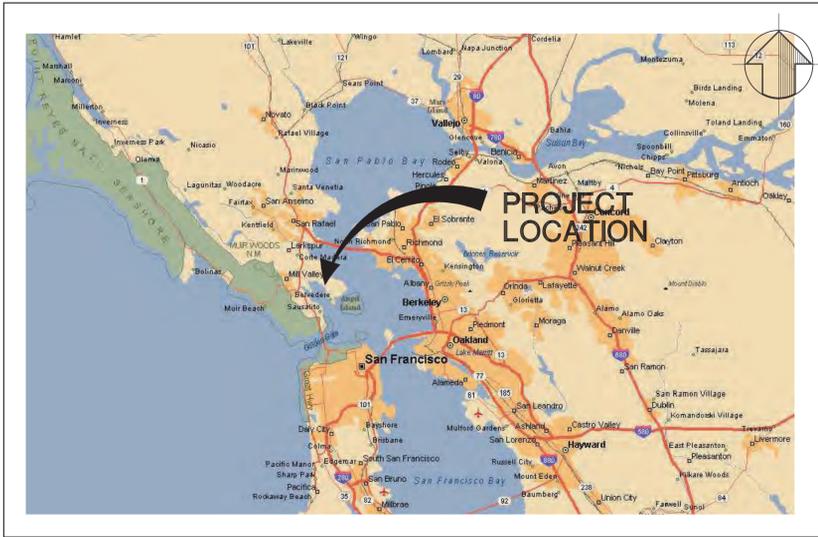


# TOWN OF TIBURON HAWTHORNE UTILITY UNDERGROUNDING DISTRICT OCTOBER 2020, JOINT TRENCH COMPOSITE PLANS



**LOCATION MAP**

NO SCALE

## INDEX OF SHEETS

SHEET NO.	DRAWING NO.	DESCRIPTION
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18	K-2	PAVING AND STRIPING KEY MAP
19 THRU 23	P-1 THRU P-5	PAVEMENT RESTORATION PLANS
24 THRU 28	ST-1 THRU ST-5	STRIPING AND MARKING PLANS
29 THRU 32	D-1 THRU D-4	JOINT TRENCH COMPOSITE PLAN DETAILS
33	D-5	PAVING CONSTRUCTION DETAILS AND CURB RAMP DETAIL

## LEGEND

	UTILITY DISTRICT BOUNDARY		EXISTING GAS
	PROPOSED JOINT TRENCH		EXISTING EDGE OF PAVEMENT
	PROPOSED SERVICE CONNECTION / DISTRIBUTION JOINT TRENCH		EXISTING JOINT TRENCH
	PROPOSED UNDERGROUND SERVICE LINE		EXISTING CURB & GUTTER
	RIGHT OF WAY		EXISTING MANHOLE
	EXISTING COMMUNICATION		EXISTING WATER METER
	EXISTING STORM DRAIN		EXISTING GAS METER
	EXISTING SANITARY SEWER		EXISTING TREE
	EXISTING WATER		EXISTING DRAINAGE INLET
	EXISTING ELECTRICAL		EXISTING FIRE HYDRANT
	EXISTING CABLE TV		TEST BORING BY MPEG, 2018
	EXISTING TELEPHONE		MONUMENT
			IRON PIN

## LEGEND

PROPOSED	EXISTING		BOX SIZE	EXCAVATION *	
		— P G & E —			
		#7 PRIMARY SPLICE BOX	4'6" x 8'6" x 6"D	6'6" x 10'6" x 7'6"D	*ALLOW FOR 6" COMPACTED ROCK OR SAND FOR ALL BOXES PER UTILITY REQUIREMENTS.
		FULL TRAFFIC #7 PRIMARY ENCLOSURE BOX	4'6" x 8'6" x 6"D	6'6" x 10'6" x 7'6"D	
		#6 BOX	4'0" x 6'6" x 5"D	5'0" x 7'6" x 6'0"D	
		FULL TRAFFIC #6 BOX	4'0" x 6'6" x 6"D	5'0" x 7'6" x 7'0"D	
		TRANSFORMER PAD	50" x 52" x 18"H	SET TO GRADE	
		DUPLEX TRANSFORMER PAD	60" x 62" x 18"H	SET TO GRADE	
		FULL TRAFFIC SECONDARY SPLICE BOX	17" x 30" x 26"D	29" x 42" x 32"D	
		SECONDARY SPLICE BOX	17" x 30" x 26"D	29" x 42" x 32"D	
		PG&E RETAINING WALL	15'0" x 4'6" x 3'6"H		
		UTILITY POLE (NOT TO SCALE)			
		— AT&T —			
		T-8 SERVICE BOX	48" x 78" x 36"D	60" x 90" x 42"D	
		T-3 SERVICE BOX	20" x 42" x 28"D	37" x 59" x 30"D	
		T-3 SERVICE BOX (FULL TRAFFIC COVER)	20" x 42" x 28"D	37" x 59" x 30"D	
		T-2 SERVICE BOX (FULL TRAFFIC COVER)	17" x 30" x 26"D	29" x 42" x 32"D	
		T-1 PULL BOX (NTS)	11" x 17" x 10"D	26" x 21" x 18"D	
		T-1 PULL BOX (NTS) (FULL TRAFFIC COVER)	11" x 17" x 10"D	26" x 21" x 20"D	
		— COMCAST CABLE —			
		B-30 TV SPLICE BOX (NTS)	13" x 24" x 18"D	33" x 46" x 24"D	
		FULL TRAFFIC B-30 TV SPLICE BOX (NTS)	13" x 24" x 18"D	33" x 46" x 24"D	
		B-36 TV SPLICE BOX			
		FULL TRAFFIC B-36 TV SPLICE BOX			
		B-48 TV SPLICE BOX	30" x 48" x 12"D	42" x 56" x 30"D	
		FULL TRAFFIC B-48 TV SPLICE BOX	30" x 48" x 12"D	42" x 56" x 30"D	
		STREET LIGHT			
		ST. LT. BOX #3~8 CALTRANS 14" x 20"			
		PROPOSED NEW ELECTRIC METER AND PANEL			
		PROPOSED DRAINAGE BOX	17" x 30" x 24"D	25" x 38" x 30"D	
		PROPOSED TERMINATION POINT			
		EXISTING ELECTRIC METER AND PANEL WITH EX PANEL AMPERAGE			
		TRENCH SECTION NUMBER			



*K. Iranpour*  
KOUROSH IRANPOUR  
SR. PROJECT MANAGER

10/5/2020  
DATE

*St PL*

ACCEPTED FOR CONSTRUCTION  
STEVEN PALMER  
DIRECTOR OF PUBLIC WORKS/TOWN ENGINEER

11/18/2020  
DATE

THE CONTRACTOR SHALL POSSESS A CLASS "A" AND THE CONTRACTOR OR LICENSED SUB-CONTRACTOR A CLASS "C-10" LICENSE AT THE TIME THE CONTRACT IS AWARDED.

**811**  
Know what's below.  
Call before you dig.



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SHEET T-1  
SHEET 1 OF 33

## GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN CONFORMANCE WITH THE SPECIFICATIONS AND GENERAL CONDITIONS.
- ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN AND THOSE SPECIFICALLY SHOWN ON THE PLANS ARE APPROXIMATE LOCATIONS AND DEPTHS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TRENCH ROUTE, AND THE EXACT LOCATION OF UTILITIES IN THE FIELD BY POT-HOLING PRIOR TO START OF CONSTRUCTION. CALL "UNDERGROUND SERVICE ALERT" (U.S.A.) AT 811 AT LEAST 48 HOURS BEFORE DIGGING. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING AND ABANDONED UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
- THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.
- THERE SHALL BE NO CHANGES IN THE APPROVED IMPROVEMENT PLANS WITHOUT PRIOR WRITTEN APPROVAL BY THE DIRECTOR OF PUBLIC WORKS/TOWN ENGINEER.
- TRENCH WIDTH SHALL NOT EXCEED THE MAXIMUM WIDTHS AS SHOWN ON THE TYPICAL TRENCH DETAIL.
- THE CONTRACTOR SHALL ACQUAINT HIMSELF WITH THE SURFACE AND SURROUNDING CONDITIONS OF THE SITE.
- THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST 5 WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION. A WORK PLAN SHALL BE SUBMITTED FOR EACH KEY AREA OF WORK FOR TOWN APPROVAL PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS FOR THE TOWN'S APPROVAL PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL PRACTICE SAFETY AT ALL TIMES AND SHALL FURNISH, ERECT, AND MAINTAIN SUCH FENCES, BARRICADES, LIGHTS AND SIGNS NECESSARY TO GIVE ADEQUATE PROTECTION TO THE PUBLIC AT ALL TIMES. TEMPORARY TRAFFIC CONTROL SHALL BE REVIEWED BY THE TOWN.
- ALL EXCAVATIONS OR TRENCHES IN PAVED AREAS SHALL REQUIRE SAW CUTTING IN A NEAT AND UNIFORM MANNER.
- ALL STREETS, ALLEYS, VEHICULAR WAYS, SIDEWALKS, AND HAUL ROUTES SHALL BE KEPT CLEAN AND CLEAR OF DEBRIS, DIRT AND DUST IN A MANNER ACCEPTABLE TO THE TOWN. AT A MINIMUM, THESE AREAS SHALL BE CLEANED AT THE END OF EACH WORK DAY. FAILURE TO DO SO WILL RESULT IN A "STOP WORK" NOTICE. SAID NOTICE WILL NOT BE RELEASED UNTIL THE AREA HAS BEEN ADEQUATELY CLEANED.
- CONTRACTOR SHALL REPLACE ALL STRIPING AND PAVEMENT MARKING DISTURBED BY CONSTRUCTION TO PRE-CONSTRUCTION CONFIGURATION.
- THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED PLANS AND SPECIFICATIONS FOR THIS PROJECT ON THE SITE AT ALL TIMES.
- THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE DEPARTMENT OF INDUSTRIAL RELATIONS, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (CAL-OSHA) WHEN TRENCH EXCAVATIONS EXCEED 5'-0". CONTACT CAL-OSHA FOR FURTHER INFORMATION (HEALTH AND SAFETY CODE 17922.5).
- THE CONTRACTOR SHALL RESTORE ALL EXISTING LANDSCAPING AND HARDSCAPE (CONCRETE OR AC WALKWAYS, PATIOS, OR OTHER SURFACE FEATURES DISTURBED BY THE CONTRACTOR'S WORK) TO THE PRE-CONSTRUCTION CONDITIONS ACCEPTABLE TO THE TOWN. LANDSCAPING RESTORATION SHALL BE PERFORMED UNDER DIRECTION OF A LICENCED LANDSCAPING SUBCONTRACTOR.

## CONSTRUCTION NOTES

- ALL BOXES ARE SHOWN SCHEMATICALLY, AND ARE SUBJECT TO CHANGE TO COMPLY WITH UTILITY REQUIREMENTS. AS BOX LOCATIONS CHANGE, THE SERVICE (SVC) TRENCH FROM THE JOINT TRENCH TO THE BOXES WILL ALSO CHANGE.
  - REFER TO INDIVIDUAL PLATS FOR SERVICE TRENCH, CONDUIT, DRAINAGE BOX, AND ELECTRIC TERMINATION POINT REQUIREMENTS.
  - BEFORE BEGINNING SUBSTRUCTURE WORK, PLEASE NOTIFY THE FOLLOWING UTILITY AGENCIES:
    - PG&E UNDERGROUND INSPECTOR AT 415-257-3130
    - AT&T INSPECTOR AT 707-575-2330
    - COMCAST INSPECTOR AT 707-208-1320
    - TOWN OF TIBURON AT 415-435-7388
- WORK NOT PROPERLY INSPECTED BY EACH UTILITY COMPANY REPRESENTATIVE MAY BE REJECTED.
- CONNECTIONS FROM JOINT TRENCH TO BOXES ARE SHOWN SCHEMATICALLY. SWEEPS IN/OUT BOXES SHALL BE CONSTRUCTED PER DETAIL  OR UTILITY STANDARDS.
  - JOINT TRENCH SHALL BE CONSTRUCTED PER DETAIL .
  - IN SECTIONS WHERE THE CLEARANCE BETWEEN THE TRENCH AND A WET UTILITY IS LESS THAN 3'-0", PLACE A CONCRETE ENCASUREMENT ABOVE THE CONDUITS. THE MIX MUST CONSIST OF 2 PARTS SAND TO 1 PART CEMENT, WITH RED DIE MIXED IN.

## ABBREVIATIONS

ABAN	ABANDONED
AC	ASPHALT CONCRETE
BOX	BOX
C	CABLE TV (COMCAST)
CB/SDCB	CATCH BASIN
CONN	CONNECTION
CO	CLEAN OUT
D.O.	DIG OUT
DU	DUCT
DW/DWY	DRIVEWAY
ELECT/E/EL	ELECTRIC (PG&E)
E(OH)	ELECTRICAL (OVERHEAD)
EOP	EDGE OF PAVEMENT
EOT	END OF TRACE
EX/EXIST	EXISTING
FOC	FACE OF CURB
G	GAS (PG&E)
GV	GAS VALVE
INV	INVERT
JP	JOINT POLE
JT	JOINT TRENCH
LAT	LATERAL
LIP	LIP OF GUTTER
MH	MANHOLE
N/L,NL	NOT LOCATED
N.T.S,NTS	NOT TO SCALE
P	PRIMARY POWER
PB	PACIFIC BELL
PM	PARKING METER
PS	PUMP STATION
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
S	SECONDARY POWER
SD	STORM DRAIN
SDDI	STORM DRAIN DRAINAGE INLET
SDMH	STORM DRAIN MANHOLE
SL,ST.LT.	STREET LIGHTING
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SVC	SERVICE
TEL,T	TELEPHONE (AT&T)
TON	TOP OF VALVE NUT
TS	TRAFFIC SIGNAL
TYP	TYPICAL
U.G.	UNDERGROUNDED
UNK	UNKNOWN
V	VALVE
W	WATER
WLAT	WATER LATERAL
WV	WATER VALVE

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NO.	DATE	BY	REVISION

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 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG

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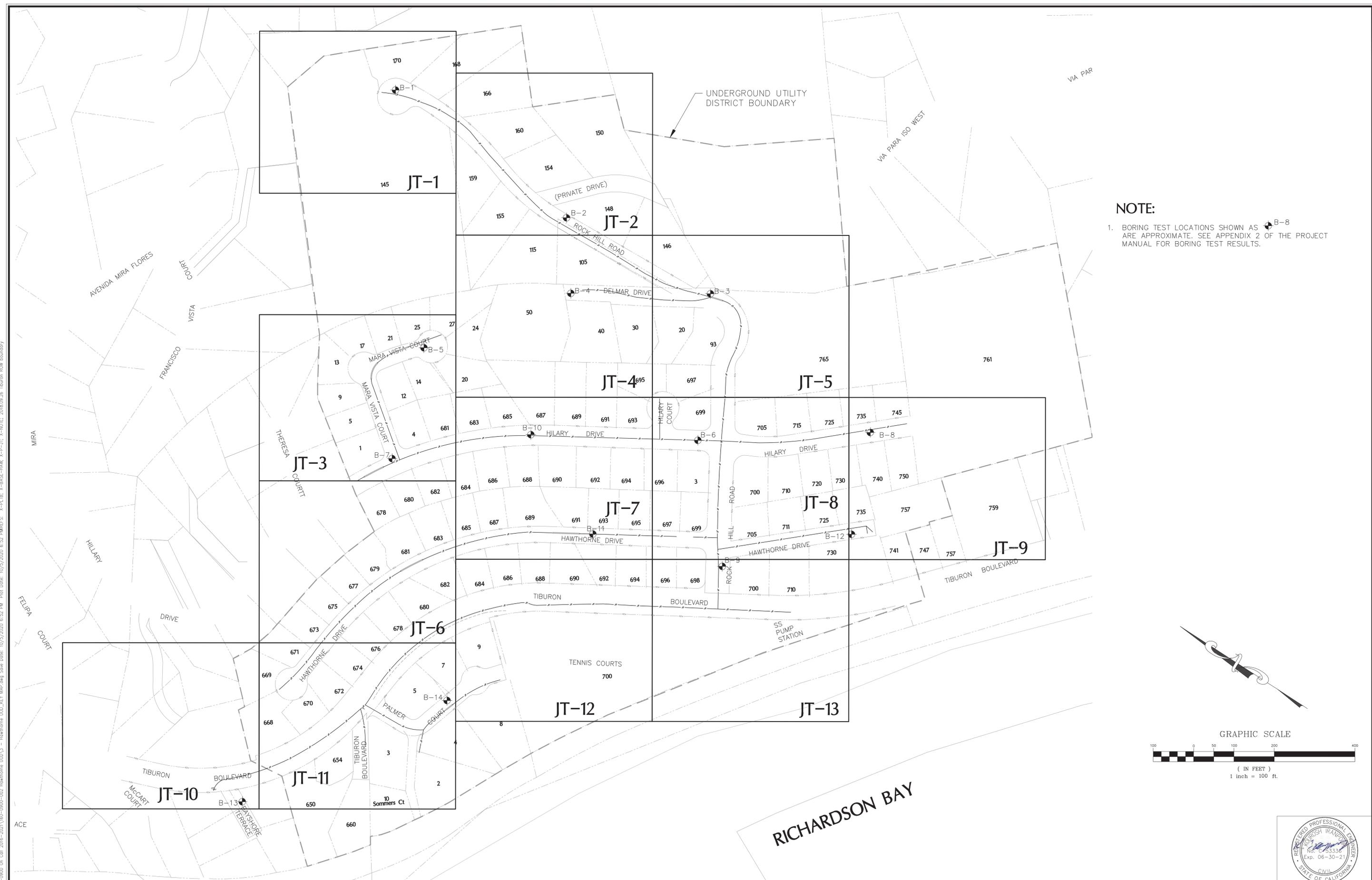
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**HAWTHORNE UTILITY UNDERGROUNDING**  
**DISTRICT**

**NOTES AND ABBREVIATIONS**



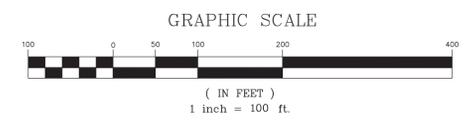
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 SHEET 2 OF 33

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**NOTE:**

1. BORING TEST LOCATIONS SHOWN AS B-8 ARE APPROXIMATE. SEE APPENDIX 2 OF THE PROJECT MANUAL FOR BORING TEST RESULTS.



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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE KEY MAP**

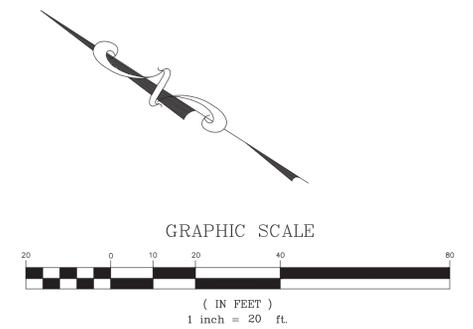
REGISTERED PROFESSIONAL ENGINEER  
 ROBERT J. HARRIS  
 No. C-53333  
 Exp. 06-30-21  
 CIVIL  
 STATE OF CALIFORNIA

DRAWING: **K-1**  
 SHEET 3 OF 33

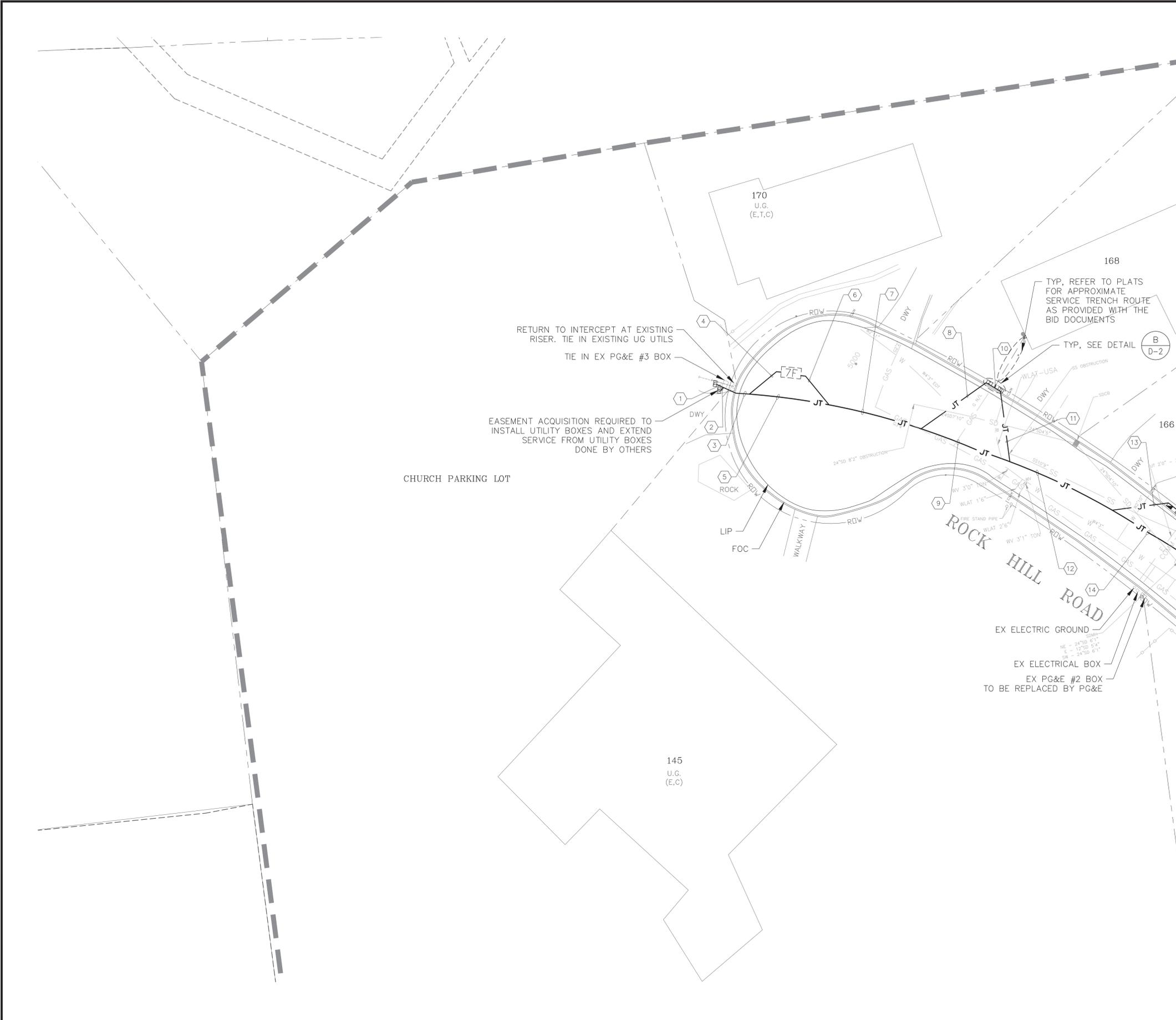
TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6"P	PG&E - 4"P	PG&E - 3"S	AT&T - 4"	AT&T - 2" svc.	COMCAST - 2"	COMCAST-1"
1	18X38	3	0	0	0	1	0	0	0
2	18X36	2	0	0	0	0	0	1	0
3	18X53	12	0	0	1	1	0	1	0
4	18X37	17	0	0	1	0	0	0	0
5	18X38	34	0	0	0	1	0	1	0
6	18X38	18	0	1	0	0	0	0	0
7	18X54	41	0	1	0	1	0	1	0
8	18X38	34	0	0	0	1	0	0	0
9	18X52	41	0	1	0	0	0	1	0
10	18X51	2	0	0	1	0	1	0	1
11	18X53	30	0	0	1	1	0	0	1
12	18X54	49	0	1	1	1	0	1	1
13	18X53	24	0	0	1	1	0	1	1
14	18X38	36	0	1	0	0	0	0	0

MATCH LINE SEE SHEET JT-2



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RETURN TO INTERCEPT AT EXISTING RISER. TIE IN EXISTING UG UTILS  
TIE IN EX PG&E #3 BOX

EASEMENT ACQUISITION REQUIRED TO INSTALL UTILITY BOXES AND EXTEND SERVICE FROM UTILITY BOXES DONE BY OTHERS

TYP. REFER TO PLATS FOR APPROXIMATE SERVICE TRENCH ROUTE AS PROVIDED WITH THE BID DOCUMENTS

TYP. SEE DETAIL (B) D-2

EX ELECTRIC GROUND  
EX ELECTRICAL BOX  
EX PG&E #2 BOX TO BE REPLACED BY PG&E

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**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**



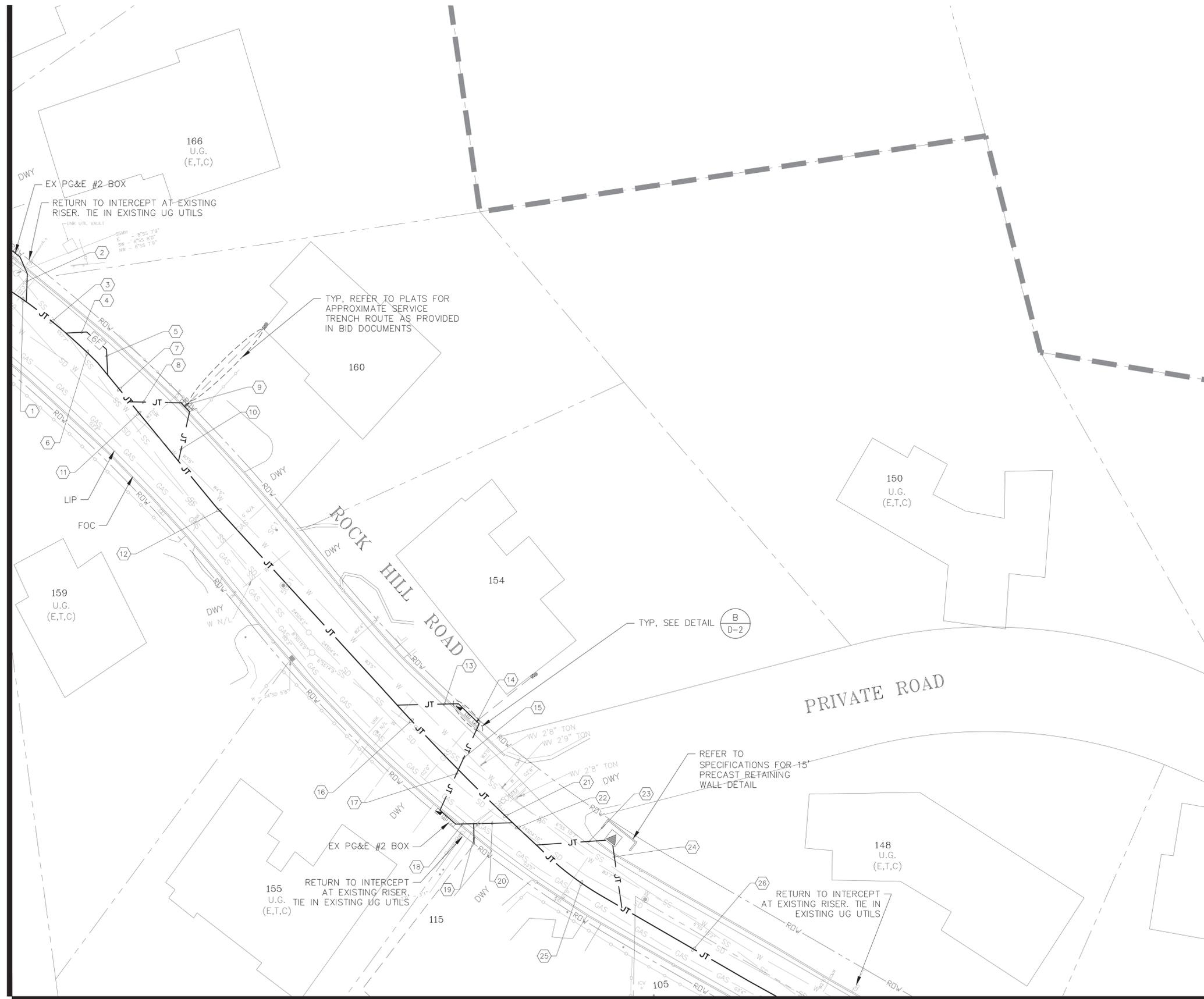
DRAWING: **JT-1**  
SHEET 4 OF 33

TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E-6"P	PG&E-4"P	PG&E-3"S	AT&T-4"	AT&T-2" svc.	COMCAST-2"	COMCAST-1" svc.
1	18X38	7	0	0	1	1	0	0	0
2	18X53	19	0	0	1	1	0	1	1
3	18X54	20	0	1	1	1	0	1	1
4	18X38	10	0	1	1	0	0	0	0
5	18X38	13	0	1	1	0	0	0	0
6	18X38	24	0	0	0	1	0	1	1
7	18X54	14	0	1	1	1	0	1	1
8	18X53	21	0	0	1	1	0	0	1
9	18X51	2	0	0	1	0	1	0	1
10	18X38	20	0	0	0	1	0	0	0
11	18X52	31	0	1	0	0	0	1	0
12	18X54	133	0	1	0	1	0	1	0
13	18X38	25	0	0	0	1	0	1	0
14	18X51	2	0	0	1	0	1	0	1
15	18X53	20	0	0	1	1	0	1	0
16	18X38	36	0	1	0	0	0	0	0
17	18X38	18	0	0	0	1	0	1	0
18	18X53	10	0	0	2	1	1	1	1
19	18X51	8	0	0	1	0	1	0	1
20	18X53	14	0	0	1	1	0	1	0
21	18X38	31	0	1	1	0	0	0	0
22	18X54	12	0	1	2	1	0	1	0
23	18X38	30	0	1	2	0	0	0	0
24	18X38	28	0	1	1	0	0	0	0
25	18X38	48	0	0	0	1	0	1	0
26	18X54	70	0	1	1	1	0	1	0

MATCH LINE SEE SHEET JT-1

MATCH LINE SEE SHEET JT-4



H:\TIBURON\160-9000-02 Hawthorne UDU'S - Hawthorne UUD\_JT-2.dwg Save Date: 10/5/2020 6:54 PM Plot Date: 10/5/2020 6:54 PM XREFS: X-P-JT, X-TOPO-HAW.LAS, X-BASE-HAW, X-IMG-ORIG, X-PLTB, X-NOTE, X-P-BOXES, X-UTIL, PDE compatible duct review

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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
 DRAWING: JT-2  
 SHEET 5 OF 33



H:\TIBORON\160-9900-02\160-9900-02\Hawthorne.UUD\6 - Hawthorne.UUD\_JT-3.dwg Save Date: 10/5/2020 6:55 PM Plot Date: 10/5/2020 6:55 PM XREFS: X-TOPG-HAW\_LAS; X-BASE-HAW; X-PLIB; X-NOTE; X-F-PL; X-P-BOXES; X-UTIL; 01/09/2020 Tiburon Composite Duct Review



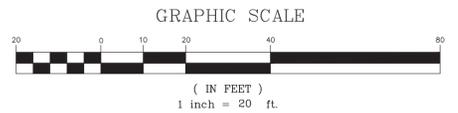
TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6"P	PG&E - 4"P	PG&E - 3"S	AT&T - 4"	AT&T - 2" svc.	COMCAST - 2"	COMCAST - 1" svc
1	18X36	4	0	0	0	0	1	0	1
2	18X37	3	0	0	1	0	0	0	0
2A	18X37	22	0	0	1	0	0	0	0
2B	18X38	17	0	0	0	1	0	1	0
3	18X51	35	0	0	1	1	0	1	0
4	18X53	71	0	0	1	1	0	1	0
5	18X53	10	0	0	1	1	0	1	0
6	18X51	3	0	0	1	0	1	0	1
7	18X51	3	0	0	1	0	1	0	1
8	18X53	10	0	0	1	1	0	1	0
10	18X53	68	0	0	1	1	0	1	0
11	18X51	14	0	0	1	0	1	0	1
12	18X53	20	0	0	1	1	0	1	0
13	18X51	45	0	0	1	0	1	0	1
14	18X51	14	0	0	1	0	1	0	1
16	18X54	14	0	1	2	1	2	1	2
17	18X51	30	0	0	1	1	2	0	2
18	18X51	2	0	0	1	0	1	0	1
19	18X51	15	0	0	1	0	1	0	1
20	18X54	60	0	1	1	1	0	1	0
21	18X38	24	0	0	0	1	1	0	1
23	18X51	16	0	0	1	0	1	1	1
24	18X51	5	0	0	1	0	1	0	1
25	18X38	25	0	1	0	0	0	0	0
26	18X51	11	0	0	1	0	0	1	2
27	18X52	13	0	1	1	0	0	1	2
28	18X38	33	0	0	0	1	2	0	0
29	18X51	23	0	0	1	0	1	0	1
32	18X37	4	0	0	1	0	0	0	0
33	18X54	92	0	1	0	1	1	1	1
34	18X37	2	0	0	2	0	0	0	0
35	18X51	5	0	0	1	0	1	0	1
36	18X51	32	0	0	1	0	1	0	1
37	18X54	21	0	1	1	1	0	1	0
38	18X53	45	0	0	1	1	0	3	0
39	18X51	10	0	0	1	0	1	0	1
40	18X53	31	0	0	1	1	0	3	0
42	18X36	30	0	0	0	0	0	3	0
43	18X36	20	0	0	0	0	0	3	0
44	18X40	29	0	0	0	2	1	4	0
45	18X51	35	0	0	2	0	1	0	0
46	18X38	47	0	1	0	0	0	0	0
48	18X51	6	0	0	1	0	1	0	1
49	18X50	32	0	0	1	0	0	0	1
51	18X38	21	0	0	0	1	1	3	0
52	18X51	19	0	0	1	0	1	0	1
53	18X54	19	0	1	2	1	0	3	2
54	18X40	10	1	0	0	0	0	0	0
55	18X38	37	0	1	1	0	0	0	0
56	18X53	23	0	0	1	1	0	3	2
57	18X40	17	1	0	0	0	0	0	0
58	18X51	19	0	0	1	0	1	0	1
59	18X56	19	1	0	2	1	1	3	3
59A	18X37	30	0	0	2	0	0	0	0
61	18X54	5	0	0	1	0	1	0	1
62	18X37	6	0	1	1	0	0	0	0
63	18X38	36	0	1	0	0	0	0	0
64	18X38	26	0	0	0	0	1	0	1
65	18X40	23	1	0	0	0	0	0	0
67	18X40	20	0	0	0	1	2	3	4
68	18X38	22	0	0	0	1	1	3	0
69	18X56	14	1	1	0	1	1	3	0

MATCH LINE SEE SHEET JT-4  
 MATCH LINE SEE SHEET JT-7  
 MATCH LINE SEE SHEET JT-6

NOTE:

- CONTRACTOR SHALL PLACE 6" CONDUIT FROM NUMBER 7 VAULT TO EXISTING CONDUIT AS NEAR AS POSSIBLE. CONTRACTOR SHALL COORDINATE WITH PG&E DURING TIE IN TO INTERCEPT EXISTING CONDUIT FOR CABLE RE-ROUTING. RETURN TO INTERCEPT.



MATCH LINE SEE SHEET JT-6

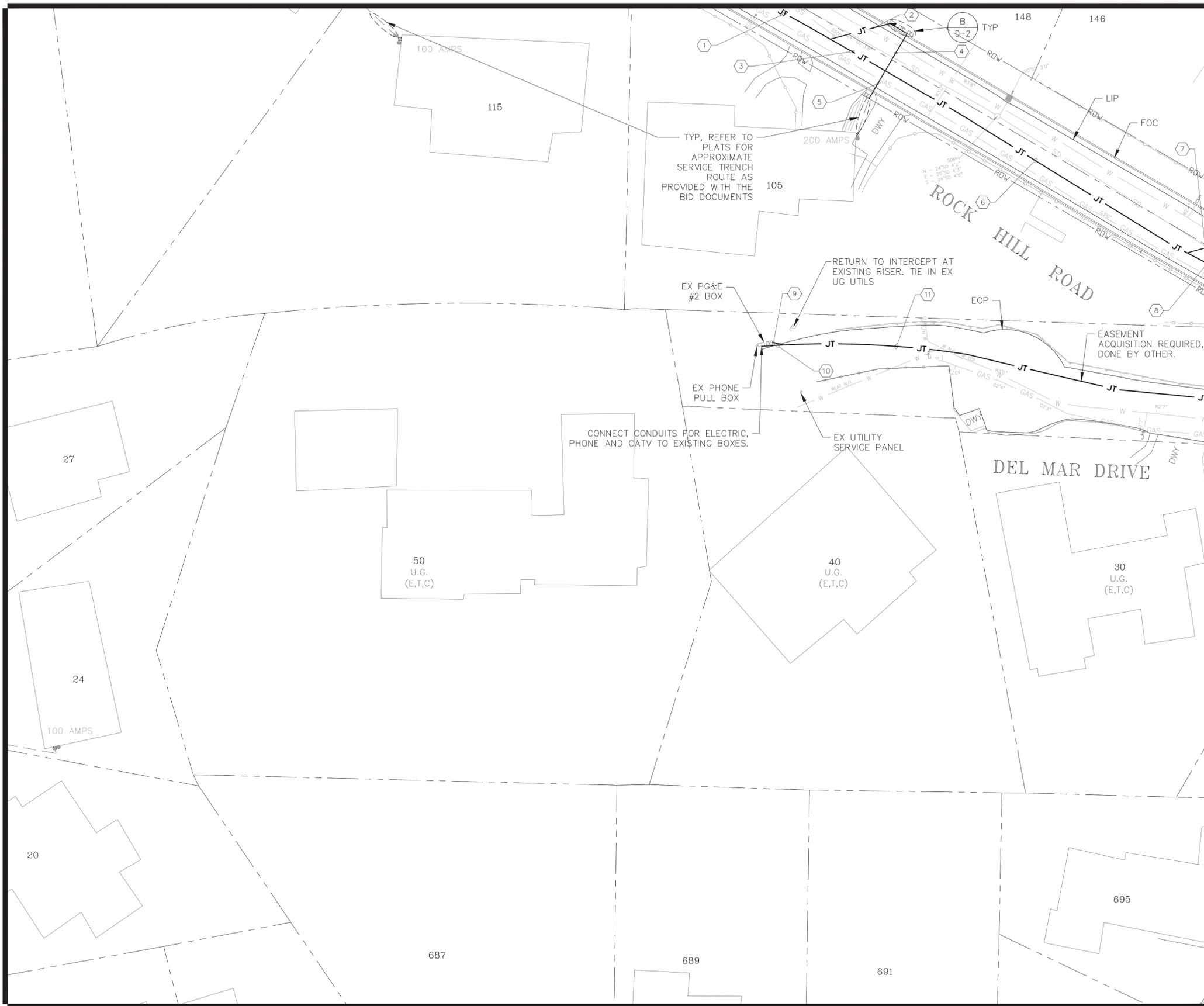
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NO.	DATE	BY	REVISION											

MATCH LINE SEE SHEET JT-2

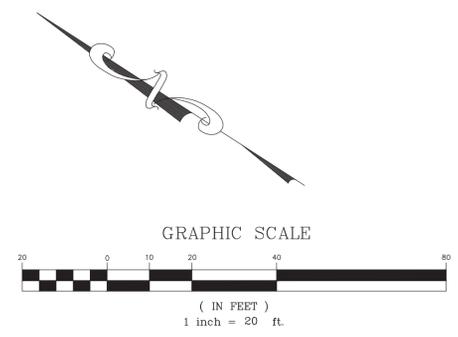
TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6"P	PG&E - 4"P	PG&E - 3"S	AT&T - 4"	AT&T - 2" svc.	COMCAST - 2"	COMCAST - 1" svc
1	18X54	25	0	1	1	1	0	1	0
2	18X53	25	0	0	1	1	0	1	0
3	18X38	26	0	1	0	0	0	0	0
4	18X53	18	0	0	1	1	1	2	1
5	18X51	12	0	0	1	0	1	0	1
6	18X54	143	0	1	0	1	0	2	0
7	18X38	12	0	0	0	1	0	2	0
8	18X38	13	0	1	0	0	0	0	0
9	18X36	5	0	0	0	0	0	1	0
10	18X53	9	0	0	1	1	0	0	0
11	18X53	179	0	0	1	1	0	1	0

H:\TIBURON\160-9900-02\160-9900-02\Hawthorne\_UUD\7 - Hawthorne\_UUD\_JT-4.dwg Save Date: 10/5/2020 6:56 PM Plot Date: 10/5/2020 6:56 PM XREFS: X-TOPD-HAW\_LAS; X-BASE-HAW; X-IMGRS-ORIG; X-PLIB; X-NOTE; X-P-JT; X-UTIL; X-P-BOXES; PDE compatible duct review  
 MATCH LINE SEE SHEET JT-3  
 MATCH LINE SEE SHEET JT-5



MATCH LINE SEE SHEET JT-7



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NO.	DATE	BY	REVISION

DRAWN BY: ZC/KC  
 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DATE ISSUED: 10/5/2020  
 JOB NO.: 160-9000.04

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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
 DRAWING: **JT-4**  
 SHEET 7 OF 33





MATCH LINE SEE SHEET JT-3

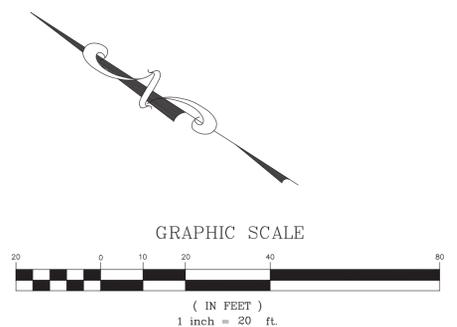
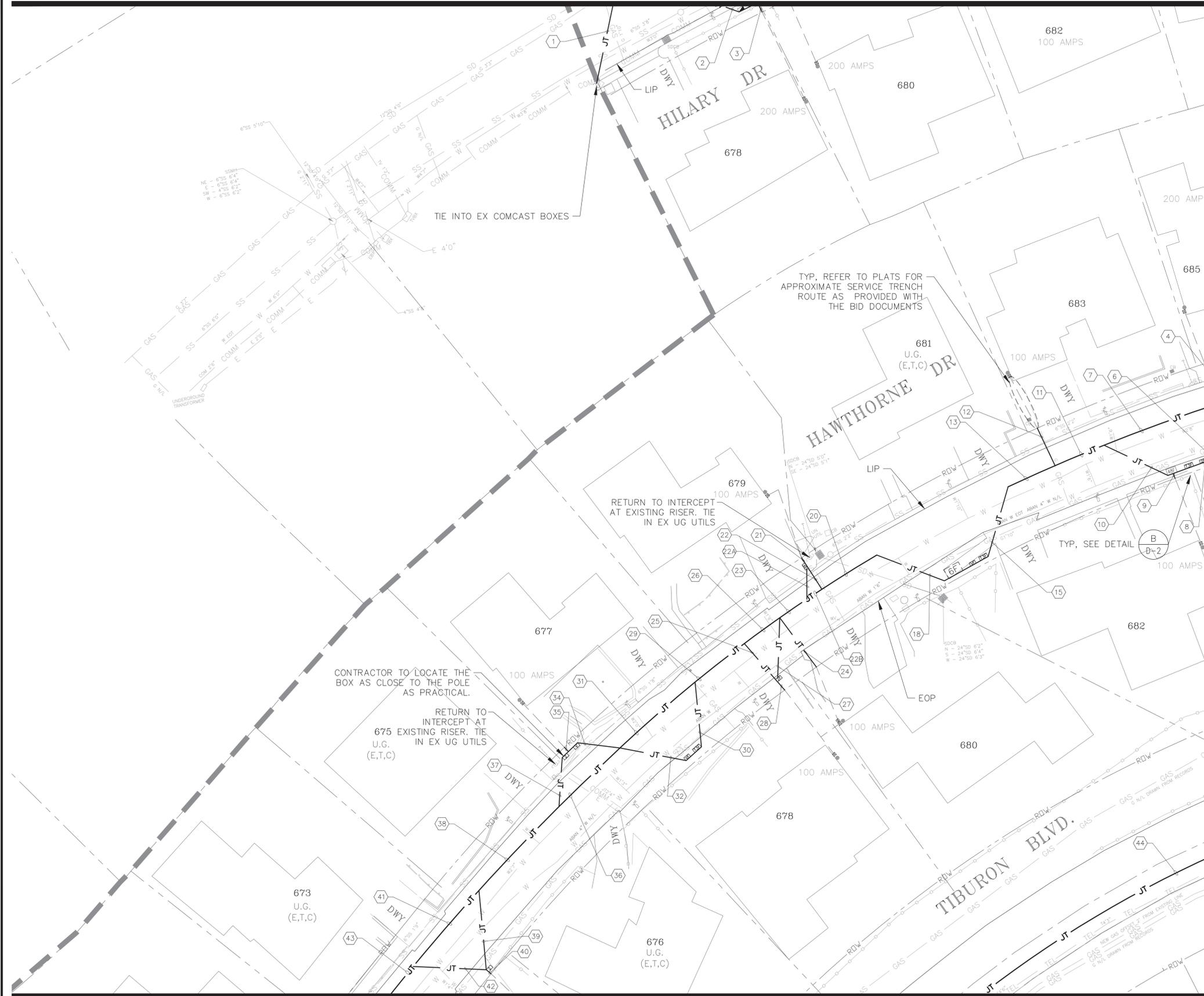
TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6"P	PG&E - 4"P	PG&E - 3"S	AT&T - 4"	AT&T - 2" svc.	COMCAST - 2"	COMCAST - 1" svc
1	18X36	32	0	0	0	0	0	3	0
2	18X36	7	0	0	0	0	0	3	0
3	18X51	3	0	0	1	0	1	0	1
4	18X51	7	0	0	1	0	1	0	1
6	18X53	7	0	0	1	1	1	2	1
7	18X38	46	0	1	0	0	0	0	0
8	18X51	3	0	0	1	0	1	0	1
9	18X51	3	0	0	1	0	1	0	1
10	18X53	29	0	0	1	1	1	1	1
11	18X54	22	0	1	1	1	1	1	1
12	18X51	17	0	0	1	0	1	0	1
13	18X54	18	0	1	2	1	0	1	0
15	18X54	29	0	1	2	1	0	1	0
18	18X54	32	0	1	1	1	2	1	3
20	18X54	26	0	1	1	1	2	1	3
21	18X51	3	0	0	1	0	1	0	1
22	18X51	10	0	0	1	0	1	0	1
22A	18X37	12	0	0	2	0	0	0	0
22B	18X54	7	0	1	0	1	1	1	2
23	18X54	13	0	1	2	1	1	1	2
24	18X51	25	0	0	1	0	1	0	1
25	18X51	20	0	0	1	0	1	0	1
26	18X54	18	0	1	1	1	0	1	1
27	18X37	24	0	0	1	0	0	0	0
28	18X51	5	0	0	1	0	1	0	1
29	18X54	25	0	1	0	1	1	1	0
30	18X38	26	0	0	0	1	1	1	0
31	18X38	41	0	1	0	0	0	0	0
32	18X38	27	0	0	0	1	1	1	1
34	18X36	17	0	0	0	0	1	1	0
35	18X51	2	0	0	1	0	1	0	1
36	18X54	34	0	1	0	1	0	0	1
37	18X51	20	0	0	1	0	0	1	0
38	18X54	47	0	1	1	1	0	1	1
39	18X50	32	0	0	1	0	0	0	1
40	18X51	2	0	0	1	0	1	0	1
41	18X54	41	0	1	0	1	0	1	0
42	18X51	30	0	0	1	0	1	0	0
43	18X54	16	0	1	1	1	1	1	0
44	30X56	108	2	0	0	1	0	0	0

MATCH LINE SEE SHEET JT-7

MATCH LINE SEE SHEET JT-12

MATCH LINE SEE SHEET JT-11



H:\TIBURON\160-9900 On Call 2016-2021\160-9900-002 Hawthorne UUD\9 - Hawthorne UUD\_JT-6.dwg Save Date: 10/5/2020 6:57 PM Plot Date: 10/5/2020 6:57 PM XREFS: X-TIPO-HAW\_LAS; X-BASE-HAW; X-P-JT; X-PLTB; X-NOTE; X-P-BOXES; X-UTIL; 01092020 Tiburon Composite Duct Review

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NO.	DATE	BY	REVISION

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 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DATE ISSUED: 10/5/2020  
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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**

DRAWING: **JT-6**  
 SHEET 9 OF 33

MATCH LINE SEE SHEET JT-4

TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E-6" P	PG&E-4" P	PG&E-3" S	AT&T-4" 2" svc.	AT&T-2" 2" svc.	COMCAST-2"	COMCAST-1" svc.
1	18X56	39	1	1	0	1	0	3	0
2	18X51	22	0	0	1	0	1	0	1
3	18X51	7	0	0	1	0	1	0	1
4	24X56	35	1	1	1	1	1	3	1
5	18X56	17	1	1	0	1	1	3	1
6	18X37	20	0	0	1	0	0	0	0
7	18X51	8	0	0	1	0	1	0	1
8	18X51	5	0	0	1	0	1	0	1
9	18X51	3	0	0	2	0	2	0	2
10	18X51	15	0	0	2	0	2	0	2
11	30X56	9	1	1	2	1	3	3	3
11A	24X40	52	1	1	1	0	0	0	0
12	24X56	30	0	0	1	1	3	3	3
13	18X51	6	0	0	1	0	1	0	1
14	18X38	28	0	0	0	1	0	3	0
15	24X56	35	1	1	1	1	0	3	0
16	18X38	29	0	1	1	0	0	0	0
17	18X56	47	1	0	0	1	0	3	0
18	18X38	6	0	1	1	0	0	0	0
19	18X36	7	0	0	0	0	1	0	0
19A	18X52	20	0	1	1	0	1	0	0
21	24X56	11	1	1	1	1	1	3	0
22	30X56	21	1	1	1	1	3	3	2
24	18X51	10	0	0	1	0	1	0	1
25	18X51	8	0	0	1	0	1	0	1
26	18X37	27	0	0	1	0	0	0	0
28	18X51	20	0	0	1	0	2	0	2
29	24X38	27	0	0	0	1	3	3	2
30	24X56	42	1	1	1	0	0	0	0
31	18X38	25	0	0	0	1	0	3	0
32	18X53	28	0	0	1	1	0	3	0
33	18X40	51	1	1	0	0	0	0	0
34	18X56	30	0	0	2	1	3	3	4
35	30X56	23	1	1	2	1	3	3	4
36	18X51	26	0	0	1	0	1	0	1
37	24X53	7	1	1	1	1	2	3	2
38	18X51	14	0	0	1	0	1	0	1
41	18X51	6	0	0	1	0	1	0	1
43	18X51	17	0	0	1	0	2	0	2
44	18X56	99	1	1	0	1	0	3	2
45	18X51	8	0	0	1	0	1	0	1
46	18X51	4	0	0	1	0	1	0	1
47A	18X51	17	0	0	1	1	1	2	1
47	18X51	11	0	0	1	0	1	0	1
48	18X54	4	0	1	0	0	0	0	0
49	18X54	140	0	1	0	1	0	2	0
50	18X37	22	0	0	1	0	0	0	0
52	18X51	2	0	0	1	0	1	0	1
54	18X56	6	0	0	1	2	1	4	1
55	18X42	13	0	0	0	2	1	4	1
56	18X54	83	0	1	0	1	1	2	1
57	18X51	20	0	0	2	0	1	0	1
58	18X51	5	0	0	1	0	1	0	1
59	18X54	18	0	1	1	1	0	2	0
61	18X54	29	0	1	1	1	0	2	0
62	18X36	6	0	0	0	0	0	2	0
63	18X36	6	0	1	1	0	0	0	0
64	18X51	7	0	0	1	0	1	0	1
65	18X37	3	0	0	1	0	0	0	0
69	18X51	37	0	0	1	0	1	0	1
73	18X54	30	0	1	1	1	1	2	1
74	18X54	18	0	1	1	1	1	2	1
75	18X51	25	0	0	1	0	1	0	1
76	18X54	149	0	1	0	1	0	2	0
77	18X51	17	0	0	1	0	1	0	1
78	18X53	24	0	0	1	1	0	2	0
79	18X38	24	0	0	0	1	1	1	1
80	18X54	12	0	1	1	0	0	0	0
81	18X54	2	0	1	1	1	1	1	1
82	18X51	2	0	0	1	0	1	0	1

MATCH LINE SEE SHEET JT-3

MATCH LINE SEE SHEET JT-6

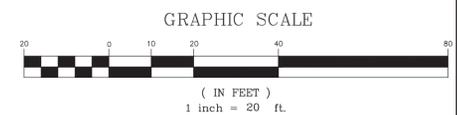
MATCH LINE SEE SHEET JT-6

MATCH LINE SEE SHEET JT-6



MATCH LINE SEE SHEET JT-8

MATCH LINE SEE SHEET JT-12



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NO.	DATE	BY	REVISION

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 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DATE ISSUED: 10/5/2020  
 JOB NO.: 160-9000.04

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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
**JT-7**  
 SHEET 10 OF 33

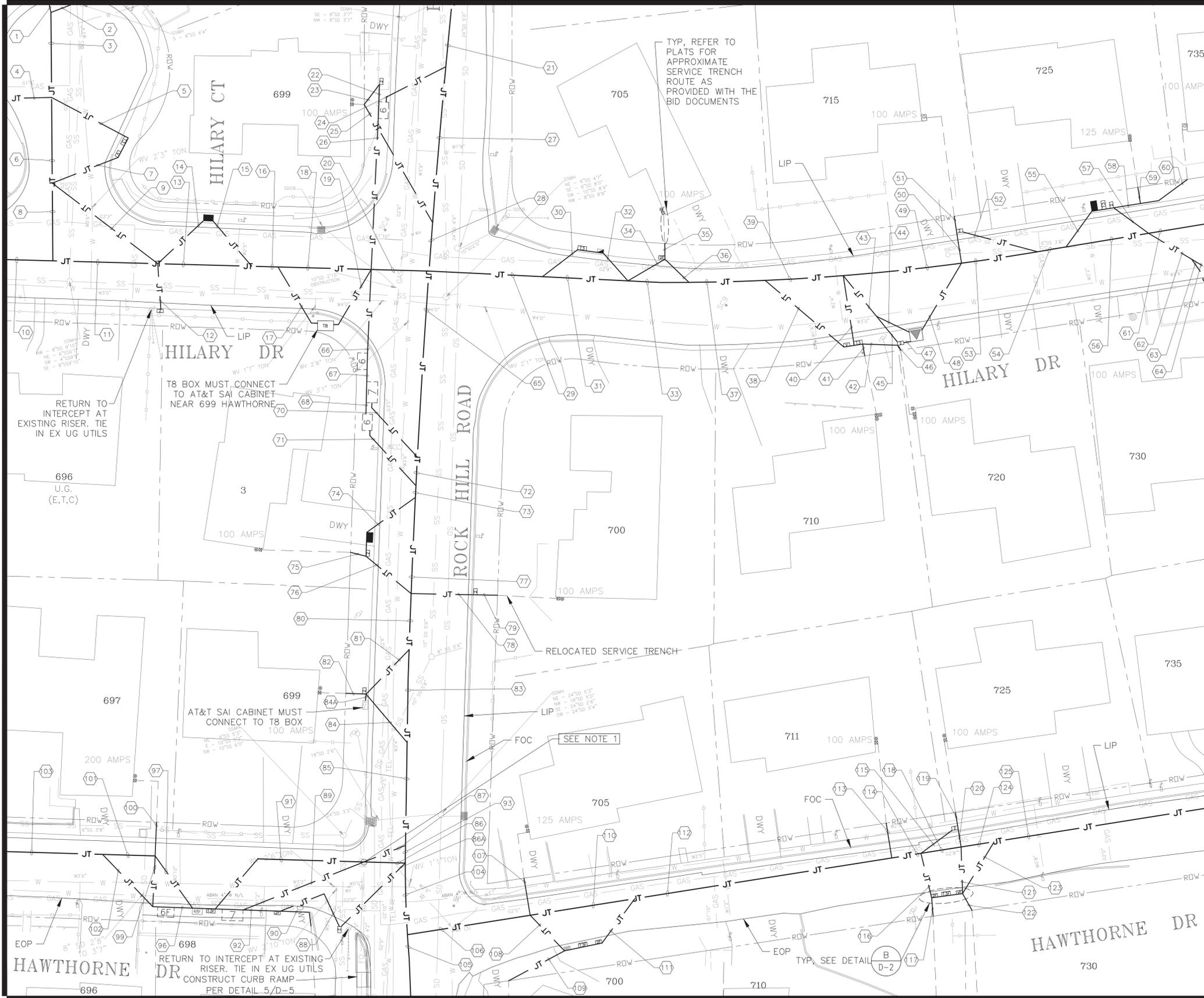
MATCH LINE SEE SHEET JT-5

SEE JT-8A FOR TRENCH CONDUIT SIZES AND QUANTITIES

NOTE:

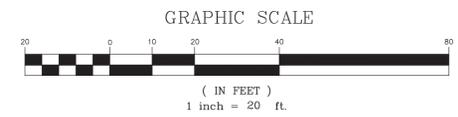
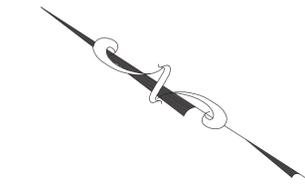
1. CONTRACTOR SHALL PLACE 6" CONDUIT FROM NUMBER 7 VAULT TO EXISTING CONDUIT AS NEAR AS POSSIBLE. CONTRACTOR SHALL COORDINATE WITH PG&E DURING TIE IN TO INTERCEPT EXISTING CONDUIT FOR CABLE RE-ROUTING. RETURN TO INTERCEPT.

MATCH LINE SEE SHEET JT-7



MATCH LINE SEE SHEET JT-13

MATCH LINE SEE SHEET JT-9



H:\TIBORON\160-9000-02 Hawthorne UUG\11-12 - Hawthorne UUG\_JT-8, JT-8A.dwg Save Date: 10/5/2020 6:59 PM Plt Date: 10/5/2020 6:59 PM Plt Date: 10/5/2020 6:59 PM Plt Date: 10/5/2020 6:59 PM  
 X=PLT; X=NOTE; X=F-BOXES; X=F-JT; X=UTIL; 01092020 Tiboron Composite Duct Review  
 H:\TIBORON\160-9000-02 Hawthorne UUG\11-12 - Hawthorne UUG\_JT-8, JT-8A.dwg Save Date: 10/5/2020 6:59 PM Plt Date: 10/5/2020 6:59 PM Plt Date: 10/5/2020 6:59 PM Plt Date: 10/5/2020 6:59 PM

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NO.	DATE	BY	REVISION

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**TOWN OF TIBORON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
**JT-8**  
 SHEET 11 OF 33



TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E-6"P	PG&E-4"P	PG&E-3"S	AT&T-4"	AT&T-2" svc.	COMCAST-2"	COMCAST-1" svc
1	18X51	3	0	0	2	0	1	0	1
2	18X51	9	0	0	1	0	1	0	1
3	18X51	34	0	0	1	0	2	0	2
4	18X51	18	0	0	1	0	1	0	1
5	18X36	35	0	0	0	0	3	0	3
6	18X37	35	0	0	2	0	0	0	0
7	18X38	29	0	0	0	2	0	1	0
8	18X38	31	0	0	0	2	0	1	0
9	18X37	54	0	0	2	0	0	0	0
10	18X56	19	1	1	0	1	0	2	0
11	18X56	41	1	1	0	1	0	3	0
12	18X37	18	0	0	3	0	0	0	0
13	24x56	40	1	1	1	1	0	0	0
14	18X36	25	0	0	0	0	0	3	0
15	18X36	24	0	0	0	0	0	4	0
16	24x56	11	1	1	1	1	0	4	0
17	18X38	29	0	0	0	1	0	0	0
18	24x56	38	1	1	1	0	0	4	0
19	18X40	28	0	0	0	4	2	0	0
20	24X59	23	0	1	1	4	2	4	0
21	18X54	25	0	1	0	1	0	1	0
22	18X37	7	0	0	1	0	0	0	0
23	18X37	10	0	0	1	0	0	0	0
24	18X38	29	0	1	0	0	0	0	0
25	18X36	55	0	0	0	0	1	0	1
26	30X38	61	0	3	1	0	0	0	0
27	18X38	63	0	0	0	1	0	1	0
28	18X38	20	0	0	0	1	1	1	1
29	18X54	46	0	1	1	2	0	1	1
30	18X38	18	0	0	0	2	0	1	1
31	18X38	35	0	1	1	0	0	0	0
32	18X38	15	0	0	0	1	1	1	1
33	18X54	25	0	1	0	1	0	1	0
34	18X51	17	0	0	1	0	1	0	1
35	18X51	6	0	0	1	0	1	0	1
36	18X37	14	0	0	1	0	0	0	0
37	18X54	31	0	1	1	1	0	1	0
38	18X38	42	0	0	0	1	0	1	0
39	18X38	32	0	1	1	0	0	0	0
40	18X38	27	0	0	0	1	1	1	1
41	18X51	5	0	0	1	0	1	0	1
42	18X51	14	0	0	1	0	1	0	1
43	18X38	21	0	1	1	0	0	0	0
44	18X38	15	0	1	0	0	0	0	0
45	18X37	13	0	0	1	0	0	0	0
46	18X51	2	0	0	1	0	1	0	1
47	18X37	3	0	0	1	0	0	0	0
48	18X38	31	0	1	1	0	0	0	0
49	18X38	48	0	0	0	1	1	1	1
50	18X51	13	0	0	1	0	1	0	1
51	18X51	6	0	0	1	0	1	0	1
52	18X37	31	0	0	1	0	0	0	0
53	18X54	31	0	1	0	1	0	1	0
54	18X54	12	0	1	1	1	0	1	0
55	18X53	18	0	0	1	1	0	1	0
56	18X38	34	0	1	0	0	0	0	0
57	18X53	17	0	0	2	1	0	2	2
58	18X51	11	0	0	2	0	2	0	2
59	18X51	7	0	0	1	0	1	0	1
60	18X51	22	0	0	1	0	1	0	1
61	18X52	25	0	1	1	0	0	2	0
62	18X50	20	0	0	1	1	0	0	2
63	18X35	8	0	0	0	0	0	0	1
64	18X50	12	0	0	1	1	0	0	1
65	24X40	75	0	0	0	3	2	4	0

Trench Section	Trench Size (in)	Length (ft)	PG&E-6"P	PG&E-4"P	PG&E-3"S	AT&T-4"	AT&T-2" svc.	COMCAST-2"	COMCAST-1" svc
66	24X45	34	1	3	1	0	0	0	0
67	18X38	5	0	1	0	0	0	0	0
68	18X38	5	0	2	0	0	0	0	0
70	18X40	29	1	0	0	0	0	0	0
71	18X38	30	0	2	0	0	0	0	0
72	18X59	12	1	0	0	2	2	4	0
73	30X59	5	1	2	0	3	3	4	0
74	18X36	24	0	0	0	0	1	4	0
75	18X51	6	0	0	1	0	1	0	1
76	18X51	24	0	0	1	0	0	2	2
77	24X56	39	1	2	0	3	2	0	0
78	18X51	25	0	0	2	0	1	0	1
79	18X51	8	0	0	1	0	1	0	1
80	30X56	23	1	2	1	3	1	2	1
81	18X53	25	0	0	1	1	1	0	1
82	18X51	8	0	0	1	0	1	0	1
83	24X56	38	1	2	0	2	0	2	0
84	18X37	26	0	0	1	0	0	0	0
84A	18X37	3	0	0	0	1	0	0	0
85	30X56	49	1	2	1	2	0	2	0
86	18X56	17	1	0	0	1	0	4	0
86A	18X37	36	0	0	1	0	0	0	0
87	18X40	18	1	1	0	0	0	0	0
88	18X37	33	0	0	1	0	0	0	0
89	18X49	53	3	1	0	0	0	0	0
90	18X51	16	0	0	1	0	1	0	1
91	18X38	68	0	0	0	1	0	4	0
92	18X51	12	0	0	1	0	1	0	1
93	18X38	7	0	0	0	2	0	2	0
96	18X38	7	0	1	1	0	0	0	0
97	18X38	26	0	0	0	1	0	1	1
99	18X37	20	0	0	1	0	0	0	0
100	18X51	14	0	0	1	0	1	0	1
101	18X38	21	0	0	0	1	1	1	0
102	18X38	30	0	1	1	0	0	0	0
103	18X54	41	0	1	1	1	1	1	0
104	18X56	29	1	1	0	1	0	2	0
105	18X54	25	1	0	0	0	0	1	0
106	18X54	50	0	1	0	1	0	1	0
107	18X51	15	0	0	1	0	1	0	1
108	18X53	20	0	0	1	1	1	1	1
109	18X51	26	0	0	1	0	1	0	1
110	18X38	43	0	1	0	0	0	0	0
111	18X53	22	0	0	1	1	0	1	0
112	18X54	105	0	1	1	1	0	1	0
113	18X51	14	0	0	1	0	1	0	1
114	18X54	12	0	1	2	1	1	1	1
115	18X37	16	0	0	2	0	0	0	0
116	18X53	18	0	0	2	1	1	1	1
117	18X51	7	0	0	1	0	1	0	1
118	18X38	16	0	1	0	0	0	0	0
119	18X51	6	0	0	1	0	1	0	1
120	18X36	8	0	0	0	0	1	0	1
121	18X36	19	0	0	0	0	1	0	1
122	18X51	8	0	0	1	0	1	0	1
123	18X53	24	0	0	1	1	0	1	0
124	18X38	13	0	1	0	0	0	0	0
125	18X54	88	0	1	1	1	0	1	0

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NO.	DATE	BY	REVISION

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 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DATE ISSUED: 10/5/2020  
 JOB NO.: 160-9000.04



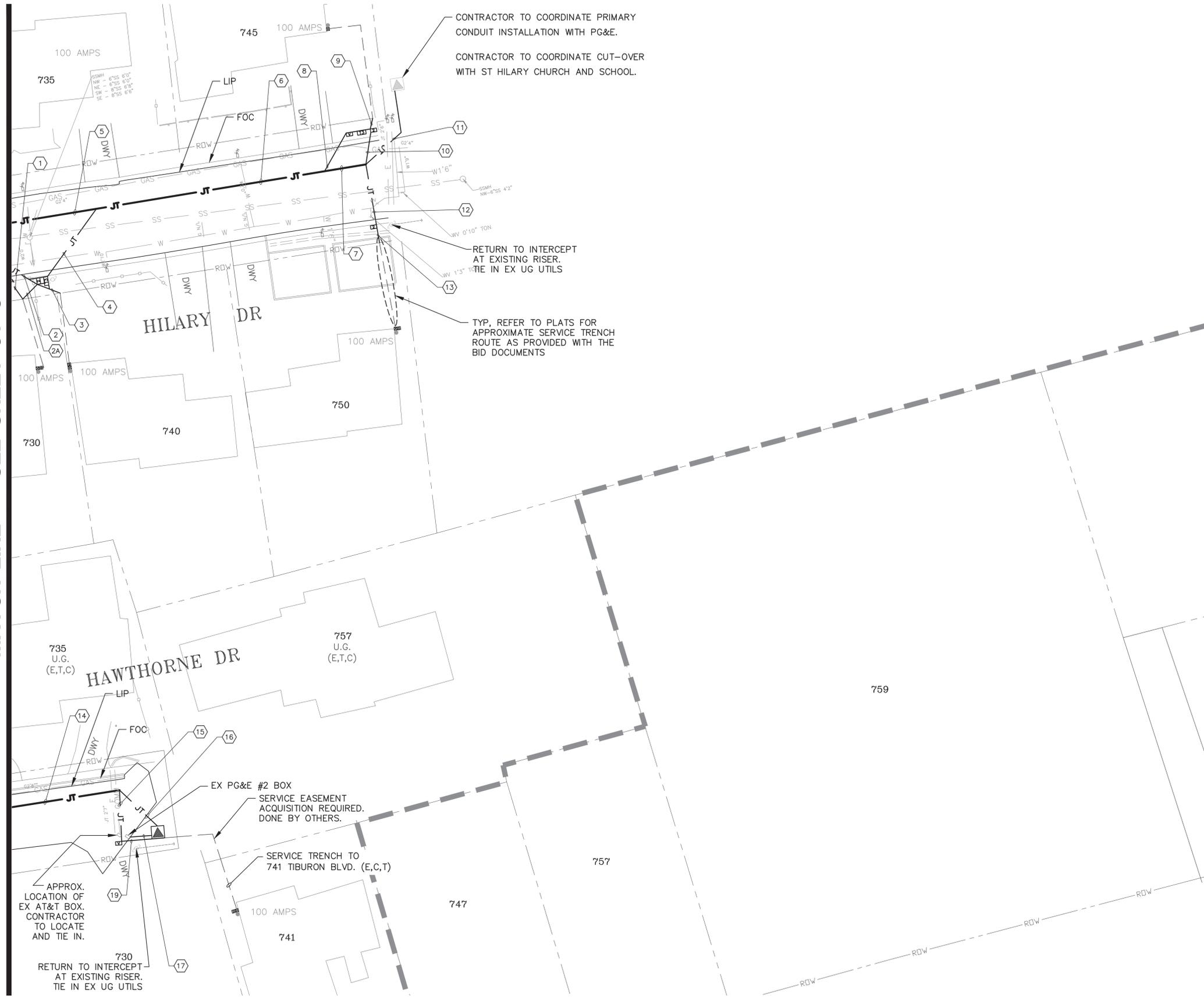
**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
**JT-8A**

DRAWING: JT-8A  
 SHEET 12 OF 33

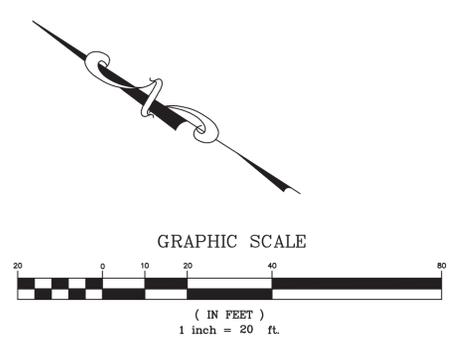
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**MATCH LINE SEE SHEET JT-8**



**TRENCH CONDUIT SIZES AND QUANTITIES**

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6"P	PG&E - 4"P	PG&E - 3"S	AT&T - 4"	AT&T - 2" svc.	COMCAST - 2"	COMCAST - 1" svc.
1	18X35	12	0	0	0	0	0	0	1
2	18X53	15	0	0	1	1	0	0	1
2A	18X51	8	0	0	1	0	1	0	0
3	18X51	10	0	0	1	0	1	0	1
4	18X38	34	0	0	0	1	0	0	0
5	18X52	35	0	1	1	0	0	2	0
6	18X54	94	0	1	1	1	0	2	0
7	18X38	17	0	1	0	0	0	0	0
8	18X53	18	0	0	1	1	0	2	0
9	18X51	4	0	0	1	0	1	0	1
10	18X51	13	0	0	1	0	1	0	1
11	18X38	36	0	1	0	0	0	0	0
12	18X51	25	0	0	1	0	1	0	1
13	18X51	7	0	0	1	0	1	0	1
14	18X54	44	0	1	1	1	0	1	0
15	18X38	19	0	0	0	1	0	1	0
16	18X38	21	0	1	1	0	0	0	0
17	18X37	9	0	0	1	0	0	0	0
19	18X36	12	0	0	0	0	1	0	1



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NO.	DATE	BY	REVISION

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 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DATE ISSUED: 10/5/2020  
 JOB NO.: 160-9000.04


**Harris & Associates**  
 1401 Willow Pass Road, Suite 500, Concord CA, 94520  
 WeAreHarris.com (925) 827-4900

**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
 SHEET 13 OF 33

DRAWING: **JT-9**  


H:\TIBURON\160-9900-02\160-9900-02\_Hawthorne\_UUD\14 - Hawthorne\_UUD\14 - 10.dwg Save Date: 10/5/2020 7:01 PM Plot Date: 10/5/2020 7:01 PM XREFS: X-TOPO-HAW\_LAS; X-BASE-HAW; X-P-UT; X-PLTB; X-NOTE; X-UTIL; X-P-BOWES  
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**TRENCH CONDUIT SIZES AND QUANTITIES**

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6"P	PG&E - 4"P	PG&E - 3"S	AT&T - 4"	AT&T - 2" svc.	COMCAST - 2"	COMCAST-1" svc
1	30X56	129	2	0	0	1	0	1	0

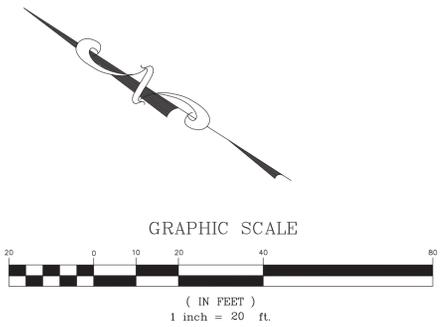


**MATCH LINE SEE SHEET JT-11**

TRANSFORMER TO BE INSTALLED AND ANCHORED ON EXISTING POLE

NEW RISER POLE TO BE INSTALLED BY PG&E. REFER TO PG&E CONSTRUCTION DRAWING.

CONTRACTOR TO COORDINATE INSTALLATION OF ELECTRIC, PHONE AND CABLE CONDUITS WITH RESPECTIVE UTILITY COMPANIES.



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NO.	DATE	BY	REVISION

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 JOB NO.: 160-9900.04

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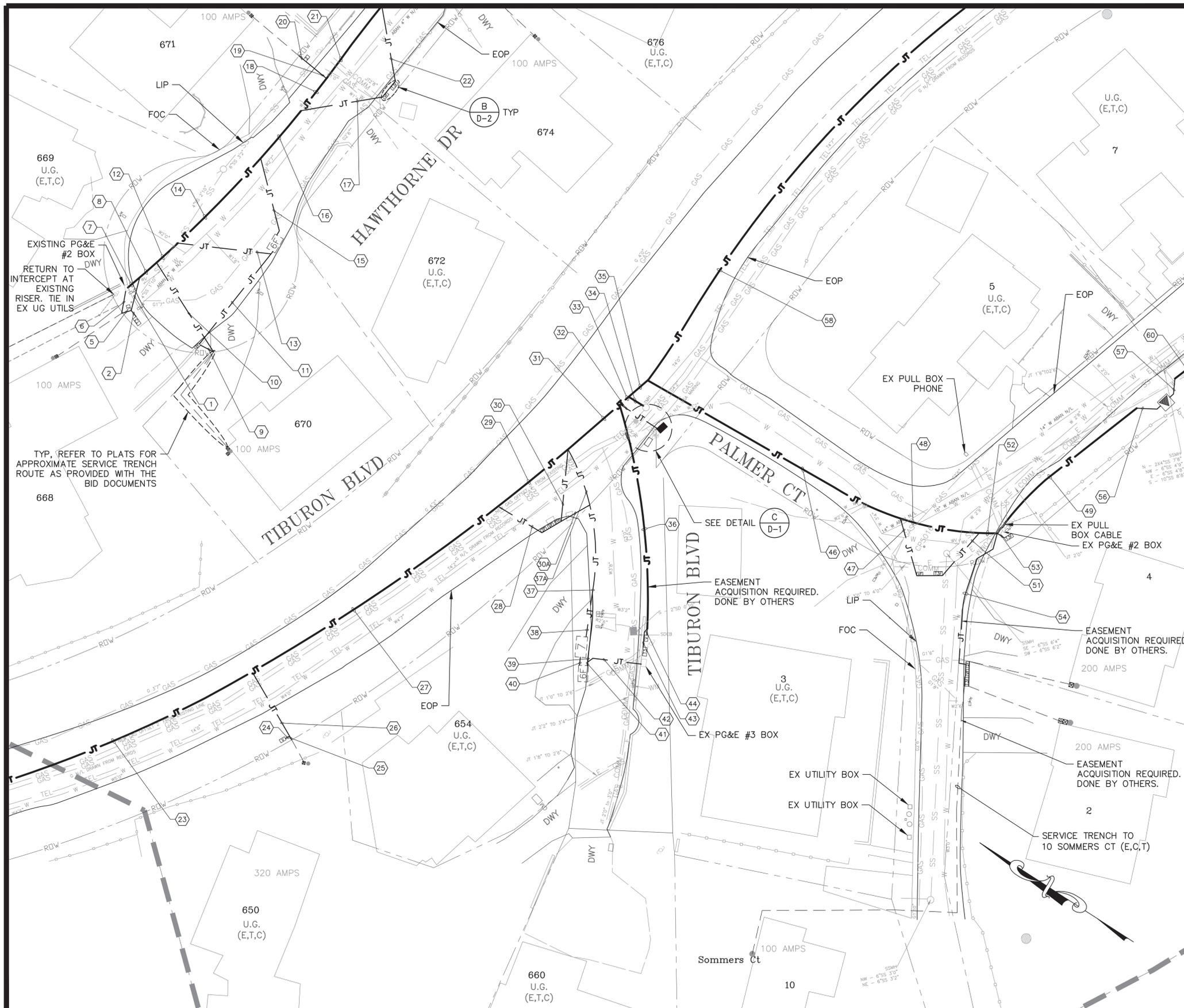
**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**



DRAWING: **JT-10**  
 SHEET 14 OF 33

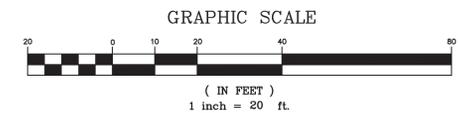
MATCH LINE SEE SHEET JT-6



TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6" P	PG&E - 4" P	PG&E - 3" S	AT&T - 4"	AT&T - 2" svc.	COMCAST - 2"	COMCAST - 1" svc.
1	18X38	14	0	0	0	1	1	1	1
2	18X38	3	0	0	0	1	1	0	0
5	18X38	4	0	0	0	0	1	0	1
6	18X37	9	0	0	1	0	0	0	0
7	18X37	6	0	0	1	0	0	0	0
8	18X53	9	0	0	1	1	1	1	1
9	18X37	6	0	0	1	0	0	0	0
10	18X38	43	0	0	0	0	1	0	1
11	18X37	48	0	0	1	0	0	0	0
12	18X53	12	0	0	1	1	0	1	0
13	18X37	38	0	0	1	0	0	0	0
14	18X38	49	0	0	0	1	0	1	0
15	18X38	33	0	1	1	0	0	0	0
16	18X54	26	0	1	1	1	0	1	0
17	18X38	34	0	0	0	1	1	1	1
18	18X52	17	0	1	1	0	1	0	1
19	18X51	11	0	0	2	0	1	0	1
20	18X51	3	0	0	1	0	1	0	1
21	18X38	37	0	1	1	0	0	0	0
22	18X38	31	0	0	0	1	1	1	2
23	30X56	111	2	0	0	1	0	1	0
24	18X38	2	0	0	0	0	0	2	1
25	18X51	2	0	0	1	0	1	0	1
26	18X51	30	0	0	1	0	1	2	0
27	36X56	122	2	0	1	1	1	1	0
28	18X53	20	0	0	1	1	1	1	0
29	30X40	37	2	0	0	0	0	0	0
30	18X53	30	0	0	0	1	0	1	0
30A	18X37	18	0	0	1	0	0	0	0
31	36X56	28	2	1	1	1	0	1	0
32	24X56	18	0	0	1	0	0	4	0
33	30X56	5	2	1	0	2	0	2	0
34	18X38	7	0	0	0	1	0	0	0
35	36X56	10	2	1	0	1	0	2	0
36	18X38	94	0	0	0	2	0	1	0
37	36X49	37	4	1	2	0	0	0	0
37A	36X49	25	4	1	1	0	0	0	0
38	30X49	18	4	0	0	0	0	0	0
39	18X38	30	0	1	2	0	0	0	0
40	18X38	3	0	1	0	0	0	0	0
41	18X45	2	0	1	3	0	0	0	0
42	18X37	23	0	0	1	0	0	0	0
43	18X38	8	0	0	0	2	0	0	0
44	18X36	3	0	0	0	0	0	1	0
46	18X54	118	0	1	0	2	0	1	0
47	18X38	24	0	0	0	2	0	1	0
48	18X38	34	0	1	0	0	0	0	0
49	18X38	78	0	1	1	0	0	0	0
51	18X53	22	0	0	0	2	1	1	1
52	18X54	8	0	1	0	2	1	1	1
53	18X38	5	0	0	0	3	1	0	0
54	18X53	62	0	0	1	1	0	1	0
56	18X38	10	0	1	1	0	0	0	0
57	18X37	8	0	0	1	0	0	0	0
58	30X56	203	2	0	0	1	0	1	0
60	18X37	10	0	0	1	0	0	0	0

MATCH LINE SEE SHEET JT-12



MATCH LINE SEE SHEET JT-10

H:\TIBURON\160-9000 On Call 2016-2021\160-9000-002 Hawthorne UGD\15 - Hawthorne UGD\_JT-11.dwg Save Date: 10/14/2020 2:05 PM Plot Date: 10/14/2020 2:05 PM XREFS: X-TOPO-HAW.LAS; X-PLIB; X-NOTE; X-UTIL; X-P-BOXES; 01092020 Tiburon Composite Duct Review

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NO.	DATE	BY	REVISION

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 DESIGNED BY ZC  
 CHECKED BY KI/SM/LG  
 DATE ISSUED 10/5/2020  
 JOB NO. 160-9000.04

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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**

REGISTERED PROFESSIONAL ENGINEER  
 HARRIS & ASSOCIATES, INC.  
 No. C 53333  
 Exp. 06-30-21  
 STATE OF CALIFORNIA

DRAWING: **JT-11**  
 SHEET 15 OF 33



MATCH LINE SEE SHEET JT-8

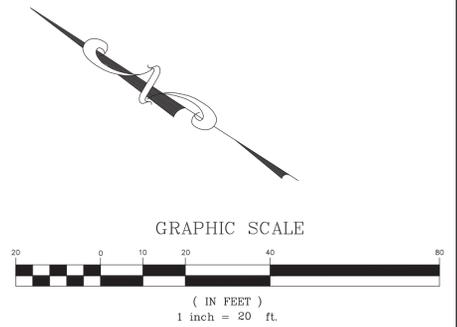
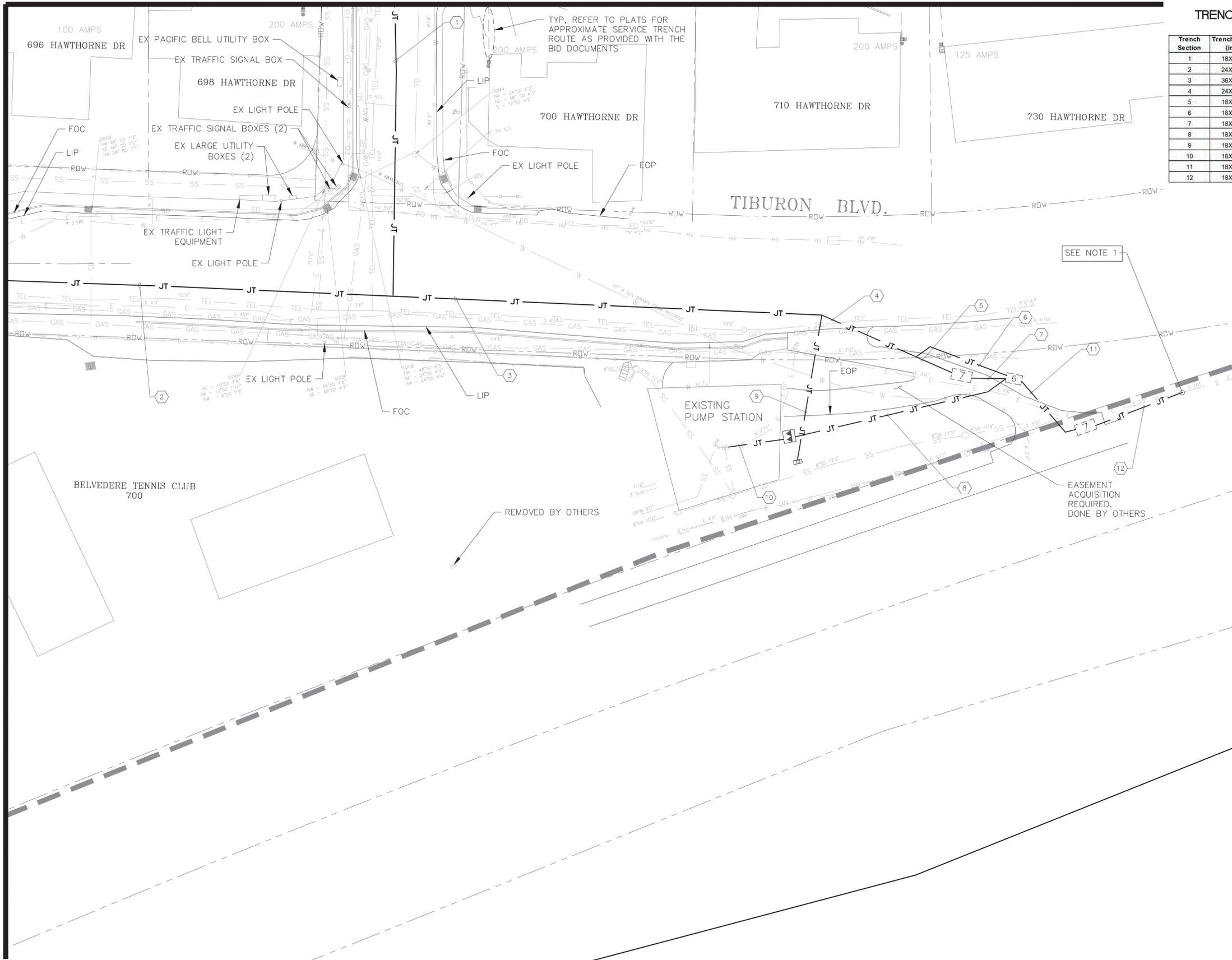
TRENCH CONDUIT SIZES AND QUANTITIES

Trench Section	Trench Size (in)	Length (ft)	PG&E - 6" P	PG&E - 4" P	PG&E - 3" S	AT&T - 4" svc.	AT&T - 2" svc.	COMCAST - 2"	COMCAST - 1" svc.
1	18X54	122	1	0	0	0	0	1	0
2	24X56	163	2	1	0	1	0	1	0
3	36X56	181	3	1	0	1	0	0	0
4	24X49	43	3	1	0	0	0	0	0
5	18X49	16	3	0	0	0	0	0	0
6	18X38	42	0	1	0	0	0	0	0
7	18X40	15	1	0	0	0	0	0	0
8	18X38	93	0	1	0	0	0	0	0
9	18X38	62	0	0	0	1	0	0	0
10	18X37	23	0	0	1	0	0	0	0
11	18X40	33	1	0	0	0	0	0	0
12	18X40	25	1	0	0	0	0	0	0

NOTE:

- CONTRACTOR SHALL PLACE 6" CONDUIT FROM NUMBER 7 VAULT TO EXISTING CONDUIT AS NEAR AS POSSIBLE. CONTRACTOR SHALL COORDINATE WITH PG&E DURING TIE IN TO INTERCEPT EXISTING CONDUIT FOR CABLE RE-ROUTING. RETURN TO INTERCEPT.

SEE SHEET JT-12



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NO.	DATE	BY	REVISION

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 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DATE ISSUED: 10/5/2020  
 JOB NO.: 160-9000.04

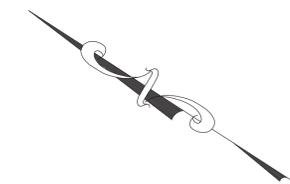
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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
 SHEET 17 OF 33

**JT-13**  
 SHEET 17 OF 33

H:\TIBURON\160-9000-02 Hawthorne\UD\18-19 - Paving Key - Rock.dwg Save Date: 10/5/2020 7:04 PM Plot Date: 10/5/2020 7:04 PM Plot Date: 10/5/2020 7:04 PM XREFS: X-PLTB; X-NOTE; X-PAVE-BGGRID; X-HATCH; X-PLTB-PAVING



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 DESIGNED BY: ZC  
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 DATE ISSUED: 10/5/2020  
 JOB NO.: 160-9000.04

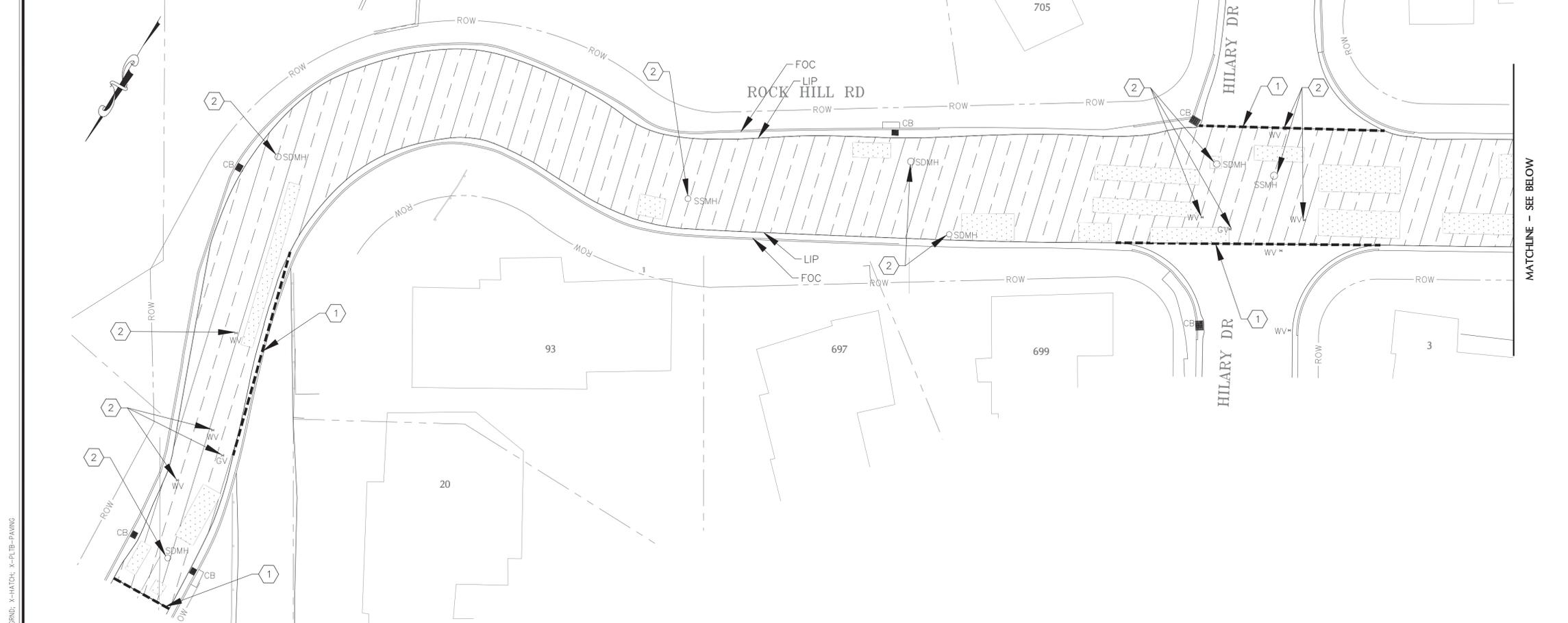

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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**PAVING AND STRIPING KEY MAP**  
**K-2**  
 SHEET 18 OF 33



DRAWING: **K-2**  
 SHEET 18 OF 33

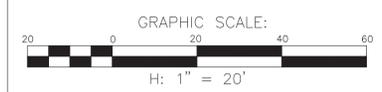
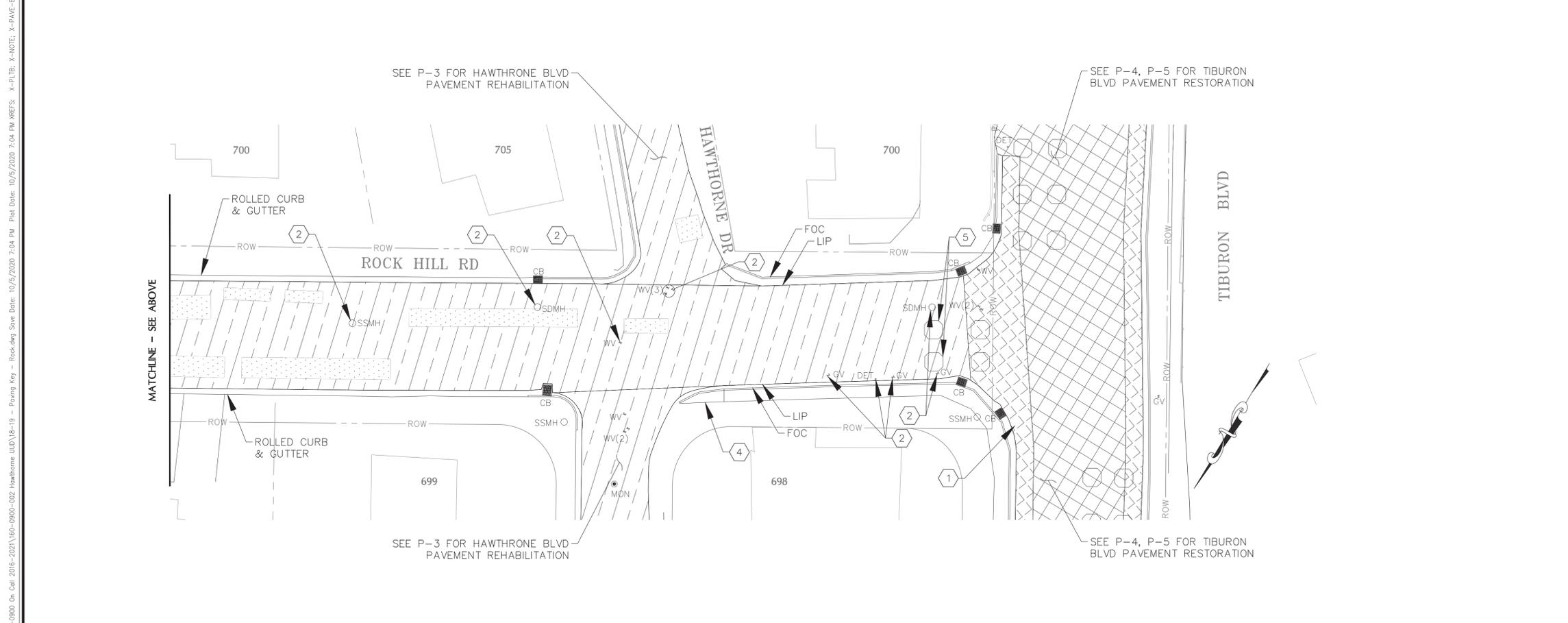


- CONSTRUCTION NOTES:**
- 1 LIMIT OF WORK AND/OR REHABILITATION TREATMENT CHANGE. EXACT LIMIT TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
  - 2 LOWER (PRIOR TO MILLING) AND RAISE (AFTER PLACEMENT OF PAVEMENT) UTILITY FRAME, COVER, OR MONUMENT TO NEW FINISH GRADE
  - 3 FOR AC OVERLAY TREATMENTS, ADJUST EXISTING UTILITY FRAME, COVER, OR MONUMENT TO NEW FINISH GRADE
  - 4 REMOVE EXISTING CONCRETE CURB RAMP AND REPLACE WITH CURB RAMP PER DETAIL 5 D-5
  - 5 REMOVE AND REPLACE EXISTING DETECTOR LOOPS

- LEGEND:**
- LIMIT OF WORK
  - [Wedge Grind Pattern] WEDGE GRIND AND CONFORM GRIND (1 D-5)
  - [Diagonal Lines] 3' SHOULDER BACKING (1 D-5)
  - [Cross-hatch Pattern] 2\"/>

- EXISTING UTILITY FACILITIES**
- CB ■ CATCH BASIN
  - SSMH ○ SANITARY SEWER MANHOLE
  - SDMH ○ STORM DRAIN MANHOLE
  - TMHO ○ TELEPHONE MANHOLE
  - GV \* PG&E GAS VALVE
  - WV \* WATER VALVE
  - MON ● MONUMENT
  - DET \* DETECTOR UTIL LID
  - DETECTOR LOOP

- RESURFACING NOTES:**
1. APPLY TACK COAT TO ALL ASPHALT SURFACES (VERTICAL AND HORIZONTAL) PRIOR TO PLACEMENT OF NEW HOT MIX ASPHALT.
  2. BASE REPAIRS ARE SHOWN SCHEMATICALLY. PRIOR TO BEGINNING ANY BASE REPAIR WORK, CONTRACTOR MUST ARRANGE AND CONDUCT A FIELD REVIEW WITH THE ENGINEER TO CONFIRM AND RECORD THE DIMENSION OF EACH BASE REPAIR LOCATION.
  3. SEE DRAWING N-1 FOR ADDITIONAL GENERAL NOTES.
  4. EDGE LIMITS OF WEDGE GRIND ARE SHOWN SCHEMATICALLY. EXACT LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.



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NO.	DATE	BY	REVISION

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 DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DATE ISSUED: 10/5/2020  
 JOB NO.: 160-9000.04

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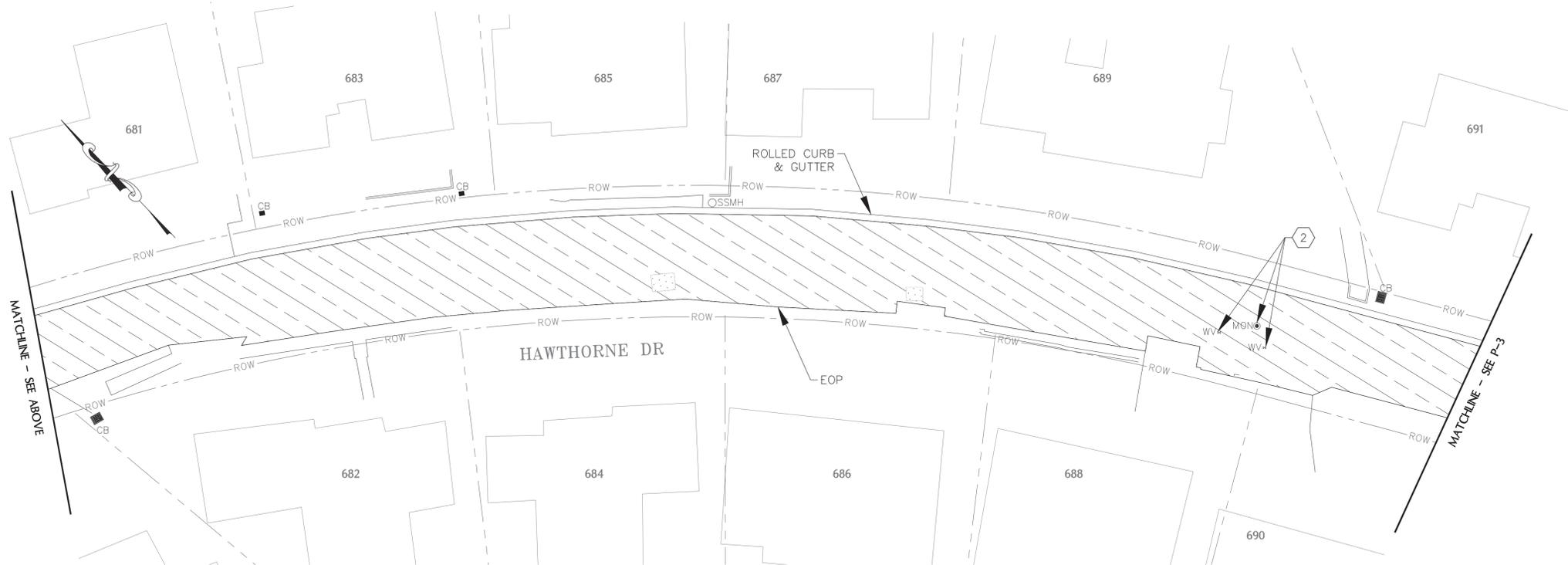
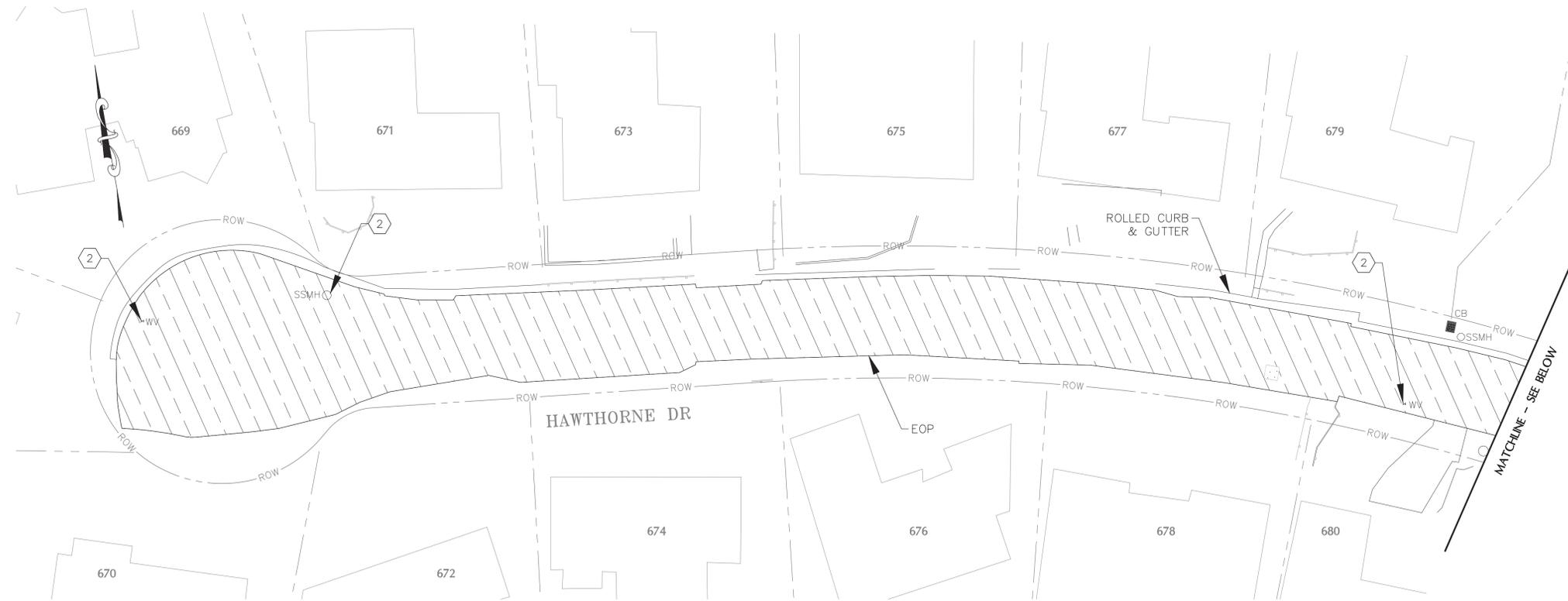
**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**ROCK HILL RD - PAVEMENT RESTORATION**

DRAWING: **P-1**  
 SHEET 19 OF 33

H:\TIBURON\160-9000\160-9000-002 Hawthorne UUD\18-19 - Paving Key - Rock.dwg Save Date: 10/5/2020 7:04 PM Plot Date: 10/5/2020 7:04 PM XREFS: X-PLTB; X-NOTE; X-PAVE-BGPRD; X-HATCH; X-PLTB-PAVING

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**CONSTRUCTION NOTES:**

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- 3 FOR AC OVERLAY TREATMENTS, ADJUST EXISTING UTILITY FRAME, COVER, OR MONUMENT TO NEW FINISH GRADE
- 4 REMOVE EXISTING CONCRETE CURB RAMP AND REPLACE WITH CURB RAMP PER DETAIL
- 5 REMOVE AND REPLACE EXISTING DETECTOR LOOPS

**LEGEND:**

**LIMIT OF WORK**

LIMIT OF WORK

WEDGE GRIND AND CONFORM GRIND

3' SHOULDER BACKING

2" HMA OVERLAY

2" MILL AND OVERLAY

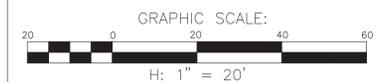
5" HMA BASE REPAIR

**EXISTING UTILITY FACILITIES**

- CB CATCH BASIN
- SSMH SANITARY SEWER MANHOLE
- SDMH STORM DRAIN MANHOLE
- TMH TELEPHONE MANHOLE
- GV PG&E GAS VALVE
- WV WATER VALVE
- MON MONUMENT
- DET DETECTOR UTIL LID
- DETECTOR LOOP

**RESURFACING NOTES:**

1. APPLY TACK COAT TO ALL ASPHALT SURFACES (VERTICAL AND HORIZONTAL) PRIOR TO PLACEMENT OF NEW HOT MIX ASPHALT.
2. BASE REPAIRS ARE SHOWN SCHEMATICALLY. PRIOR TO BEGINNING ANY BASE REPAIR WORK, CONTRACTOR MUST ARRANGE AND CONDUCT A FIELD REVIEW WITH THE ENGINEER TO CONFIRM AND RECORD THE DIMENSION OF EACH BASE REPAIR LOCATION.
3. SEE DRAWING N-1 FOR ADDITIONAL GENERAL NOTES.
4. EDGE LIMITS OF WEDGE GRIND ARE SHOWN SCHEMATICALLY. EXACT LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.



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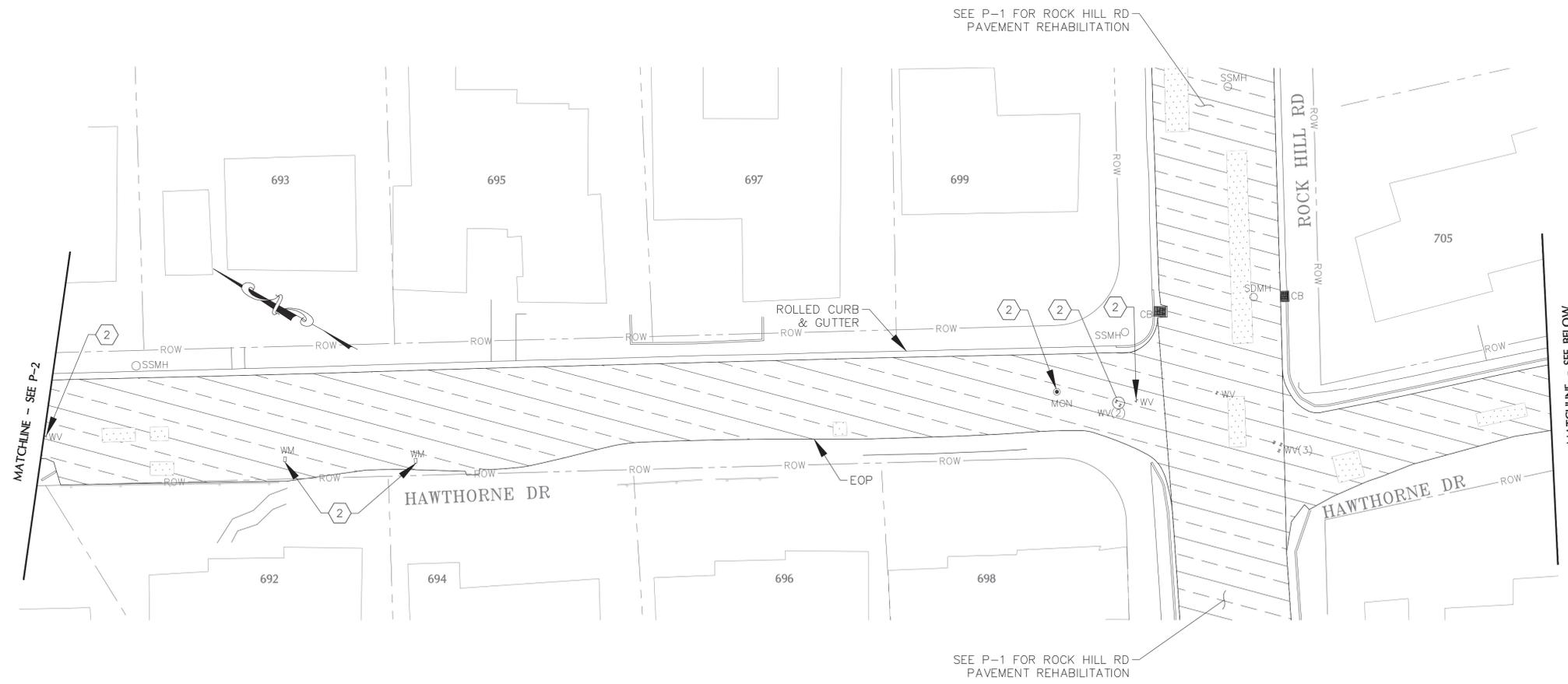
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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**HAWTHORNE DR - PAVEMENT RESTORATION**

DRAWING: **P-2**  
 SHEET 20 OF 33

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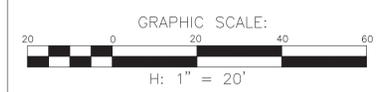
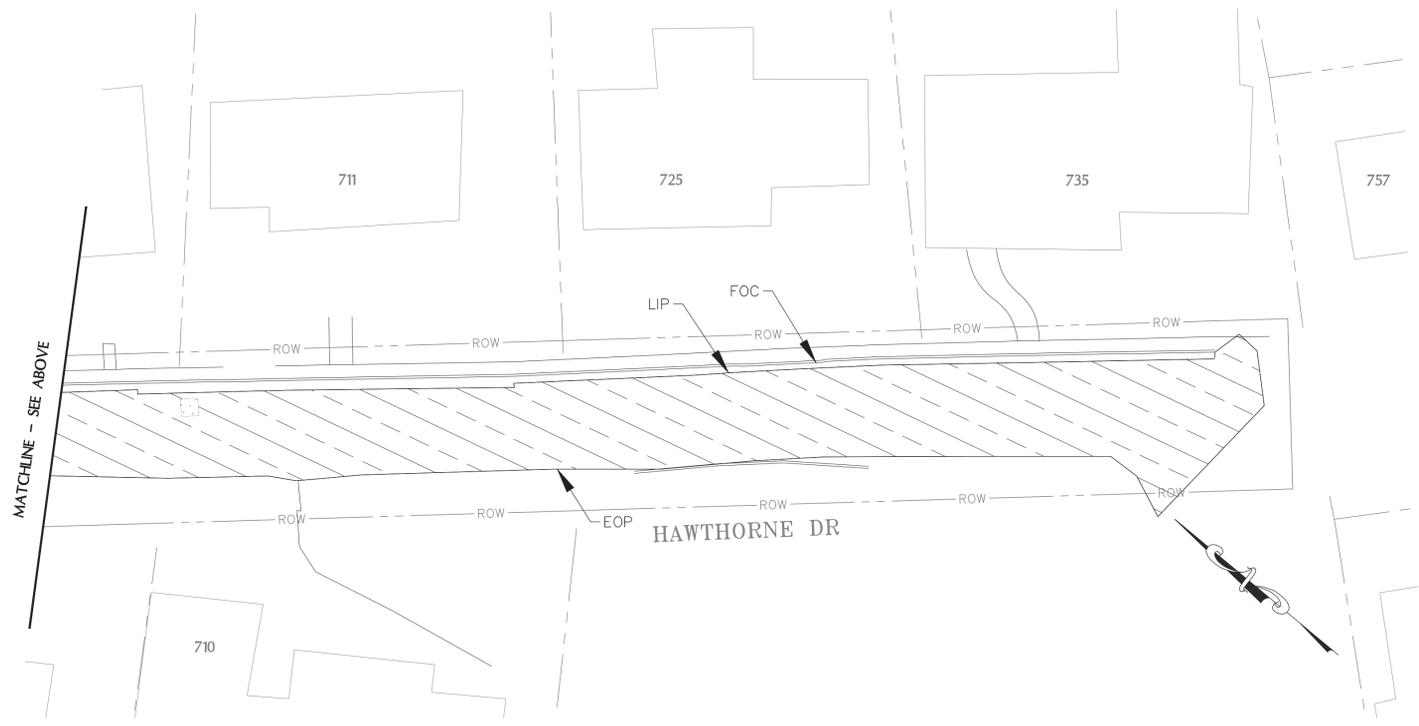


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  - 4 REMOVE EXISTING CONCRETE CURB RAMP AND REPLACE WITH CURB RAMP PER DETAIL 
  - 5 REMOVE AND REPLACE EXISTING DETECTOR LOOPS

- LEGEND:**
-  LIMIT OF WORK
  -  WEDGE GRIND AND CONFORM GRIND 
  -  3' SHOULDER BACKING 
  -  2" HMA OVERLAY 
  -  2" MILL AND OVERLAY 
  -  5" HMA BASE REPAIR 

- EXISTING UTILITY FACILITIES**
- CB  CATCH BASIN
  - SSMH  SANITARY SEWER MANHOLE
  - SDMH  STORM DRAIN MANHOLE
  - TMH  TELEPHONE MANHOLE
  - GV  PG&E GAS VALVE
  - WV  WATER VALVE
  - MON  MONUMENT
  - DET  DETECTOR UTIL LID
  -  DETECTOR LOOP

- RESURFACING NOTES:**
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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING DISTRICT**

**HAWTHORNE DR - PAVEMENT RESTORATION**

DRAWING: **P-3**  
 SHEET 21 OF 33

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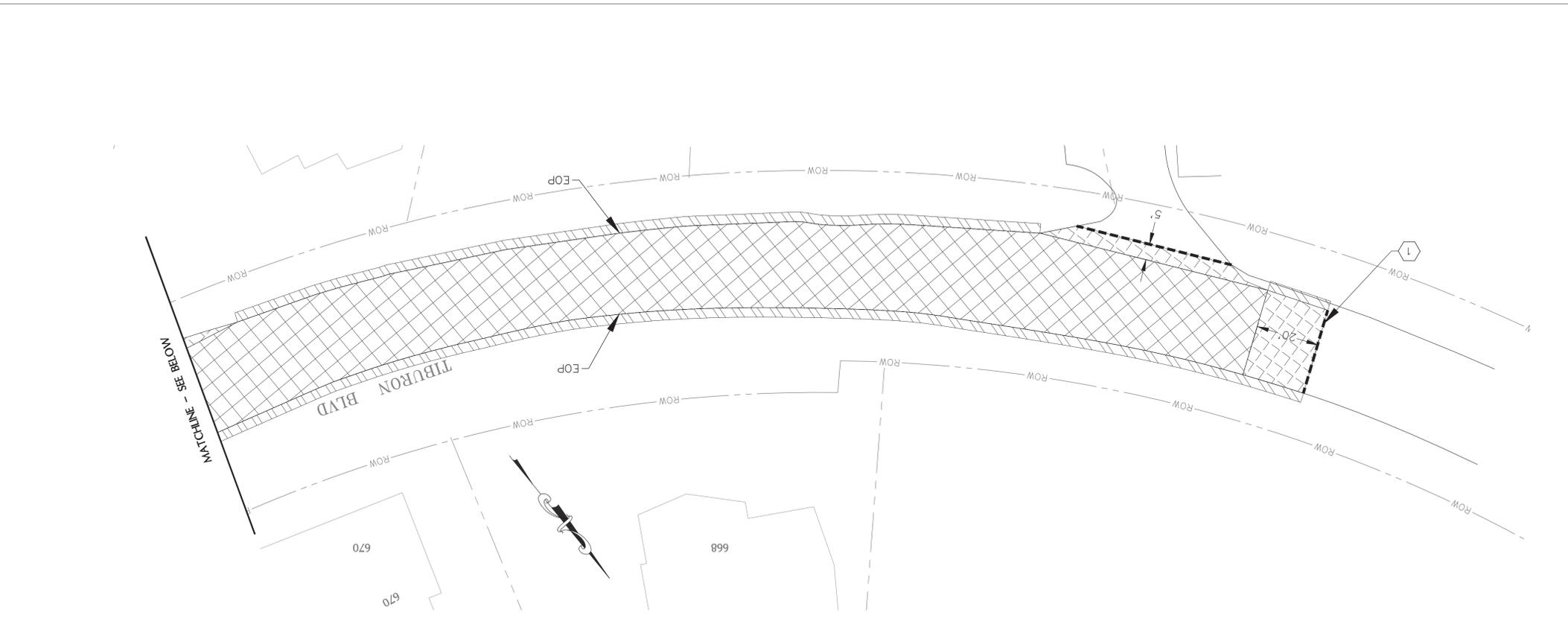
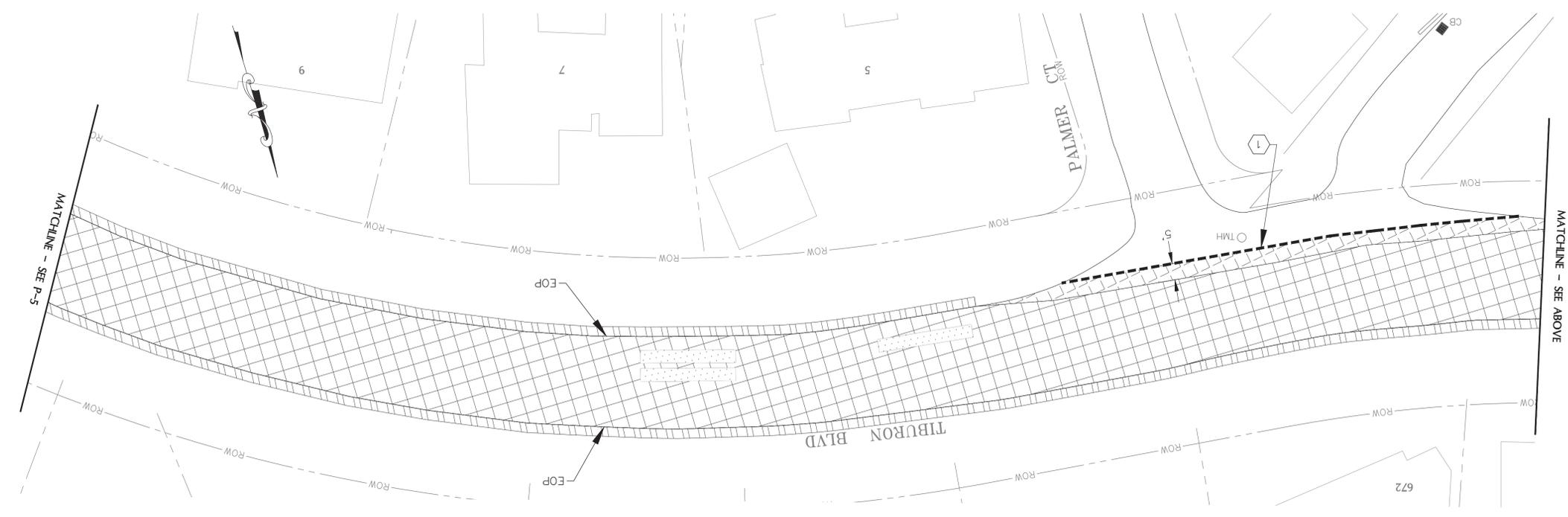
**TOWN OF TIBURON  
 HAWTHORNE UTILITY UNDERGROUNDING  
 DISTRICT**

**TIBURON BLVD - PAVEMENT RESTORATION**

REGISTERED PROFESSIONAL ENGINEER  
 JOHN R. HARRIS  
 REG. NO. 53336  
 EXP. 06-30-21  
 CIVIL  
 STATE OF CALIFORNIA

GRAPHIC SCALE:

H: 1" = 20'



**RESURFACING NOTES:**

1. APPLY TACK COAT TO ALL ASPHALT SURFACES (VERTICAL AND HORIZONTAL) PRIOR TO PLACEMENT OF NEW HOT MIX ASPHALT.
2. BASE REPAIRS ARE SHOWN SCHEMATICALLY. PRIOR TO BEGINNING ANY BASE REPAIR WORK, CONTRACTOR MUST ARRANGE AND CONDUCT A FIELD REVIEW WITH THE ENGINEER TO CONFIRM AND RECORD THE DIMENSION OF EACH BASE REPAIR LOCATION.
3. SEE DRAWING N-1 FOR ADDITIONAL GENERAL NOTES.
4. EDGE LIMITS OF WEDGE GRIND ARE SHOWN SCHEMATICALLY. EXACT LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

- EXISTING UTILITY FACILITIES**
- CB CATCH BASIN
  - SSMH SANITARY SEWER MANHOLE
  - SDMH STORM DRAIN MANHOLE
  - TMH TELEPHONE MANHOLE
  - GV FOG GAS VALVE
  - WV WATER VALVE
  - MON MONUMENT
  - DET DETECTOR UTILITY
  - DET DETECTOR LOOP

- LEGEND:**
- WEDGE GRIND AND CONFORM GRIND (1 D-5)
  - SHOULDER BACKING (1 D-5)
  - HMA OVERLAY (1 D-5)
  - MILL AND OVERLAY (2 D-5)
  - HMA BASE REPAIR (3 D-5)

- CONSTRUCTION NOTES:**
1. LIMIT OF WORK AND/OR REHABILITATION TREATMENT CHANGE. EXACT LIMIT TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
  2. LOWER (PRIOR TO MILLING) AND RAISE (AFTER PLACEMENT OF PAVEMENT) UTILITY FRAME, COVER, OR MONUMENT TO NEW FINISH GRADE.
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  4. REMOVE EXISTING CONCRETE CURB RAMP AND REPLACE WITH CURB RAMP PER DETAIL (5 D-5)
  5. REMOVE AND REPLACE EXISTING DETECTOR LOOPS

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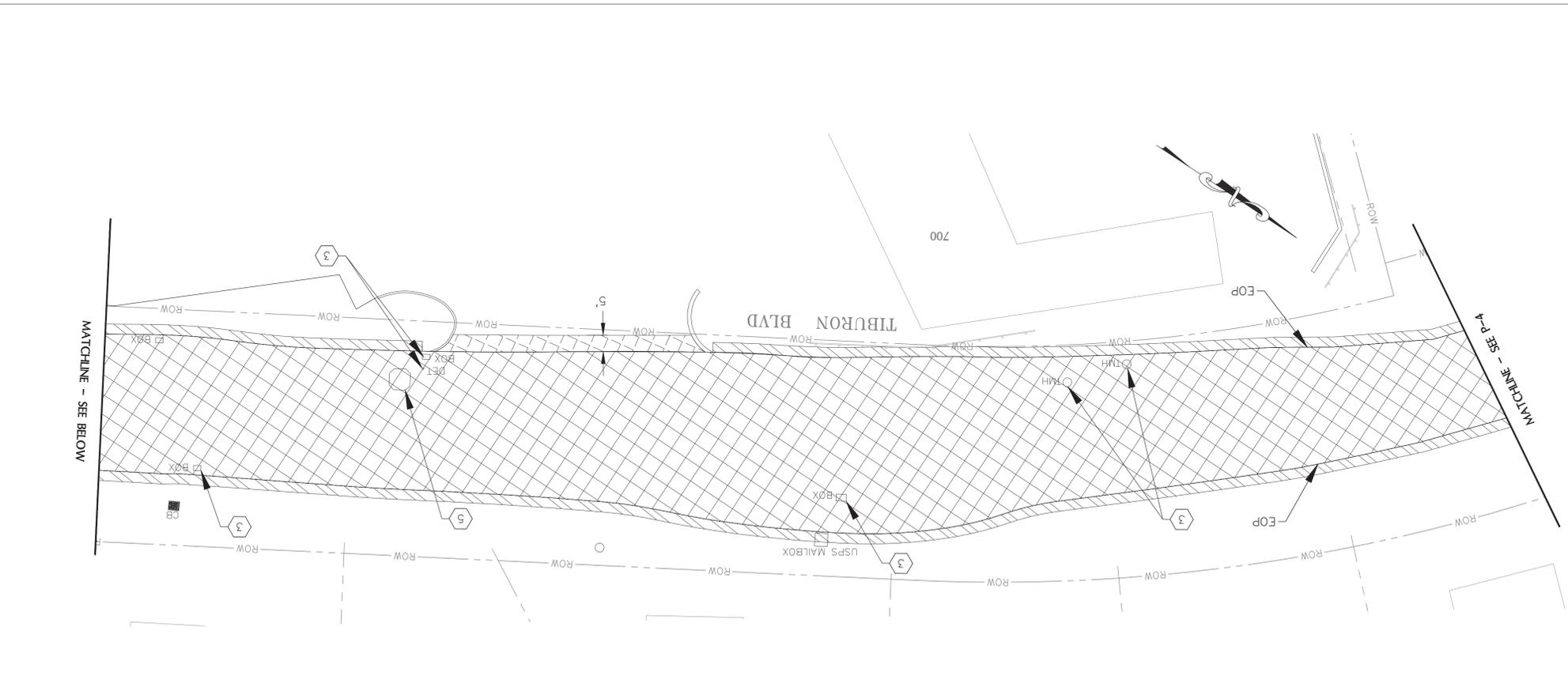
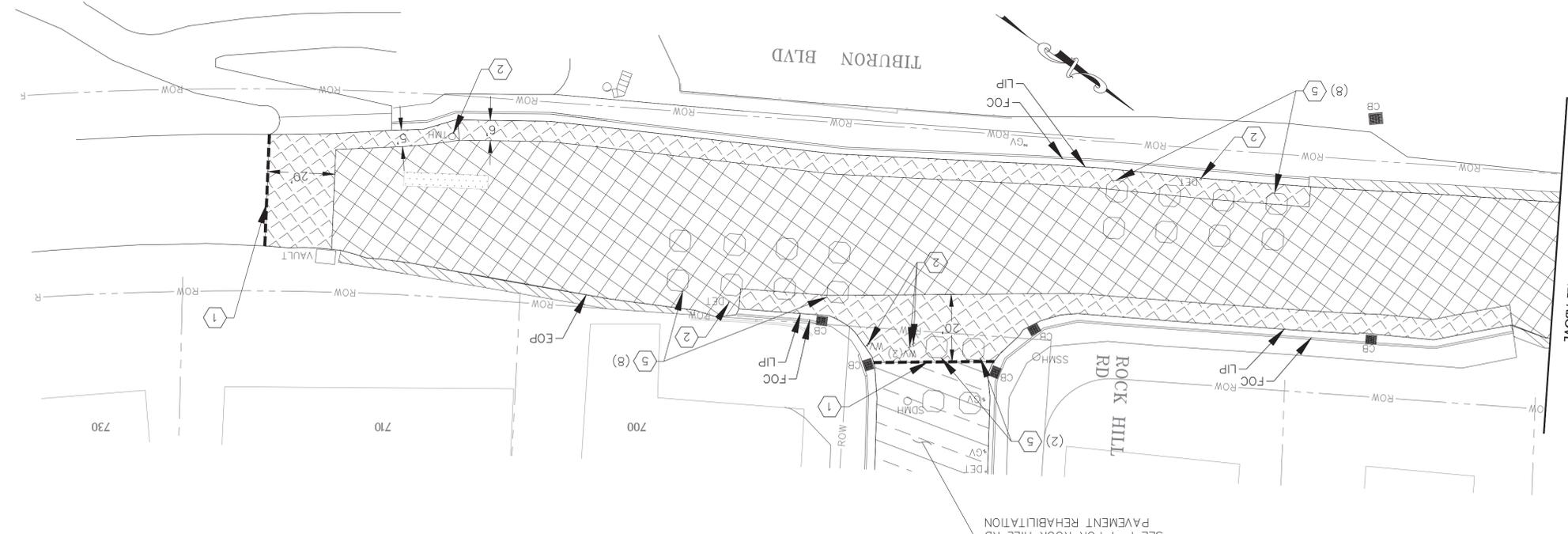
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TIBURON BLVD - PAVEMENT RESTORATION



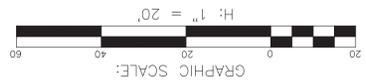
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- EXISTING UTILITY FACILITIES
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  - TMH TELEPHONE MANHOLE
  - GV GAS VALVE
  - WV WATER VALVE
  - MON MONUMENT
  - DET DETECTOR UTILITY LID
  - DET DETECTOR LOOP

- LEGEND:
- LIMIT OF WORK
  - WEDGE GRIND AND CONFORM GRIND (D-5/1)
  - 3' SHOULDER BACKING (D-5/1)
  - 2" HMA OVERLAY (D-5/1)
  - 2" MILL AND OVERLAY (D-5/2)
  - 5' HMA BASE REPAIR (D-5/3)

- CONSTRUCTION NOTES:
1. LIMIT OF WORK AND/OR REHABILITATION TREATMENT CHANGE. EXACT LIMIT TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
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  3. FOR AC OVERLAY TREATMENTS, ADJUST EXISTING UTILITY FRAME, COVER, OR MONUMENT TO NEW FINISH GRADE.
  4. REMOVE EXISTING CONCRETE CURB RAMP AND REPLACE WITH CURB RAMP PER DETAIL (D-5/5).
  5. REMOVE AND REPLACE EXISTING DETECTOR LOOPS.





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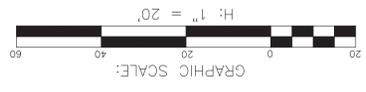
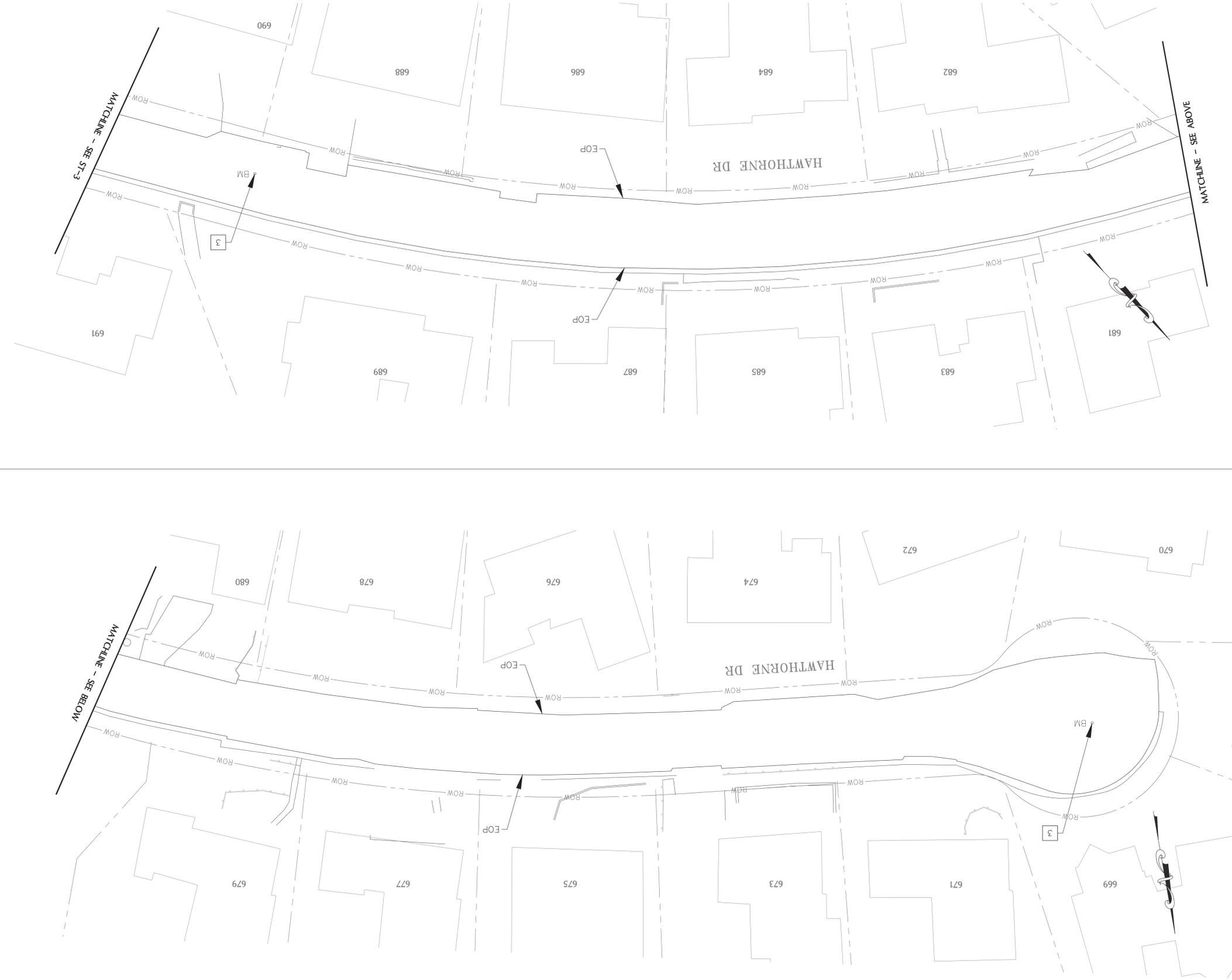
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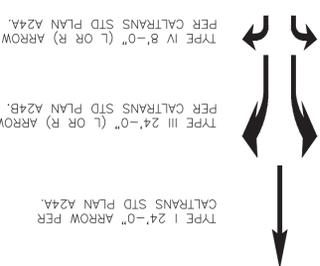
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**TOWN OF TIBURON  
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**HAWTHORNE DR - STRIPING AND MARKINGS**



**STRIPING LEGEND:**



- DIMENSION MEASURED ON THE SHEET PANEL WHERE IT IS NOTED (TYP.)
- NUMBER INDICATES PAVEMENT MARKERS AND TRAFFIC LINES DETAIL NUMBER PER 2015 CALTRANS STD PLANS RSP A204 TO A20D.
- CHANGE OF PAVEMENT DELINEATION DETAIL TYPE.
- FIRE HYDRANT BLUE MARKER

**STRIPING CONSTRUCTION NOTES:**

1. INSTALL PAVEMENT MARKINGS PER 2015 CALTRANS STD PLANS, WHITE UNLESS OTHERWISE NOTED ON PLANS. WORDS ARE INDICATED ON PLANS.
2. INSTALL 12" WHITE LIMIT LINE PER CALTRANS STD PLAN A24E. TOTAL LENGTH IS INDICATED.
3. REPLACE AND/OR INSTALL BLUE, TWO-WAY REFLECTIVE FIRE HYDRANT MARKER PER MUTCD 2014 CALIFORNIA SUPPLEMENT SECTION 5B.11.
4. INSTALL YELLOW LADDER CROSSWALK PER DETAIL 4/D-5.
5. TOTAL SQUARE-FOOT IS INDICATED ON PLANS.

**STRIPING NOTES:**

1. SEE DRAWING N-01 FOR ADDITIONAL GENERAL NOTES.
2. LANE WIDTHS SHOWN ON PLANS ARE APPROXIMATE.
3. FOR STRIPES CONSISTING OF MULTIPLE LINES, THE COMPOSITE SECTION IS MEASURED AS A LINEAL FOOT OF STRIPING AND SHOWN ON PLANS, BUT QUANTIFIED AS DESCRIBED IN THE PROJECT SPECIFICATIONS FOR PAYMENT.

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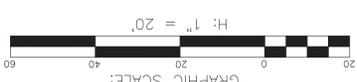
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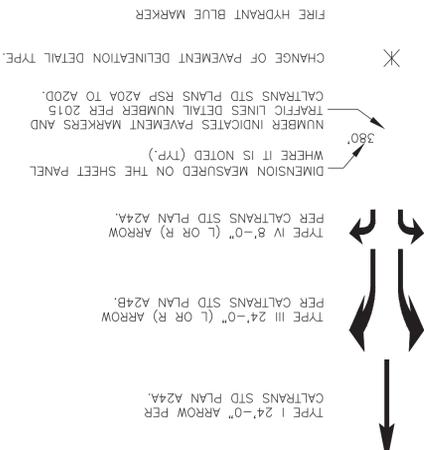
**TOWN OF TIBURON  
DISTRICT  
HAWTHORNE UTILITY UNDERGROUNDING**

**HAWTHORNE DR - STRIPING AND MARKINGS**

SHEET 26 OF 33  
**ST-3**



**STRIPING LEGEND:**



**STRIPING CONSTRUCTION NOTES:**

1. UNLESS OTHERWISE NOTED ON PLANS, WORDS ARE INDICATED ON PLANS.
2. INSTALL 12" WHITE LIMIT LINE PER CALTRANS STD PLAN A24E. TOTAL LENGTH IS INDICATED.
3. REPLACE AND/OR INSTALL BLUE, TWO-WAY REFLECTIVE FIRE HYDRANT MARKER PER MUTCD 2014 CALIFORNIA SUPPLEMENT SECTION 3B.11.
4. INSTALL YELLOW LADDER CROSSWALK PER DETAIL 4/D-5. TOTAL SQUARE-FOOT IS INDICATED ON PLANS.

**STRIPING NOTES:**

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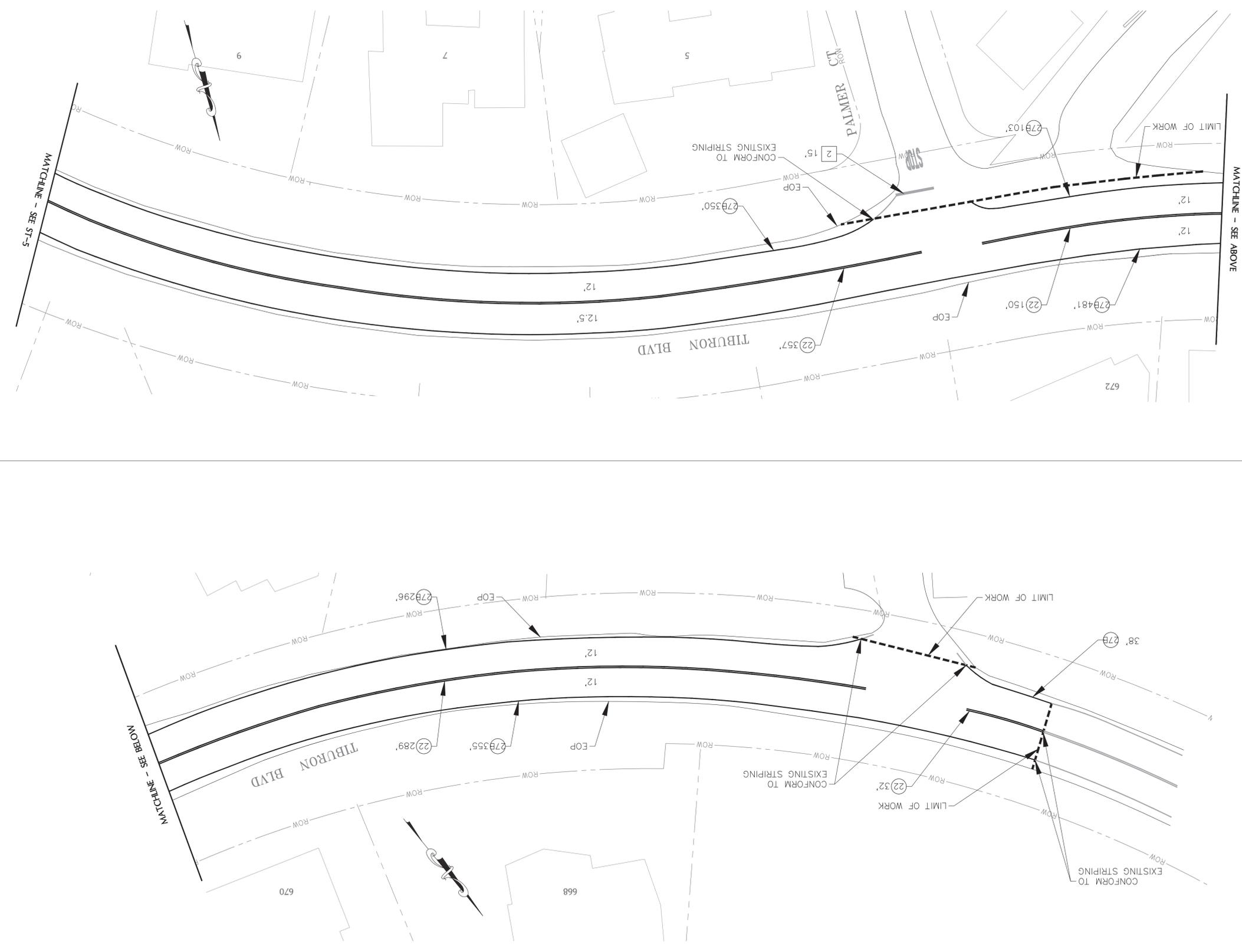
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**TOWN OF TIBURON**  
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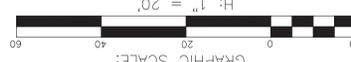
**TIBURON BLVD - STRIPING AND MARKINGS**

SHEET 27 OF 33  
**ST-4**





GRAPHIC SCALE:



H: 1" = 20'

**STRIPING NOTES:**

- SEE DRAWING N-01 FOR ADDITIONAL GENERAL NOTES.
- LANE WIDTHS SHOWN ON PLANS ARE APPROXIMATE.
- FOR STRIPES CONSISTING OF MULTIPLE LINES, THE COMPOSITE SECTION IS MEASURED AS A LINEAL FOOT OF STRIPING AND SHOWN ON PLANS, BUT QUANTIFIED AS DESCRIBED IN THE PROJECT SPECIFICATIONS FOR PAYMENT.

**STRIPING CONSTRUCTION NOTES:**

- INSTALL PAVEMENT MARKINGS PER 2015 CALTRANS STD PLANS, WHITE UNLESS OTHERWISE NOTED ON PLANS. WORDS ARE INDICATED ON PLANS.
- INSTALL 12" WHITE LIMIT LINE PER CALTRANS STD PLAN A24E, TOTAL LENGTH IS INDICATED.
- REPLACE AND/OR INSTALL BLUE, TWO-WAY REFLECTIVE SECTION 5B.11, MARKER PER MUTCD 2014 CALIFORNIA SUPPLEMENT SECTION 5B.11.
- INSTALL YELLOW LADDER CROSSWALK PER DETAIL 4/D-5.
- TOTAL SQUARE-FOOT IS INDICATED ON PLANS.

**STRIPING LEGEND:**

1. TYPE I 24'-0" ARROW PER CALTRANS STD PLAN A24A.

2. TYPE III 24'-0" (L OR R) ARROW PER CALTRANS STD PLAN A24B.

3. TYPE IV 8'-0" (L OR R) ARROW PER CALTRANS STD PLAN A24A.

4. DIMENSION MEASURED ON THE SHEET PANEL WHERE IT IS NOTED (TYP.)

5. NUMBER INDICATES PAVEMENT MARKERS AND TRAFFIC LINES DETAIL NUMBER PER 2015 CALTRANS STD PLANS RSP A204 TO A20D.

6. CHANGE OF PAVEMENT DELINEATION DETAIL TYPE.

7. BM.

DRAWINGS:

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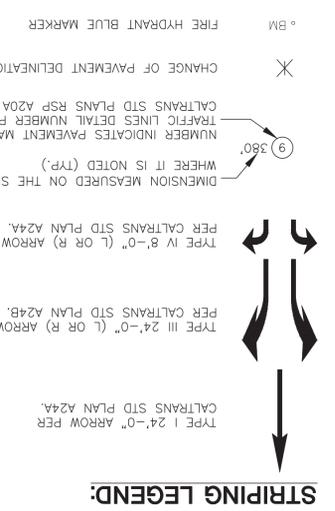
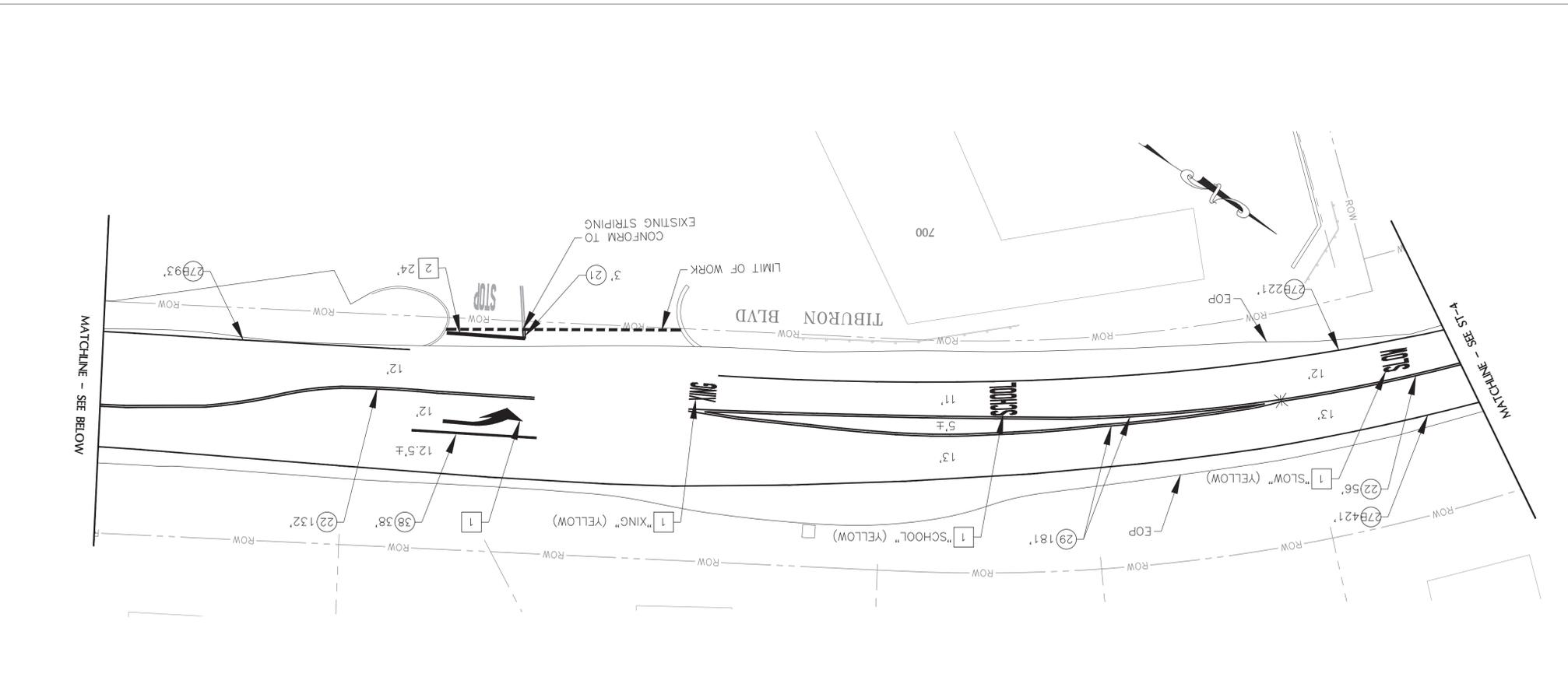
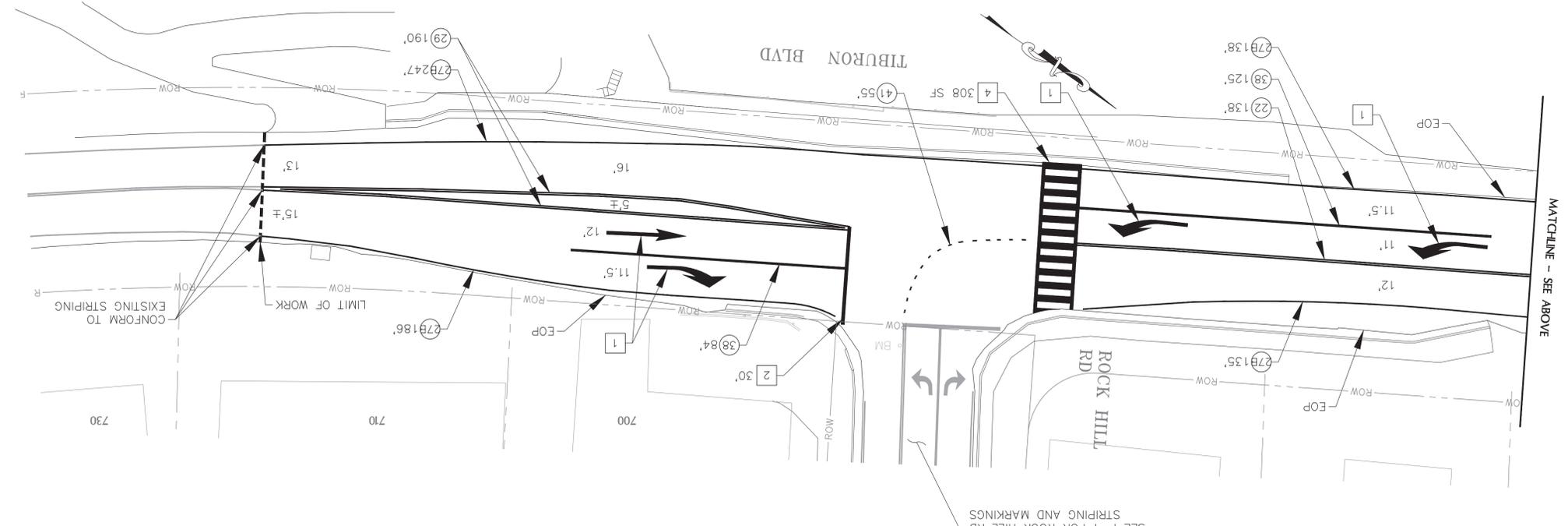
NO.	DATE	BY	REVISION

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 CHECKED BY: KI/SM/LG  
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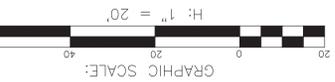
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**TOWN OF TIBURON**  
**HAWTHORNE UTILITY UNDERGROUNDING**  
**DISTRICT**

**TIBURON BLVD - STRIPING AND MARKINGS**



- STRIPING CONSTRUCTION NOTES:**
1. SEE DRAWING N-01 FOR ADDITIONAL GENERAL NOTES.
  2. LANE WIDTHS SHOWN ON PLANS ARE APPROXIMATE.
  3. FOR STRIPES CONSISTING OF MULTIPLE LINES, THE COMPOSITE SECTION IS MEASURED AS A LINEAL FOOT OF STRIPING AND SHOWN ON PLANS, BUT QUANTIFIED AS DESCRIBED IN THE PROJECT SPECIFICATIONS FOR PAYMENT.
- STRIPING LEGEND:**
1. INSTALL PAVEMENT MARKINGS PER 2015 CALTRANS STD PLANS, WHITE UNLESS OTHERWISE NOTED ON PLANS. WORDS ARE INDICATED ON PLANS.
  2. INSTALL 12" WHITE LIMIT LINE PER CALTRANS STD PLAN A24E, TOTAL LENGTH IS INDICATED.
  3. REPLACE AND/OR INSTALL BLUE, TWO-WAY REFLECTIVE FIRE HYDRANT MARKER PER MUTCD 2014 CALIFORNIA SUPPLEMENT SECTION 5B.11.
  4. INSTALL YELLOW LADDER CROSSWALK PER DETAIL 4/D-5, TOTAL SQUARE-FOOT IS INDICATED ON PLANS.





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NO.	DATE	BY	REVISION

DESIGNED BY: ZC  
 CHECKED BY: KI/SM/LG  
 DRAWN BY: ZC/KC

DATE ISSUED: 10/5/2020  
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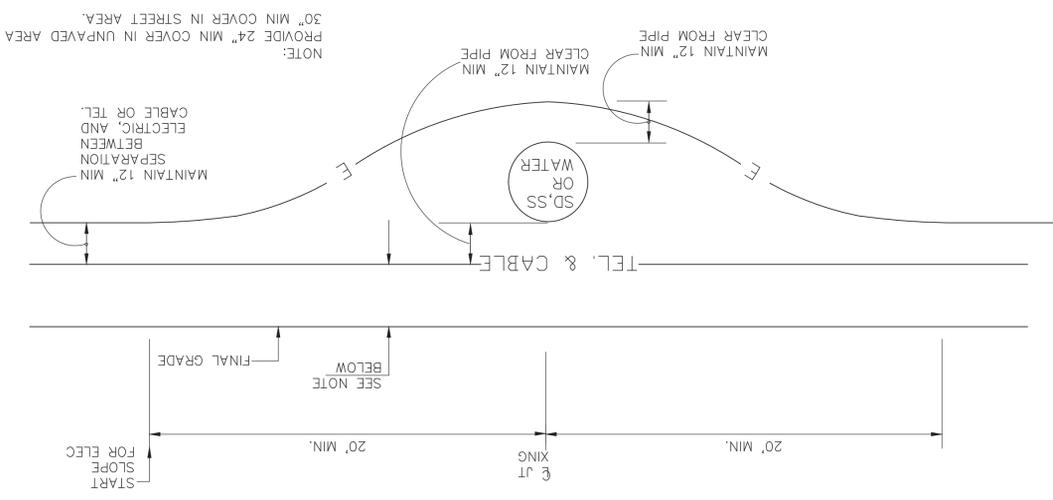
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**HAWTHORNE UTILITY UNDERGROUNDING**  
**DISTRICT**

**JOINT TRENCH COMPOSITE PLAN**  
**DETAILS**

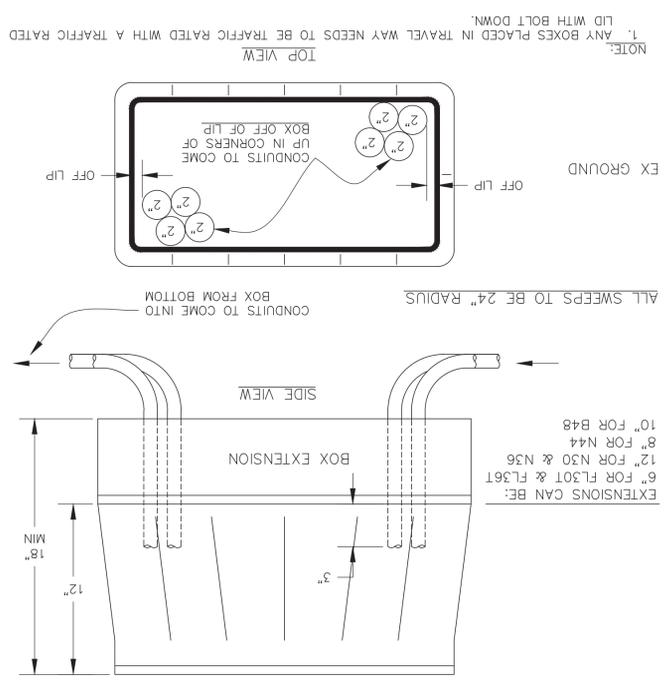
SHEET 30 OF 33  
**D-2**



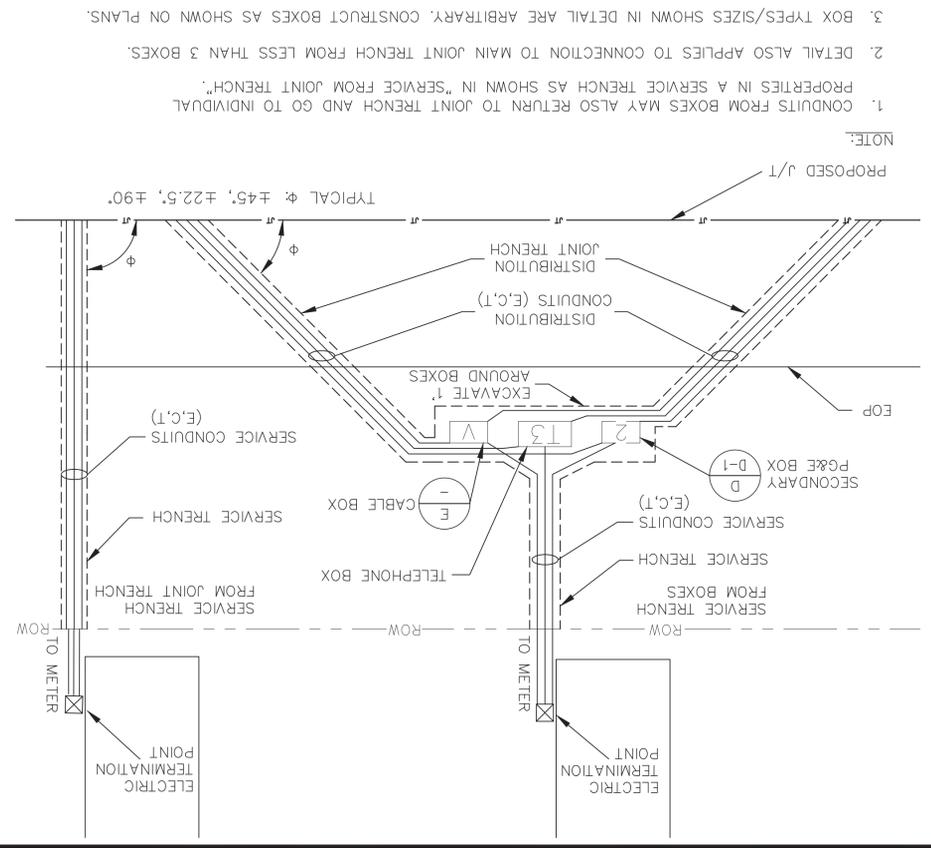
**D** - N.T.S.  
**TYPICAL SECTION (CONDUITS OVER/UNDER WET UTILITIES)**



**E** - N.T.S.  
**CABLECOMM BOX INSTALLATION**



**B** - N.T.S.  
**CONNECTION FROM MAIN JOINT TRENCH TO BOXES**

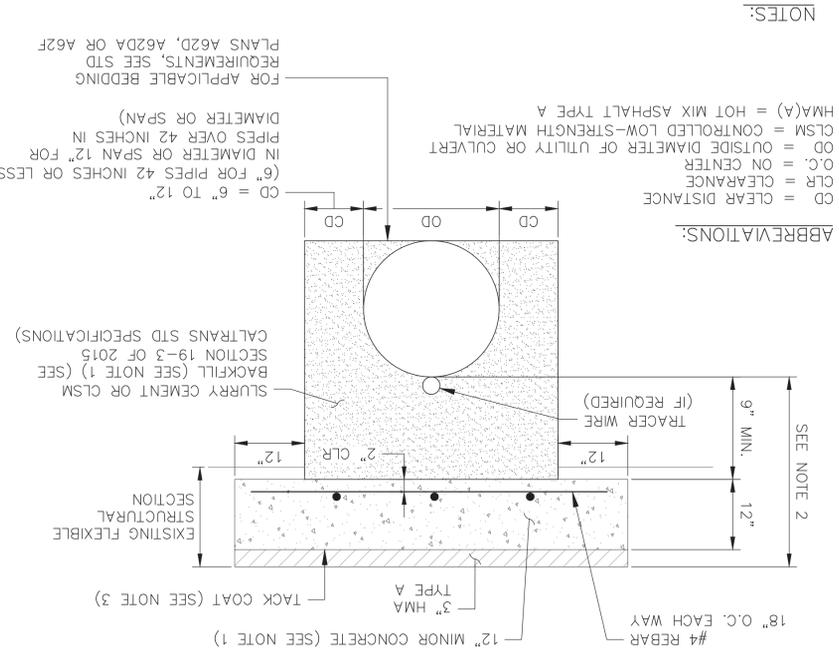


**A** - N.T.S.  
**NOT USED**

**C** - N.T.S.  
**TRENCH DETAIL FOR TRENCH IN TIBURON BLVD**



1. CONCRETE CAP MAY BE RAPID STRENGTH CONCRETE (RSC); IF RSC IS USED, REPLACE THE SLURRY CEMENT OR CLSM BACKFILL WITH LEAN CONCRETE BACKFILL OR RSC DEPENDING UPON THE PROJECT'S TIME CONSTRAINTS.
2. FOR NEW INSTALLATIONS, MINIMUM DEPTHS OF COVER REQUIREMENTS ARE TO FOLLOW GUIDELINES IN THE ENCROACHMENT PERMITS MANUAL OR HIGHWAY DESIGN MANUAL. WHEN COVER OVER A REPLACEMENT PIPE/ENCASMENT PIPE LESS THAN 24" A SPECIAL COVER OVER A REPLACEMENT PIPE/ENCASMENT PROJECTS, REFER TO HQ DRAINAGE DETAIL LIBRARY).
3. TACK COAT (ASPHALTIC EMULSION) SHALL BE APPLIED PRIOR TO PLACING HMA TYPE A.
4. ALL TRENCH WORK SUBJECT TO STATE REGULATIONS AND INSPECTION.
5. ALL MATERIALS, WORKMANSHIP, TESTING, AND INSPECTIONS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS AND PROJECT-SPECIFIC SPECIAL PROVISIONS.
6. USE OF THIS DETAIL IS APPLICABLE IF HIGH GROUNDWATER CONDITIONS DO NOT EXIST WITHIN THE TRENCH.



**ABBREVIATIONS:**  
 CD = CLEAR DISTANCE  
 CLR = CLEARANCE  
 O.C. = ON CENTER  
 OD = OUTSIDE DIAMETER OF UTILITY OR CULVERT  
 CLSM = CONTROLLED LOW-STRENGTH MATERIAL  
 HMA(A) = HOT MIX ASPHALT TYPE A  
 FOR APPLICABLE BEDDING REQUIREMENTS, SEE STD PLANS A62D, A62DA OR A62F

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TOWN OF TIBURON  
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JOINT TRENCH COMPOSITE PLAN  
 DETAILS

SHEET 31 OF 33  
 D-3



BOXED-PAD FOR PAD-MOUNTED TRANSFORMERS

UG-1: Transformers Greenbook

Box-Pad For Pad-Mounted Transformers

Table 2 Dimensions for Pad-Box

Transformer	Pad Code	Number	A	B	C	D	E	I	W
1-Wire, 2-bushing Style DFLB	360001	25	15	5.5	4	46	28	36	50
2-Wire, 4-bushing Style DFLB	360002	28	15	11	4	60	31	50	50
3-Wire, 6-bushing Style DFLB, Duplex and Style MTP	360003	37	15	6.5	4	60	40	50	50

Figure 1 Box-Pad

See Note 5 on Page 1

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UG-1: Transformers Greenbook

Box-Pad For Pad-Mounted Transformers

Figure 2 Pad Top View (50" x 52" x 18" box-pad shown)

Figure 3 Facilities Plan View

Figure 4 Detail A Placement of Conduits

Figure 5 Detail B Placement of Single Cable Conduits

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UG-1: Transformers Greenbook

Box-Pad For Pad-Mounted Transformers

Section A-A Pad Front View

Section B-B Pad Side View

Typical Box-Pad Installation (continued)

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TOWN OF TIBURON UNIFORM STANDARDS	RESTORATION OF ASPHALT	SHEET 2 OF 3
REV.	DATE	BY
MAY 2017		
DWG. NO.		
140		

NOTE: REFER TO DRAWING NO. 150 (NOTE 4)

NOTE: REFER TO DRAWING NO. 150 (NOTE 2)

NOTE: REFER TO DRAWING NO. 150 (NOTE 3)

NOTE: REFER TO DRAWING NO. 150 (NOTE 2)

NOTE: REFER TO DRAWING NO. 150

TOWN OF TIBURON UNIFORM STANDARDS	RESTORATION OF ASPHALT	SHEET 3 OF 3
REV.	DATE	BY
MAY 2017		
DWG. NO.		
150		

RESTORATION OF ASPHALT REQUIREMENTS

NOTES:

- EXISTING PAVEMENTS SHALL BE REMOVED TO CLEAN, STRAIGHT LINES PARALLEL AND PERPENDICULAR TO THE FLOW OF TRAFFIC. DO NOT CONSTRUCT FINAL RESTORATION WITH ANGLED SIDES AND IRREGULAR SHAPES.
- IF A PROPOSED CUT IS WITHIN 10 FT OF AN EXISTING PATCH, EXTEND THE FINAL RESTORATION TO THE EXISTING PATCH (FOR BELL HOLE OR TRENCH NO GREATER THAN 10 FT LONGITUDINAL).
- IF A NEW PATCH IS DONE WITHIN AN EXISTING PATCH, THE BOUNDARIES OF THE PATCHES SHALL COINCIDE.
- IF A SECTION OF PAVEMENT IS DAMAGED DURING CONSTRUCTION, THE DAMAGED AREA IS WITHIN 10 FT OF THE NEW PATCH, THE FINAL RESTORATION OF THE PATCHES SHALL COINCIDE.
- LIMITS OF FINAL PAVEMENT RESTORATION TO STOP AT ONE OF THE FOLLOWING LOCATIONS: CENTER OF LANE, TRAVEL LANE LINE, BIKE LANE LINE, ISLAND CURB/GUTTER, EDGE OF ROADWAY PAVEMENT CURB/GUTTER.
- STEEL PLATES USED FOR BRIDGING SHALL EXTEND A MINIMUM OF 1 FT BEYOND THE EDGE OF TRENCH. PLATES SHALL HAVE NONSKID ABRASIVE SURFACE PER CALTRANS SPECIFICATIONS 75-1.03F, AND COUNTER-SINKING MAY BE REQUIRED WHEN NECESSARY BY AGENCY ENGINEER.
- CUTBACK SHALL NOT BE USED EXCEPT WHEN PRE-APPROVED BY THE AGENCY ENGINEER OR WHEN TRIMMING TRENCH PLATES.

Table A

Road Type	Final AC Surface	Min. AC Thickness	Traffic Index**	Local AC Thickness	Alternate Depth LMA.C.
Arterial**	8.0"	6"	3.0"	6.0"	14.0"
Collector	6.5"	5"	2.0"	5.0"	11.0"
Local	5.0"	4"	2.0"	4.0"	7.0"

\*\*Unless applicant provides actual R-Value test results and pavement section design Or as approved by City/County Engineer based on actual traffic loading

TOWN OF TIBURON UNIFORM STANDARDS	TRENCH NOTES	SHEET 3 OF 3
REV.	DATE	BY
MAY 2017		
DWG. NO.		
120		

MATERIAL AND COMPACTION REQUIREMENT FOR TRENCH BACKFILL

- INTERMEDIATE BACKFILL SHALL BE CLASS II AGGREGATE BASE, SUBGRADE OR ENGINEER, RELATIVE COMPACTION SHALL BE AT LEAST 90%.
- CLASS II AGGREGATE BASE SHALL CONFORM TO THE STATE STANDARD SPECIFICATIONS. MINIMUM RELATIVE COMPACTION SHALL BE 95% IF PAVEMENT HAVING A STRUCTURAL SECTION GREATER THAN 15" IS CUT. ADDITIONAL BASE MATERIAL MAY BE REQUIRED BY THE AGENCY ENGINEER. BASE SHALL BE PLACED AND COMPACTED PRIOR TO PLACING OF TEMPORARY PAVING.
- TESTING OF MATERIALS AND PERFORMANCE SHALL BE IN CONFORMANCE WITH THE METHODS STATED IN THE LATEST EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, EXCEPT THAT RELATIVE COMPACTION MAY BE TESTED BY SANDHOLE METHOD (800, ASTM D-1557, OR TEST METHOD CALIF. 231 (NUCLEAR DENSITOMETRY).
- PLACE AC IN 3" MAX. LIFTS, EXCEPT FINAL LIFT SHALL BE 2 1/2" MAX. ADDITIONAL THICKNESS AND LIFTS OF ASPHALT CONCRETE MAY BE REQUIRED TO MATCH EXISTING STRUCTURAL SECTION ON MAJOR ROADS, OR PER LOCAL JURISDICTION REQUIREMENTS.
- "LETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
- THE USE OF FEA GRAVEL (OR SIMILAR ROUNDED AGGREGATE), IS NOT PERMITTED.
- THE USE OF CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE AGENCY ENGINEER PRIOR TO PLACEMENT.
- TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE AGENCY ENGINEER. TRIMMING SHALL BE BY SAWCUT OR ROTARY GRINDER.
- THE SURFACE COURSE OF TRENCH RESTORATION SHALL EXTEND TO THE UP OR DOWN EDGE OF PAVEMENT IF THE EDGE OF TRENCH IS WITHIN 4' OF UNPAVED SHOULDER.
- CONTRACTOR MUST SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.

TOWN OF TIBURON UNIFORM STANDARDS	TRENCH BACKFILL & RESURFACING	SHEET 2 OF 3
REV.	DATE	BY
MAY 2017		
DWG. NO.		
110		

NOTE: FOR TRENCHES IN UNPAVED SHOULDERS, TOP 12" SHALL BE CLASS II AGGREGATE OR OTHER THAN STREETS IN THE PUBLIC RIGHT OF WAY

TYPE 1

TYPE 2

TYPE 3

TOWN OF TIBURON UNIFORM STANDARDS	TRENCH DETAILS	SHEET 1 OF 3
REV.	DATE	BY
MAY 2017		
DWG. NO.		
100		

NOTE: IF ROADWAY HAS EXISTING AC OVER CONCRETE, TRENCH RESTORATION SHALL BE DETERMINED BY THE AGENCY ENGINEER.

TYPE 1

TYPE 2

TYPE 3

TOWN OF TIBURON UNIFORM STANDARDS	RESTORATION OF ASPHALT	SHEET 1 OF 3
REV.	DATE	BY
MAY 2017		
DWG. NO.		
130		

RESTORATION OF ASPHALT REQUIREMENTS

NOTES:

- ALL STREET LAYOUTS MUST BE APPROVED BY TOWN REPRESENTATIVE IN THE FIELD, OR TOWN INSPECTOR AT LEAST 24 HOURS BEFORE SAWCUTTING IS BEGUN.
- BACKFILL WITH CONTROLLED DENSITY FILL (CDF).
- FINAL PAVING SHALL BE SMOOTH AND CONFORM TO EXISTING PAVEMENT.
- BEACH SAND IS NOT ALLOWED FOR FILL SAND.
- USE CDF MATERIAL FOR BACKFILLING AROUND MANHOLES, VAULTS & BOXES.
- SAW-CUT FULL DEPTH OF EXISTING AC PAVEMENT. PAVEMENT EDGES OF SECOND SAW-CUT DAMAGED DURING CONSTRUCTION SHALL BE RE-CUT TO NEAT SURFACES IN ACCORDANCE TO THE 2015 CALTRANS STANDARD SPECIFICATIONS. TACK COAT SHALL BE APPLIED TO ALL VERTICAL SURFACES PRIOR TO PAVING. TACK COAT SHALL BE APPLIED TO COMPLETE WIDTH AND EDGE JUST PRIOR TO PLACING ASPHALT CONCRETE.
- WHERE EDGE OF GUTTER IS WITHIN 4 FEET OF SAW-CUT, REMOVE REMAINING EXISTING AC PAVEMENT AND REPLACE WITH NEW HMA PAVING. PRIOR TO PAVING APPLY A TACK COAT TO THE EXPOSED SAW-CUT EDGE.
- ALL ROADWAY SURFACE MARKINGS, INCLUDING BUT NOT LIMITED TO STRIPING SHALL BE REPLACED TO PRE-EXISTING CONDITIONS (COLOR, SHAPE, AND MATERIAL TYPE TO MATCH).
- TRENCH WITH FOR EXCAVATION AND CONDUIT PLACEMENT PER PG&E STANDARD SS453, EXHIBIT B.
- TRENCH SURFACE RESTORATION FOR TRENCHES IN AREAS RECEIVING MILL & OVERLAY TREATMENT OR OVERLAY TREATMENT AS SHOWN ON PLANS DO NOT REQUIRE 2" T-CUT GRIND.

TOWN OF TIBURON UNIFORM STANDARDS	RESTORATION OF ASPHALT	SHEET 1 OF 3
REV.	DATE	BY
MAY 2017		
DWG. NO.		
130		

RESTORATION OF ASPHALT REQUIREMENTS

NOTES:

- FOR TRENCH REPAIRS IN THE VEHICLE TRAVEL LANE(S), THE RESTORATION SHALL BE EXTENDED TO THE LANE LINE OR CENTER OF LANE. IN ACCORDANCE WITH MINIMUM T-CUT DIMENSIONS SHOWN ON DRAWING 100.
- IF THE LIMITS OF RESTORATION ENTER A BIKE LANE WIDTH, THE RESTORATION SHALL BE EXTENDED TO COVER THE ENTIRE BIKE LANE WIDTH.
- IF THE LIMITS OF EXCAVATION ARE WITHIN 4 FT OF THE GUTTER UP OR DOWN EDGE OF PAVEMENT, THE RESTORATION SHALL BE EXTENDED TO THE GUTTER UP OR EDGE OF PAVEMENT.

PLAN



