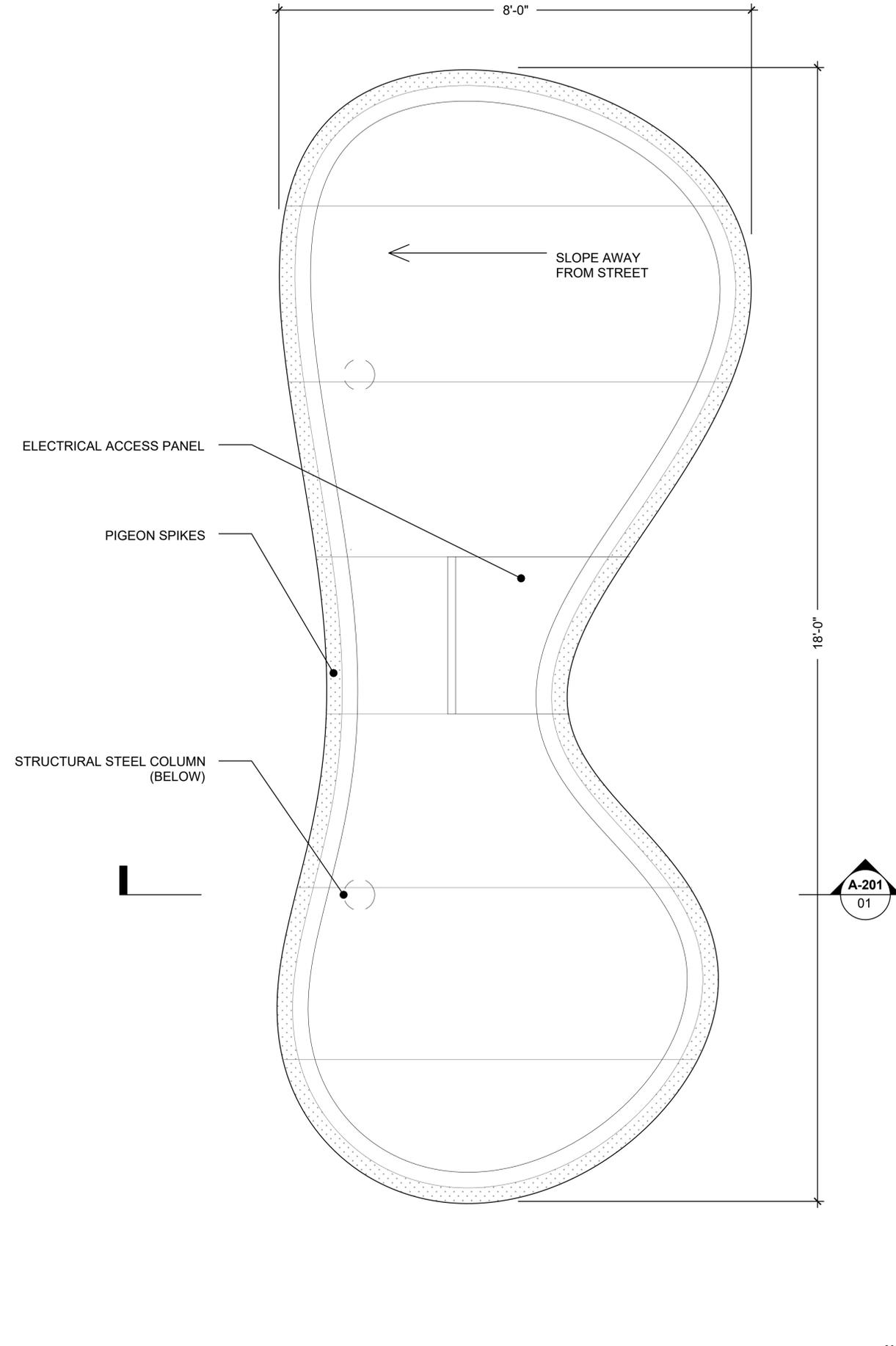
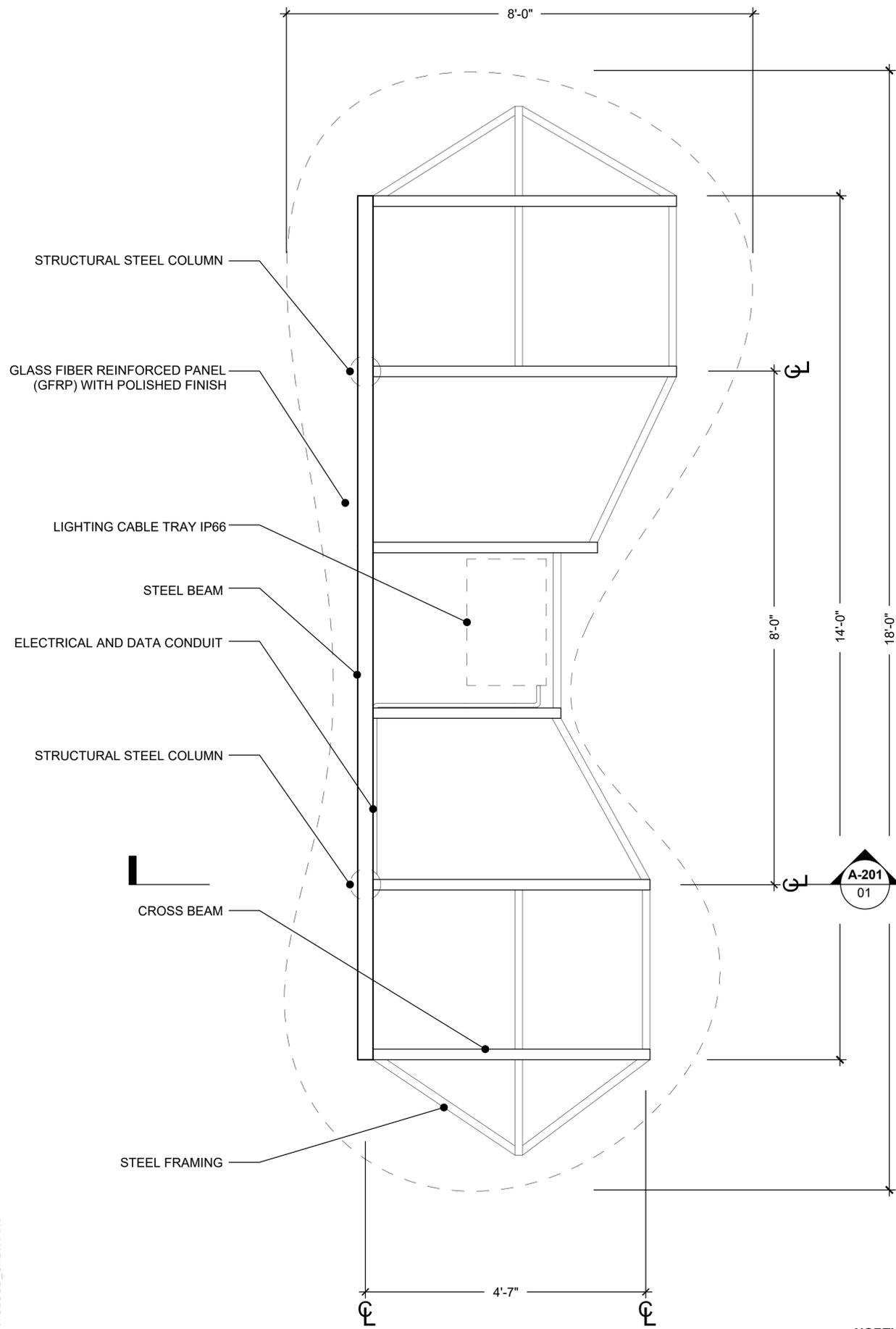
DRAWING SCALE

As noted on drawings
Sheet size: 24" X 36"

DATE ISSUED

18.02.16

A-101



01 FRAMING PLAN - TYPICAL
Scale: 1" = 1'-0"

02 ROOF PLAN - TYPICAL
Scale: 1" = 1'-0"

GENERAL NOTES

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FUTURE CITIES LAB
2325 3rd Street, Suite 229
San Francisco, CA 94107
Contact: Jason K Johnson
<info@future-cities-lab.net>
Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
benjamin@darlingacorotis.com
(510) 604-6059

FABRICATOR

MACHINIC
2325 3rd Street
San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
610 16th Street, Ste 420
Oakland, CA 94612
(510) 839-4568

Thomas Kronenmeyer
thomas@community-design.com

Helene Fried
hfassoc@earthlink.net

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(03/16/2018)

PROJECT NAME

**LIGHTCLOUD
SCULPTURAL STREET LIGHTING**

I-880 Madison St Underpass
Oakland, CA

**FRAMING PLAN AND
ROOF PLAN**

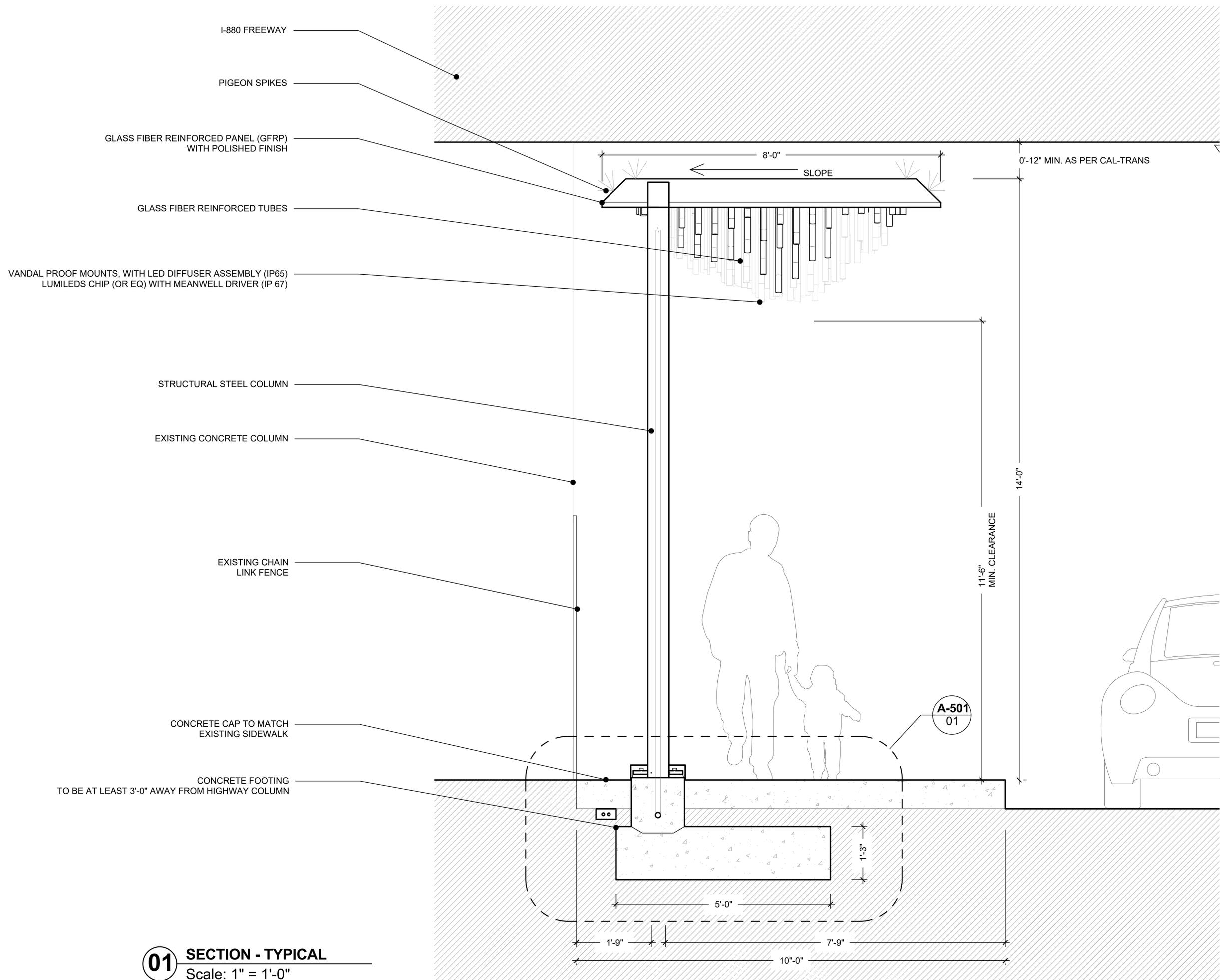
DRAWING SCALE

As noted on drawings
Sheet size: 24" X 36"

DATE ISSUED

18.02.16

A-102



01 SECTION - TYPICAL
Scale: 1" = 1'-0"

GENERAL NOTES

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LEAD ARTIST

FUTURE CITIES LAB
2325 3rd Street, Suite 229
San Francisco, CA 94107
Contact: Jason K Johnson
<info@future-cities-lab.net>
Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
benjamin@daringacorotis.com
(510) 604-6059

FABRICATOR

MACHINIC
2325 3rd Street
San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
610 16th Street, Ste 420
Oakland, CA 94612
(510) 839-4568

Thomas Kronenmeyer
thomas@community-design.com

Helene Fried
hfassoc@earththink.net

REVISION NOTES

PAAC MEETING #2
(03/16/2018)

PROJECT NAME

LIGHTCLOUD
SCULPTURAL STREET LIGHTING

I-880 Madison St Underpass
Oakland, CA

TYPICAL SECTION

DRAWING SCALE

As noted on drawings
Sheet size: 24" X 36"

DATE ISSUED

18.02.16

A-201

GENERAL NOTES

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2. SHOP DRAWINGS SHOULD BE SUBMITTED BY CONTRACTOR FOR ALL TRACES INCLUDED BUT NOT LIMITED TO STRUCTURAL, ELECTRICAL AND DATA.

LEAD ARTIST

FUTURE CITIES LAB
 2325 3rd Street, Suite 229
 San Francisco, CA 94107
 Contact: Jason K Johnson
 <info@future-cities-lab.net>
 Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
 benjamin@darincorotis.com
 (510) 604-6059

FABRICATOR

MACHINIC
 2325 3rd Street
 San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
 610 16th Street, Ste 420
 Oakland, CA 94612
 (510) 839-4568

Thomas Kronenmeyer
 thomas@community-design.com

Helene Fried
 hfassoc@earthink.net

REVISION NOTES

PAAC MEETING #2
 (03/16/2018)

PROJECT NAME

**LIGHTCLOUD
 SCULPTURAL STREET LIGHTING**

I-880 Madison St Underpass
 Oakland, CA

FOUNDATION DETAIL

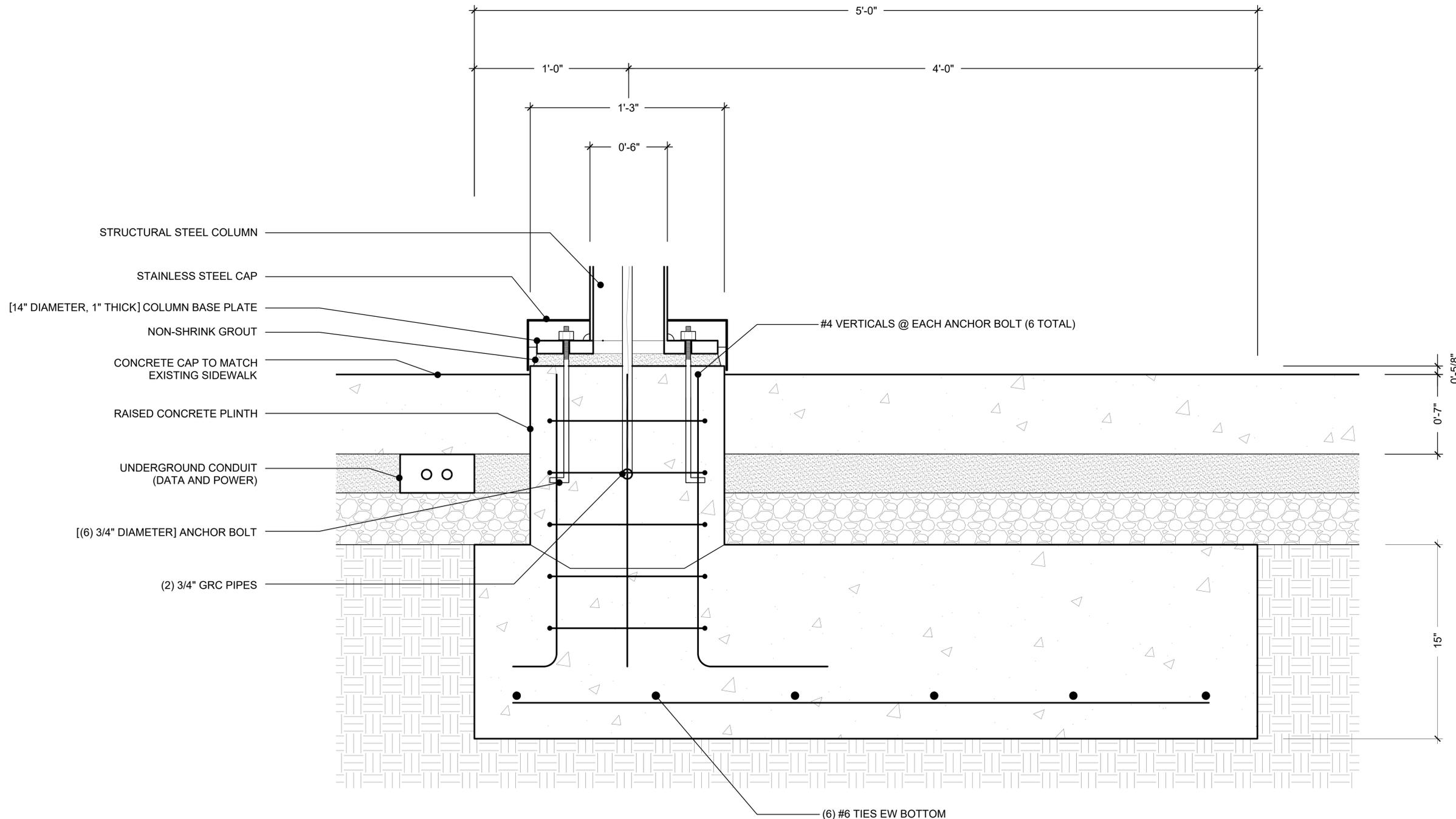
DRAWING SCALE

As noted on drawings
 Sheet size: 24" X 36"

DATE ISSUED

18.02.16

A-501



01 FOUNDATION DETAIL - TYPICAL
 Scale: 3" = 1'-0"





A VIEW NORTH-WEST ALONG I-880



A VIEW NORTH-EAST TOWARD 6TH ST



A VIEW EAST FROM THE NORTH CORNER OF 5TH ST AND MADISON ST



A VIEW NORTH-EAST TOWARD 6TH ST



A VIEW WEST FROM ACROSS 6TH STREET



A VIEW SOUTH-WEST TOWARD 5TH ST



A VIEW SOUTH-WEST TOWARD 5TH ST



A VIEW WEST FROM THE EAST CORNER OF 6TH ST AND MADISON ST



A VIEW ALONG MADISON ST SOUTH, UNDER I-880



A VIEW ACROSS MADISON ST, UNDER I-880



A VIEW ACROSS MADISON ST, UNDER I-880



A VIEW ACROSS MADISON ST, UNDER I-880

GENERAL NOTES

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FUTURE CITIES LAB
 2325 3rd Street, Suite 229
 San Francisco, CA 94107
 Contact: Jason K Johnson
 <info@future-cities-lab.net>
 Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
 benjamin@daringacorotis.com
 (510) 604-6059

FABRICATOR

MACHINIC
 2325 3rd Street
 San Francisco, CA 94107

URBAN DESIGN CONSULTANT

CD+A
 610 16th Street, Ste 420
 Oakland, CA 94612
 (510) 839-4568

Thomas Kronenmeyer
 thomas@community-design.com

Helene Fried
 hfassoc@earthlink.net

REVISION NOTES

PAAC MEETING #2
 (03/16/2018)

PROJECT NAME

**LIGHTCLOUD
SCULPTURAL STREET LIGHTING**

I-880 Madison St Underpass
 Oakland, CA

SITE PHOTOS

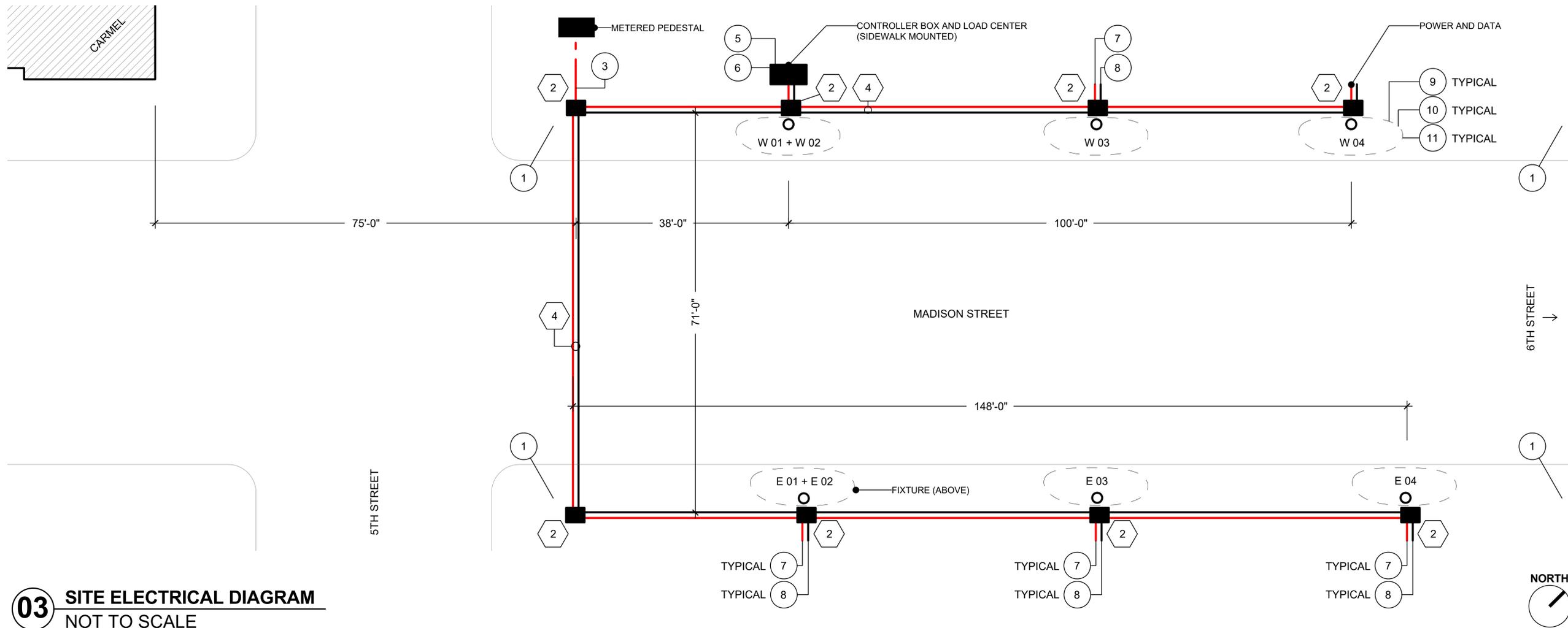
DRAWING SCALE

As noted on drawings
 Sheet size: 24" X 36"

DATE ISSUED

18.02.16

A-900



03 SITE ELECTRICAL DIAGRAM
NOT TO SCALE

GENERAL NOTES

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2325 3rd Street, Suite 229
San Francisco, CA 94107
Contact: Jason K Johnson
<info@future-cities-lab.net>
Phone: (415) 255-4879



GENERAL CONTRACTOR

STRUCTURAL ENGINEER

Benjamin Corotis
benjamin@darlingacorotis.com
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FABRICATOR

MACHINIC
2325 3rd Street
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URBAN DESIGN CONSULTANT

CD+A
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Oakland, CA 94612
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PAAC MEETING #2
(03/16/2018)

PROJECT NAME

**LIGHTCLOUD
SCULPTURAL STREET LIGHTING**

I-880 Madison St Underpass
Oakland, CA

ELECTRICAL DIAGRAM

DRAWING SCALE

As noted on drawings
Sheet size: 24" X 36"

DATE ISSUED

18.02.16

E-101

SECTION	PANEL ID	ARTWORK PANEL TYPE	X PANEL QUANT	Y PANEL QUANT	Z PANEL QUANT	# OF LED UNITS	DMX CHAN PER LED UNIT	DMX CHANS	GROUND J-BOX	POWER	MAX AMPS	CIRCUIT ID	POWER + DATA SUPPLY UNITS
E1	1	X	1			12	120	1440		240VAC	3	1	1
E1	2	Y		2		12	120	1440		240VAC	5	1	0.5
E1	3	Z			2	6	120	720	1	240VAC	5	1	0.5
E2	4	X	1			12	120	1440		240VAC	3	2	1
E2	5	Y		2		12	120	1440		240VAC	5	2	0.5
E2	6	Z			2	6	120	720	1	240VAC	5	2	0.5
E3	7	Y	1			12	120	1440		240VAC	5	3	1
E3	8	X		2		12	120	1440		240VAC	5	3	0.5
E3	9	X			2	6	120	720	1	240VAC	5	3	0.5
W1	10	Y	1			12	120	1440		240VAC	3	4	1
W1	11	Z		2		12	120	1440		240VAC	5	4	0.5
W1	12	Y			2	6	120	720	1	240VAC	5	4	0.5
W2	13	X	1			12	120	1440		240VAC	3	5	1
W2	14	Y		2		12	120	1440		240VAC	5	5	0.5
W2	15	X			2	6	120	720	1	240VAC	5	5	0.5
W3	16	X	1			12	120	1440		240VAC	3	6	1
W3	17	Y		2		12	120	1440		240VAC	5	6	0.5
W3	18	Z			2	6	120	720	1	240VAC	5	6	0.5
		Computer								120VAC	5	7	NA
		Spares								NA		8	NA
		Totals	6	12	12	180		21600	6	0	85	8	9.5

01 ELECTRICAL SCHEDULE

SITE ELECTRICAL - OAKLAND UNDERPASS	
1	Existing In-Slab J-Box (Oakland Street Signal)
2	Proposed 18" x 18" x 12" Concrete Polymer Flush Type In-Slab Junction Box with Power / Data Divider
3	Under Ground Conduit Run Type 1 (Electrical)
4	Under Ground Conduit Runs Type 1 (Electrical) and Type 2 (Data)
5	Load Center - 100A min, 120/240V, 1 PH, 8 SP - Circuits #1,2,3,4,5,6 are 240VAC 20A; Circuits #7 is 120VAC 20A; Circuit #8 is a spare
6	Waterproof Enclosure for Lighting Controller
7	Power 3/4" RMC (Rigid Metal Conduit) 10AWG min wire size for 3 wire, 12AWG for 2 Wire
8	CAT6 Ethernet in 3/4" RMC (Rigid Metal Conduit)
9	Philips Leader Cable in 3/4" LFMC (Liquid-Tight Flexible Metal Conduit) Connecting AB panels
10	Philips Leader Cable exposed (Only within IP67 Artwork Panel)
11	PDS or DEP (Intergrated Power and Data Supplies by Philips or similar)
	- AC Power distributed in Rigid Metal Conduit to the first panel each section
	- AC Power is then distributed in a daisy chain to each the Power + Data Supply Units
	- Data (CAT6) is distributed in a daisy chain from the computer to each Power + Data Supply Units sequentially
	- Cables between LED fixtures carry both AC Power and data.
	Note: Seal all points of entry to prevent water infiltration. Use RTV silicone + weatherproof J-boxes.
	COMPUTER (Pharos VLC 50, or similar)
	- Refer to Product Documentation for detailed wiring and safety information
	- Artist to provide computer and Stainless Steel enclosure (Size TBC)
	- Must be located in Safe, Secure and climate stable location. Safe Operating Temperature: 0°C to 50°C (32°F to 122°F)
	- IP40 Ingress rating; UL Certified; Humidity Range: 10-50% relative, non-condensing
	- 19" Rack Mount, 13.5" deep, ~1.75" High; 3.1 kg (6.8 lbs)
	- Power and Data always separate: Use single KO for 120 VAC; Use single KO for Data Out
	- VLC50 Video Lighting Controller 50 (25,600 channels eDMX)
	POWER + DATA SUPPLY UNITS (PDS-400 48V EO UL, or similar)
	- Refer to Product Documentation for detailed wiring and safety information
	- Units, cables and leader cables Provided by Artist
	- Cast Aluminum Housing is IP66 suitable for Wet Locations; UL Certified
	- Power is daisy-chained within each circuit section
	- Each of the artwork's panel's Data is also daisy-chained to its neighbor
	- All Power and Data conduit after PDS to be 3/4" LFMC
	- Unit has 3/4" threaded holes in NPT for Power; RTV Silicone to seal
	- Unit has 1/2" threaded holes in NPT for Data (Use reducer to connect) RTV Silicone to seal

02 GENERAL NOTES

ATTACHMENT D

Checklist #11: Maintenance Plan



February 16, 2018

Kristen Zaremba
Cultural Affairs Division, Economic and Workplace Development
City of Oakland
1 Frank Ogawa Plaza, 9th Floor
Oakland, CA 94612

RE: Supplemental Packet Checklist – Public Art for Private Development Maintenance Obligations

Dear Ms. Zaremba,

CP V JLS, LLC is committed to on-going operation and maintenance of the proposed Light Cloud public art piece on Madison Street between 5th and 6th streets beneath the I880 overpass. We recognize that this is City managed/operated property within Caltrans ROW and as such, the City will be obligated to Caltrans for maintenance of the improvements. CP VI Franklin, LLC will be the party ultimately responsible for maintenance of the art piece consistent with the requirements of the Public Art for Private Development ordinance requirements.

Please contact me with any questions and thank you for your assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read 'GP', is written over the typed name 'Greg Pasquali'.

On behalf of CP V JLS LLC
Greg Pasquali



LIGHTCLOUD

**I-880 Underpass, Madison Street, between 5th and 6th
Oakland, CA**

***** DRAFT *** ARTWORK INSTALLATION, OPERATING AND MAINTENANCE MANUAL**

ARTIST CONTACT:

FUTURE CITIES LAB / MACHINIC LLC
Jason Kelly Johnson
info@future-cities-lab.net
(415) 255-4879

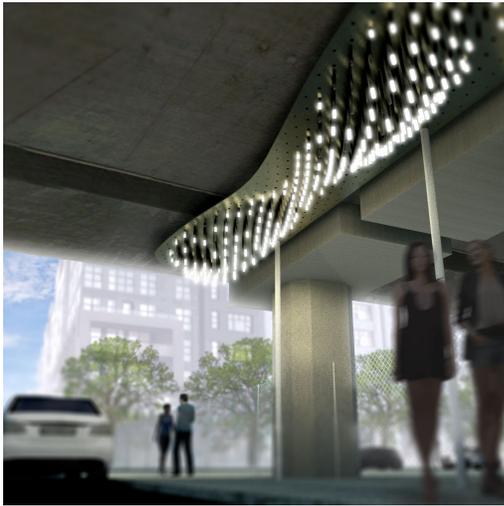
CLIENT CONTACT:

CARMEL PARTNERS
Greg Pasquali
gpasquali@carmelpartners.com
(415) 231-0221

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1. About the Artwork	3
2. Operating Procedures	
Recommended Artwork Operation	4
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3. Maintenance Procedures	
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How to change an LED Rod	8
5. Technical Reference	
Lightcloud Master Schedule	9
Electrical Components Spec Sheets (See Pages ## - ##)	x
Cable tray Electronics and Wiring Diagrams (See Pages ## - ##)	x
6. Exhibit A: Project Maintenance Instructions	10
7. Exhibit B: Attic Stock Parts	11

1. About the Artwork



LIGHTCLOUD

<http://www.future-cities-lab.net/lightcloud>

Lightcloud translate sounds from the highway underpass into unique formations of dynamically patterned light. Slowly changing ambient effects are triggered by the sound of passing people, cyclists and cars from the two neighborhoods and I-880 above. Lightcloud animates the underpass with variable intensities of computer-controlled LED illumination and creates a meditative, interactive and dynamic experience for pedestrians. It is a first step towards weaving the neighborhood together. Similar to the dancing motion of a Chinese celebration dragon, waves of light oscillate through Lightcloud. The quality and placement of lighting elements will enhance safety and comfort. Ambient light levels can also be increased during the evening and will enhance the overall ambiance of the area to ensure visibility of pedestrians by motorists.

Artists:

Jason Kelly Johnson & Nataly Gattegno
Future Cities Lab, San Francisco

Date completed: TBD

Suspended Artwork Materials: Stainless Steel, Cast Acrylic, LEDs. For additional Materials and components see Global Components Schedule. Fabricated and assembled by the artists in artists' studio.

Structural materials: Carbon Steel (Galvanized, 2-part Epoxy Coated), Stainless Steel. Fabricated by TBD.

2. Operating Procedures

Recommended Artwork Operation [** To Be Finalized when we know artwork type **]

- The artwork LED should be left on continuously.
- [More info as developed]

Startup Procedure [** To Be Finalized when we know location of hub **]

1. Turn on circuit breaker for main control hub, located on x side (see plan below for load center locations) . Circuit breaker is labeled for hub.
2. Turn on circuit breakers for each section of artwork. North load center is located on North side, South load center is located on South side. Circuit breaks are labeled for each section: North 1, North 2, North 3, South 1, South 2, South 3
3. Verify all LEDs are illuminated and active.

Shutdown Procedure

1. Turn artwork off at breakers. Circuit breaks are labeled for each section allowing individual sections to be turned off at a time if necessary.

For additional information, refer to electrical drawings and consult with Artist.

INSERT Site Plan Here locating Hub and Artwork Sections

3. Maintenance Procedures

**** NOTE:** All inspections to be performed by Client, or Client representative

Exterior Inspection / Cleaning

STRUCTURE: In accordance with the attached Exhibit A, the exterior of the structure must be visually inspected.

- This inspection includes looking for areas of rust and corrosion on the metal
- Ensuring that all fasteners are tight and in place
- Touch-up painting as necessary
- Remove any visual signs of nesting by animals

FIXTURES: In accordance with the attached Exhibit A, the LEDs and LED components must be visually inspected.

- Place the system in test mode before checking the LEDs
- LEDs should first be checked for functionality including on and off and brightness
- LED cables and wires should be inspected for damage
- LED rods should be checked to see if they are still fastened tightly to the structure

CLEANING: The structure and light loops should be cleaned in accordance with the attached Exhibit A.

- Cleaning can be accompanied by lightly power washing the structure and loops with soap and water. Direct or extreme water pressure should be avoided on all surfaces. If the structure has an extreme amount of build-up, soft brushes and sponges can be used. Keep water away from DMX boxes and the Main Electrical Cabinet. High pressure water should never be pointed directly at the installation.
- In case of graffiti on stainless steel: Use non-powerful, non-toxic graffiti cleaner Lightly rub with a Scotch Brite sponge.
- In case of physical damage of stainless steel 60 days post-installation: Consult with Artist
- In case of pencil, pen or paint marks on LED rods: Clean with soap and water or non-abrasive plastic safe cleaners

Interior Inspection / Cleaning

CABLE TRAYS: In accordance with the attached Exhibit A, the Cable Trays should be periodically inspected and cleaned.

- Inspect the outside of the enclosure for damage
- Visual inspection of exterior cable connecting from cable tray to LEDs. Make sure screw connector is tight.

DMX BOXES: In accordance with the attached Exhibit A, the DMX Boxes should be periodically inspected and cleaned.

- Inspect the outside of the enclosure for damage
- Open the enclosure and check for leak marks. If leaks are occurring replace the gasket or entire box
- Check for corrosion and rust
- Remove any visible particulates with a vacuum or rag
- Avoid water within the enclosure
- Check and tighten any connections
- Check to make sure boxes are securely fastened after inspection and cleaning

MAIN ELECTRICAL CABINET: In accordance with the attached Exhibit A, the Main Electrical Cabinet should be periodically inspected and cleaned.

- A licensed electrician should be used for all inspections and cleaning of the Main Electrical Cabinet
- Do not inspect or clean the cabinet while the cabinet is energized
- A licensed electrician should check for rust, corrosion and clean any particulates from the enclosure
- The licensed electrician will be able to inform the Owner of any repairs that may be necessary
- Check to make sure box is securely fastened after inspection and cleaning

4. Troubleshooting

General Notes on functionality of light fixtures

- If functioning properly, all light fixtures should be animated and changing colors and patterns.
- The artwork should be responding to traffic overhead and people in the underpass [**** To Be Finalized after further development**].
- If individual or groups of fixtures are off, this most likely indicates the fixtures are not receiving power.
- If individual or groups of fixtures are frozen in one color, this most likely indicates the fixtures are not receiving data.

The source of many issues may be narrowed down with the following understanding of power and data distribution. Please also refer to electrical drawings provided by Artist.

- AC Power is distributed to each section of the artwork via underground conduit and runs up one of the four columns to each section. AC power is then distributed from a main Power Junction in a daisy chain to each cable tray via smaller junction boxes.
- Data and sensor line are distributed to each section of the artwork via underground conduit and up one of the columns for each section. The dmx data is distributed through the DMX Splitter and daisy chained through the DMX Decoders in a branching pattern from the Splitter. The last decoder in each Tray connects to the first decoder in the next.
- LEDs are connected to their respective decoders in numerical order.

Possible problems

- **Problem: Single LED Rod not illuminated or flickering.**
Cause: Damage to LED Rod , Bad LED
 1. Replace LED (see instructions on How to replace LED on page x)
- **Problem: LED Animations appear to be frozen, artwork not responding to triggers.**
Cause: Pharos Controller not working
 1. Power down Controller, wait 20 seconds, Repower Controller
 2. Contact Artist for remote management/ external reboot.
 3. Contact Pharos support.
- **Problem: One or multiple sections of the artwork are off.**
Cause: Tripped breaker
 1. Reset breakers in appropriate load centers.

- **Problem: Artwork will not turn on at all.**

Cause 1: Controller issue.

Cause 2: No power to artwork.

1. Check status of controller in Main Control Hub.
2. If OFF: Check breaker status for power to Control hub and Artwork
3. If ON: Check status indicator lights on Pharos.
 - a. If Active: Connections between Control Hub and Artwork Sections have been damaged: Contact Artist.

- **Problem: Artwork does not seem to be responding to Humans**

Cause: Sensors Blocked

1. Check that sensors are clear of debris, dirt, or other foreign objects.
2. Check for status light on sensor
 - a. If On: Call artists for remote management.
 - b. If OFF (but LEDS illuminated): Replace sensor.

How to change an LED Rod [** TBD later **]

1. Turn off power to artwork section at breaker.
2. Loosen set screws on Aluminum channel holding LED.
3. Unplug connector at Between LED and steel lattice
4. Take a replacement LED strip from attic stock kit.
5. Measure length of LED removed from artwork.
6. Cut New LED to same length as the one removed.
7. Place the new LED into the Aluminum channel and tighten set screws to hold in place.
8. Reconnect LED with connector coming from steel lattice
9. Turn power back on to Artwork Section at breaker
10. Verify new LED is working as should be.

*** ADD PICTURES TO BE TAKEN DURING INSTALL WITH NOTATIONS *****

5. Technical Reference

ATTACH SPECS FOR [To Be Finalized]:

Lightcloud Master Schedule Link	
Electrical Components Spec Sheets	
Pharos Equipment Pharos LPC Pharos PoE Pharos RDM Wiring Diagrams	
Enttec RDM DMX Splitter	
LED Type	
Meanwell Power Supplies	
Lightcloud Wiring and Connection Diagrams for cable trays North South	

EXHIBIT A: PROJECT MAINTENANCE INSTRUCTIONS

**** NOTE:** All inspections to be performed by Client, or Client representative

12 Months After Installation			
Exterior & Functions		General visual inspection of materials and functioning	
		Visual Inspection	Solution
	Main Electrical Cabinet DMX Boxes Cable Trays	Corrosion	Maintenance
		Leakage Marks	Maintenance
		Particulates	Cleaning
	Structure	Corrosion	Maintenance
		Paint defects	Maintenance
		Dirt on Stainless Steel Loops	Cleaning
		Nesting	Cleaning
	Fixtures	Defect of LEDs	Replacement
	* System in Test Mode *	Dirt on LED Loops	Cleaning

24 Months After Installation			
Exterior & Functions		General visual inspection of materials and functioning	
		Visual Inspection	Solution
	Main Electrical Cabinet DMX Boxes Cable Trays	Corrosion	Maintenance
		Leakage Marks	Maintenance
		Particulates	Cleaning
	Structure	Corrosion	Maintenance
		Paint defects	Maintenance
		Dirt on Stainless Steel Loops	Cleaning
		Nesting	Cleaning
	Fixtures	Defect of LEDs	Replacement
	* System in Test Mode *	Dirt on LED Loops	Cleaning

EXHIBIT B: ATTIC STOCK PARTS

The artists have supplied Client with general attic stock to ensure that the artwork LEDs can be replaced during the first year of operation. Attic stock will be provided in a labelled box. We recommend contacting Artist by e-mail so they can advise on replacing any of the items marked with a * below. These starred items should be replaced by a licensed electrician or person experienced with DMX LED systems.

- 1. *6 DMX Decoders**
- 2. *3 DMX LED Drivers**
- 3. 6 LED rods**

All Attic Stock parts will be warrantied in accordance with the Fabrication Agreement signed by Artist and Client.

ATTACHMENT E

Checklist #13: Community Outreach Documentation

SIGN IN SHEET

Please provide Name and Contact Info so we can keep you informed of progress

NAME	ADDRESS LIVE OR WORK IN JACK LONDON?	PHONE	EMAIL
Ernest & Henrietta Goldsby	222 Broadway #1005	510 333 8945	hennetta@oldsby@gmail.com
Kristen Zaremba	City-Cultural Affairs	510 238 2155	kzaremba@adclandnet.com
Tim Phillips	28 th 4 th Street, Suite 201	510 986 0111	tim@gyroscopeinc.com
PAUL WARNER	311 OAK ST #508	415.637.3998	PAUL@SAGEMODERN.COM
JUDY MORAN	373 4th St #3A		judmoran21@gmail.com
PAUL THYSSEN	222 BROADWAY #710	415-298-5810	paul@jackjondonoakland.org
Greg Annis	240 3rd Street Apt 308	925.516.0339	gannis.ga@gmail.com
Ben DELANEY	407 MLK 94607	510 419 0800	ben@bendelaney.com
Chadi Chazbel	1111 Broadway 9th fl. 94607	510 587 8620	cchazbel@hntb.com
Gary Knecht			
CARL CHAN	621 MADISON ST. 94607	510 835-3333	CHAN@CARL@SBCGLOBAL.NET
Kevin Khoo	311 Oak St #810	510 309 2670	Kevin.khoo.2003@gmail.com
Flora Law	1111 Broadway 9th fl	510 587 8621	FLAW@HNTB.COM
Don McBirney	1999 Harrison St. 1750	510-433-5847	DON.MCBIRNEY@COLLIERS.COM
Rebecca Chetouras	737 2nd St. #205		Rchetouras@gmail.com
CK Kuebel	407 M. L. King		ck@kuebel.com
Sarlan Hauser	333 B'way	510 388 4412	Sarlan@jacklondonoakland.org

ATTACHMENT F

Checklist #14: Timeline

LIGHT CLOUD
 JLS 4th & Madison Public Art
Conceptual Timeline

Updated 2/16/18

	2017					2018												2019		
	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March
DESIGN																				
Conceptual																				
Schematic																				
Design Development																				
Shop Drawings																				
OUTREACH, APPROVALS AND PERMITS																				
RFP Process																				
City and Caltrans Stakeholder Meetings																				
PAAC 1																				
Community Meeting																				
PAAC 2																				
Oakland Encroachment Permit Process																				
Caltrans Encroachment Permit Process																				
FABRICATION AND INSTALLATION																				
Fabrication																				
Installation																				
Operational																				