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ISSUE	DATE
PLANNING STUDY SESSION	061518
PLANNING RESUBMITTAL	112918
PLANNING RESUBMITTAL	080219
STUDY SESSION PACKAGE	102419
PLANNING COMMISSION	062520

ARCHITECT

ch x tld
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MODULAR FABRICATOR

APPROVAL STAMP

1034-1042 47TH STREET
EMERYVILLE, CA
94608

COVER

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PAINTED METAL TRIM
PLANTER

STAINED CEDAR
EAVES

SMOOTH INTEGRAL
COLOR STUCCO
(WHITE)

COMPOSITE SIDING
WOOD TEXTURE, STAIN

FIBERGLASS WINDOWS
MARVIN ESSENTIAL
(DARK BRONZE COLOR)

WOOD ENTRY DOOR
SIMPSON DOORS



a new sustainable prefab construction project in emeryville

APN:	PARCEL 2, 49-1175-008-3
TOTAL LOT AREA:	13,245 SQ. FT. (PER LOT LINE ADJUSTMENT)
ZONING:	RM - MEDIUM DENSITY RESIDENTIAL
BUILDING CODE INFORMATION	
OCCUPANCY TYPE:	R-3
CONSTRUCTION TYPE:	VB
SPRINKLERED:	YES



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7	RENDERING
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A-0.0 COVER AND MATERIALS	L1 LANDSCAPE PLAN		
A-0.1 PROJECT INFO			
A-0.2 EXISTING SITE PHOTOS	I 1.1 IRRIGATION PLAN		
A-0.5 MASSING VIEWS	I 1.2 IRRIGATION DETAILS		
	I 1.3 IRRIGATION DETAILS		
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A-4.1 EXTERIOR ELEVATIONS			

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OWNER	ARCHITECT	PLANNING CONSULTANT	SURVEY/CIVIL
F.E. FORBES COMPANY, INC. 1795 SOLANO AVENUE BERKELEY, CA 94707 T. 510.526.7933 CONTACT: MARK FORBES E. mforbes@feforbes.com	TOBY LONG DESIGN 6114 LA SALLE AVE #552 OAKLAND, CA 94611 T. 415.905.9030 X1 C. 510.333.3447 CONTACT: TOBY LONG, AIA E: toby@tobylongdesign.com	RHOADES PLANNING GROUP 46 SHATTUCK SQUARE BERKELEY CA, 94704 T. 510.545.4341 CONTACT: MARK RHOADES JEAN EISBERG E: mark@rhoadesplanninggroup.com jean@rhoadesplanninggroup.com	TRIAD/HOLMES ASSOCIATES 873 NORTH MAIN ST. #150 REDWOOD CITY, CA 93514 T: 760.873.4273 F: 760.873.8024 CONTACT: ANDREW HOLMES E: aholmes@thainc.com
LANDSCAPE / ARBORIST			GEN CONTRACTOR
INSIDE OUT 6000 HARWOOD AVENUE OAKLAND, CA 94618 T: 510.655.7674 F: 510.655.7673 CONTACT: PENNELL PHILLIPS E: penn@aboutinsideout.com			MODULAR FABRICATOR

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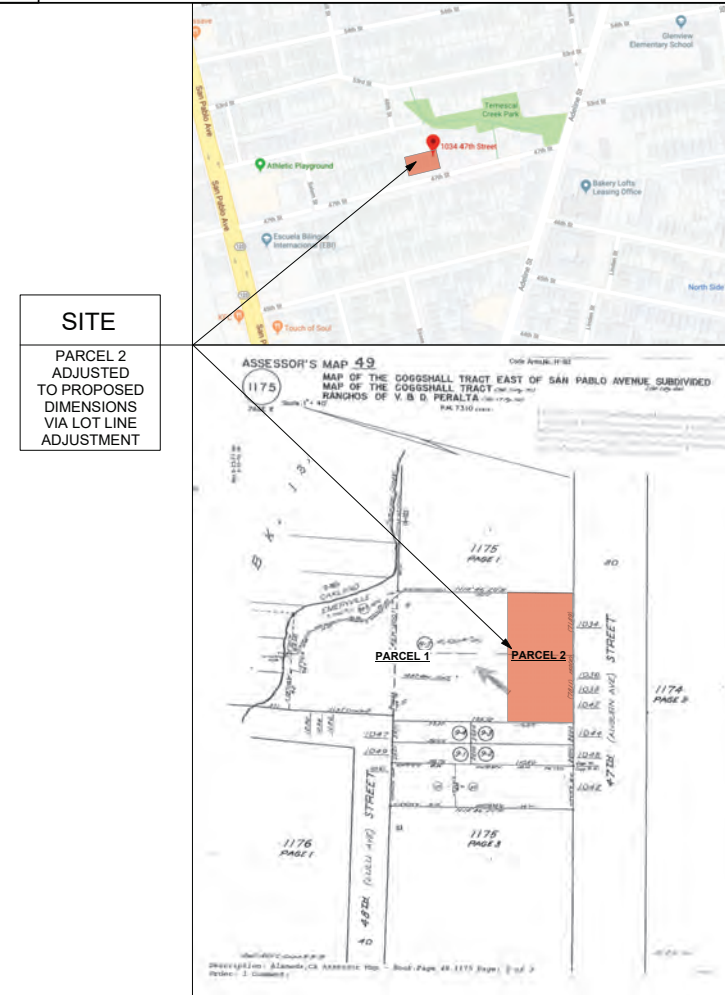
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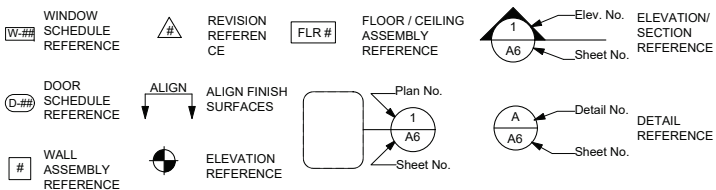
1	PROJECT DESCRIPTION
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2	VICINITY MAP / PARCEL MAP
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2019 CA BUILDING CODE 2019 CA MECHANICAL CODE 2019 RESIDENTIAL CODE
 2019 CA ENERGY CODE 2019 CA PLUMBING CODE
 2019 CA GREEN CODE 2019 CA ELECTRICAL CODE

3	CODE REFERENCE
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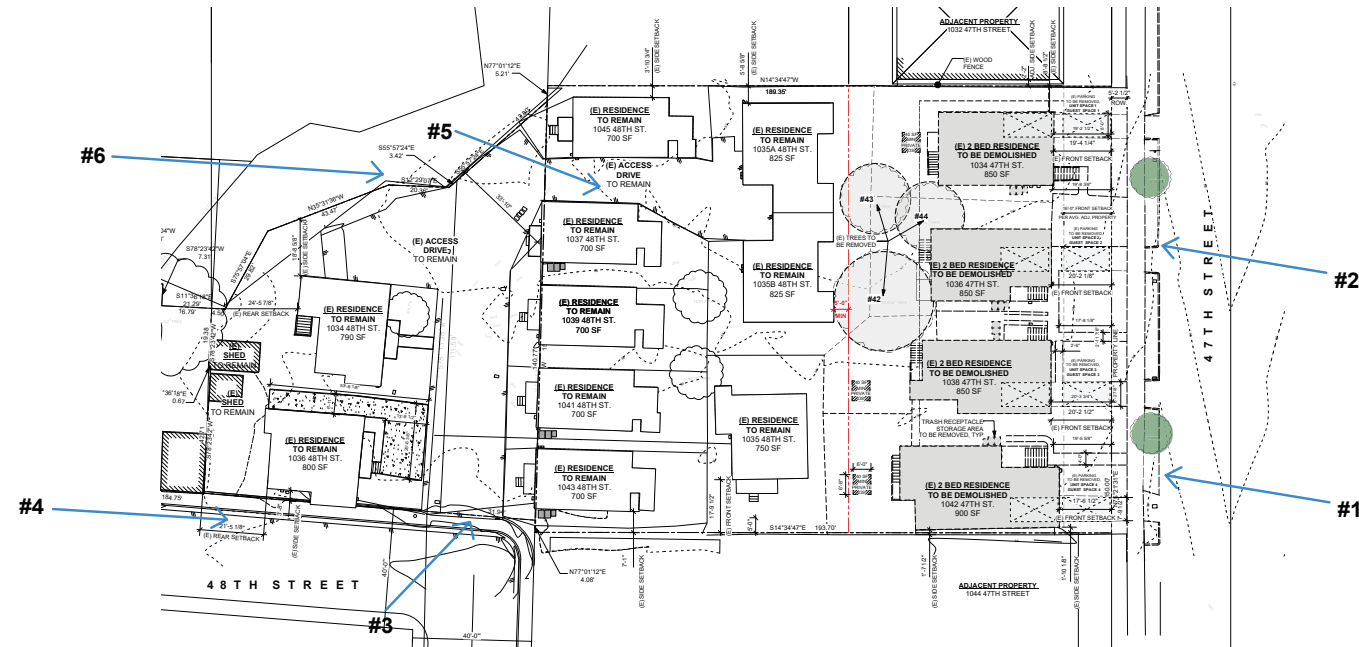
4	SYMBOLS
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PROJECT INFORMATION

9	CONTACT INFO
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PARCEL 2 - UNIT SUMMARY																			
(N/E)	ADDRESS	UNIT LIVING AREA (SF)		BEDROOMS		PRIVATE OPEN SPACE (40 SF. REQ / UNIT)		COMMON OPEN SPACE (20 SF. REQ / UNIT)		TOTAL OPEN SPACE (60 SF. REQ / UNIT)		AUTO PARKING RESIDENT (1 REQ / UNIT)		AUTO PARKING GUEST (0.2 REQ / UNIT)		LONG TERM BIKE PARKING (1 REQ / UNIT)		SHORT TERM BIKE PARKING (1 REQ / 4 AUTO GUEST)	
		EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
NEW	1034A 47th ST (2 BED)	0	810	0	2	0	486	0	80	0	566	0	1	0	0.167	0	2	0	N/A
NEW	1034B 47th ST (2 BED)	0	1,150	0	2	0	255	0	80	0	335	0	0	0	0.167	0	2	0	N/A
NEW	1036A 47th ST (2 BED)	0	810	0	2	0	431	0	80	0	511	0	0	0	0.167	0	2	0	N/A
NEW	1036B 47th ST (2 BED)	0	1,150	0	2	0	255	0	80	0	335	0	0	0	0.167	0	2	0	N/A
NEW	1038A 47th ST (2 BED)	0	798	0	2	0	436	0	80	0	516	0	1	0	0.167	0	2	0	N/A
NEW	1038B 47th ST (2 BED)	0	1,150	0	2	0	255	0	80	0	335	0	0	0	0.167	0	2	0	N/A
TOTAL NEW		0	5,868	0	12	0	2118	0	480	0	2598	0	6	0	1.00	0	12	0	4
(E)	1034 47th ST (2 BED)	850	DEMO	2	N/A	40	N/A	(E) NON-CONFORMING	N/A	N/A	1	N/A	1	N/A	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING
(E)	1036 47th ST (2 BED)	850	DEMO	2	N/A	40	N/A	(E) NON-CONFORMING	N/A	N/A	1	N/A	1	N/A	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING
(E)	1038 47th ST (2 BED)	850	DEMO	2	N/A	40	N/A	(E) NON-CONFORMING	N/A	N/A	1	N/A	1	N/A	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING
(E)	1042 47th ST (2 BED)	900	DEMO	2	N/A	40	N/A	(E) NON-CONFORMING	N/A	N/A	1	N/A	1	N/A	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING	(E) NON-CONFORMING
TOTAL EXISTING TO DEMO		3,450	0	8	0	160	0	0	0	0	4	0	0	0	0	0	0	0	0

REFERENCE MAP



PHOTOS



#1: Looking north at 1042 47th Street (left) and 1038 47th Street (right): two westernmost units proposed for redevelopment



#2: Looking north at 1036 47th Street (left) and 1034 47th Street (right): two easternmost units proposed for redevelopment



#3: Looking east along drive aisle extending from 48th Street – middle units proposed to remain



#4: Looking southeast along 48th Street – rear unit and detached garage proposed to remain



#5: Looking south from drive aisle extending from 48th Street – middle units and garages proposed to remain



#6: Looking south from Temescal Creek Park multi-use trail – middle units proposed to remain



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EXISTING SITE
PHOTOS

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STREET VIEW
LOOKING NORTH



AERIAL REAR VIEW
LOOKING SOUTH



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MASSING

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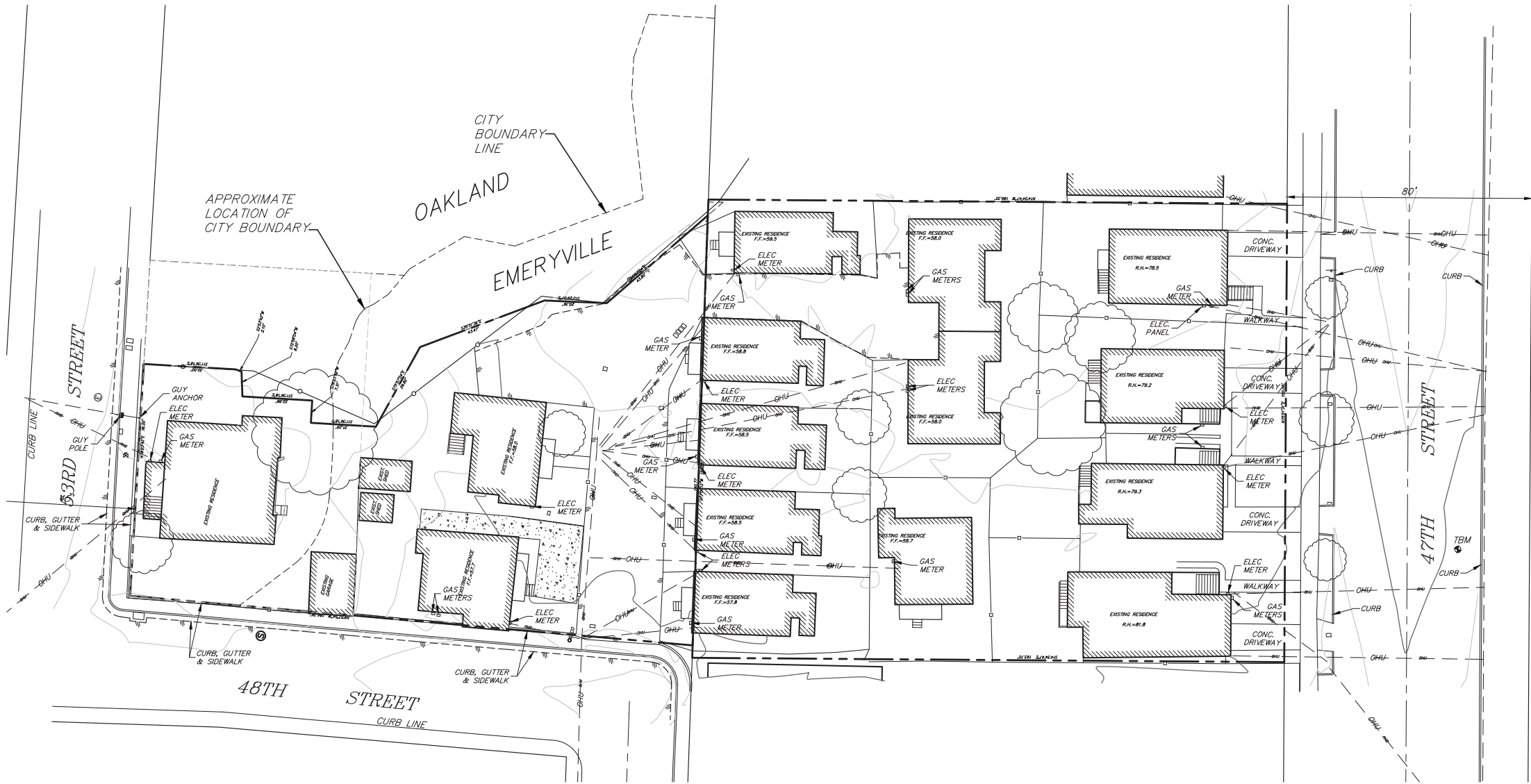
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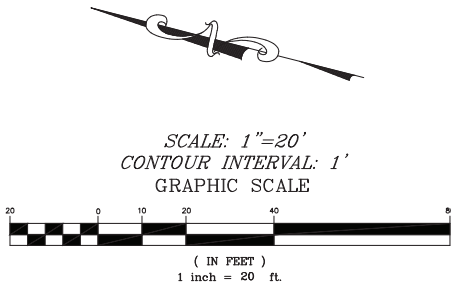
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Z:\09 RWC\09-1807 47th St Emeryville\From Redwood City\09-1807\09-1807 47th & 53rd St topog.dwg Apr 30,2020 - 11:37am, sll



LEGEND

- PROPERTY LINE
- CENTERLINE
- EDGE OF PAVEMENT
- SSCO SANITARY SEWER CLEANOUT
- SEWER MANHOLE
- GAS VALVE
- P.G.&E. MANHOLE
- EXISTING GROUND CONTOUR & ELEV.
- EXISTING SURFACE SPOT ELEVATION
- WATER METER BOX
- OVERHEAD UTILITIES
- WOOD FENCE, HEIGHT AS NOTED
- WROUGHT IRON FENCE, HEIGHT=6'
- TBM TEMPORARY BENCHMARK, MAG NAIL & SHINER IN PAVEMENT LOCATED APPROX. 16 FEET EAST OF CENTERLINE OF 47TH STREET ACROSS FROM SUBJECT PROPERTY AT 1042 AND 1038 47TH STREET. ELEVATION=54.91, NAVD88 (GEOID12B)



SITE NOTES

ADDRESS: 1034 47TH STREET, EMERYVILLE, CA
APN: 49-1175-8-3
ADDRESS: 1031 53RD STREET, OAKLAND, CA
APN: 13-1175-12-2

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Andrew K. Holmes

ANDREW HOLMES L.S. 4428



PREPARED & SUBMITTED BY:

DATE:

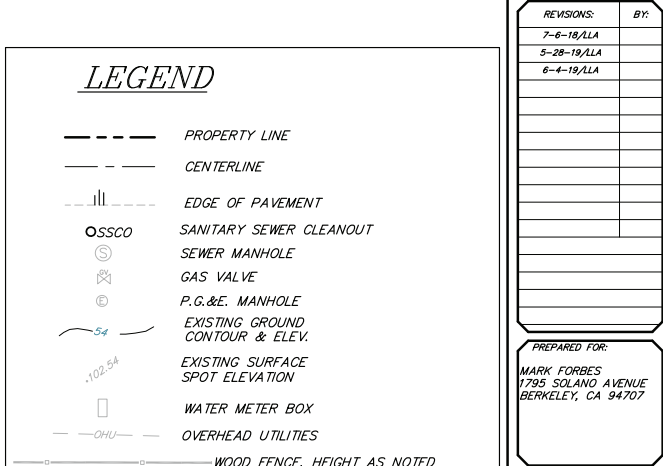
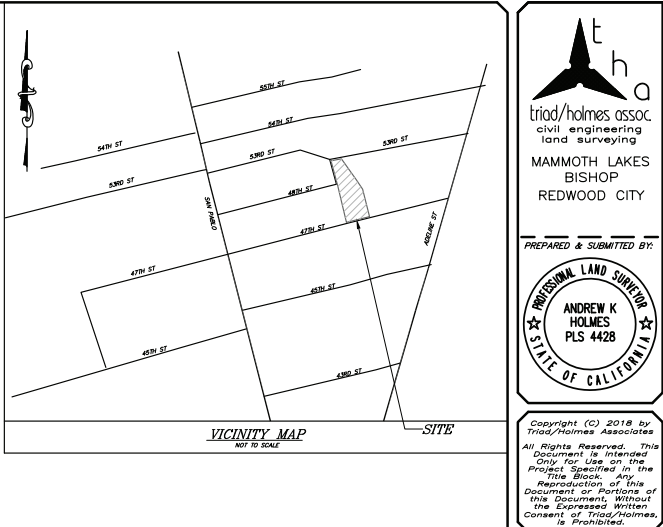
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REVISIONS: BY: JSP

PREPARED FOR:
Mark Forbes
1795 Solano Avenue
Berkeley, CA 94707
510 526-7833
mforbes@forbes.com

1034 47TH STREET, EMERYVILLE
1031 53RD STREET, OAKLAND
BOUNDARY / TOPOGRAPHIC MAP

DATE 4-4-2017
SCALE 1"=20'
DRAWN JSP
JOB NO. 09.1807
DWG 1
SHEET 1 OF 1



WROUGHT IRON FENCE, HEIGHT=6'
 TBM TEMPORARY BENCHMARK, MAG NAIL & SHINER
 IN PAVEMENT LOCATED APPROX. 16 FEET
 EAST OF CENTERLINE OF 47TH STREET
 ACROSS FROM SUBJECT PROPERTY AT 1042
 AND 1038 47TH STREET.
 ELEVATION=54.91, NAVD88 (GEOID12B)

NOTES:

SURVEYOR: ANDREW K. HOLMES PLS 4428
 TRIAD/HOLMES ASSOCIATES
 777 WOODSIDE ROAD,
 REDWOOD CITY, CA 94061


OWNERS: MARK FORBES
 1795 SOLANO AVENUE
 BERKELEY, CA 94707

ADDRESS: 1034 47TH STREET, EMERYVILLE, CA
 APN: 049-1175-008-03
 ADDRESS: 1031 53RD STREET, OAKLAND, CA
 APN: 013-1175-012-02

LOT LINE ADJUSTMENT EXHIBIT

OF LANDS OF FORBES
 BEING ASSESSOR'S PARCELS
 049-1175-008-03 AND 013-1175-012-02,
 ALAMEDA COUNTY, CALIFORNIA

CITY OF EMERYVILLE/OAKLAND ALAMEDA COUNTY CALIFORNIA
 SCALE: 1"=20' MAY 2019

 triad/holmes associates
 777 WOODSIDE ROAD, SUITE 2A
 REDWOOD CITY, CA 94061
 PHONE: (650) 368-0216
 FAX: (650) 368-0288

09-1708(1a).dwg

1034 47TH STREET, EMERYVILLE
 1031 53RD STREET, OAKLAND
 LOT LINE ADJUSTMENT EXHIBIT

DATE 7-6-2018

SCALE 1"=20'

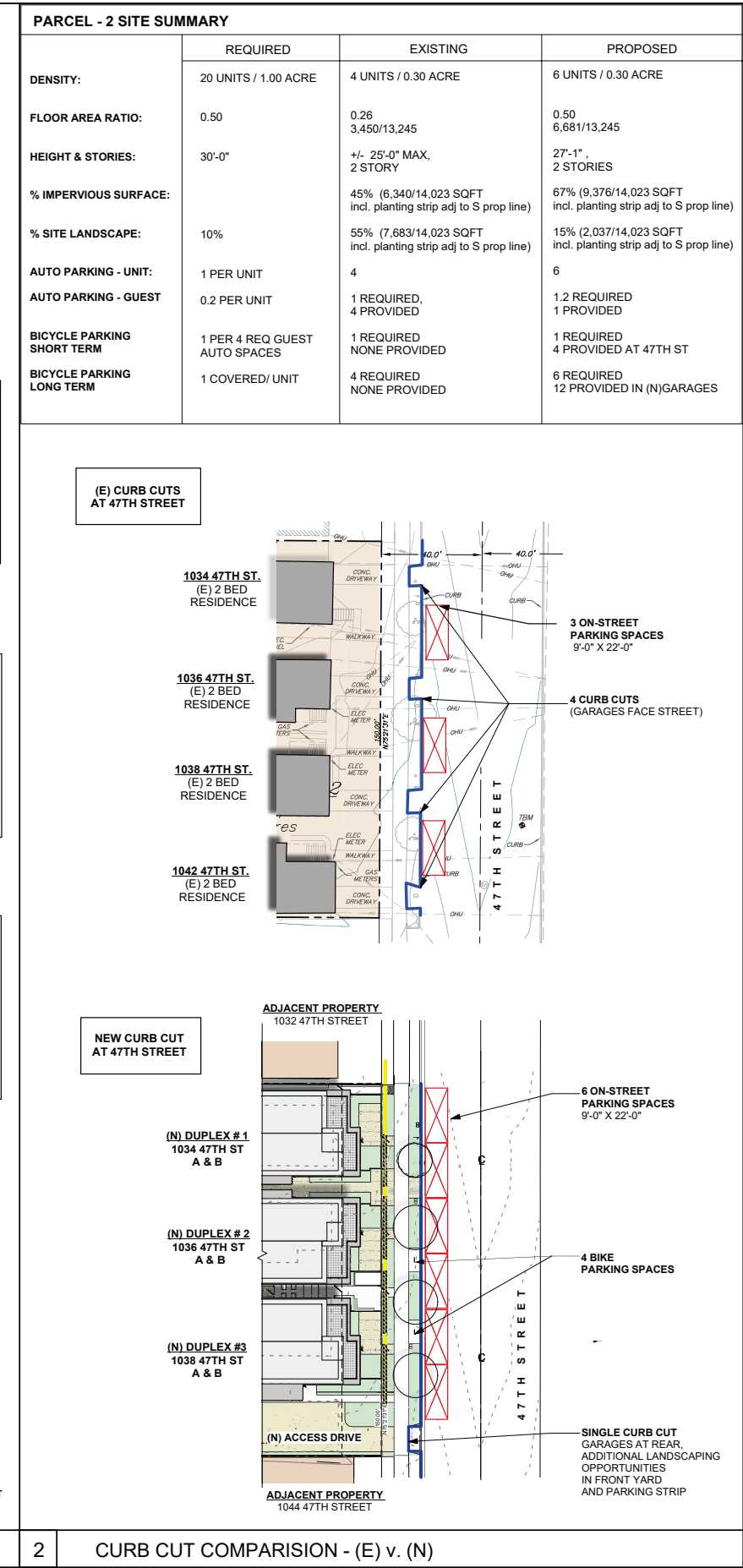
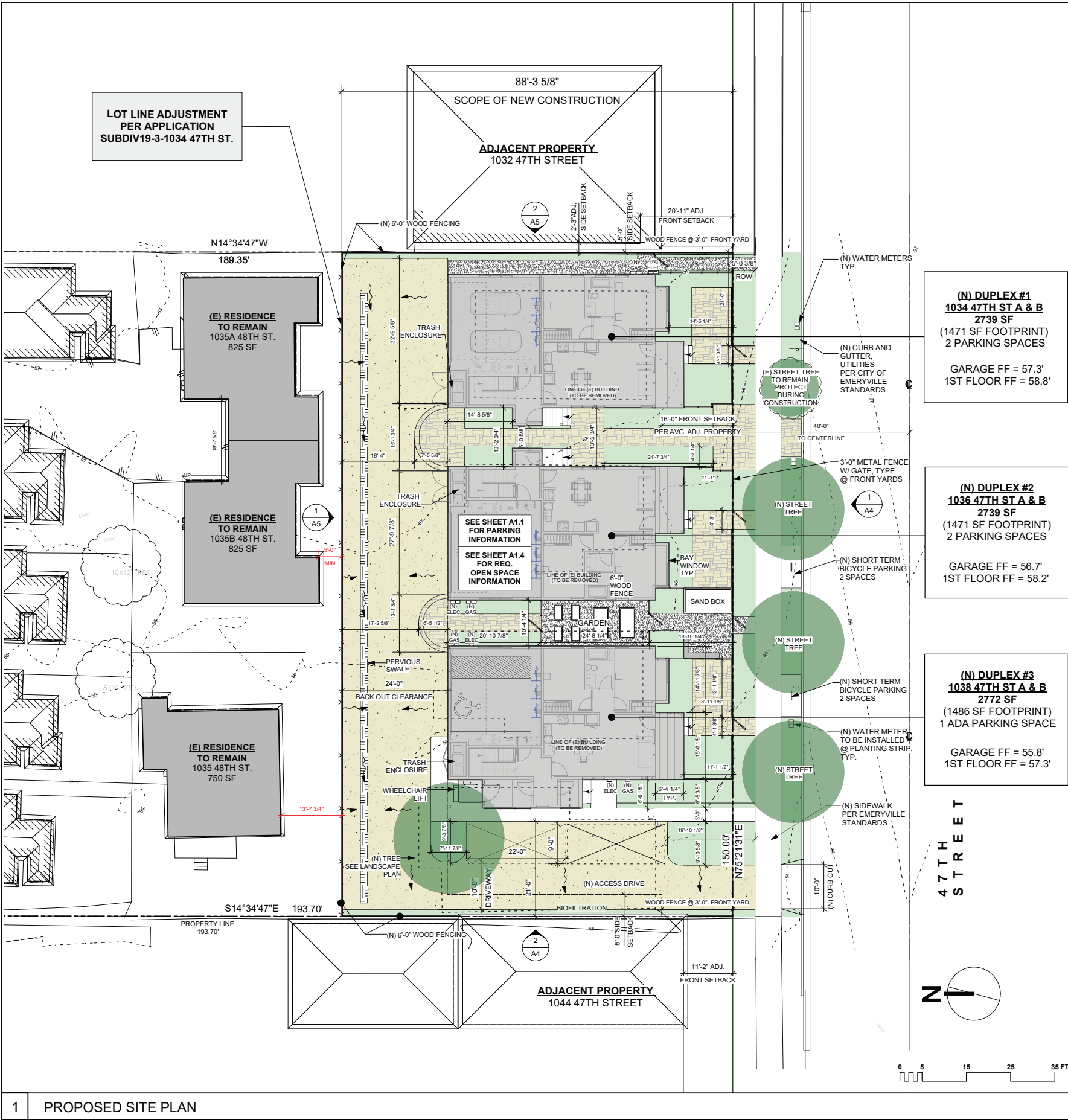
DRAWN

JOB NO. 09.1807

DWG

1

SHEET 7 OF 7



LICENSED ARCHITECT
ROSS E. LONG, III
C-28651
STATE OF CALIFORNIA

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PROPOSED SITE PLAN

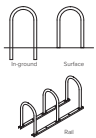
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Submittal Sheet

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beyond the bike

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Cyclo's unique ability to carefully combine considered thought with a twist of poetic spirit to create a range of simple, playful and practical products has earned it global recognition with numerous awards and accolades.

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- Elegant and effortless cycle storage, ideal for home, office and retail display applications.
- Store bikes horizontally or vertically, accessories in the centre.
- Secure three point wall fixing, insert panel hides fixings.
- Spacer included to accommodate wide bars.
- Rotate to accommodate frame angles.
- Rubber contact points protect frame.
- Facility to lock bike in place.
- Available in 6 bright colours.

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UK Design Council



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Patent Nos. GB2398770, EP1471132, US 6,435, US10/545,742 Further International Patents Pending.
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cycloc[®]
beyond the bike

SOLO™

Robust Polypropylene

2 large holes allow your bike to be secured with a conventional bicycle lock

Spacer for wide handlebars included; use of it is optional

Rubber contact pads to protect your frame

Secure three-point fixings

Slotted holes enable Solo

Insert panel hides fixings



Facility to lock

Store your accessor

Horizontal or vertical storage

This architectural floor plan depicts a three-unit residential building with an attached driveway and guest parking space. The plan is oriented with the driveway on the left and the guest parking space at the bottom.

Units and Features:

- Unit 1 (Top):** Features a garage door (18'-0" wide), a kitchen, a bathroom, and a living area. The garage door is labeled "TYPICAL".
- Unit 2 (Middle):** Features a garage door (18'-0" wide), a kitchen, a bathroom, and a living area. The garage door is labeled "TYPICAL".
- Unit 3 (Bottom):** Features a garage door (18'-0" wide), a kitchen, a bathroom, and a living area. The garage door is labeled "TYPICAL".

Common Areas and Amenities:

- Vertical Bike Storage:** Located between Unit 2 and Unit 3, with a typical ceiling height of 7'-0" minimum.
- WC Lift:** Located near the bottom left, adjacent to the guest parking space.
- Guest Parking Space G1:** A designated parking area at the bottom of the plan, measuring 22'-0" by 9'-0".
- Driveway:** A large driveway area on the left side of the plan, measuring 24'-0" by 23'-4 5/8".

Dimensions and Notes:

- The overall width of the building is 24'-0".
- The overall depth of the building is 23'-4 5/8".
- The guest parking space is 22'-0" wide and 9'-0" deep.
- The driveway is 24'-0" wide and 23'-4 5/8" deep.
- The plan includes various other dimensions for individual rooms and clearances, such as 18'-0" for garage doors and 8'-6" for typical room widths.

**REQ'D SHORT
TERM BIKE
PARKING
2 RACK
SPACES**

**SHORT
TERM BIKE
PARKING
ADDITIONAL
RACK
SPACES**

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PARKING PLAN

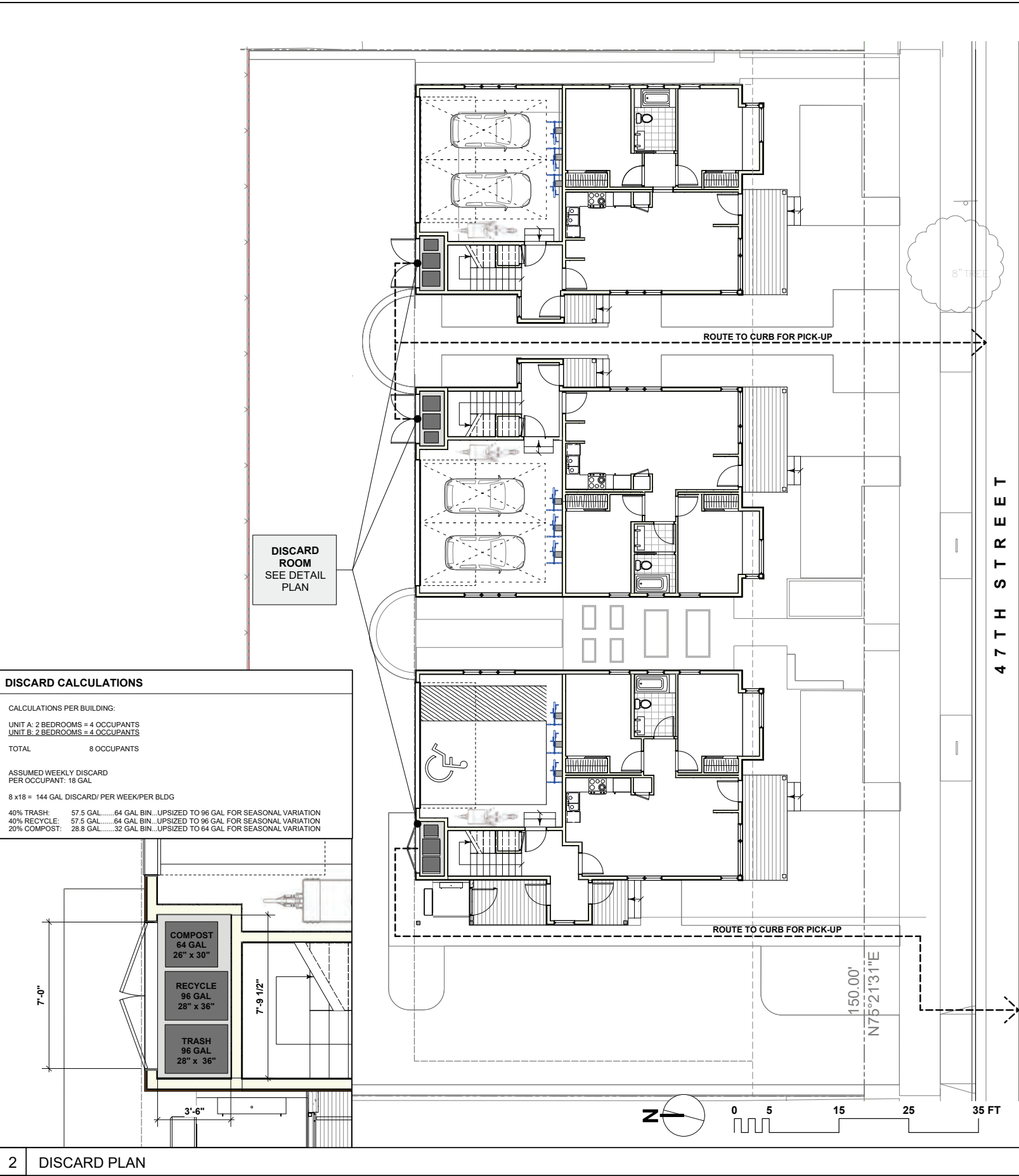
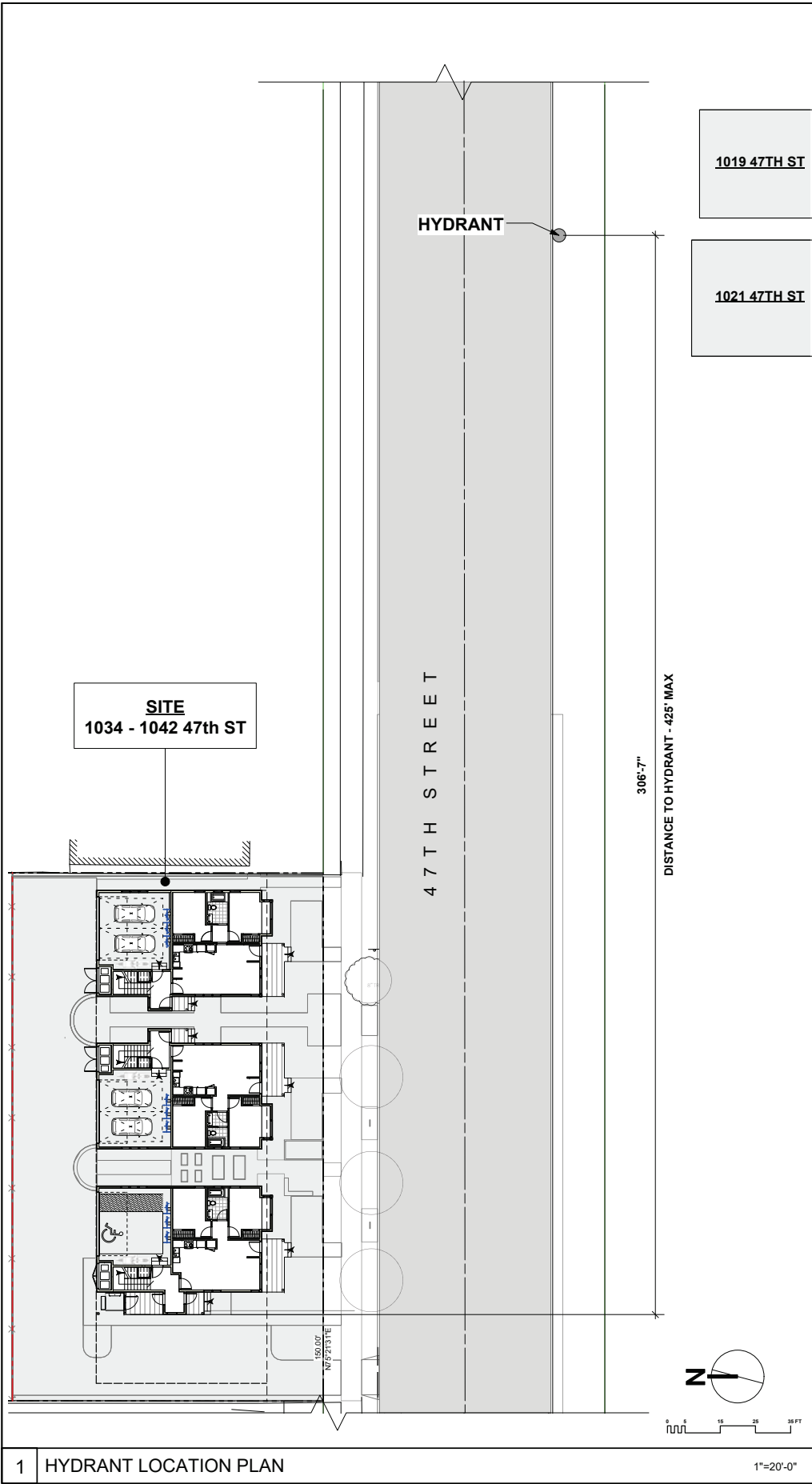
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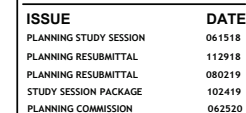
DISCARD/HYDRANT PLAN

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TEL: 905.893.2100, DARYL@CHX.D.COM



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REQUIRED OPEN SPACE

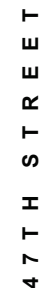
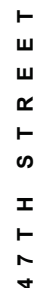
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scale $1/8" = 1'-0"$

sheet

A1.4

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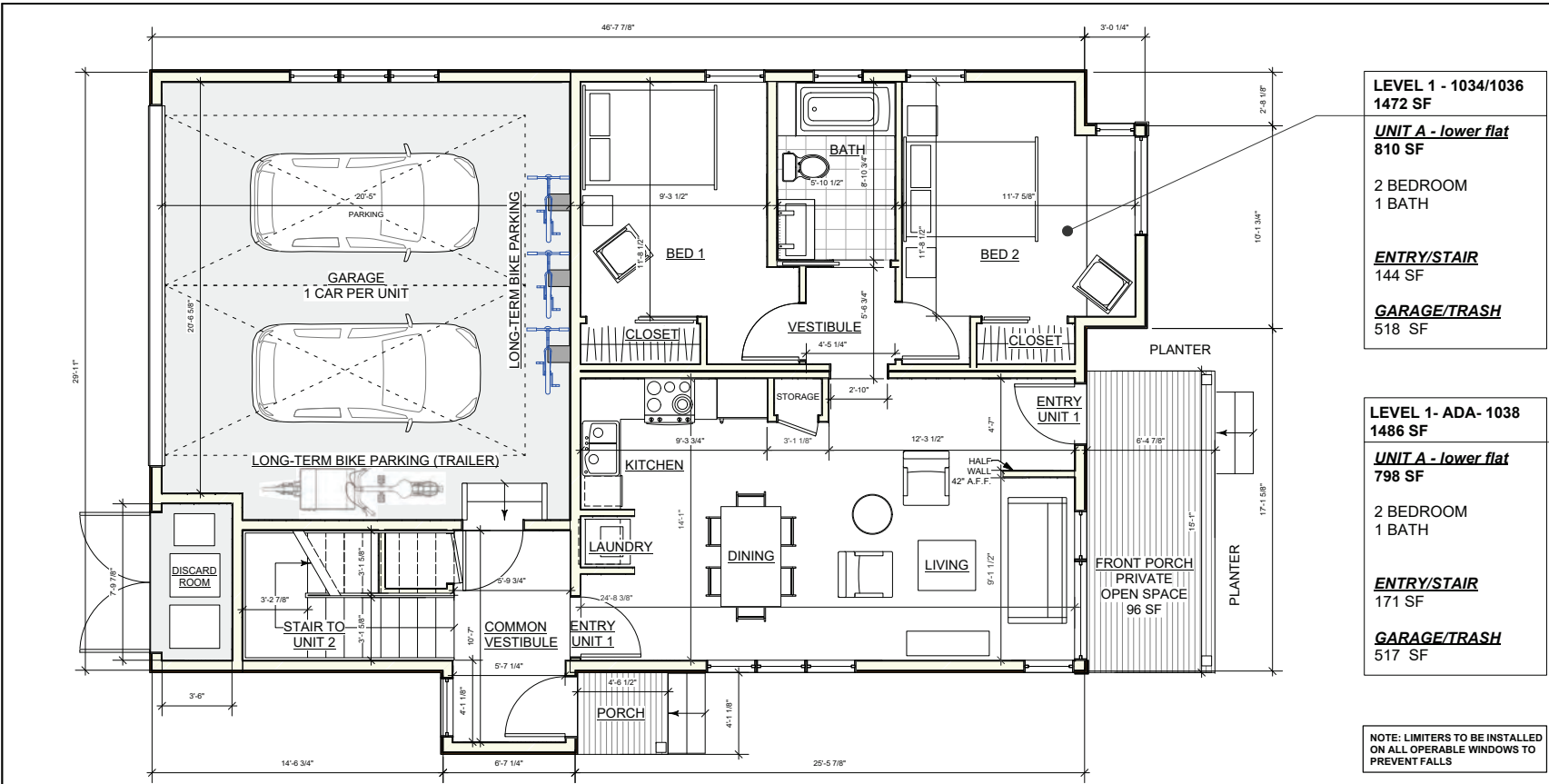


2	LEVEL 2 - REQUIRED OPEN SPACE
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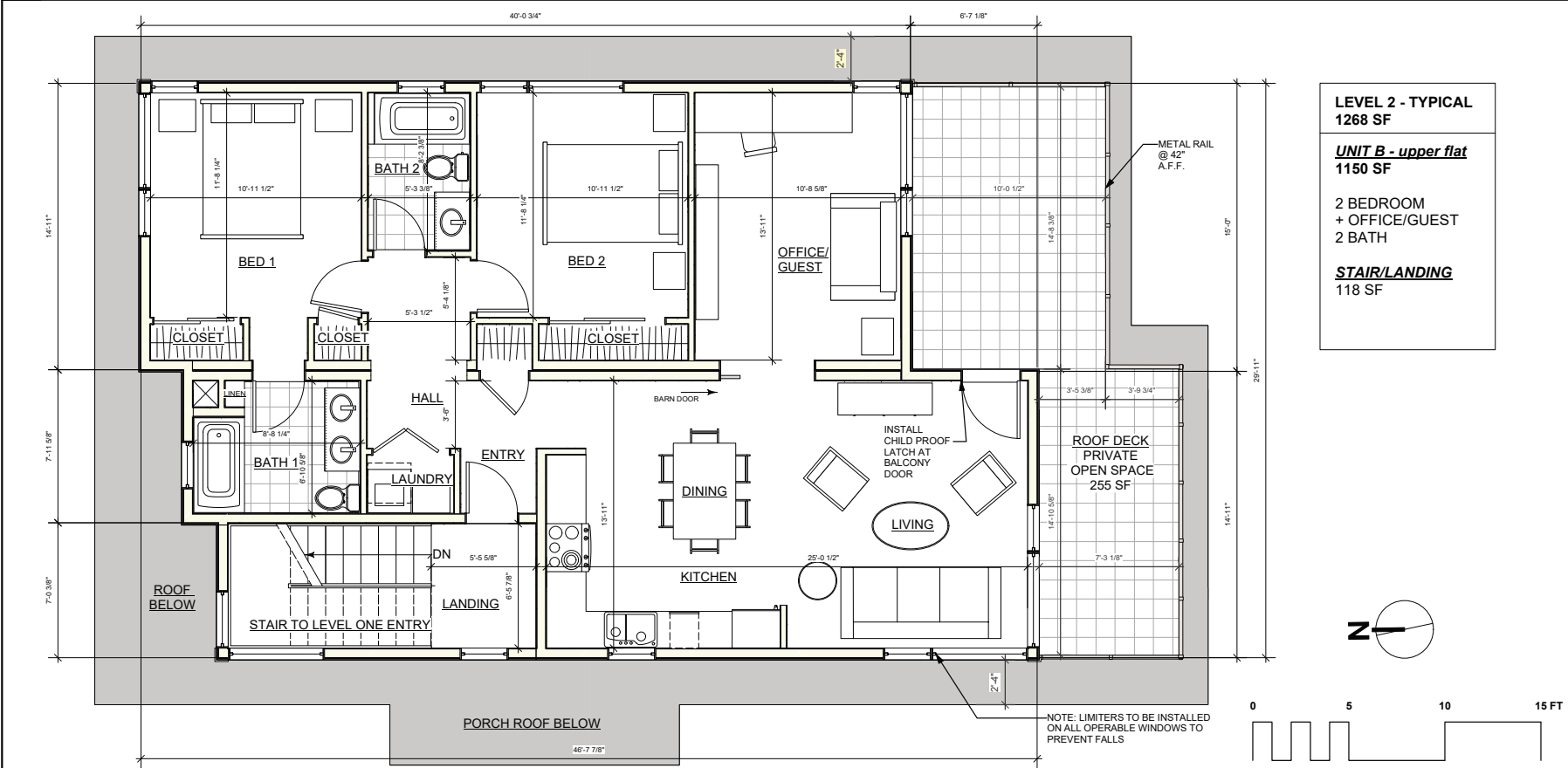
PARCEL 2 - OPEN SPACE											
(N)/(E)	ADDRESS	UNIT LIVING AREA (SF)		BEDROOMS		PRIVATE OPEN SPACE (40 SF. REQ / UNIT)		COMMON OPEN SPACE (20 SF. REQ / UNIT)		TOTAL OPEN SPACE (60 SF. REQ / UNIT)	
		EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
NEW	1034A 47th ST (2 BED)	0	810	0	2	0	486	0	80	0	566
NEW	1034B 47th ST (2 BED)	0	1,150	0	2	0	255	0	80	0	335
NEW	1036A 47th ST (2 BED)	0	810	0	2	0	431	0	80	0	511
NEW	1036B 47th ST (2 BED)	0	1,150	0	2	0	255	0	80	0	335
NEW	1038A 47th ST (2 BED)	0	798	0	2	0	436	0	80	0	516
NEW	1038B 47th ST (2 BED)	0	1,150	0	2	0	255	0	80	0	335
TOTAL NEW		0	5,868	0	12	0	2118	0	480	0	2598

3	OPEN SPACE CALCULATION
---	------------------------

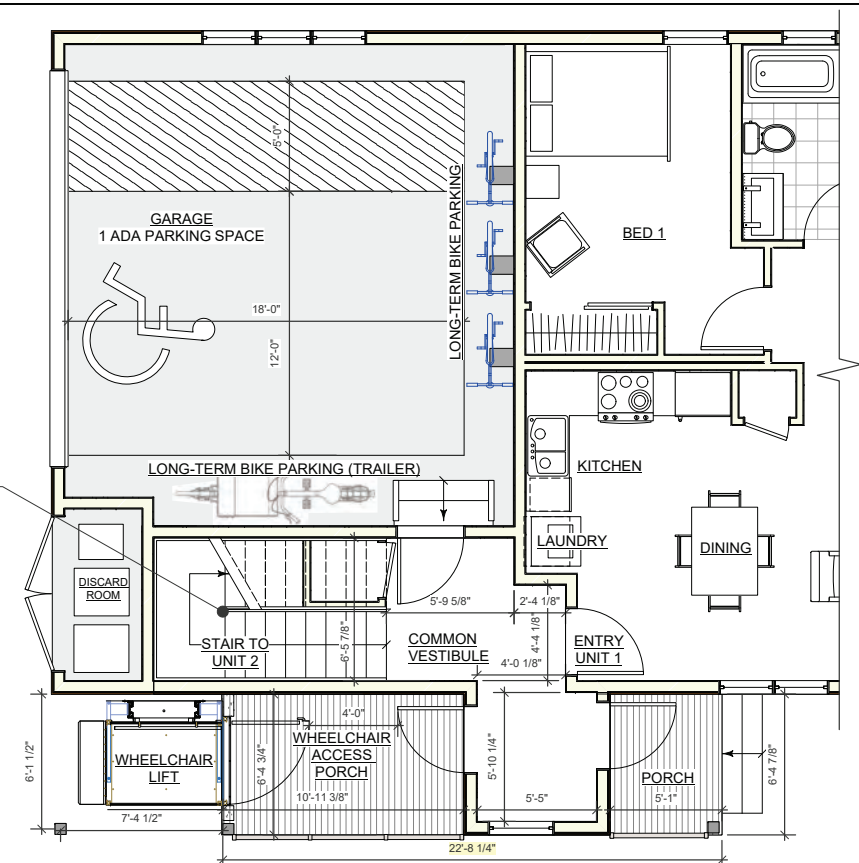
1	LEVEL 1 - REQUIRED OPEN SPACE
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1 LEVEL 1 - STANDARD AND ADA UNIT PLANS



2 LEVEL 2 - UNIT PLAN



3 MODULAR DIAGRAMS

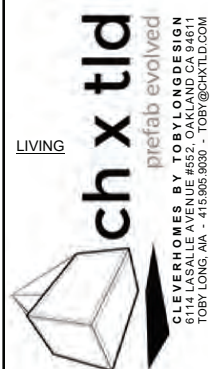
BLDG AREA - 1034 47TH /1036 47TH		BLDG AREA - 1038 47TH	
UNIT A - LEVEL 1	810 SF	UNIT A - LEVEL 1 - ADA	798 SF
UNIT B - LEVEL 2	1150 SF	UNIT B - LEVEL 2	1150 SF
HABITABLE SF	1960 SF	HABITABLE SF	1948 SF
COMMON (VESTIBULE/STAIRS/LANDINGS)	262 SF	COMMON (VESTIBULE/STAIRS/LANDINGS)	289 SF
F.A.R. SF	2222 SF	F.A.R. SF	2237 SF
GARAGE/TRASH	518 SF	GARAGE/TRASH	518 SF
TYP. BUILDING TOTAL	2740 SF	BUILDING 3 TOTAL	2754 SF

4 AREA CALCULATION



ISSUE	DATE
PLANNING STUDY SESSION	061518
PLANNING RESUBMITTAL	112918
PLANNING RESUBMITTAL	080219
STUDY SESSION PACKAGE	102419
PLANNING COMMISSION	062520

ARCHITECT



MODULAR FABRICATOR

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PLANS

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scale
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sheet

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1 SOUTH (FRONT) ELEVATION - 47th ST



2 WEST ELEVATION @ DRIVEWAY



ISSUE	DATE
PLANNING STUDY SESSION	061518
PLANNING RESUBMITTAL	112918
PLANNING RESUBMITTAL	080219
STUDY SESSION PACKAGE	102419
PLANNING COMMISSION	062520

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ELEVATIONS

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scale
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sheet
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1 REAR (NORTH) ELEVATION



2 EAST ELEVATION - TYPICAL



ISSUE	DATE
PLANNING STUDY SESSION	061518
PLANNING RESUBMITTAL	112918
PLANNING RESUBMITTAL	080219
STUDY SESSION PACKAGE	102419
PLANNING COMMISSION	062520

ARCHITECT



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scale
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sheet

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Plant List

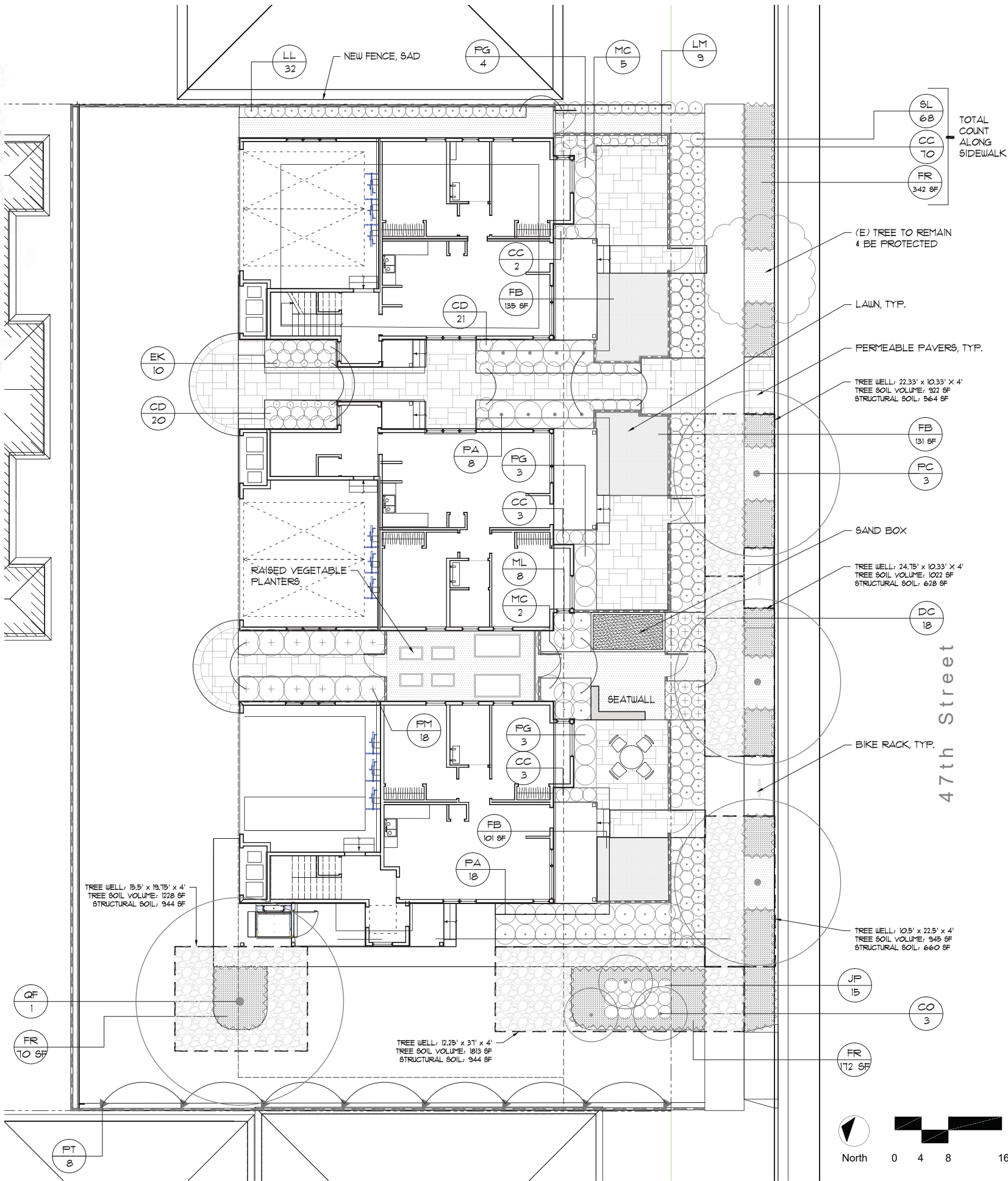
Index	Latin Name	Common Name	Size	Spacing	Quantity	H2O Use
Trees						
CC	Cercis canadensis 'Hearts of Gold'	Hearts of Gold eastern redbud	15 Gallon	As Shown	3	M
PC	Pistacia chinensis	Chinese pistache	24" box	As Shown	3	L
QF	Quercus frainetto Schmidt	Schmidt Hungarian oak	36" box	As Shown	1	L
Shrubs						
CA	Calamagrostis 'Karl foerster'	Reed grass	1 gallon	24" o.c.	78	M
CD	Carex divisa	Berkley Sedge	1 Gallon	24" o.c.	41	L
DC	Deschampsia cespitosa 'Pixie Fountain'	Pixie fountain grass	1 gallon	24" o.c.	18	L
JP	Junco palm	roli	1 gallon	24" o.c.	15	L
LL	Lomandra longifolia Breeze	Dwarf Mail Rush	1 Gallon	30" o.c.	32	L
MC	Muhlenbergia capillaris 'Lemon'	Pink Muhly Grass	5 gallon	30" o.c.	7	L
ML	Muhlenbergia lindheimeri 'Loni'	Autumn Glow Muhly	1 Gallon	36" o.c.	8	L
PA	Pennisetum alopecuroides 'Mouduy'	Black Flowering Fountain Grass	5 gallon	36" o.c.	26	L
PG	Pennisetum tenuifolium 'Gold Ball'	Gold Ball Kunrua	1 Gallon	36" o.c.	10	M
PM	Pennisetum alopecuroides 'Mouduy'	Black Flowering Fountain Grass	5 gallon	48" o.c.	18	L
Lawn, Groundcovers & Vines						
EK	Eriogon karwinskianus	Santa Barbara daisy	1 Gallon	As shown	10	L
FB	Tall dwarf fescue by Bolero	Lawn	soil	—	867 sf	M
FR	Festuca rubra	Creeping fescue	soil	—	584 sf	L
LM	Liriope muscari 'Variegata'	Variegated Lilyturf	1 Gallon	18" o.c.	8	M
PT	Parthenocissus tricuspidata 'Veitchii'	Boston Ivy	2 Gallon	12" o.c.	8	L
SL	Salvia nemorosa 'Lyrical White'	Meadow sage	1 Gallon	24" o.c.	88	M

Planting Notes

- All work shall be performed by persons familiar with planting work and under the supervision of a qualified plant foreman.
- Plant material locations shown are diagrammatic and may be subject to change in the field by the Landscape Architect (LA).
- In case of discrepancies contact LA for clarification.
- Plant locations are to be adjusted in the field as necessary to screen utilities but not to block windows or impede access.
- The LA reserves the right to make substitutions, additions or deletions in the planting scheme as they feel necessary while work is in progress. Such changes are to be accompanied by equitable adjustments in the contract price if/when necessary.
- All trees in formal grouping (i.e. street trees) shall be matching in size and shape.
- Eventual branching heights of trees shall be 6' min. above finish grade.
- Selectively remove branches over 5" in diameter as trees reach maturity.
- Trees with included bark shall not be planted.
- To check & prepare rootball, matted roots to be shaved on all 5 sides and treated with a sugar solution (30 grams of sugar/liter of water applied to one sq. meter of soil surface). Trees with circling roots shall not be planted.
- All on-grade planting areas to receive soil amendments per soil's report.
- Planting areas shall remain 3' clear of all fire hydrants and fire lanes.
- Root barriers are not to be used. To divert root growth, 4-6" of crushed rock to be added between hardscape & structural soils.
- Amendments and Mulch
 - At least 6 cubic yards of compost, with a composition according to City standards or a City-approved soil report recommendation, per 1,000 square feet shall be incorporated into the top 6 inches of soil.
 - A minimum 3-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, areas receiving closely spaced plugs as a lawn alternative, areas with creeping or rooting ground covers, or direct seeding applications where mulch is contraindicated. Nonporous material shall not be placed under the mulch.
 - Trees shall have adequate rootable soil volume (600 cubic feet for small trees, 900 cubic feet for medium-size trees, and 1,200 cubic feet for large trees) and good drainage.

See Sheet I1-I3 for Irrigation Plan, Notes & Details

Total Landscape Area: 2452 SF



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OAKLAND CA 94618
510 655 7674
aboutinsideout.com



ISSUES:

- 02.19.20 Response to city comments
- 04.28.20 Planting Revisions
- 06.25.20 Planning Commission

1034-1042 47th Street
Emeryville CA
94608

TITLE:

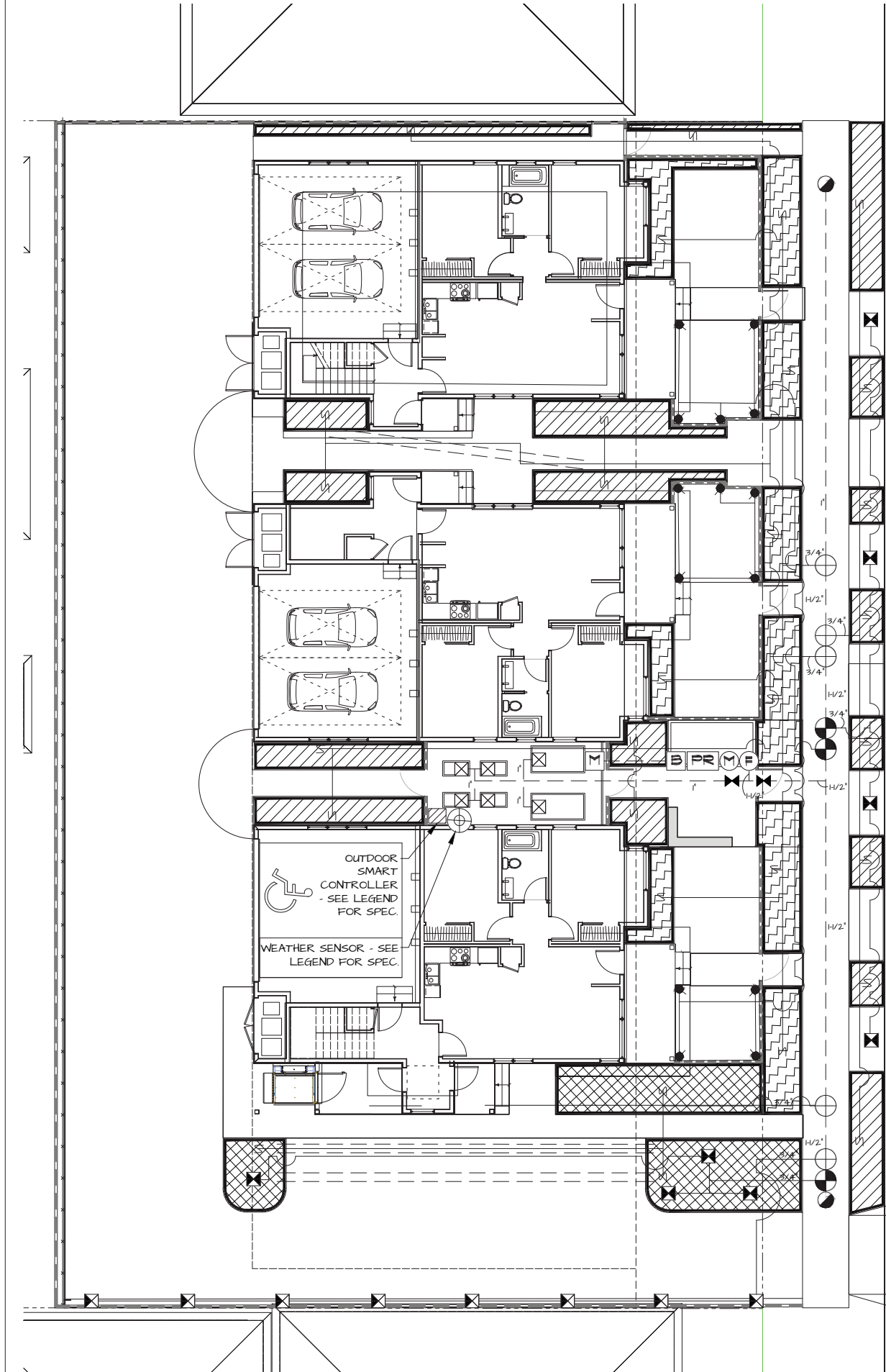
Preliminary
Landscape Plan
& Planting Imagery

SCALE: 1/8"=1'-0"

DATE: SEE ISSUES ABOVE

DRAWING NO:

L1



NOTES:
CONTRACTOR TO FIELD VERIFY THE IRRIGATION SYSTEM AT THE EXISTING TREES AND REPLACE WITH ROOT ZONE WATERING SYSTEM PER LEGEND.

M
8
A
1' 6.8
681 SF

L
7
A
1' 3.6
361 SF

L
6
A
1' 6.0
600 SF

L
5
A
1' 4.0
4 SF

H
4
A
1' 2.9
367 SF

L
3
A
1' 4.3
42.7 SF

L
2
A
1' 2.4
8 SF

M
1
A
1' 4.0
4 SF

47th Street

IRRIGATION NOTES

DIAGRAMMATIC PLAN
THIS SYSTEM IS DIAGRAMMATIC. ALL PIPE, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS AND JOINT TRENCHES WHEREVER POSSIBLE.

SPRINKLER ADJUSTMENT REQUIRED
THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND PREVENT OVERSPRAY ONTO WALKS AND ROADWAYS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS. CONTRACTOR TO USE PRESSURE COMPENSATING SCREENS WHEN RADIUS IS REDUCED MORE THAN FIFTY PERCENT (50%).

INSTALL NECESSARY CHECK VALVE IN HEADS THAT EXHIBIT TENDENCIES FOR LOW HEAD DRAINAGE.
INSTALL ALL HEADS A MINIMUM OF 18" AWAY FROM BUILDING WALLS & A MINIMUM OF 12" AWAY FROM ALL STUCCO SURFACES.

FIELD CONDITIONS
DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST AND SHOULD BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR MUST ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS REQUIRED.

SWING JOINTS
INSTALL ALL HEADS WITH DOUBLE OR TRIPLE SWING JOINTS, USING STREET ELLS, AS PER DETAIL.

MINIMUM PRESSURE AND MAXIMUM GALLONS REQUIRED
THE SPRINKLER SYSTEM DESIGN IS BASED ON A MINIMUM OPERATIONAL PRESSURE AND A MAXIMUM DEMAND AT THE POINT OF CONNECTION, AS NOTED ON THE PLAN. BEFORE INSTALLING THE SYSTEM, CHECK POINT OF CONNECTION AND IMMEDIATELY NOTIFY CONTRACTING OFFICER IF PRESSURE IS NOT AS NOTED OR THE REQUIRED GALLONS PER MINUTE IS NOT AVAILABLE.

WATER LINE UNDER PAVING
ALL MAINLINE UNDER PAVING SHALL BE INSTALLED 24" DEEP. ALL LATERAL LINES UNDER PAVING SHALL BE SCH 40 PVC AND INSTALLED 24" DEEP.

SYSTEM COVERAGE
THE IRRIGATION CONTRACTOR IS TO ADJUST HEAD LOCATIONS IN THE FIELD IN ORDER TO GUARANTEE 100% COVERAGE. CONTRACTOR TO CONTACT THE CONTRACTING OFFICER PRIOR TO ANY MAJOR CHANGE(S) RESULTING IN ADDITIONAL COST TO THE OWNER.

Irrigation System Maintenance Procedures

While the system is designed to operate automatically, a regular maintenance schedule is necessary to prevent and address failures in the system as well as ensure that the system operates in a manner that meets or exceeds the MAWA values provided.

Any broken or malfunctioning irrigation system components should be replaced with the same components, or an equal or superior equivalent.

Upon completion of the project, the following measures should be performed by property management at intervals noted below:

Weekly:
During weekly landscape maintenance operations, the maintenance personnel should look for signs of runoff, erosion, and plant die off due to irrigation system failures. If issues are detected, they should be brought to the attention of the maintenance supervisor and property management for timely correction.

All overhead spray heads shall be inspected to ensure clear operation and in order to identify and repair any damaged equipment.

Monthly:
All irrigation and master valves shall be visually inspected by a property management representative while the valve is under operating conditions. All control valves and filters should be visually inspected and cleaned as required and in accordance with manufacturers specifications. All leaks shall be promptly reported to a landscape maintenance representative so that the valve may be repaired or replaced in a timely fashion with the minimum amount of leaking water exposed to open air.

All Root Watering Systems are to be visually inspected to insure that all locking grates are being reasonably kept free of debris. All grates that are not kept reasonably free of debris are to be reported to a landscape maintenance representative. All Root Watering Systems that have their locking grates damaged or missing are to be reported to a landscape maintenance representative so that the locking grate may be repaired or replaced in a timely fashion.

MAINTENANCE LOG
Keep a log of all inspections and maintenance performance on the irrigation system (Updated copy to be provided to Property Manager on a monthly basis)

Overall Landscape Maintenance Procedures

At a minimum, the following items should be addressed on a regular basis as required per city code:

Weekly
Pruning, weeding and maintenance of turf areas should be done on a weekly basis

Monthly
Dead, dying and diseased vegetation should be replaced with equivalent plant material w/ similar hydrozone requirements, provided that the replaced vegetation does not result in mixing higher water use plants with low water use plants in the same hydrozone.

Invasive plant species should be eradicated as required.

Plant material should be maintained in order to avoid obstruction of motorists views.

Annually
Mulch should be replenished in order to maintain appropriate soil moisture levels.

Soil amendments consistent with the agronomic soils report for this project should be applied in the manner prescribed in order to support and maintain healthy plant growth.

Lawns should be fertilized in a manner consistent with best management practices

IRRIGATION LEGEND

SYMBOL	MFG.	MODEL NO.	DESCRIPTION	RAD	GPM	PR	PSI
■	HUNTER	(2) RZWS-36-50-CV	ROOT ZONE WATERING SYSTEM	1'	0.50 (1.0)	1.0	30
■	HUNTER	(3) RR18-T RISER WITH HE-60-T Emitter & HE-OFF DIFFUSER CAP	POINT SOURCE Emitter SYSTEM	1'	0.1 (0.3)	1.0	30
●	HUNTER	PROS-06-PRS30-CV-MP1000-90-210	QUARTER SPRAY HEAD	8'-15'	.21		0.41 30
▨	HUNTER	HDL-06-12-500-CV (SPACE DRIPLINES 12" O.C.)	Drip LINE SYSTEM	12"	1.0 Per 100 S.F.	0.96	30
▨	HUNTER	HDL-06-12-500-CV (SPACE DRIPLINES 12" O.C.)	Drip LINE SYSTEM	12"	1.0 Per 100 S.F.	0.96	30
▨	HUNTER	HEL-06-12-500-CV (SPACE DRIPLINES 12" O.C.)	Drip LINE SYSTEM	12"	1.0 Per 100 S.F.	0.96	30

DRIP IRRIGATION NOTES

THE CONTRACTOR WILL NEED TO FIELD LOCATE HUNTER PLD-ARV AIR RELIEF VALVE KIT (SEE DETAIL) AT THE HIGHEST LOCATIONS ON EACH DRIP LINE SYSTEM

AT THE EXHAUST HEADER OF DRIP SYSTEM, THE CONTRACTOR SHALL INSTALL HUNTER PLD-BV FLUSH VALVE W/ BALL VALVE AND A HUNTER ECO-INDICATOR AT EACH DRIP SYSTEM AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT (SEE DETAILS).

- WATER METER - REFER TO CIVIL ENGINEER'S PLAN
- 1" WILKINS 375XL BACKFLOW PREVENTER W/ 1 1/2" SXL WYE STRAINER LOCATED IN V.I.T. STRONGBOX S88C-45SS STAINLESS STEEL ENCLOSURE OR EQUAL
- 1 1/2" HUNTER IBC-151G-FS NORMALLY CLOSED MASTER VALVE - RELAY TO CONTROLLER
- 1" HUNTER FCT-100 FLOW SENSOR IN PVC HOUSING - RELAY TO CONTROLLER.
- NIBCO T-580 BALL VALVE - LINE SIZE
- HUNTER, QUICK COUPLER, HQ-22DLRC WITH LOCKING CAP.
- AUTOMATIC CONTROLLER LOCATION - SEE NOTE ON THIS SHEET
- WEATHER SENSOR LOCATION - SEE NOTE ON THIS SHEET
- HUNTER ICV-101G-FS-AS-ADJ SERIES REMOTE CONTROL VALVE - SIZE INDICATED.
- HUNTER ICZ-101-40 1" CONTROL ZONE KIT WITH PVC BALL VALVE FOR FLOW 2.0 TO 20 GPM.
- 3/4" BRASS HOSE BIB W/ THREADED HOSE END TIMER (ANALOG) AT EACH COMMUNITY GARDEN PLANTER SEE DETAIL 3, SHEET I1.4

POTABLE LATERAL LINE
PVC SCH. 40 LATERAL LINE - 12" COVER IN PLANTING AREAS, 24" COVER UNDER PAVING. - SIZES INDICATED.

MAINLINE - INSTALL 18" COVER IN PLANTING AREAS, 24" COVER UNDER PAVING - SIZES INDICATED.
Mainlines (pressurized) 1 1/2 inch and smaller shall be Schedule 40 solvent-weld P.V.C., Mainlines (pressurized) 2 inch through 3 inch shall be Class 315 solvent-weld P.V.C., with thrust blocks per detail.

PVC SCH 40 MAIN AND LATERAL LINE SLEEVE 2x DIA. OF PIPE. - PROVIDE SLEEVES UNDER ALL PAVING OR WALL FOOTING.

SLEEVE NOTE:
* NOT ALL THE REQUIRED SLEEVES FOR CONTROL WIRE, LATERAL AND MAINLINE PIPE ARE SHOWN ON PLANS FOR CLARITY. PROVIDE CONTROL WIRE, LATERAL & MAINLINE PIPE SLEEVES UNDER ANY HARDSCAPE (CONCRETE / ASPHALT) OR WALL FOOTING.
* ALL CONTROL WIRE, LATERAL AND MAINLINE PIPE RUNS TO BE INSTALLED IN SEPERATE SLEEVES.
* ALL SLEEVING TO BE SCH. 40 PVC
* SIZING :
- WIRE SLEEVES TO BE MIN. 2" AND DETERMINED BY CONTRACTOR IN FIELD. MUST BE OVERSIZED LEAVING AMPLE ROOM FOR FUTURE WIRE ADDITIONS OR REPAIRS.
- PIPE SLEEVING TO BE MIN. 2 x DIAMETER OF PIPE ENCASED.

NOTE:SEE IRRIGATION SYSTEM INFORMATION FOR INDIVIDUAL VALVE PRECIPITATION RATES AND OPERATING PSI AS REQUIRED BY CODE.

INDICATES HYDROZONE
INDICATES STATION NUMBER
INDICATES CONTROLLER
INDICATES GPM
INDICATES VALVE SIZE
INDICATES STATION S.F.

CONTROLLER NOTE

CONTRACTOR TO INSTALL A (12) STATION HUNTER IC-600-PED-SS EXTERIOR CONTROLLER W/ (1) ICM-600 MODULES LOCATED IN STAINLESS STEEL PEDESTAL AT THE APPROXIMATE LOCATION AS SHOWN. CONTRACTOR TO INSTALL AN HUNTER WSS-SEN-WS-GUARD WIRELESS SOLAR SYNC LOCATED IN SENSOR GUARD AND MOUNT TO THE SIDE OF PEDESTAL PER MFG. SPECS. IN AN AREA FREE OF OVERHEAD OBSTRUCTIONS. IRRIGATION SYSTEMS ARE DESIGNED TO OPERATE AT A MAXIMUM OF 6.8 GPM. CONTRACTOR TO PULL 24V WIRES AND CONNECT TO A MASTER VALVE, FLOW SENSOR AND REMOTE CONTROL VALVES AT THE APPROPRIATE LOCATIONS AS SHOWN AS REQUIRED. CONTRACTOR TO PROVIDE 120V CONTINUOUS POWER TO THE CONTROLLER. COORDINATE THESE LOCATIONS WITH OWNER/ DEVELOPER AND SHALL BE LOCATED WITHIN 800' AWAY FROM FLOW SENSOR.

POINT OF CONNECTION NOTE

CONTRACTOR TO LOCATE A WATER METER. REFER TO CIVIL ENGINEERING PLANS FOR THE LOCATION. INSTALL A REDUCED BACKFLOW PREVENTER, A MASTER VALVE AND A FLOW SENSOR AT THE APPROXIMATE LOCATION AS SHOWN. ALL POC APPURTENANCE MUST BE INSTALLED IN PLANTING AREA. COORDINATE THESE LOCATIONS WITH OWNER/DEVELOPER. CONTRACTOR TO RELAY MASTER VALVE & FLOW SENSOR TO CONTROLLER.

AVAILABLE PRESSURE: 70.0 PSI (ASSUMED)
DESIGN PRESSURE: 62.3 PSI
MAXIMUM DEMAND: 6.8 GPM

COMPLIANCE STATEMENT

I HAVE COMPLIED WITH THE CRITERIA OF THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE AND HAVE APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

JOHN PENNELL PHILLIPS 06-15-20
DATE

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OAKLAND CA 94618
510 655 7674
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ISSUES:

- 02.19.20 Response to city comments
- 04.28.20 Planting Revisions
- 06.25.20 Planning Commission

1034-1042 47th Street
Emeryville CA
94608

TITLE:

Irrigation Plan, Notes
& Legend

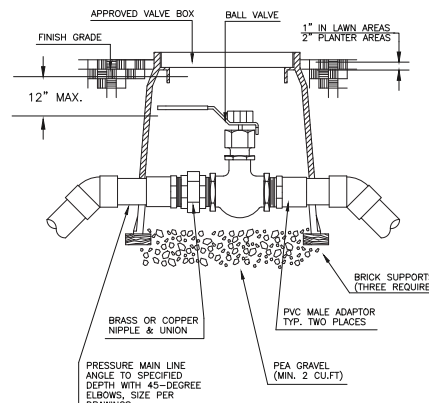
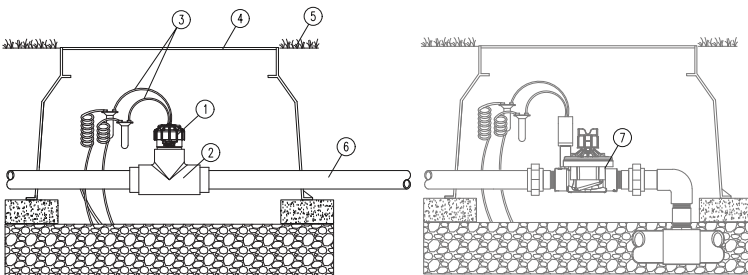
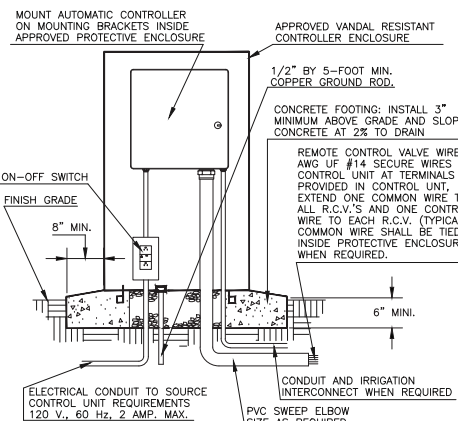
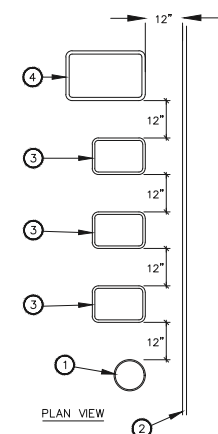
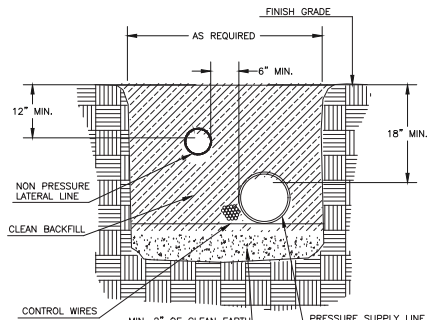
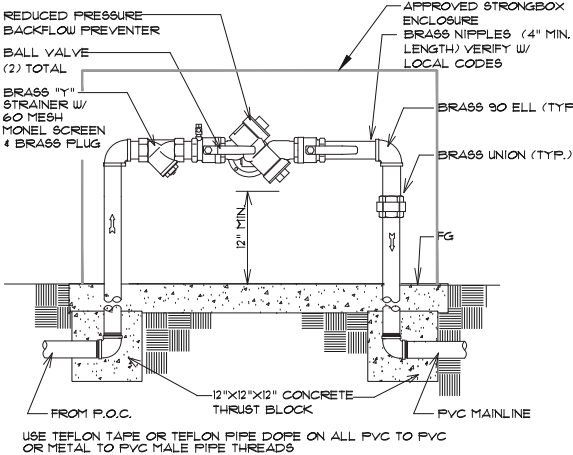
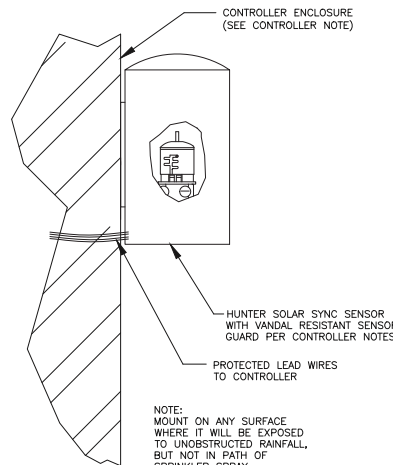
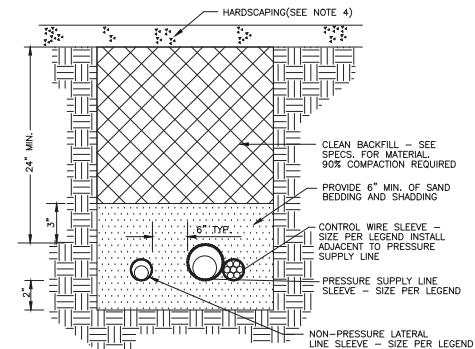
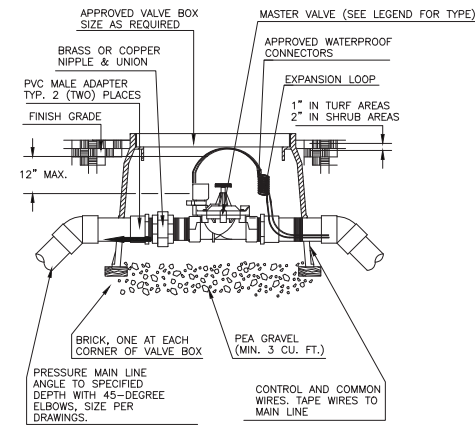
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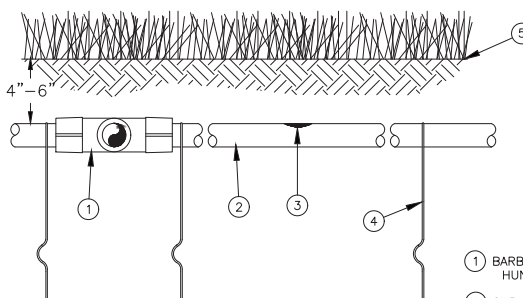
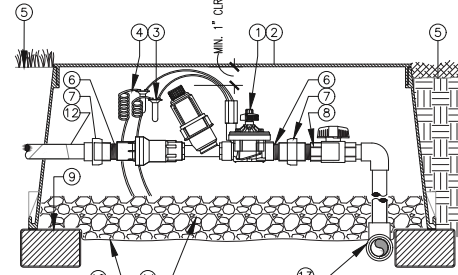
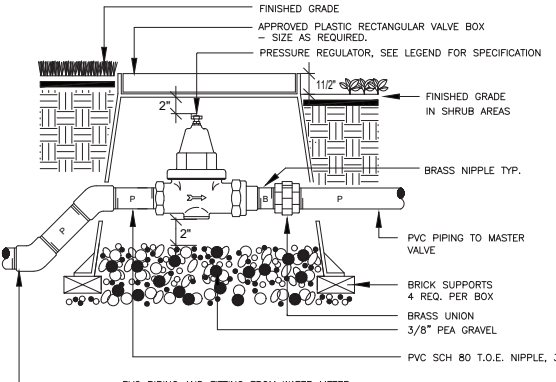
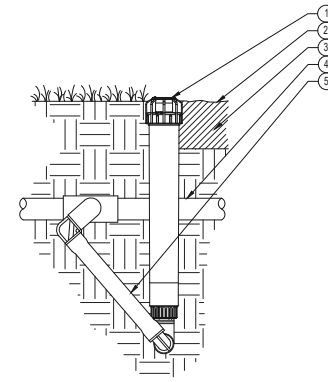
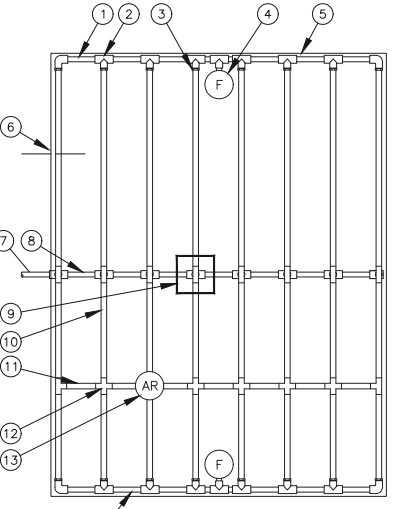
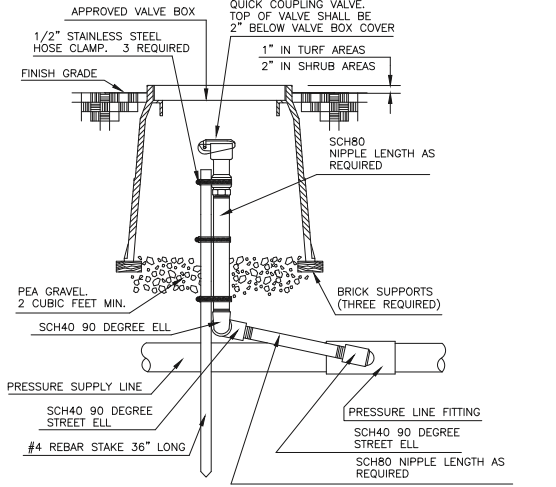
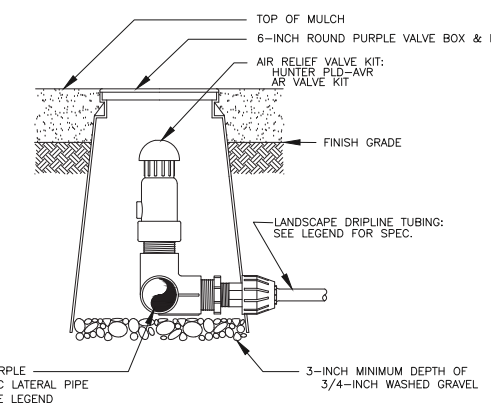
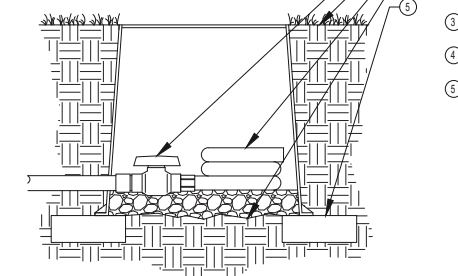
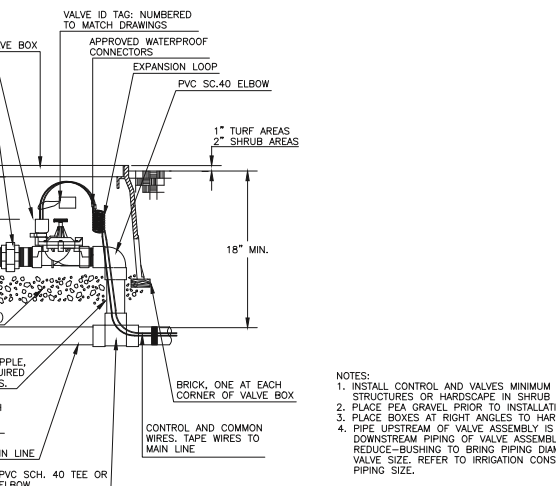
DATE: 08 JUNE 2019

DRAWING NO:

11.1



 <p>APPROVED VALVE BOX FINISH GRADE 12" MAX. 1" IN LAWN AREAS 2" PLANTER AREAS</p> <p>BALL VALVE</p> <p>BRASS OR COPPER NIPPLE & UNION</p> <p>PVC MALE ADAPTOR TYP. TWO PLACES</p> <p>PEA GRAVEL (MIN. 2 CU.FT.)</p> <p>PRESSURE MAIN LINE ANGLE TO SPECIFIED DEPTH WITH 45-DEGREE ELBOWS, SIZE PER DRAWINGS.</p> <p>BRICK SUPPORTS (THREE REQUIRED)</p> <p>NOTES: 1. PLACE PEA GRAVEL PRIOR TO INSTALLATION OF VALVE BOX 2. BALL VALVE SHALL BE INSTALLED IN SHRUB AREAS UNLESS OTHERWISE APPROVED</p>	 <p>*NOTE* INLET PIPE LENGTH OF SENSOR MUST BE MIN. 10X PIPE DIA. STRAIGHT, CLEAN RUN OF PIPE, NO FITTINGS OR TURNS. OUTLET PIPE LENGTH OF SENSOR MUST BE MIN. 5X PIPE DIA. OF STRAIGHT CLEAN RUN OF PIPE, NO FITTINGS OR TURNS.</p> <p>1 FLOW SENSOR – SEE LEGEND FOR SPEC. 2 PVC HOUSING 3 MIN. 18/2 WIRE TO ACC POWER MODULE. MAXIMUM WIRE DISTANCE RUN OF 1,000' 4 STANDARD VALVE BOX 5 FINISH GRADE 6 MAIN LINE PIPE 7 MASTER VALVE</p>	 <p>MOUNT AUTOMATIC CONTROLLER ON MOUNTING BRACKETS INSIDE APPROVED PROTECTIVE ENCLOSURE</p> <p>APPROVED VANDAL RESISTANT CONTROLLER ENCLOSURE</p> <p>1/2" BY 5-FOOT MIN. COPPER GROUND ROD.</p> <p>CONCRETE FOOTING: INSTALL 3" MINIMUM ABOVE GRADE AND SLOPE CONCRETE AT 2% TO DRAIN</p> <p>REMOTE CONTROL VALVE WIRES: AWG UP #14 SECURE WIRES TO CONTROL UNIT AT TERMINALS PROVIDED IN CONTROL UNIT. EXTEND ONE COMMON WIRE TO ALL R.C.V.'S AND ONE CONTROL WIRE TO EACH R.C.V. (TYPICAL) COMMON WIRE SHALL BE TIED INSIDE PROTECTIVE ENCLOSURE WHEN REQUIRED.</p> <p>ON-OFF SWITCH</p> <p>FINISH GRADE</p> <p>8" MIN.</p> <p>ELECTRICAL CONDUIT TO SOURCE CONTROL UNIT REQUIREMENTS 120 V., 60 Hz, 2 AMP. MAX.</p> <p>CONDUIT AND IRRIGATION INTERCONNECT WHEN REQUIRED</p> <p>PVC SWEEP ELBOW SIZE AS REQUIRED</p> <p>6" MIN.</p> <p>NOTES: 1. COMMON WIRE TO BE WHITE AND CONTROL WIRES TO BE COLOR CODED. 2. NO SPLICES SHALL BE MADE BETWEEN CONTROLLER AND R.C.V.. 3. ALL WIRING, CONDUIT OR PLUMBING TO GO THROUGH BOTTOM OF CONCRETE FOOTING. 4. AFTER ESTABLISHMENT OF ALL PLANT MATERIAL CONTROLLER SHALL BE PROGRAMMED TO IRRIGATE SOLELY DURING NIGHTTIME (TYPICAL) 5. CONTROLLER SHALL BE HARD-WIRED TO GROUND 110 VAC POWER SOURCE.</p>	<div><div><div>INSIDEOUT</div><div>architecture interiors landscape</div><div>6000 HARDWOOD AVE OAKLAND, CA 94618 510 655 7674 aboutinsideout.com</div></div><div><div>LICENSED LANDSCAPE ARCHITECT</div><div>Signature: [Signature]</div><div>03-31-2022</div><div>06-08-2020</div><div>State of California</div></div></div> <div>ISSUES: 02.19.20 Response to city comments 04.28.20 Planting Revisions 06.25.20 Planning Commission</div>	
<p>G. BALL VALVE</p> <p>VALVE BOX LABELING NOTE: HEAT BRAND ALL VALVE BOX COVERS IN 2" HIGH LETTERS PER EQUIPMENT LOCATED WITHIN VALVE BOXES. LABEL "BV" FOR ALL BALL VALVES LABEL "QCV" FOR ALL QUICK COUPLING VALVES LABEL "MV" FOR ALL MASTER VALVES LABEL "VALVE STATION" FOR ALL CONTROL VALVES LABEL "FM" FOR ALL FLOW MASTER VALVES LABEL "AR" FOR ALL AIR RELIEF VALVES LABEL "FV" FOR ALL FLUSH VALVES</p> <p>LEGEND - USE CARSON VALVE BOXES. 1. 10" DIAMETER CIRCULAR VALVE BOX. 2. EDGE OF LAWN, WALK, FENCE, CURB, ETC. 3. 14" x 19" RECTANGULAR VALVE BOX. 4. 20" x 30" RECTANGULAR VALVE BOX.</p> <p>NOTES: A. CENTER VALVE BOX OVER VALVE TO FACILITATE SERVICING OF VALVE. B. SET VALVE BOXES 2" MAXIMUM ABOVE GRADE IN MULCH COVER OR GROUND COVER/SHRUB AREAS - SET FLUSH WITH FINISH GRADE IN TURF AREAS. C. SET VALVE BOX AND VALVE ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE - INSTALL IN TURF ONLY IF THERE IS NO ADJACENT GROUND COVER. D. SET VALVE BOXES PARALLEL TO ONE ANOTHER AND PERPENDICULAR TO EDGE. E. AVOID HEAVY COMPACTION OF SOIL AROUND VALVE BOXES TO PREVENT THEIR DEFORMATION/COLLAPSE. F. CONTRACTOR TO USE PURPLE LID W/ LOCKING BOLTS.</p>  <p>PLAN VIEW</p>	<p>D. FLOW SENSOR</p>  <p>FINISH GRADE</p> <p>AS REQUIRED</p> <p>6" MIN.</p> <p>12" MIN.</p> <p>18" MIN.</p> <p>NON PRESSURE LATERAL LINE</p> <p>CLEAN BACKFILL</p> <p>CONTROL WIRES</p> <p>MIN. 2" OF CLEAN EARTH</p> <p>PRESSURE SUPPLY LINE</p> <p>NOTES: 1. BELOW PAVED AREAS A MINIMUM OF 6" LAYER OF CLEAN FILL SAND SHALL BE INSTALLED ABOVE AND BELOW PIPING. 2. PROVIDE MINIMUM COVER OF 24" ON PRESSURE SUPPLY LINES 3" AND LARGER.</p>	<p>A. AUTOMATIC CONTROLLER</p> <p>NOTE: INSTALL BACKFLOW PREVENTER AS REQ. BY LOCAL CODES AND HEALTH DEPT. VERIFY LOCAL REGS. PRIOR TO INSTALLATION. AND PROVIDE BACKFLOW ENCLOSURE AS REQUIRED.</p>  <p>REDUCED PRESSURE BACKFLOW PREVENTER</p> <p>APPROVED STRONGBOX ENCLOSURE</p> <p>BALL VALVE (2) TOTAL</p> <p>BRASS "1" STRAINER W/ 60 MESH MIGNEL SCREEN</p> <p>4 BRASS PLUG</p> <p>BRASS 90 ELL (TYP.)</p> <p>BRASS UNION (TYP.)</p> <p>12"X12"X12" CONCRETE THRUST BLOCK</p> <p>FROM P.O.C.</p> <p>PVC MAINLINE</p> <p>USE TEFLON TAPE OR TEFLON PIPE DOPE ON ALL PVC TO PVC OR METAL TO PVC MALE PIPE THREADS</p> <p>POTABLE— CONTRACTOR SHALL PAINT BACKFLOW PREVENTOR DEVICE 'GREEN' TO PREVENT THEFT</p>	1034-1042 47th Street Emeryville CA 94608	
<p>H. VALVE BOX INSTALLATION</p>  <p>CONTROLLER ENCLOSURE (SEE CONTROLLER NOTE)</p> <p>HUNTER SOLAR SYNC SENSOR WITH VANDAL RESISTANT SENSOR GUARD PER CONTROLLER NOTES</p> <p>PROTECTED LEAD WIRES TO CONTROLLER</p> <p>NOTE: MOUNT ON ANY SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY.</p> <p>WIRE SPLICING STEPS</p> <ol style="list-style-type: none">1. STRIP WIRES 1/2" TO 5/8". USING LINEMANS PLIERS OR OTHER STYLE TOOL, TWIST ENDS TOGETHER MIN 3 TIMES. INSERT INTO SCOTCHLOK ELECTRICAL CONNECTOR AND ROTATE CLOCKWISE UNTIL ADDITIONAL FORCE IS REQUIRED.2. INSERT THE SPLICE INTO THE GEL-FILLED INSULATOR TUBE. PUSH PAST THE LOCKING FINGERS TO HOLD THE SCOTCHLOK CONNECTOR IN PLACE.3. POSITION WIRE CHANNELS AND SNAP INSULATOR TUBE COVER CLOSED. <p>* WIRE CONNECTORS TO BE DBR/Y-6 BY 3M OR EQUAL</p>	<p>E. TYPICAL TRENCHING</p>  <p>HARDSCAPING(SEE NOTE 4)</p> <p>CLEAN BACKFILL - SEE SPECS. FOR MATERIAL, 90% COMPACTION REQUIRED</p> <p>PROVIDE 6" MIN. OF SAND BEDDING AND SHADING</p> <p>CONTROL WIRE SLEEVE - SIZE PER LEGEND INSTALL ADJACENT TO PRESSURE SUPPLY LINE</p> <p>PRESSURE SUPPLY LINE SLEEVE - SIZE PER LEGEND</p> <p>NON-PRESSURE LATERAL LINE SLEEVE - SIZE PER LEGEND</p> <p>NOTES: 1. ALL SLEEVES TO BE SCH 40 PVC. 2. EXTEND ALL SLEEVES 12" BEYOND EDGE OF HARDSCAPING AT BOTH ENDS. 3. ROUTE SLEEVING AROUND HANDICAP RAMPS. 4. PIPING UNDER PAVEMENT SUSCEPTIBLE TO TRAFFIC LOADS REFER TO CITY STANDARDS. (24" MIN. TO 36" MAX DEPTH TO TOP OF PIPE BELOW HARDSCAPE SURFACE.</p>	<p>B. BACKFLOW PREVENTER</p>  <p>APPROVED VALVE BOX SIZE AS REQUIRED</p> <p>BRASS OR COPPER NIPPLE & UNION</p> <p>PVC MALE ADAPTER TYP. 2 (TWO) PLACES</p> <p>FINISH GRADE</p> <p>12" MAX.</p> <p>MASTER VALVE (SEE LEGEND FOR TYPE)</p> <p>APPROVED WATERPROOF CONNECTORS</p> <p>EXPANSION LOOP</p> <p>1" IN TURF AREAS 2" IN SHRUB AREAS</p> <p>BRICK, ONE AT EACH CORNER OF VALVE BOX</p> <p>PEA GRAVEL (MIN. 3 CU. FT.)</p> <p>PRESSURE MAIN LINE ANGLE TO SPECIFIED DEPTH WITH 45-DEGREE ELBOWS, SIZE PER DRAWINGS.</p> <p>CONTROL AND COMMON WIRES, TAPE WIRES TO MAIN LINE</p> <p>NOTES: 1. PLACE PEA GRAVEL PRIOR TO INSTALLATION OF VALVE BOX. 2. PLACE BOXES AT RIGHT ANGLES TO HARDSCAPE OR STRUCTURES. 3. PIPE UPSTREAM OF VALVE ASSEMBLY IS EQUAL IN DIAMETER TO DOWNSTREAM PIPING OF VALVE ASSEMBLY. IF NECESSARY, ADD REDUCE-BUSHING TO BRING PIPING DIAMETER TO VALVE SIZE. 4. MASTER VALVES 4" AND LARGER TO BE PROVIDED WITH FLANGED CONNECTIONS IN LIEU OF UNIONS.</p>	TITLE: Irrigation Details	
<p>J. RAIN SENSOR</p>	<p>I. WIRE CONNECTOR</p>	<p>F. TYPICAL SLEEVING</p>	<p>C. MASTER VALVE</p>	SCALE: DATE: 08 JUNE 2019
				DRAWING NO: 11.2

 <p>1 BARBED PLD FITTING TEE: HUNTER PLDTEE 2 SUB-SURFACE DRIPLINE: SEE LEGEND FOR SPEC. 3 INLINE DRIP EMITTER 4 TIE DOWN STAKE – SEE NOTE 1. 5 FINISH GRADE OR SHRUB BED WITH MULCH</p> <p>NOTES: 1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY. 2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION. 3. INSERTION FLOW AND TRENCHED INSTALLATIONS DO NOT REQUIRE TIE DOWN STAKES.</p>	<p>LEGEND</p> <p>1 HUNTER REMOTE CONTROL VALVE (IC2) WITH FILTER REGULATOR 2 IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS 3 WATERPROOF CONNECTORS (2) 4 18"-24" COILED WIRE TO CONTROLLER 5 FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH) 6 SCH. 80 CLOSE NIPPLE, MATCH SIZE TO VALVE 7 PVC SLIP X FPT UNION 8 ISOLATION VALVE, SIZE AND TYPE PER PLAN 9 BRICK SUPPORTS (4) 10 FILTER FABRIC – WRAP TWICE AROUND BRICK SUPPORTS 11 3/4" WASHED GRAVEL – 4" MIN. DEPTH 12 IRRIGATION LATERAL 13 MAINLINE LATERAL AND FITTINGS</p> 	 <p>SECTION VIEW - N.T.S.</p>	<div> <div> <div>INSIDEOUT</div> <div> architecture interiors landscape 6000 HARDWOOD AVE OAKLAND, CA 94618 510 655 7674 aboutinsideout.com </div> </div> <div> <div> <div>LICENSED LANDSCAPE ARCHITECT</div> <div> <div> <div>Signature</div> <div>03-31-2022</div> <div>06-08-2020</div> <div>Date</div> </div> <div> <div>Revised Date</div> <div>06-08-2020</div> <div>Date</div> </div> </div> <div>STATE OF CALIFORNIA</div> </div> </div> <div> ISSUES: 02.19.20 Response to city comments 04.28.20 Planting Revisions 06.25.20 Planning Commission </div> </div>
<p>G. SURSURFACE DRIP LINE</p>  <p>LEGEND: 1 PRESSURE INDICATOR 2 FINISHED GRADE 3 ADJACENT MULCH 4 PVC LATERAL PIPE 5 SWING JOINT</p>	<p>D. CONTROL ZONE KIT</p>  <p>1 PVC EXHAUST HEADER 2 PVC SCH 40 TEE OR EL (TYPICAL) 3 BARB X MALE FITTING 4 FLUSH POINT (TYPICAL) – SEE LEGEND FOR SPEC. 5 PERIMETER OF AREA 6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA 7 PVC SUPPLY PIPE FROM DRIP CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND) 8 PVC SUPPLY MANIFOLD 9 CONNECTION FROM SUPPLY MANIFOLD TO DRIPLINE (TYPICAL)– SEE INSET A 10 SUB-SURFACE DRIPLINE: – SEE LEGEND FOR SPEC. 11 BLANK DRIP TUBING 12 BARB X BARB INSERT TEE OR CROSS 13 1/2" AIR RELIEF VALVE – SEE LEGEND FOR SPEC. 14 BARB X FEMALE FITTING 15 3/4" PVC NIPPLE, LENGTH AS NECESSARY</p> <p>NOTES: 1. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH RECOMMENDED BY MANUFACTURER. 2. AIR RELIEF VALVE INSTALLED IN VALVE BOX AT OPTIMAL HIGHEST POINT FROM CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE. 3. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING. 4. PRESSURE INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP. 5. FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.</p> <p>INSET A</p>	<p>A. PRESSURE REGULATOR</p>  <p>NOTE: PLACE PEA GRAVEL PRIOR TO INSTALLATION OF VALVE BOX</p>	<p>1034-1042 47th Street Emeryville CA 94608</p> <p>TITLE: Irrigation Details</p>
<p>H. PRESSURE INDICATOR</p> <p>NOTE: PLACE ALL AIR RELIEF ASSEMBLIES AT HIGHEST SPOTS IN THE FIELD.</p>  <p>TOP OF MULCH 6-INCH ROUND PURPLE VALVE BOX & LID AIR RELIEF VALVE KIT: HUNTER PLD-AVR AR VALVE KIT FINISH GRADE LANDSCAPE DRIPLINE TUBING: SEE LEGEND FOR SPEC. PURPLE PVC LATERAL PIPE SEE LEGEND 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL</p>	<p>E. DRIP LINE LAYOUT</p>  <p>LEGEND: 1 BALL VALVE 2 FINISHED GRADE 3 IRRIGATION HOSE (LENGTH AS NECESSARY) 4 FILTER FABRIC 5 BRICK</p>	<p>B. QUICK COUPLER</p>  <p>NOTES: 1. INSTALL CONTROL AND VALVES MINIMUM 2' APART, 2' FROM STRUCTURES OR HARDSCAPE IN SHRUB AREAS. 2. PLACE PEA GRAVEL PRIOR TO INSTALLATION OF VALVE BOX. 3. PLACE BOXES AT RIGHT ANGLES TO HARDSCAPE OR STRUCTURES. 4. PIPE UPSTREAM OF VALVE ASSEMBLY IS EQUAL IN DIAMETER TO DOWNSTREAM PIPING OF VALVE ASSEMBLY. IF NECESSARY, ADD REDUCE-BUSHING TO BRING PIPING DIAMETER TO REMOTE CONTROL VALVE SIZE. REFER TO IRRIGATION CONSTRUCTION DOCUMENTS FOR PIPING SIZE.</p>	<p>SCALE: DATE: 08 JUNE 2019</p> <p>DRAWING NO: 11.3</p>
<p>I. AIR RELIEF VALVE</p>	<p>F. FLUSH VALVE ASSEMBLY</p>	<p>C. REMOTE CONTROL VALVE</p>	

IRRIGATION CALCULATIONS & SCHEDULES

Data											
Reference Evapotranspiration (Eto) Amounts:											
Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.50	1.50	2.80	3.90	5.10	5.30	6.00	5.50	4.80	3.10	1.40	0.90

Total Yearly Eto: 41.80 inches

Irrigation System Information:									
Station	Plant Factor	Irr Type	sq ft area	ppt	Efficiency	GPM	Run Days	Cycle/Day	
A1	0.5	RWS	4	1.00	81%	4.00	3	2	
A2	0.2	Emitter	8	1.00	81%	2.40	3	1	
A3	0.2	Drip - 12"	427	0.96	81%	4.30	3	1	
A4	0.8	Rotator	367	0.41	75%	2.80	3	4	
A5	0.2	RWS	4	1.00	81%	2.00	3	1	
A6	0.2	Drip - 12"	600	0.96	81%	5.70	3	1	
A7	0.2	Drip - 12"	361	0.96	81%	3.60	3	1	
A8	0.5	Drip - 12"	681	0.96	81%	6.80	3	2	

California Water Efficient Landscape Worksheet - 47th Street - POC 'A'									
Reference Evapotranspiration (ET _a)		41.8		Project Type		Residential		0.55	
Hydrozone # / Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^d		
Regular Landscape Areas									
HZ 1 - DRIP - MOD.	0.5	Drip	0.81	0.62	681	420	10894		
HZ 2 - DRIP - LOW	0.2	Drip	0.81	0.25	1,388	343	8882		
HZ 3 - BUBBLER - LOW	0.2	Drip	0.81	0.25	8	2	51		
HZ 4 - EMITTER - LOW	0.2	Drip	0.81	0.25	8	2	51		
HZ 5 - RORATOR - MOD.	0.8	Overhead	0.75	1.07	367	391	10145		
			0.75	0.00			0	0	
					Totals	2452	1159	30024	
Special Landscape Areas									
				1			0	0	
				1			0	0	
				1			0	0	
				1			0	0	
					Totals	0	0	0	
							ETWU Total	30024	
							Maximum Allowed Water Allowance (MAWA) ^f	34950	

ETAF Calculations	
Regular Landscape Areas	
Total ETAF x Area	1159
Total Area	2452
Average ETAF	0.47
All Landscape Areas	
Total ETAF x Area	1159
Total Area	2452
Average ETAF	0.47

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Total Landscape Area in this package: 2,436 SQ. FT.

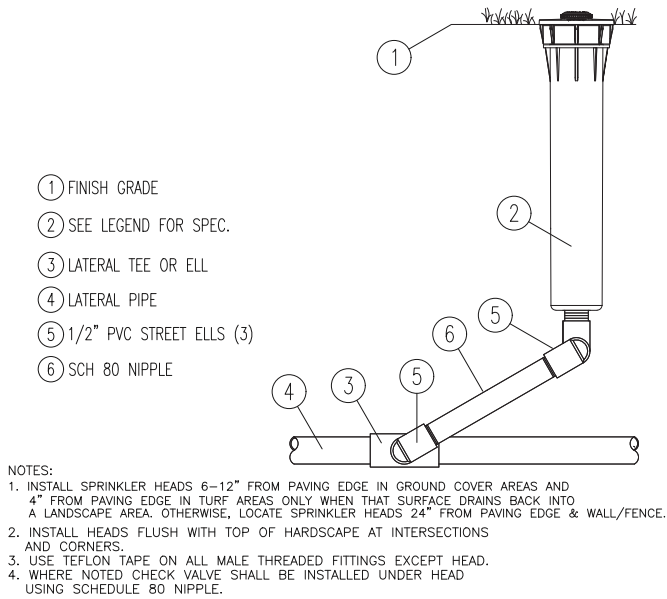
Establishment Irrigation Schedule												
Station	Run Days per week	Cycles (Start times)	Minutes per Cycle									
			Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
A1	3	2	3	3	5	7	9	10	11	10	9	6
A2	3	1	2	2	4	6	8	8	9	8	7	5
A3	3	1	2	2	4	6	8	8	9	8	7	5
A4	3	4	6	6	11	15	20	21	23	21	19	12
A5	3	1	2	2	4	6	8	8	9	8	7	5
A6	3	1	2	2	4	6	8	8	9	8	7	5
A7	3	1	2	2	4	6	8	8	9	8	7	5
A8	3	2	3	3	5	8	10	10	12	11	9	6

NOTE:
FOR THE ESTABLISHMENT PERIOD, THE CONTRACTOR IS TO SELECT THE APPROPRIATE 90 DAY PERIOD (I.E. MAY,JUNE,JULY) FROM THE ANNUAL SCHEDULE PROVIDED

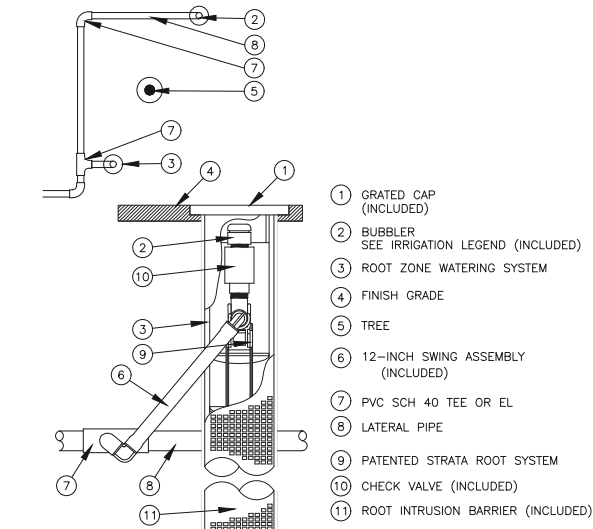
Established Irrigation Schedule												
Station	Run Days per week	Cycles (Start times)	Minutes per Cycle									
			Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
A1	3	2	2	2	4	6	8	8	9	8	7	5
A2	3	1	2	2	3	5	6	7	7	7	6	4
A3	3	1	2	2	4	5	7	7	8	7	6	4
A4	3	4	5	5	9	13	17	17	20	18	16	10
A5	3	1	2	2	3	5	6	7	7	7	6	4
A6	3	1	2	2	4	5	7	7	8	7	6	4
A7	3	1	2	2	4	5	7	7	8	7	6	4
A8	3	2	2	2	5	6	8	9	10	9	8	5

PRESSURE LOSS CALCULATIONS - POC 'A'	
VALVE #	'A7'
GPM	6.8 GPM
WATER METER (EXISTING)	
BALL VALVES (1 1/2")	1.0
BACKFLOW PREVENTER (1")	12.0
FLOW METER (1")	1.0
MASTER VALVE (1 1/2")	1.5
VALVE	2.8
MAINLINE	(95' @ 1 1/2") 0.1
LATERAL LINE	(5.0 MAX.) (5.0 MAX.)
ELEVATION CHANGE	(UP GRADE 0') 0.0
FITTING LOSS (10%)	2.4
TOTAL PRESSURE LOSS	26.6
MINIMUM OPERATING PRESSURE	30
10% RESIDUAL PRESSURE REQUIRED	5.7
DESIGN PRESSURE REQUIRED	62.3
AVAILABLE PRESSURE (P.O.C.)	70.0 (ASSUMED)
SET PRESSURE REGULATOR @	65.0
RESIDUAL PRESSURE REMAINING	+2.7

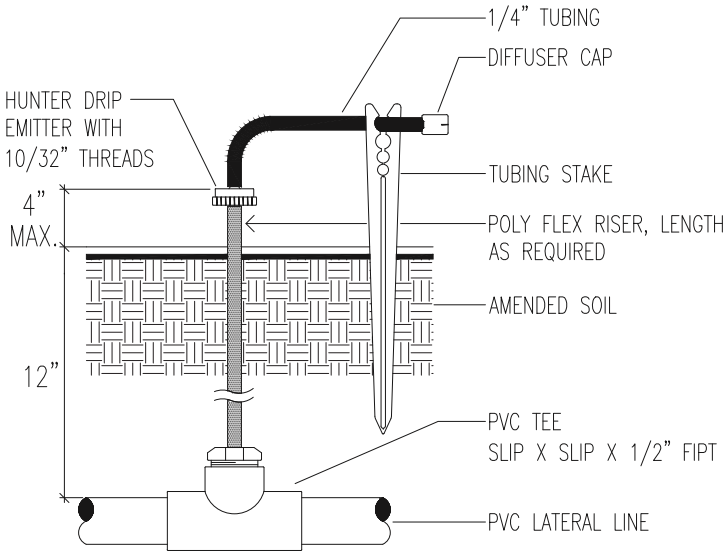
Contractor shall verify the static water pressure with supplier prior to installation. If different from PSI noted above, Contractor to notify Owner for instructions. Failure to do so will result in contractor being responsible for changes that might occur.



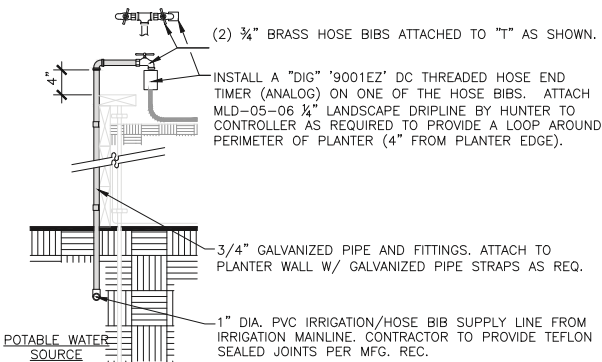
D. POP-UP SPRINKLER HEAD



A. ROOT ZONE WATERING SYSTEM



B. POINT SOURCE EMITTER AT VINES



C. COMMUNITY GARDEN IRRIGATION

INSIDEOUT
architecture | interiors | landscape
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ISSUES:
02.19.20 Response to city comments
04.28.20 Planting Revisions
06.25.20 Planning Commission

1034-1042 47th Street
Emeryville CA
94608

TITLE:
Irrigation Details,
Calculations &
Schedules

SCALE:
DATE: 08 JUNE 2019

DRAWING NO:

11.4