

CAUTION !! CAUTION !! CAUTION !!
 EX. JOINT TRENCH AND EX. GAS AND ALL OTHER UTILITY LOCATIONS ARE SHOWN BASED UPON INFORMATION PROVIDED BY OTHERS AND FIELD OBSERVATION. JOINT TRENCH CONTRACTOR TO VERIFY EXACT LOCATION OF ALL EXISTING FACILITIES PRIOR TO ANY JOINT TRENCH CONSTRUCTION. POT HOLE IF NECESSARY. CONTACT U.S.A. DIG ALERT 2 WORKING DAYS IN ADVANCE.

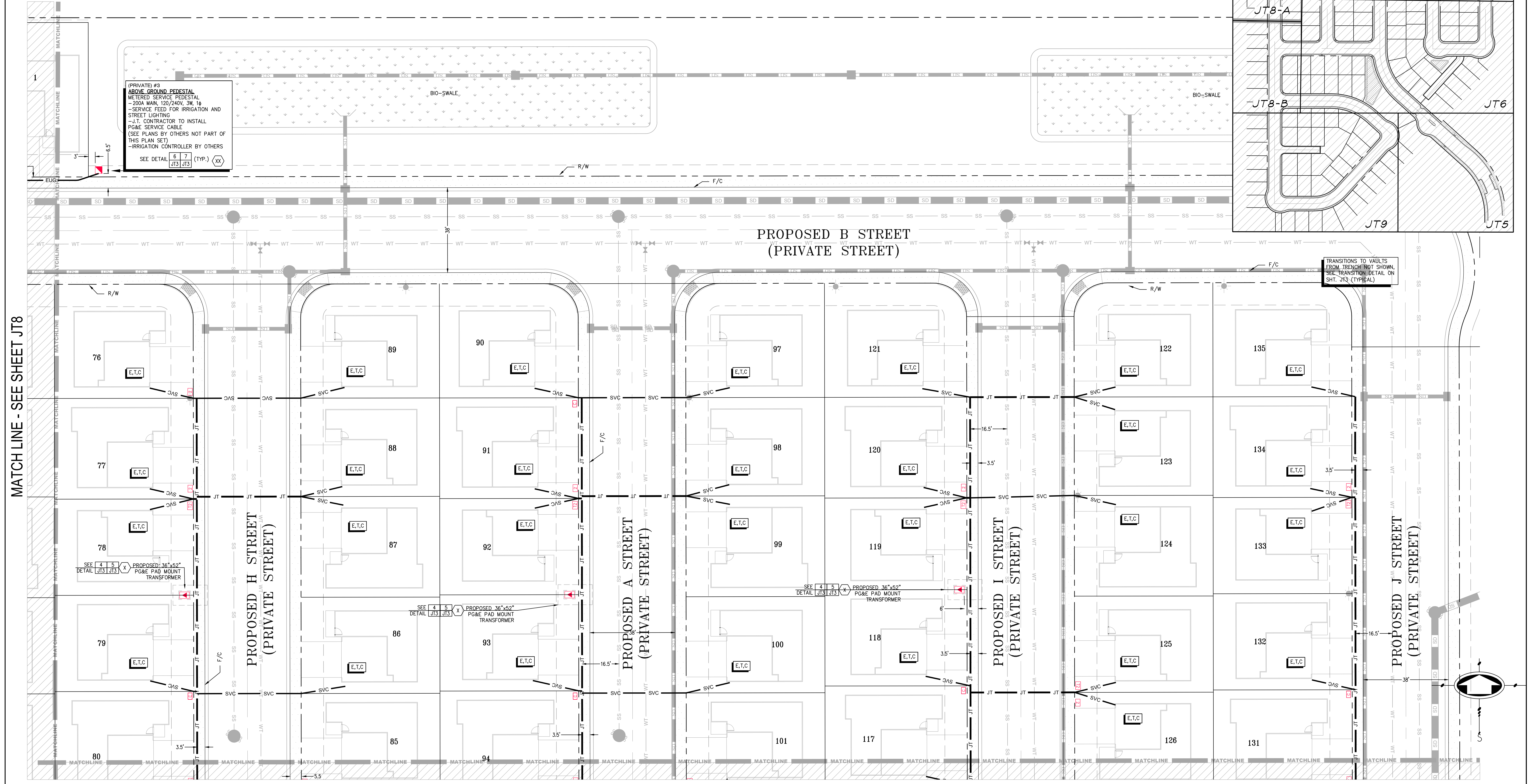
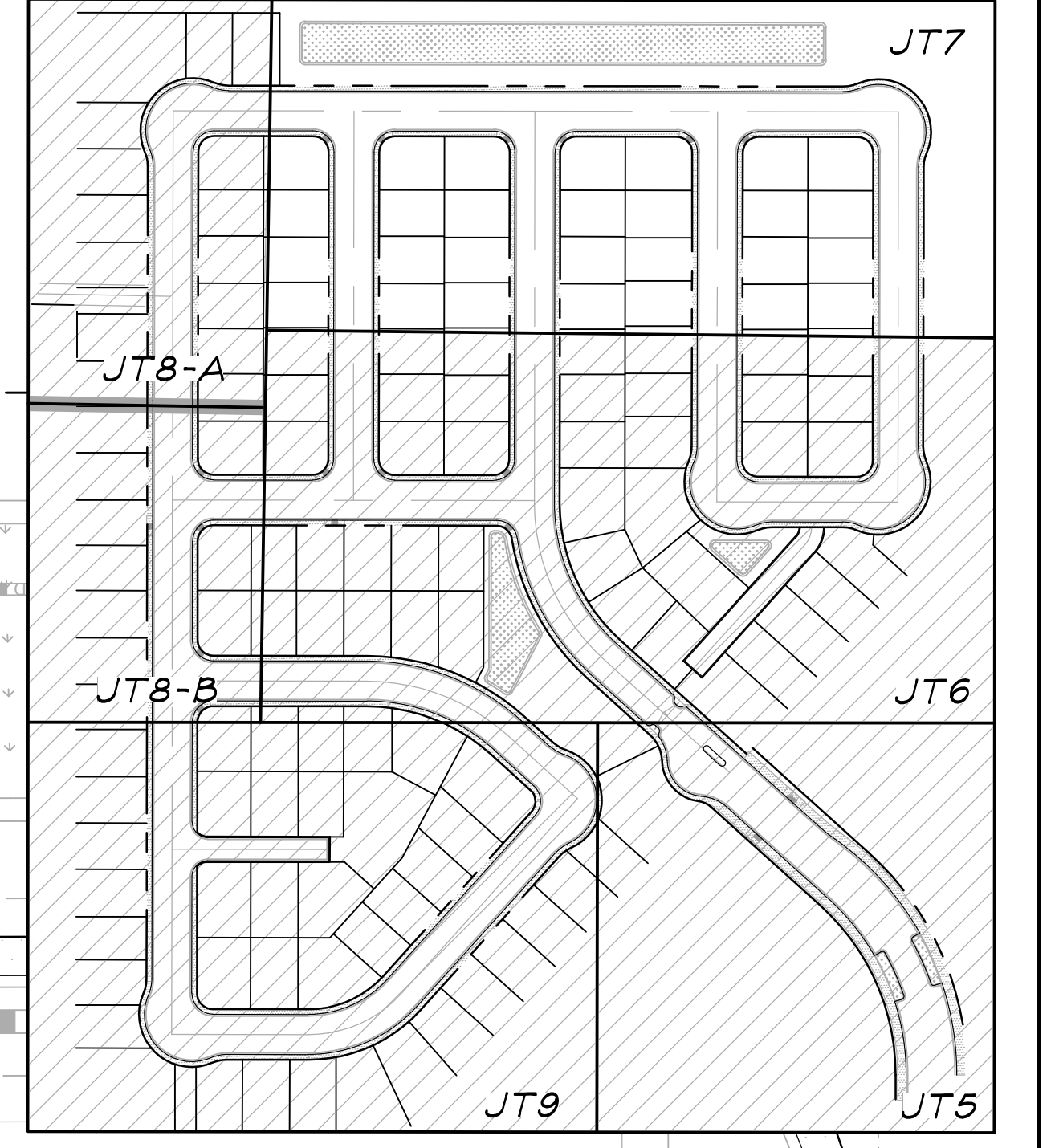
CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A. INDUSTRIAL ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING AROUND ENERGIZED EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER AND SAFETY PRECAUTIONS AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES.

TRENCH SECTION		A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
TELEPHONE		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CABLE T.V.		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC SEC.		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC PRL.		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY

SERVICE TERMINATION LEGEND
 E.T.C. ELECTRIC, TELEPHONE, CATV LOCATION

KEY MAP
 NOT TO SCALE

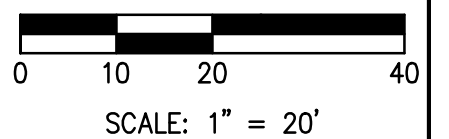


(PRIVATE) #3
 ABOVE GROUND PEDESTAL
 METERED SERVICE PEDESTAL
 -200A MAX. 120/240V, 3W, 1Φ
 -SERVICE FEED FOR IRRIGATION AND STREET LIGHTING
 -JT CONTRACTOR TO INSTALL PG&E SERVICE CABLE
 (SEE PLANS BY OTHERS NOT PART OF THIS PLAN SET)
 -IRRIGATION CONTROLLER BY OTHERS
 SEE DETAIL 6 7 (TYP.) (XX)
 J13 J13

TRANSITIONS TO VAULTS FROM TRENCH NOT SHOWN. SEE TRANSITION DETAIL ON SHIT. #33 (TYPICAL)

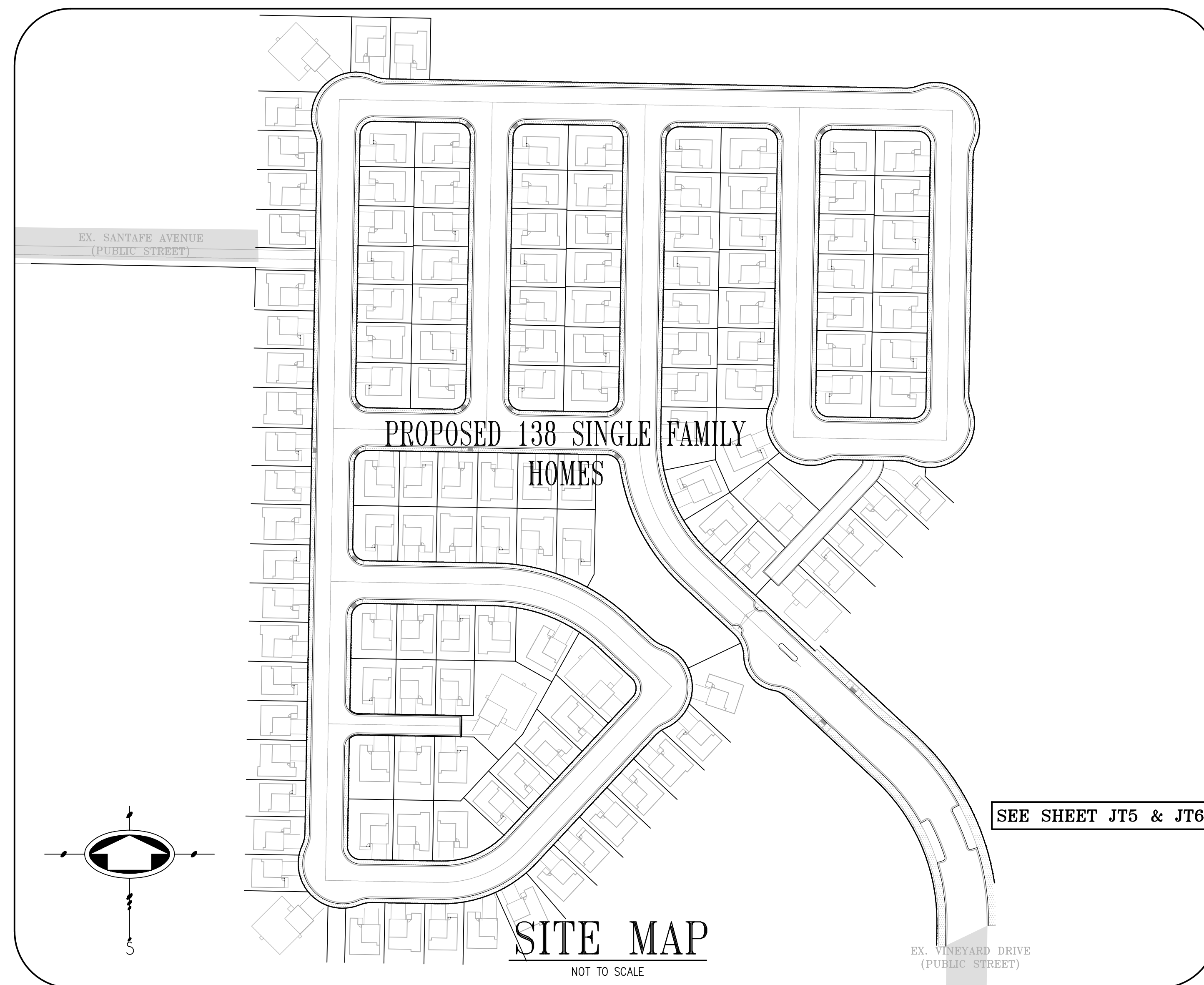
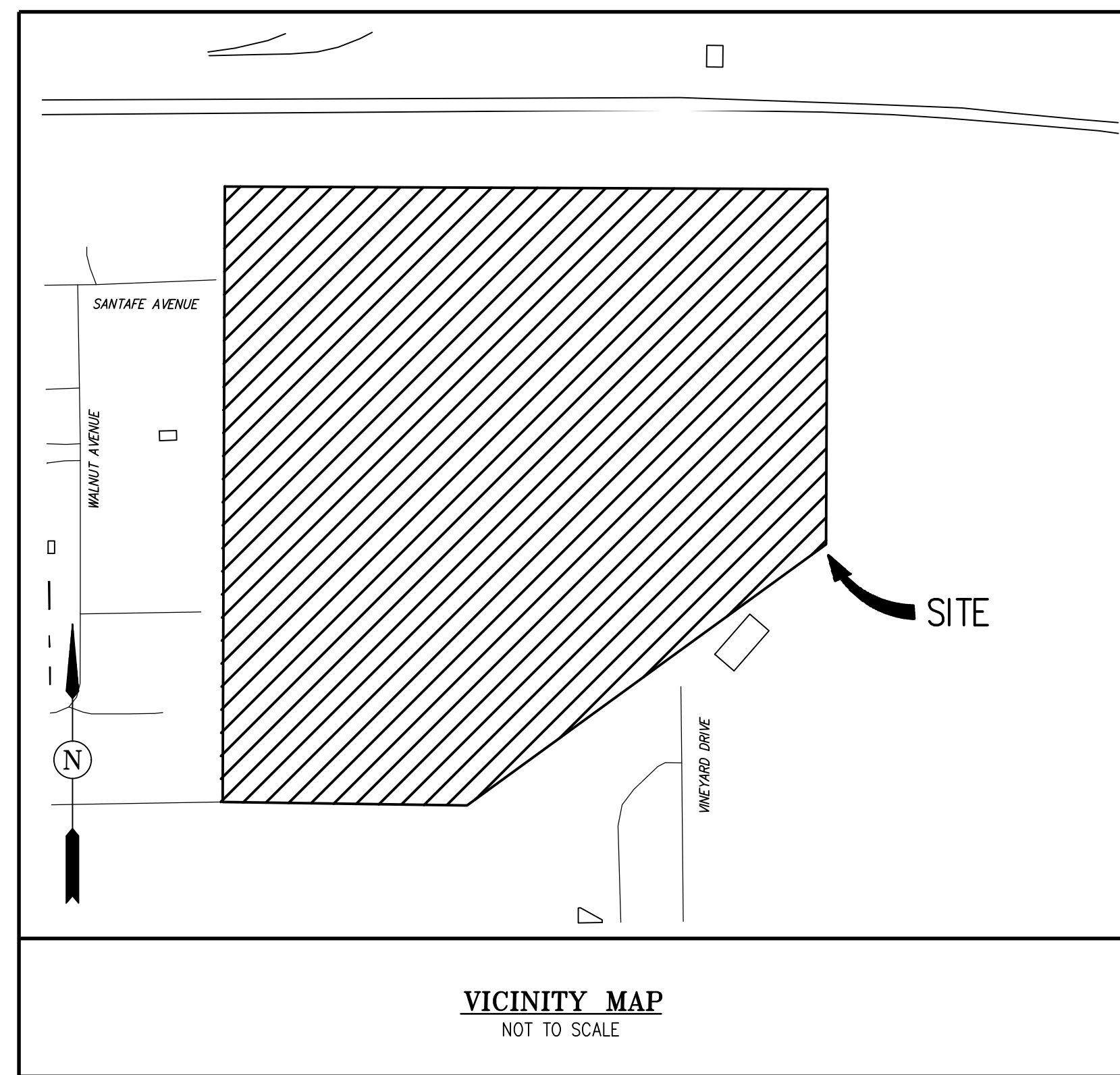
MATCH LINE - SEE SHEET JT8

MATCH LINE - SEE SHEET JT6



813 First Street Brentwood, CA 94513 (925) 240-2595 (925) 240-7013 fax www.tarrar.com		<ul style="list-style-type: none"> • Planning • Design • Estimating • Joint Trench • Street Lighting • Fiber Optic 	<ul style="list-style-type: none"> • T-24 • PG&E Gas Design • PG&E Elec Design • H. E. P. Design • Cost Analysis • Due Diligence 	JOINT TRENCH COMPOSITE PLAN DENOVA HOMES RANCHO MEADOWS ANTIOCH CALIFORNIA				NO. _____ REVISIONS _____ BY _____ DATE _____	DATE: JUNE 2024 SCALE: 1:20 JOB NO.: 224086	DATE LAST WORKED ON: 11/25/2024 DRAWN: LGR CHECKED: ND PRELIMINARY NOT FOR CONSTRUCTION		SHEET JT7 OF JT9 SHEETS	
		INTENT TO CONSTRUCT											
		811 BEFORE YOU DIG UNDERGROUND SERVICE TREATMENT											
		CALIFORNIA PROFESSIONAL ENGINEER TARRAR Exp. 06/30/2026 CIVIL STATE OF CALIFORNIA											

DENOVA HOMES RANCHO MEADOWS ANTIOCH CONTRA COSTA COUNTY CALIFORNIA



LEGEND	
— JT —	PROPOSED JOINT TRENCH
— SVC —	PROPOSED JOINT TRENCH SERVICE
— EX JT —	EXISTING JOINT TRENCH
— GAS —	PROPOSED GAS
— EX GAS —	EXISTING GAS
— ESL —	EXISTING STREET LIGHT CONDUIT
— ECUG —	EXISTING UNDERGROUND CATV LINES
— EEUG —	EXISTING UNDERGROUND ELECTRIC LINES
— EUUG —	EXISTING UNDERGROUND UTILITY LINES
— ETUG —	EXISTING UNDERGROUND TELEPHONE LINES
— EUOH —	EXISTING OVERHEAD UTILITY LINES
— ECOH —	EXISTING OVERHEAD CATV LINES
— ETOH —	EXISTING OVERHEAD TELEPHONE LINES
— EEOH —	EXISTING OVERHEAD ELECTRIC LINES
— CUG —	PROPOSED UNDERGROUND CATV LINES
— EUG —	PROPOSED UNDERGROUND ELECTRIC LINES
— TUG —	PROPOSED UNDERGROUND TELEPHONE LINES
— UOH —	PROPOSED OVERHEAD UTILITY LINES
—	DESIGNATES UTILITY LINES TO BE REMOVED
▲	PROPOSED 36"x52" PG&E PAD MOUNT TRANSFORMER
6	PROPOSED 4"x6"x5" PG&E SUBSURFACE SPLICE BOX.
FVT SS	PROPOSED 3"x5"x4"x6" PG&E SUBSURFACE SPLICE BOX.
TZ	PROPOSED 14"x20"x15" TELEPHONE SERVICE BOX
C	PROPOSED 13"x24"x18" CATV SPLICE BOX (B30)
■	PROPOSED METER SERVICE PEDESTAL
□	EXISTING PRIMARY SPLICE BOX
□	EXISTING SECONDARY SPLICE BOX
(X)	PHOTO NUMBER REFERENCE, SEE PHOTO EXHIBIT SHEET(S)

SHEET INDEX	
SHEET NO.	DESCRIPTION
JT1	JOINT TRENCH COMPOSITE TITLE SHEET
JT2	JOINT TRENCH GENERAL NOTES AND DETAILS
JT3	JOINT TRENCH DETAILS
JT4	JOINT TRENCH SECTIONS AND DETAILS
JT5 - JT9	JOINT TRENCH COMPOSITE PLAN
SL1	STREET LIGHTING GENERAL NOTES AND DETAILS
SL2 - SL5	STREET LIGHTING SITE PLAN

9,503 L.F. OF JOINT TRENCH AND 27 STREET LIGHTS SHALL BE INSTALLED WITH THIS JOINT TRENCH PLAN SET

138 SINGLE FAMILY HOMES
138 NEW SERVICE COMPLETIONS (ELECTRIC, TELEPHONE & CATV)

TARRAR UTILITY REP.:	KHALID TARRAR	JOB NO.	224086	PHONE NO.	(925) 240-2595
DEVELOPER:	DENOVA HOMES	JOB NO.	224086	PHONE NO.	R-DEVELPHNO
PG&E ELECTRIC COORDINATOR:	TBD	JOB NO.	R-ELEJOBNO	PHONE NO.	R-ELECPHNO
PG&E GAS COORDINATOR:	TBD	JOB NO.	R-GASJOBNO	PHONE NO.	R-GASPHNO
TELEPHONE REP.:	ATT	JOB NO.	R-TELEJOBNO	PHONE NO.	R-TELEPHNO
CABLE T.V. REP.:	COMCAST	JOB NO.	R-CATVJOBNO	PHONE NO.	R-CATVPHNO

FILES STATUS			
DESCRIPTION:	BY:	DATE:	STATUS:
CIVIL PLANS (ELECTRONIC FILE)	CBG	06-11-2024	R
ARCHITECTURAL PLANS (ELECTRONIC FILE)	CBG	06-11-2024	R
LANDSCAPE PLANS (ELECTRONIC FILE)	XXXX	XX-XX-XXXX	XXXX
GAS DESIGN	TARRAR UTILITY CONSULTANTS	XX-XX-XXXX	XXXX
ELECTRIC DESIGN	TARRAR UTILITY CONSULTANTS	XX-XX-XXXX	XXXX
TELEPHONE INTENT REPLY	XXXX	XX-XX-XXXX	XXXX
CATV INTENT REPLY	XXXX	XX-XX-XXXX	XXXX
STREET LIGHT PLANS - PUBLIC	XXXX	XX-XX-XXXX	XXXX
STREET LIGHT PLANS - PRIVATE	XXXX	XX-XX-XXXX	XXXX
SOILS REPORT	XXXX	XX-XX-XXXX	XXXX

A = APPROVED • ANS = APPROVED NOT SIGNED • NA = NOT APPROVED • F = FIRST SUBMITTAL • SS = SECOND SUBMITTAL • R = RECEIVED

TARRAR UTILITY CONSULTANTS
APPROVED FOR SUBMITTAL
NICK DELGADO
QUALIFIED APPLICANT DESIGN ENGINEER

DESIGN CHANGE COMPONENT
ANY CHANGES TO THIS DESIGN
MUST BE APPROVED BY
ADD ADE NAME / PH# HERE
PG&E GAS ADE

COMPOSITE DRAWING BY DEVELOPER

Approved _____ Telephone representative _____ Date _____

Approved _____ CATV representative _____ Date _____

SUBSTRUCTURE VERIFICATION STAMP
DEVELOPER NOTE AND SIGN

ALL PG&E ENCLOSURES AND BOXES HAVE BEEN SET TO GRADE ACCORDING TO GRADE STAKES PROVIDED BY DEVELOPERS ENGINEER. ALL COSTS TO RELOCATE OR READJUST BOXES AT A LATER DATE WILL BE BILLED TO THE DEVELOPER. PLEASE HAVE YOUR JOB SUPT. VERIFY THE CORRECT GRADE OF ALL ENCLOSURES AND BOXES, AND SIGN AND DATE DRAWING.

THANK YOU

SIGNED _____
DATE: _____

813 First Street
Brentwood, CA 94513
(925) 240-2595
(925) 240-7013 fax
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TARRAR

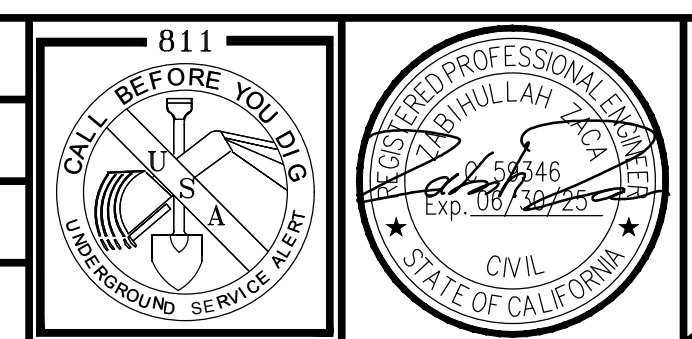
UTILITY CONSULTANTS

- Planning
- Design
- Estimating
- Joint Trench
- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH COMPOSITE TITLE SHEET

DENOVA HOMES RANCHO MEADOWS ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE	DATE: JUNE 2024	DATE LAST WORKED ON: 11/20/2024	SHEET JT1
				SCALE: NOT TO SCALE	DRAWN: LGR	OF JT9
				JOB NO.: 224086	PRELIMINARY NOT FOR CONSTRUCTION	SHEETS
INTENT TO CONSTRUCT						



PROJECT NOTES:

- FIELD ADJUST SERVICES TO MINIMIZE INTERFERENCE WITH EXISTING FACILITIES (TYPICAL).
- CONTRACTOR SHALL PERFORM ALL TRENCHING, EXCAVATING, BACKFILLING AND OTHER WORK AS SHOWN OR NOTED ON PLANS, AND AS SPECIFIED ON UTILITY BID DOCUMENTS.
- FIELD ADJUST SPICE BOXES TO KEEP CLEAR OF SIDEWALK, DRIVEWAYS AND EXISTING FACILITIES (TYPICAL).
- A 3 FOOT LEVEL WORKING AREA MUST BE MAINTAINED AROUND ALL ELECTRIC ENCLOSURES. PRIOR TO ENERGIZING THE SYSTEM, THE ELECTRIC UTILITY COMPANY INSPECTOR WILL DETERMINE IF RETAINING WALLS ARE REQUIRED TO MEET MINIMUM CLEARANCE BETWEEN ENCLOSURES AND THE TOPS OR TOES OF SLOPES. IF RETAINING WALLS ARE REQUIRED, THE DEVELOPER AND/OR CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FROM THE CITY/COUNTY BUILDING DEPARTMENT PRIOR TO WALL CONSTRUCTION.
- TRANSITION TO VAULTS FROM TRENCH NOT SHOWN, SEE TRANSITION DETAIL SHEET JT3 (TYPICAL).
- CONTRACTOR SHALL PLACE ALL UTILITY SPICE BOXES, ENCLOSURES & CONDUIT IN PROPER RELATIONSHIP TO FINAL GRADE (SHOWN SCHEMATICALLY).
- ALL PG&E, TELEPHONE, CABLE T.V. AND FIBER OPTIC BOXES AND JOINT TRENCH FACILITIES ARE TO MAINTAIN A MINIMUM OF 3' SEPARATION FROM SEWER, WATER LATERALS AND DRIVEWAYS.
- CONTRACTOR SHALL COORDINATE ALL CONNECTIONS BETWEEN PROPOSED AND EXISTING FACILITIES AS DIRECTED BY THE RESPECTIVE UTILITY COMPANY INSPECTOR. UTILITY COMPANY PERSONNEL SHALL MAKE ALL "HOT TIE-INS"; THE CONTRACTOR IS PROHIBITED FROM WORKING IN ANY ENERGIZED FACILITIES.
- THE CONTRACTOR SHALL OBTAIN THE APPROPRIATE STREET EXCAVATION AND ENCROACHMENT PERMIT(S) FROM THE CITY/COUNTY PRIOR TO STARTING WORK IN THE PUBLIC STREET AREA.
- FIELD LOCATE JOINT TRENCH FACILITIES TO KEEP CLEAR OF SERVICE LATERALS. SERVICE LATERALS TO BE ROUTED TO AVOID SPICE BOX (ADDITIONAL P.U.E MAY BE REQUIRED).
- RESPECTIVE UTILITY COMPANY TO OBTAIN CITY APPROVAL OF ALL ABOVE GROUND EQUIPMENT.
- UNLESS OTHERWISE SHOWN ON THE PLANS, NATURAL BENDS SHALL BE USED FOR ALL CONDUIT EXCEPT STREET LIGHT CONDUIT.
- INCIDENTAL TRENCHING TO SPICE BOXES NOT SHOWN (TYPICAL). CONTRACTOR TO PROVIDE ADDITIONAL TRENCHING AS REQUIRED FOR CONDUIT ROUTING TO SPICE BOXES AND CABINETS (TYPICAL).
- ALL CONDUITS SHALL ENTER OR EXIT PERPENDICULAR TO BOX WALLS.
- ALL CONDUITS MUST BE MANDREL TESTED AND APPROVED.
- OFFSET SPICE BOXES TO ROUTE TELEPHONE/FIBER OPTIC CONDUIT AS NEEDED (TYPICAL).
- PULL ROPES SHALL BE PLACED IN ALL EMPTY CONDUITS AS REQUIRED BY EACH UTILITY COMPANY.
- ALL PG&E SPICE BOXES ADJACENT TO TRANSFORMER SHALL BE 26" IN DEPTH (TYPICAL).
- ALL CONDUITS NOT ENTERING SPICE BOXES OR ENCLOSURES SHALL BE CAPPED.
- COORDINATE TIE-IN WITH UTILITY COMPANY AS REQUIRED.
- THE STREET LIGHT SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE "MATERIAL AND LABOR RECAP" AND LIGHT SCHEDULE AS SHOWN ON THESE PLANS.
- ALL EXISTING DUCTS TO BE USED IN THESE PLANS SHALL BE "VERIFIED" BY PULLING A MANDREL THROUGH THE ENTIRE EXISTING LENGTH PRIOR TO CONNECTION.
- EDGE OF SPICE BOXES & PEDESTALS SHALL BE 5' FROM EDGE OF FIRE HYDRANT AND 3' FROM STREET LIGHT (TYPICAL). CONTRACTOR TO AVOID DISTURBING FIRE HYDRANT THRUST BLOCK.
- ALL UTILITY SUBSTRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE "MATERIAL AND LABOR RECAP" SHOWN ON THESE PLANS.
- MAINTAIN 3' CLEARANCE AND LEVEL AREA AROUND PRIMARY SPICE BOXES & XFMRs.
- DUE TO UNCERTAINTIES OF THE EXACT LOCATION OF EXISTING FACILITIES, FIELD LOCATION OF PROPOSED FACILITIES MAY BE REQUIRED. CONFIRM WITH VARIOUS UTILITIES FOR EXACT PLACEMENT.
- FOR CLARITY - BOXES/PEDESTALS ARE SHOWN AT LARGER SIZE THAN ACTUAL. FIELD ADJUST TO KEEP CLEAR OF DRIVEWAYS (TYPICAL).
- ALL SERVICE FACILITIES SHALL BE EXTENDED TO EITHER THE PROPERTY LINE OR TO POSITION SHOWN ON THE PLANS, AND THEN CAPPED, BURIED AND LOCATION STAKED.
- THESE PLANS WERE PREPARED UTILIZING PLANS RECEIVED FROM CBG (XXX) XXX-XXXX

JOINT TRENCH AND UTILITY BOX LOCATION

THIS AREA RESERVED FOR JOINT TRENCH SECTIONS TO BE PLACED AT A LATER TIME

JOINT TRENCH STREET SECTIONS

NOT TO SCALE
NOTE: SEE PLANS FOR CONFIGURATIONS AND ARRANGEMENTS.
* UNLESS OTHERWISE SHOWN
WITHIN ROADWAY SECTION
(95% RELATIVE COMPACTION FOR THE TOP 6" BELOW ROAD SUBGRADE AND 90% BELOW THAT)

GENERAL NOTES:

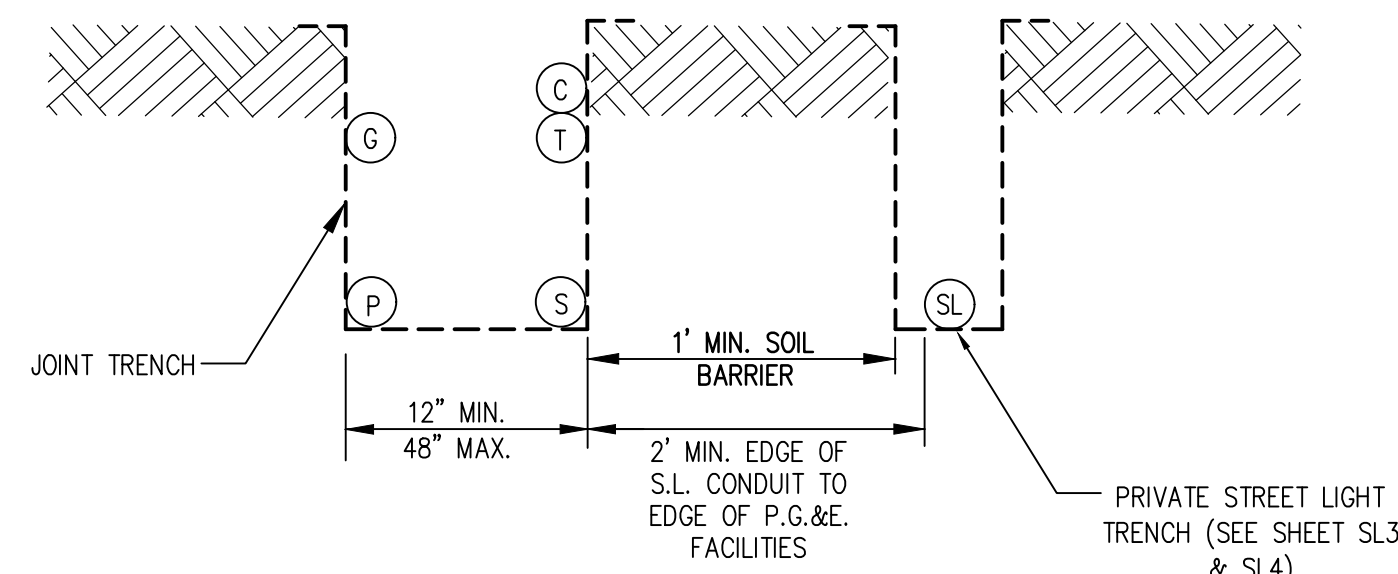
- ALL JOINT TRENCH CONSTRUCTION WORK SHALL BE IN ACCORDANCE WITH PG&E UTILITY OPERATIONS UO STANDARD 55453.
- ALL WORK SHALL BE SUBJECT TO THE INSPECTION AND SATISFACTION OF ALL PARTICIPATING UTILITIES AND CITY INSPECTORS.
- BACKFILL SELECTION SHALL BE SUBJECT TO THE APPROVAL OF THE RESPECTIVE UTILITY COMPANIES, THE SOILS ENGINEER AND THE CITY AND/OR COUNTY WHERE THE PROJECT IS LOCATED. CONSULT PARTICIPATING UTILITIES, SOILS ENGINEER, AND THE CITY FOR APPROVED BACKFILL MATERIAL. COMPACTION TO MEET LOCAL AGENCIES REQUIREMENTS.
- THE BOTTOM OF THE TRENCH SHALL BE CLEARED OF ROCKS AND OTHER HARD SURFACES. DISTRIBUTION TRENCHES WITHOUT TELEPHONE CONDUIT DO NOT REQUIRE BEDDING MATERIAL. SERVICE TRENCHES WITHOUT TELEPHONE CONDUIT REQUIRE 2" SAND BEDDING AS A PAD ON WHICH UTILITY FACILITIES CAN REST. SERVICE TRENCHES CONTAINING TELEPHONE CONDUIT ONLY REQUIRE A 1" SAND BEDDING. ALL OTHER TRENCHES CONTAINING TELEPHONE CONDUIT REQUIRE A 3" SAND BEDDING. REFER TO PG&E GREEN BOOK PUBLICATION 55453, EXHIBIT B AND AT&T SPEC95 "AT&T SPECIFICATIONS" TRENCHING AND CONDUIT GUIDE FOR FURTHER INFORMATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE PAVEMENT AND/OR SIDEWALK WHERE REMOVED OR DAMAGED AS A RESULT OF ITS OPERATION (UNLESS OTHERWISE NOTED). REPLACEMENT OF PAVEMENT AND/OR SIDEWALK TO BE PER CITY SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND NOTIFY ALL PARTICIPATING UTILITY INSTALLATIONS.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT FIRST NOTIFYING TARRAR UTILITY CONSULTANTS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTENCE AND/OR PRECISE LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION. TARRAR UTILITY CONSULTANTS MAKES NO WARRANTY WHATSOEVER THAT THE EXISTING UNDERGROUND UTILITIES AND/OR STRUCTURES DEPICTED ON THE PLANS HAVE BEEN ACCURATELY LOCATED OR THAT THERE ARE NO OTHER UNDERGROUND UTILITIES AND STRUCTURES IN ADDITION TO WHAT HAS BEEN SHOWN. CALL U.S.A. A MINIMUM OF 48 HOURS PRIOR TO STARTING CONSTRUCTION. FOR CALIFORNIA NORTH, (KERN COUNTY AND NORTHERLY, AND NEVADA) CALL (800)227-2600. FOR CALIFORNIA SOUTH, (SAN BERNARDINO COUNTY AND SOUTHERLY) CALL (800)422-4133.
- CONTRACTOR SHALL COMPLY WITH ALL STATE, COUNTY AND CITY LAWS AND ORDINANCES AND WITH THE REGULATIONS OF THE DEPARTMENT OF INDUSTRIAL RELATIONS, O.S.H.A. AND ANY OTHER GOVERNMENTAL AGENCY RELATING TO THE SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL.
- THE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED TO BE COMPLEMENTARY TO EACH OTHER. ANYTHING SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS, OR MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN ON THE DRAWINGS, SHALL BE OF LIKE EFFECT AS IF SHOWN ON OR MENTIONED IN BOTH. IF DISCREPANCY IS FOUND, NOTIFY TARRAR UTILITY CONSULTANTS PRIOR TO STARTING WORK.
- TRENCH AND CONDUIT LAYOUTS ARE SHOWN SCHEMATICALLY.
- TRENCHING OR SUBSTRUCTURE EXCAVATION MAY NECESSITATE OPERATION OVER, UNDER, OR ADJACENT TO OTHER UNDERGROUND UTILITIES (STORM, SEWER, WATER, ETC...). THE CONTRACTOR IS RESPONSIBLE TO LOCATE, PROSPECT, EXPOSE AND PROTECT ALL ADJACENT OR CROSSING UNDERGROUND UTILITIES. THIS WORK TO PROTECT THOSE UTILITIES IS NOT CONSIDERED AS EXTRA WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW IMPROVEMENT PLANS, IN CONJUNCTION WITH THIS PLAN, AND BID THE WORK ACCORDINGLY.
- THE QUANTITIES SHOWN ON THESE PLANS ARE ONLY ESTIMATES OF WHAT WILL ACTUALLY BE REQUIRED FOR THE CONSTRUCTION OF THE OVERALL PROJECT. FINAL QUANTITIES MAY VARY ACCORDING TO CHANGES, ADDITIONS, DELETIONS OR OMISSIONS ON THE ORIGINAL PLAN.
- VERIFY ALL SUBSTRUCTURE EXCAVATION DIMENSIONS WITH SUPPLIER(S) BEFORE BIDDING.
- TARRAR UTILITY CONSULTANTS ASSUMES NO RESPONSIBILITY FOR ANY VARIANCE BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHOULD REVIEW THE PROJECT SITE PRIOR TO SUBMITTING ITS BID.
- THE CONTRACTOR IS REQUIRED TO EXCAVATE BELL HOLE(S) AT TIE-IN LOCATIONS AS DIRECTED BY PARTICIPATING UTILITY.
- CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A. INDUSTRIAL ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING ENERGIZED EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER AND SAFETY PRECAUTIONS AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AS-BUILT DRAWINGS AFTER INSTALLATION OF PG&E'S GAS AND ELECTRIC SYSTEMS (PRIOR TO "HOT TIE-INS").
- THE CITY INSPECTOR SHALL BE NOTIFIED TWO WORKING DAYS PRIOR TO COMMENCEMENT OF WORK. COORDINATE WITH THE INSPECTOR ANY SERVICES TO BE ABANDONED.
- THE CONTRACTOR IS TO VERIFY THE RIGHT OF WAY, PUBLIC UTILITY EASEMENT AND/OR PUBLIC SERVICE EASEMENT ACQUISITION WITH THE APPLICANT PRIOR TO CONSTRUCTION WITHIN AREAS OF QUESTION.
- PG&E'S GENERAL TERM AND CONDITIONS FOR GAS AND ELECTRIC EXTENSION AND SERVICE CONSTRUCTION BY "APPLICANT" (EFFECTIVE 07/1/95) TO BE UTILIZED FOR ALL TRENCHING, BACKFILLING, AND INSTALLATION WORK.
- IN THE EVENT OF DISPUTES OR DISAGREEMENT OVER ANY INSTALLATIONS, DESIGNS, PLANS OR DRAWINGS, THE SPECIFICATIONS AND REQUIREMENTS OF THE INDIVIDUAL UTILITY COMPANIES AND THEIR INSPECTORS SHALL TAKE PRECEDENCE. IN CASE OF DISCREPANCIES WITHIN THE DRAWINGS AND SPECIFICATIONS HEREIN, THE CONTRACTOR SHALL CONSULT TARRAR UTILITY CONSULTANTS FOR INTERPRETATION BEFORE WORK IS STARTED.
- TARRAR UTILITY CONSULTANTS HEREIN, ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE QUALITY, QUANTITY OR TIMING OF WORK TO BE PERFORMED BY THE CONTRACTOR, UTILITY COMPANY CONSTRUCTION CREWS, OR OTHER SUB-CONTRACTOR OF DEVELOPER.
- ALL TRENCHING, BACKFILLING AND INSTALLATION WORK IS TO BE IN ACCORDANCE WITH THE STANDARD PRACTICES AND SPECIFICATIONS OF EACH UTILITY COMPANY PARTICIPATING IN THE UTILITY TRENCHES WITHIN THE PROJECT.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POINTS OF ACCESS THAT ARE AGREEABLE TO ADJACENT LAND USES AND TENANTS AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASCERTAINING WHAT INSPECTIONS WILL BE REQUIRED FOR APPROVAL OF THE WORK AND FOR COORDINATING ALL SUCH INSPECTIONS. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS PRIOR NOTICE TO THE CITY, SOILS ENGINEER, UTILITY COMPANIES OR ANY OTHER INDIVIDUALS OR PUBLIC AGENCIES, THAT THE WORK IS READY FOR INSPECTION.
- THE CONTRACTOR SHALL NOTIFY DEVELOPER 48 HOURS PRIOR TO THE NEED FOR SURVEY STAKING. THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF ALL CONSTRUCTION STAKING SET BY THE DEVELOPER'S SURVEYORS AND WILL BE BACK CHARGED FOR ANY RE-STAKING THAT IS REQUIRED. ANY EXTRA CONSTRUCTION STAKING NECESSITATED SOLELY BY THE CONTRACTOR'S NEGLIGENCE WILL BE CHARGED TO AND PAID FOR BY THE CONTRACTOR.
- ALL TRANSFORMERS AND TRANSFORMER PADS ARE TO BE INSTALLED PER PG&E SPECIFICATIONS. PROTECTIVE BOLLARDS ARE TO BE PLACED WHERE NEEDED.
- THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND CONDUCT HIS WORK ACCORDINGLY.
- KEEP ALL BOXES AND PEDESTALS WITHIN PUBLIC UTILITY EASEMENTS OR RIGHT OF WAY. AS SHOWN.
- ALL SAND BACKFILL MUST HAVE TESTING OF PH LEVEL AS WELL AS SAND EQUIVALENT. SEE CITY OF ANTIOCH REQUIREMENTS.
- THE PROPOSED CONSTRUCTION OPERATION MAY TAKE PLACE AT OR NEAR FENCE LINES, PROPERTY LINES AND PROPERTY IMPROVEMENTS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING THESE AREAS AND FOR MAINTAINING THESE AREAS AND FACILITIES AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
- THE CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR THE SITE CONDITION AND SHALL DEFEND AND HOLD THE DEVELOPER AND TARRAR UTILITY CONSULTANTS HARMLESS FROM ANY ALLEGED CLAIMS OR LIABILITIES, EXCEPT THOSE ARISING FROM SOLE NEGLIGENCE OF THE DEVELOPER OR TARRAR UTILITY CONSULTANTS.
- THE APPROXIMATE LOCATIONS OF ALL EXISTING UTILITY COMPANY UNDERGROUND LINES, POLES BOXES, ETC., WERE OBTAINED FROM A REVIEW OF AVAILABLE UTILITY COMPANY RECORDS, REPRESENTATIONS OF UTILITY COMPANY PERSONAL, OR FIELD OBSERVATIONS. NEITHER THE DEVELOPER NOR TARRAR UTILITY CONSULTANTS ASSUME ANY RESPONSIBILITY FOR VARIANCES BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. NO EXTRA PAYMENT WILL BE MADE TO THE CONTRACTOR FOR ANY ADDITIONAL TRENCHING, BOX EXCAVATIONS, MATERIALS, ETC., THAT MAY BE REQUIRED TO COMPLETE THIS PROJECT IN THE EVENT AN EXISTING TIE-IN POINT SUBSTRUCTURE IS EITHER NON-EXISTING OR IS NOT SHOWN ON THE PLANS IN ITS ACTUAL FIELD POSITION. IT IS THE CONTRACTOR'S OBLIGATION AND RESPONSIBILITY TO SAFELY LOCATE ALL EXISTING UNDERGROUND FACILITIES BY SURFACE MARKING AND/OR HAND EXCAVATION PRIOR TO STARTING CONSTRUCTION.
- "DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE TO OBTAIN A CITY OF ANTIOCH ENCROACHMENT PERMIT FOR ALL WORK DONE IN THE PUBLIC RIGHT OF WAY. DEVELOPER AND/OR CONTRACTOR IS ALSO RESPONSIBLE TO PROVIDE JOINT TRENCH PLANS TO THE CITY OF ANTIOCH AT THE TIME OF APPLICATION FOR THE ENCROACHMENT PERMIT."

ABBREVIATION LIST

B/C	BACK OF CURB	H.P.S.	HIGH PRESSURE SODIUM	RT	RETAINING WALL
B/W	BACK OF WALK	IRR.	IRRIGATION CONTROLLER	R/W	RIGHT OF WAY
BTU	BRITISH TERM UNITS	J.T.	JOINT TRENCH	SCH.	SCHEDULE
CB	CATCH BASIN	KV	KILO-VOLTS	SD	STORM DRAIN
CL	CENTERLINE	LE	LANDSCAPE EASEMENT	SHT.	SHEET
CAT.	CATALOG	LF	LINEAR FOOT/FEET	S/W	SIDE WALK
C OR CATV	CABLE TELEVISION	MH	MANHOLE	SS	SANITARY SEWER
CFH	CUBIC FEET PER HOUR	MIN.	MINIMUM	SSE	SANITARY SEWER EASEMENT
C.I.P.	CAPITOL IMPROVEMENT PROJECT	MPGE	MINIMUM POINT OF ENTRY	ST. LT.-S/L	STREET LIGHT
CL	CENTER LINE	N.T.S.	NOT TO SCALE	SUBD'V	SUBDIVISION
CU	COPPER	O.D.	OUTER DIAMETER	Sq Ft.	SQUARE FOOTAGE
E	ELECTRIC	O.H.	OVER HEAD	T	TELEPHONE
EP	EDGE OF PAVEMENT	PIEUE	PRIVATE INGRESS, EGRESS, AND UTILITY EASEMENT	TUC	TARRAR UTILITY CONSULTANTS
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT	EL	PROPERTY LINE	TYP.	TYPICAL
EX	EXISTING	P.S.	POWER SUPPLY	T/S	TRAFFIC SIGNAL
F/C	FACE OF CURB	PROJ.	PROJECT	U.G.	UNDERGROUND
FH	FIRE HYDRANT	PROJ.	PROJECT	U.O.N.	UNLESS OTHERWISE NOTED
FUT.	FUTURE	PSDE	PRIVATE STORM DRAIN EASEMENT	V	VOLT
F.O.	FIBER OPTIC	PSE	PUBLIC SERVICE EASEMENT	W	WATT
G	GAS	PVAV	PRIVATE VEHICLE ACCESS WAY	WT	WATER
GALV.	GALVANIZE	P.V.C.	POLY VINYL CHLORIDE	W/	WITH
G.E.	GENERAL ELECTRIC	P.W.E	PUBLIC WATER LINE EASEMENT	W/O	WITHOUT
GRD.	GROUND	PWR	POWER	W/L	WATER LINE EASEMENT
H.O.A.	HOME OWNERS ASSOCIATION	PUE	PUBLIC UTILITY EASEMENT	W/O	WITHOUT
				XFMR	TRANSFORMER

PRIVATE STREET LIGHT TRENCH LOCATION ADJACENT TO JOINT TRENCH

PRIVATE STREET LIGHT SECTION DETAIL



813 First Street
Brentwood, CA 94513
(925) 240-2595
(925) 240-7013 fax
www.tarrar.com



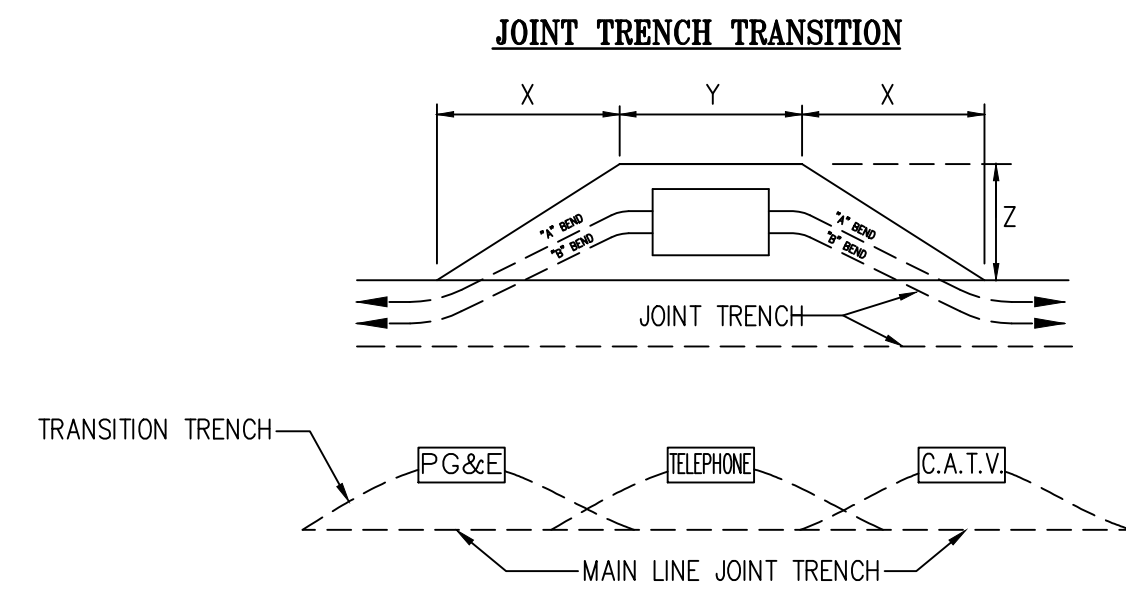
- Planning
- Design
- Estimating
- Joint Trench
- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH GENERAL NOTES AND DETAILS
DENOVA HOMES
RANCHO MEADOWS
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: JUNE 2024 DATE LAST WORKED ON: 11/20/2024
SCALE: NOT TO SCALE DRAWN: LGR CHECKED: ND
JOB NO.: 224086 PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811 CALL BEFORE YOU DIG
CALIFORNIA PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
ANTIOCH, CALIFORNIA
NOV 15 2024
CIVIL
SHEET **JT2** OF **JT9** SHEETS



BEND	PRIMARY BOX SIZE	DISTANCE (when conduit enters box)			NOTES
		"X"	"Y"	"Z"	
"A"	3' x 5'	24"	7"	5"	BEND IS 60° RADIUS WITH AN ANGLE OF 10 DEG. USE 2-5 COUPLINGS WITH 1-5' CONDUIT SECTION FOR EACH BEND SHOWN.
	4'-6" x 8'-6"	24"	11"	7"	
"B"	3' x 5'	32"	7"	5"	BEND IS 30° RADIUS WITH AN ANGLE OF 15 DEG. USE 3-5 COUPLINGS WITH 2-2 1/2' CONDUIT SECTION FOR EACH BEND SHOWN.
	4'-6" x 8'-6"	32"	11"	7"	

NOTE:

- CONTRACTOR TO EXCAVATE TRANSITIONS FROM MAIN-LINE TRENCH TO VAULTS AS REQUIRED BY EACH UTILITY.
- TRANSITIONS NOT SHOWN ON COMPOSITE DRAWING FOR CLARITY.
- CONTRACTOR TO INCLUDE COST OF TRANSITIONS IN VAULT EXCAVATION COST.

DETAIL 1 TYPICAL PRIMARY BOX EXCAVATION USING CONDUIT
N.T.S. JT3

CONSTRUCTION LABOR AND MATERIAL RESPONSIBILITY

PUBLIC UTILITY SYSTEM (JOINT TRENCH)

TRENCHING: EXCAVATE, BACKFILL AND COMPACT.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
GAS MATERIAL: FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
ELECTRIC CABLE: FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
ELECTRIC CONDUIT: FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
ELECTRIC SPICE BOXES: EXCAVATE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
ELECTRIC TRMR. ENCLS.: EXCAVATE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
ELECTRIC EQUIP. ENCLS.: EXCAVATE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
ELECTRIC TRMR. PADS: GRADE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
ELECTRIC SWITCH PADS: GRADE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TELEPHONE CONDUIT: FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TELEPHONE CABLE: FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TELEPHONE SPICE BOX: EXCAVATE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TELEPHONE INTER. PADS: GRADE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
C.A.T.V. CONDUITS: FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
C.A.T.V. SPICE BOXES: EXCAVATE.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
FURNISH.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
INSTALL.	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR

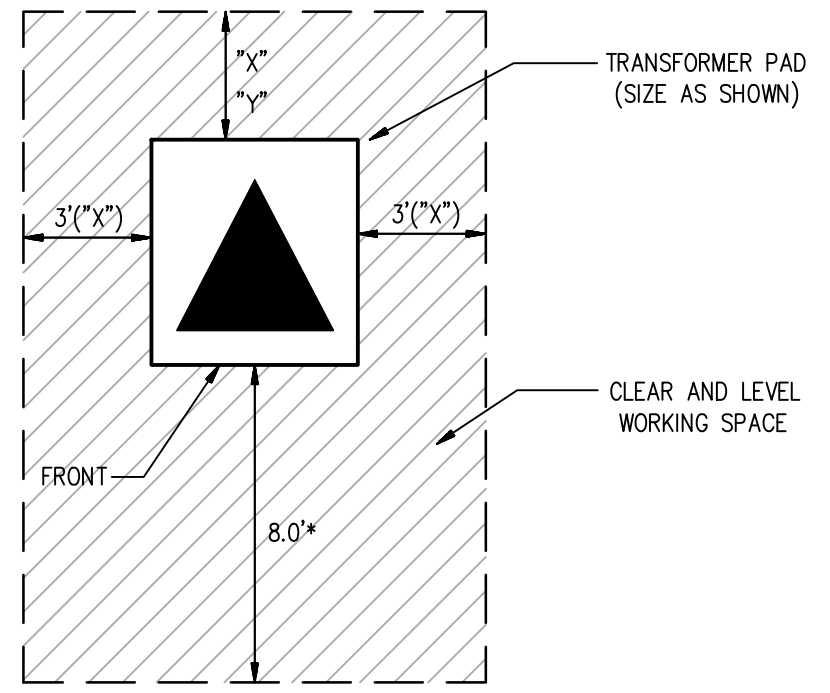
STREET LIGHTING SYSTEM (!CHANGE ME!)

WIRE: FURNISH.	PG&E ELECTRIC
INSTALL.	PG&E ELECTRIC
CONDUIT: FURNISH.	PG&E ELECTRIC
INSTALL.	PG&E ELECTRIC
BASES: FURNISH.	PG&E ELECTRIC
INSTALL.	PG&E ELECTRIC
LUMINAIRES: FURNISH.	PG&E ELECTRIC
INSTALL.	PG&E ELECTRIC
SPICE BOXES: FURNISH.	PG&E ELECTRIC
INSTALL.	PG&E ELECTRIC
EXCAVATE.	PG&E ELECTRIC
FURNISH.	PG&E ELECTRIC
INSTALL.	PG&E ELECTRIC

SCHEDULE: LS2A	PG&E ELECTRIC
INSTALL IN JOINT TRENCH: NO/YES	PG&E ELECTRIC
INSTALL IN SEPARATE TRENCH: YES/NO	PG&E ELECTRIC
CONDUIT SIZE: 1 1/2"	PG&E ELECTRIC
CONDUIT TYPE: SCH. 40	PG&E ELECTRIC
WIRE SIZE: #8 TYPE: CU	PG&E ELECTRIC

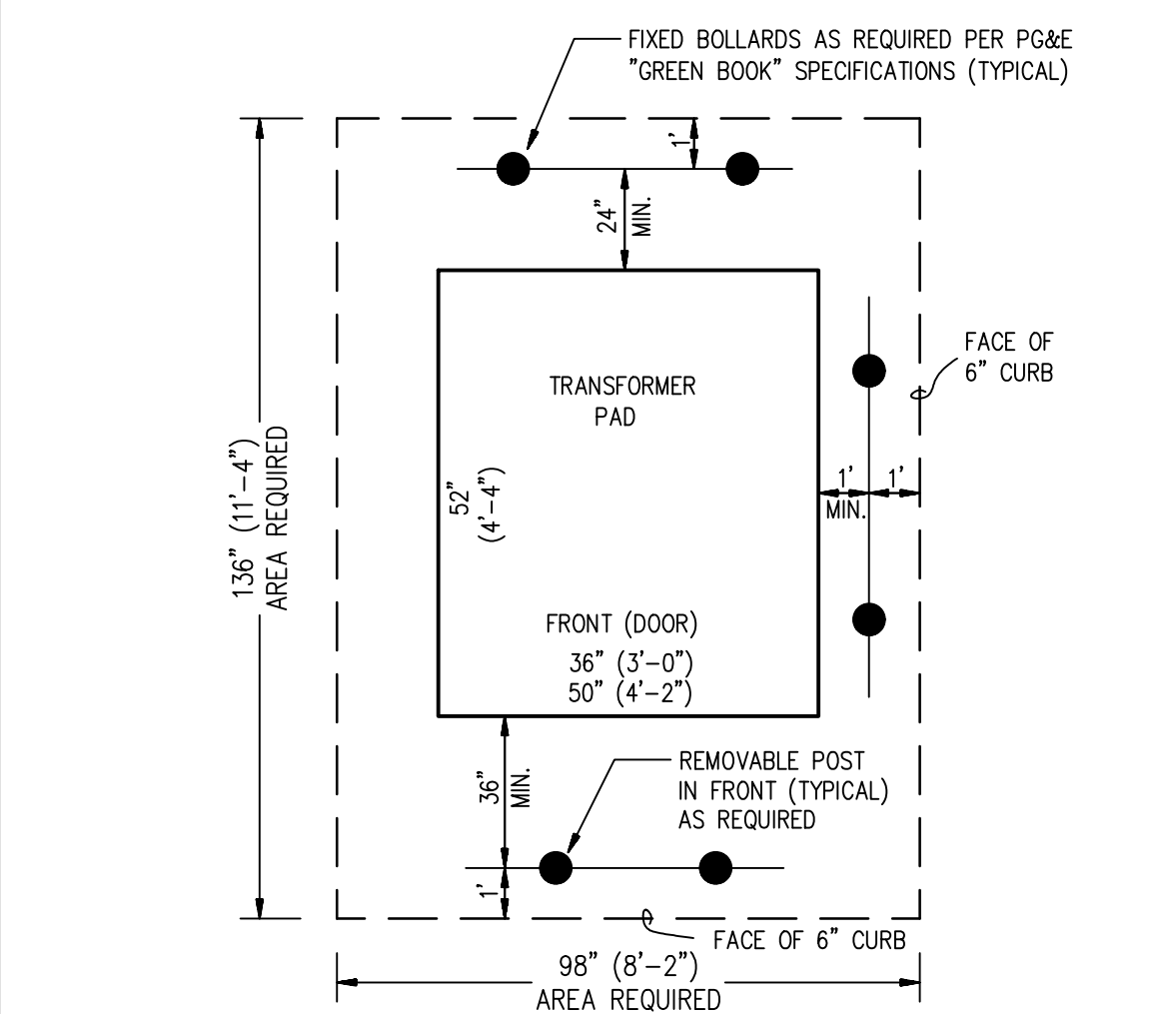
ADDITIONAL NOTES:
DEVELOPER TO SUPPLY AND INSTALL GAS & ELECTRIC FACILITIES UNDER THE COMPETITIVE BIDDING PROVISIONS OF PG&E GREEN BOOK RULES 15, 16 AND 20.

● DESIGNATES THE WORK TO BE PERFORMED BY THE CONTRACTOR AND EACH UTILITY COMPANY.

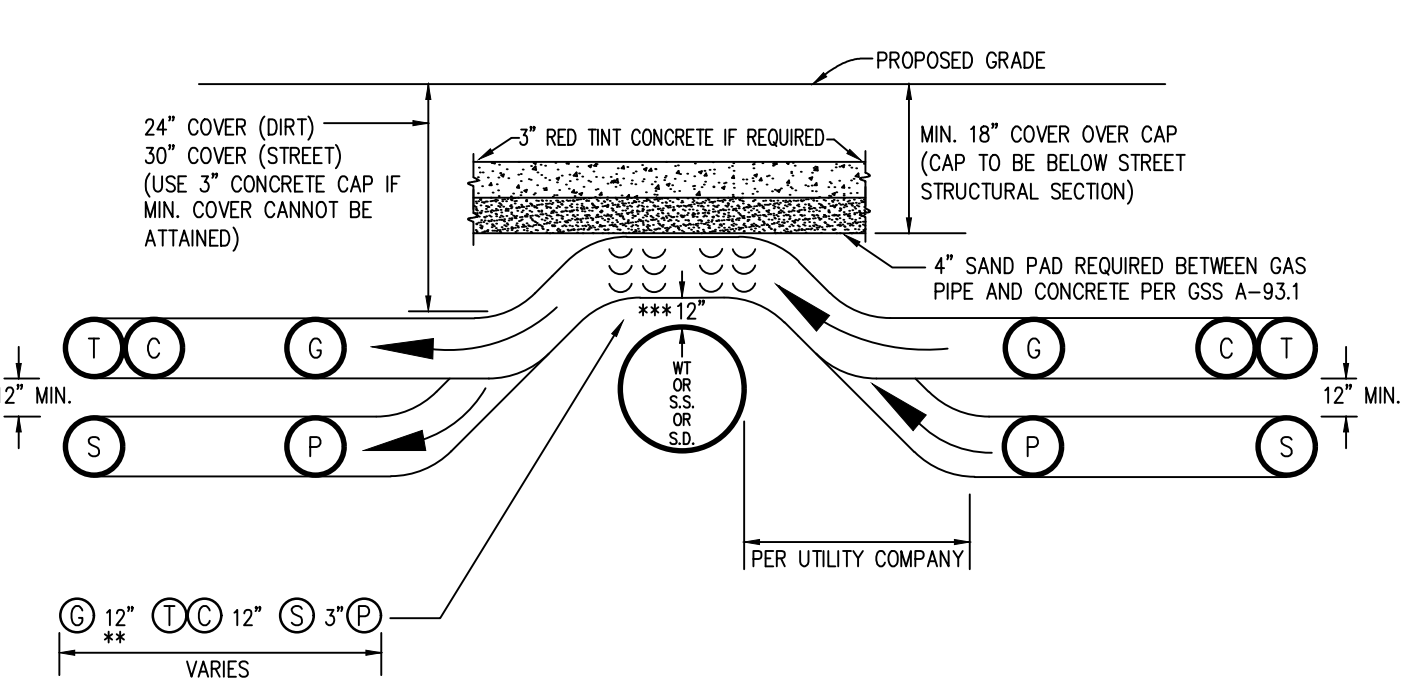


"X" = 3' MIN. CLEARANCE FROM COMBUSTIBLE WALL
 "Y" = 2' MIN. CLEARANCE FROM NON-COMBUSTIBLE WALL
 * MINIMUM 9' (COMMERCIAL/HIGH DENSITY) FROM FACE OF CURB
 * MINIMUM 3' (RESIDENTIAL/LOW DENSITY) FROM FACE OF CURB
 ** MINIMUM 4' FROM ANY DOORWAY

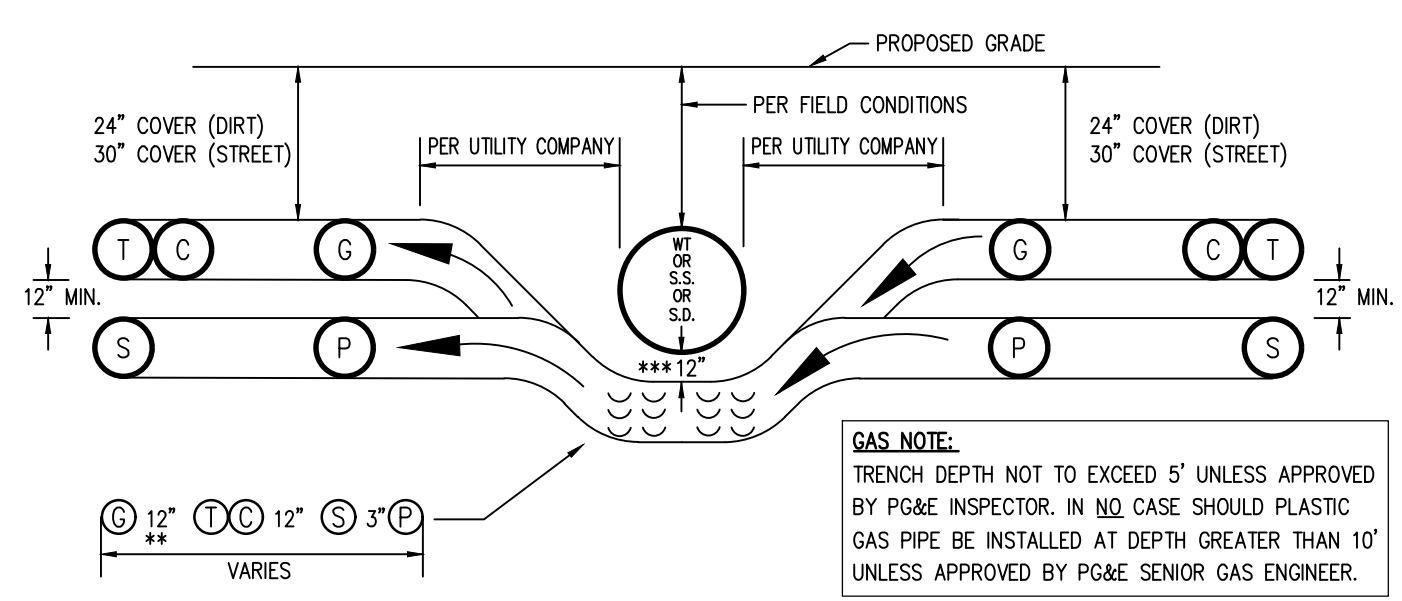
DETAIL 4 PG&E PAD MOUNT TRANSFORMER DETAIL
N.T.S. JT3



DETAIL 5 PG&E STYLE IIE TRANSFORMER DETAIL
N.T.S. JT3 (PHYSICAL PROTECTION REQUIREMENTS IN PARKING LOT, TRAVELED WAY, ETC. ...)



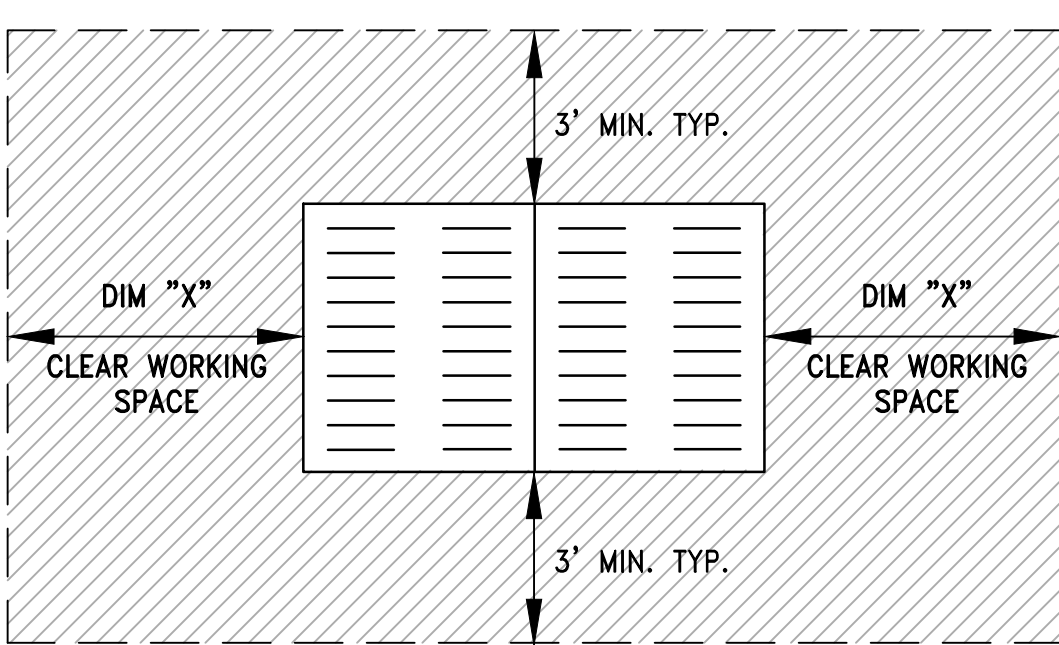
JOINT TRENCH OVER WATER, SANITARY SEWER OR STORM DRAIN
CHOICE 1 (PREFERRED METHOD)



JOINT TRENCH UNDER WATER, SANITARY SEWER OR STORM DRAIN
CHOICE 2 (OPTIONAL METHOD)

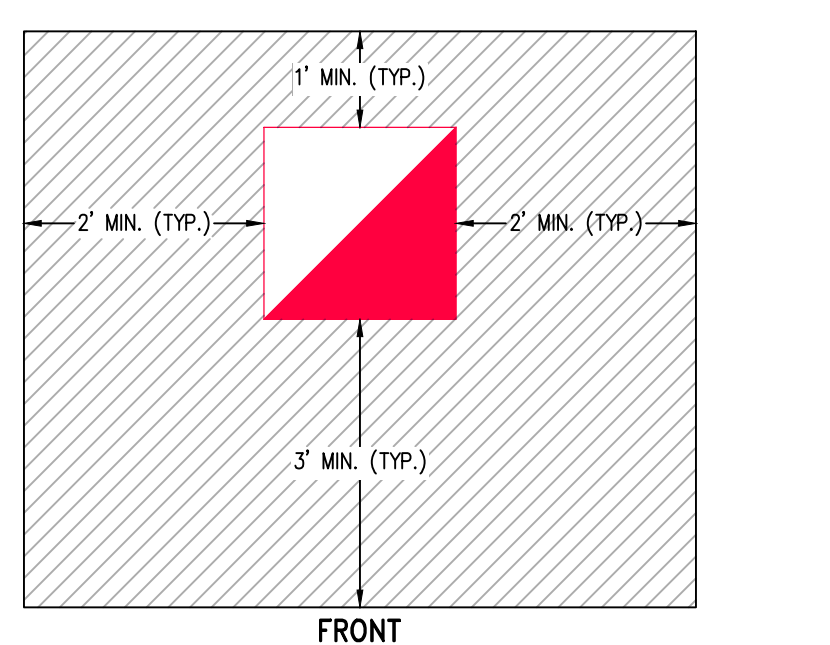
- SEE MINIMUM COVER & CLEARANCE CHART
- WITH MUTUAL AGREEMENT, WHEN 4" O.D. OR SMALLER GAS PIPE IS INSTALLED SEPARATION MAY BE REDUCED TO NOT LESS THAN 6" BETWEEN GAS AND COMMUNICATION DUCTS (TELEPHONE & CATV).
- 6" MINIMUM REQUIRED BY PG&E-ADDITIONAL CLEARANCE MAYBE REQUIRED BY CITY OR COUNTY

DETAIL 2 OVER UNDER DETAILS
N.T.S. JT3

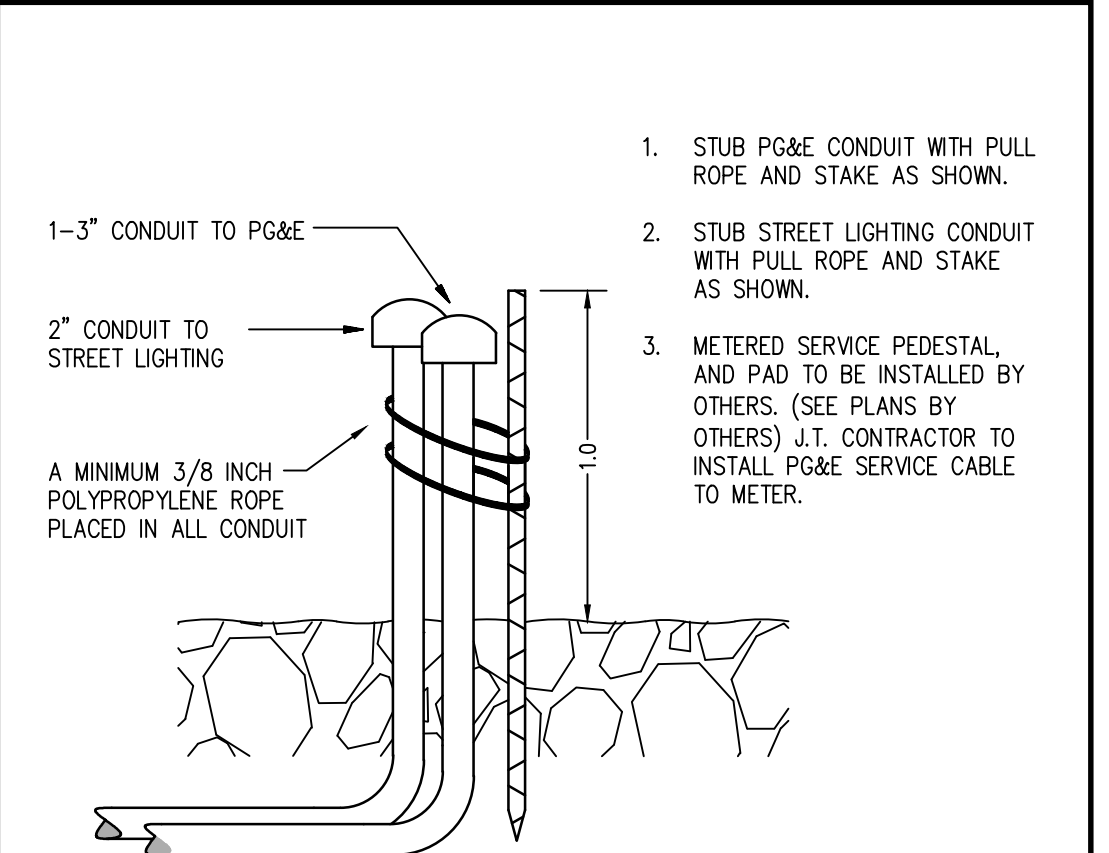


3' MIN. 3'0" x 5'0" ENCLOSURES
 4' MIN. 4' x 6'6" x 5'0" ENCLOSURES
 5' MIN. 4'6" x 8'6" x 6'0" ENCLOSURES
 (OR EASEMENT REQUIRED)

DETAIL 3 PG&E ENCLOSURE CLEARANCES
N.T.S. JT3

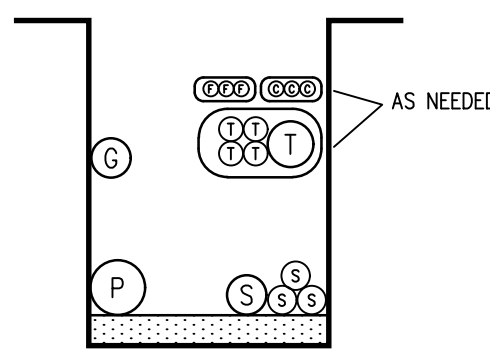


DETAIL 6 PG&E METERED SERVICE
PEDESTAL CLEARANCES
N.T.S. JT3



DETAIL 7 METERED SERVICE PEDESTAL PAD
N.T.S. JT3 STREET LIGHTING

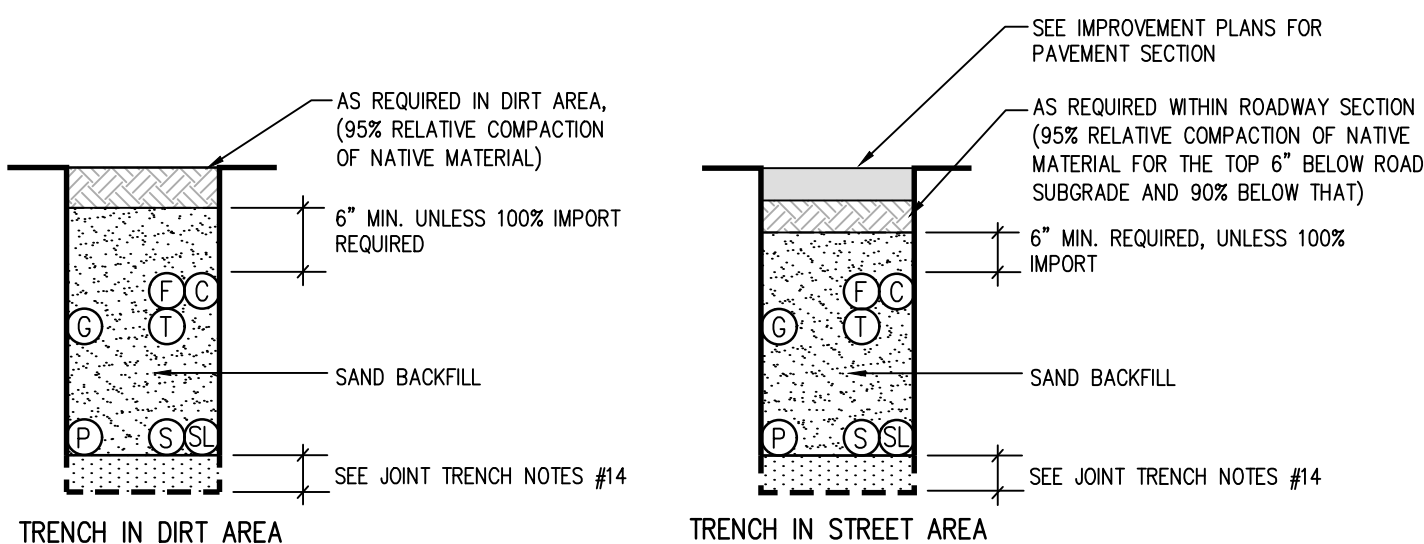
JOINT TRENCH MINIMUM COVER AND CLEARANCES											
MINIMUM SEPARATION FROM											
UTILITY	G	T	TD	C	S	P	SL	SLP	F	FE	MINIMUM COVER
G (GAS)*	-	12"	12"	12"	6"	12"	12"	6"	12"	12"	24"; 30" IN STREET
T (TELEPHONE) DUCT	12"	-	1"	12"	12"	12"	12"	1"	12"	12"	24"; 30" IN STREET
TD (TELEPHONE) DIRECT BURY	12"	1"	-	1"	12"	12"	12"	1"	12"	12"	24"; 30" IN STREET
C (CABLE T.V.)	12"	1"	1"	-	12"	12"	12"	1"	12"	12"	24"; 30" IN STREET
S (ELECT. SECONDARY)	6"	12"	12"	12"	1.5"	2"	12"	1.5"	12"	12"	24"; 30" IN STREET
P (ELECT. PRIMARY)	12"	12"	12"	12"	2"	2"	2"	2"	12"	12"	36"; 36" IN STREET
SL (PUBLIC AND PRIVATE-STREET LIGHT)**	12"	12"	12"	12"	12"	-	12"	12"	12"	12"	24"; 30" IN STREET
SLP (PG&E-STREET LIGHT)	6"	12"	12"	12"	1.5"	2"	12"	1.5"	12"	12"	24"; 30" IN STREET
FE (FOREIGN ELECTRIC SOURCES, NON PG&E)	12"	12"	12"	12"	12"	12"	12"	12"	12"	-	24"; 30" IN STREET
F (FIBER OPTIC)	12"	1"	1"	1"	12"	12"	12"	12"	-	12"	24"; 30" IN STREET



TYPICAL EXAMPLE OF STACKING FACILITIES IN JOINT TRENCH

LEGEND

- MEETS UTILITY TRENCH ALLOTMENT
- EXCEEDS UTILITY TRENCH ALLOTMENT
- ⊙ GAS
- ⊙ ELECTRIC PRIMARY
- ⊙ ELECTRIC SECONDARY
- ⊙ TELEPHONE (DUCT OR DIRECT BURY)
- ⊙ CATV
- ⊙ STREET LIGHT (PUBLIC OR PRIVATE)
- ⊙ STREET LIGHT (PG&E)
- ⊙ FOREIGN ELECTRIC
- ⊙ FIBER OPTIC



TRENCH IN DIRT AREA

TRENCH IN STREET AREA

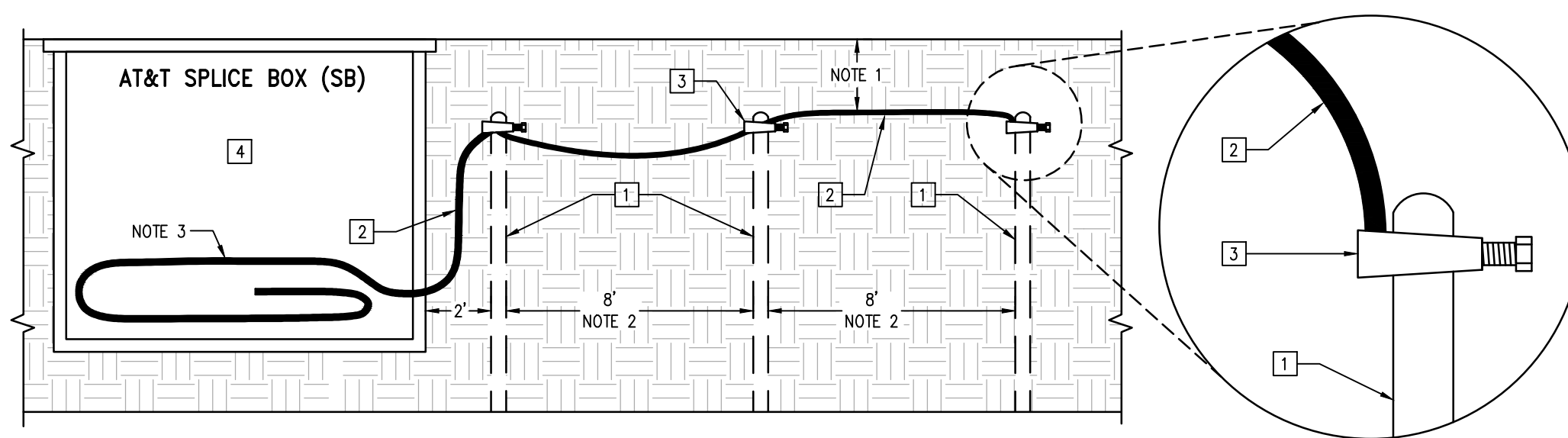
JOINT TRENCH NOTES:

- TRENCH COVER & CLEARANCES SHOWN ARE MINIMUMS ONLY AND MAY REQUIRE ALTERATIONS TO SUIT FIELD CONDITIONS.
- IT IS RECOMMENDED THAT ALL FACILITIES ARE TO BE A MINIMUM OF 12" BELOW SUB-BASE DISTURBANCE.
- * WITH MUTUAL AGREEMENT FROM PARTICIPATING UTILITIES, WHEN 4" O.D. OR SMALLER GAS PIPE IS INSTALLED, SEPARATION MAY BE REDUCED TO NOT LESS THAN 6" BETWEEN GAS AND COMMUNICATION DUCTS (TELEPHONE, C.A.T.V. & FIBER OPTIC).
- * WHERE 6" GAS MAIN IS LOCATED IN THE JOINT TRENCH A 18" MINIMUM SEPARATION FROM GAS MAIN TO ALL UTILITIES WILL BE REQUIRED.
- ** WITH MUTUAL AGREEMENT FROM PARTICIPATING UTILITIES, STREET LIGHT SEPARATION MAY BE REDUCED TO 0" BETWEEN STREET LIGHT AND COMMUNICATION DUCTS (TELEPHONE, C.A.T.V. & FIBER OPTIC).
- TRENCH CONFIGURATIONS SHOWN ARE FOR INSTALLATION WHERE EACH OCCUPANT IS UTILIZING HIS ENTIRE SPACE ALLOCATION. OTHER CONFIGURATIONS OR REDUCED DIMENSIONS MAY BE USED, PROVIDED THAT MINIMUM COVER AND CLEARANCES ARE MAINTAINED.
- THE CONTRACTOR IS TO ADJUST TRENCH DEPTHS AT ALL JOINT TRENCH LATERAL CROSSINGS TO MAINTAIN REQUIRED CLEARANCES BETWEEN ALL PARTICIPATING UTILITIES.
- TRENCH SECTIONS ARE SHOWN SCHEMATICALLY AND INDICATE AREAS OF OCCUPANCY ONLY; THEY DO NOT REFLECT SIZE OR QUANTITY OF FACILITIES TO BE INSTALLED.
- TRENCH FOOTAGES PER SECTION ARE APPROXIMATE. SECTIONS ARE DESIGNED TO ACCOMMODATE ALL REQUIRED FACILITIES AS INDICATED ON EACH TRENCH PARTICIPANT'S CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL VERIFY TRENCH FOOTAGES FOR ACCURACY PRIOR TO EXCAVATION AND TAKE NECESSARY PRECAUTION CROSSING WATER AND SEWER FACILITIES.
- THE CONTRACTOR SHALL REFER TO THE COMPOSITE, CONDUIT, AND/OR EACH RESPECTIVE UTILITY INSTALLATION PLAN FOR THE NECESSARY CONDUIT CABLE AND/OR PIPE TO BE INSTALLED IN THIS PROJECT.
- TYPE "M2" TRENCH SHALL BE INSTALLED AFTER CURB AND GUTTER INSTALLATION. CONTRACTOR SHALL COORDINATE ADDITIONAL MOVE-INS NECESSARY TO COMPLETE THE SERVICES TO THE DWELLING UNITS WITH THE DEVELOPER, ALL AGENCIES AND THE UTILITY COMPANIES. THE COST OF THESE MOVE-INS SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR TRENCHING.
- THE AVERAGE TRENCH DEPTHS SHOWN ARE BASED ON THE MINIMUM UTILITY COMPANY REQUIREMENTS FOR DEPTH AND SEPARATION. CONTRACTOR SHALL ADJUST TRENCH WIDTH & DEPTH AS REQUIRED TO ADEQUATELY CLEAR EXISTING UNDERGROUND FACILITIES AND MAINTAIN MINIMUM UTILITY CLEARANCES. ALL TRENCHES OVER 60" DEEP MUST COMPLY WITH OSHA REQUIREMENTS. (SEE THE JOINT TRENCH MINIMUM COVER AND CLEARANCE TABLE)
- CONTRACTOR SHALL USE SAND BEDDING AND SHADING AS REQUIRED BY THE UTILITY COMPANIES. THE BOTTOM OF THE TRENCH SHALL BE CLEARED OF ROCKS AND OTHER HARD SURFACES. DISTRIBUTION TRENCHES WITHOUT TELEPHONE CONDUIT DO NOT REQUIRE BEDDING MATERIAL. SERVICE TRENCHES WITHOUT TELEPHONE CONDUIT REQUIRE 2" SAND BEDDING AS A PAD ON WHICH UTILITY FACILITIES CAN REST. SERVICE TRENCHES CONTAINING TELEPHONE CONDUIT ONLY REQUIRE A 1" SAND BEDDING. ALL OTHER TRENCHES CONTAINING TELEPHONE CONDUIT REQUIRE A 3" SAND BEDDING. REFER TO PG&E GREEN BOOK PUBLICATION S5453, EXHIBIT B AND AT&T SPEC95 "AT&T SPECIFICATIONS" TRENCHING AND CONDUIT GUIDE FOR FURTHER INFORMATION.
- ALL TRENCHING AND BACKFILLING TO BE DONE IN ACCORDANCE WITH THE CITY OF ANTIOCH ENGINEERING STANDARDS AND SPECIFICATIONS.
- ALL PG&E, TELEPHONE, CABLE, AND FIBER OPTIC BOXES AND JOINT TRENCH FACILITIES ARE TO MAINTAIN A MINIMUM OF 3" SEPARATION FROM SEWER AND WATER LATERALS AND DRIVEWAYS. ALL UTILITY VAULTS, BOXES, PEDESTALS, ETC. MUST MAINTAIN A 5' MINIMUM CLEARANCE FROM FIRE HYDRANTS, AND 3' MINIMUM FROM STREETLIGHTS.

JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TELEPHONE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CABLE T.V.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC SEC.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC PRI.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIBER OPTICS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY



LEGEND

- 8' LENGTH x 5/8" DIAMETER GROUND ROD POLES
- BARE CONTINUOUS SOLID NUMBER 6 AWG. WIRE
- GROUND CLAMP
- TELEPHONE SPLICE BOX

NOTES

- MINIMUM DEPTH = 12 INCHES
- GROUND BEDS MAY BE PLACED IN ANY CONFIGURATION AS LONG AS THE 8 FOOT SEPARATION BETWEEN GROUND RODS IS MAINTAINED AND THE 2 FOOT SEPARATION FROM THE SB WALL IS NOT ENCRUCED UPON.
- BARE #6 GROUND WIRE TO ENTER THROUGH SIDEWALL OR BOTTOM OF SB AND WRAP SB ONCE.

DETAIL 1 AT&T AERIAL AND BURIED
N.T.S. JT4 GROUND BED DESIGN

THIS AREA RESERVED FOR JOINT TRENCH SECTIONS
TO BE PLACED AT A LATER TIME

813 First Street
Brentwood, CA 94513
(925) 240-2595
(925) 240-7013 fax
www.tarrar.com



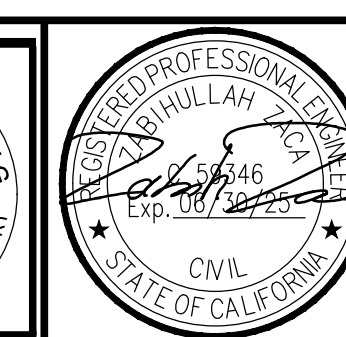
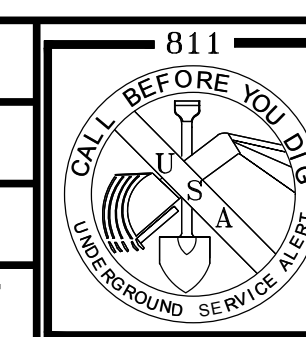
- Planning
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- I-24
- PG&E Gas Design
- PG&E Elec. Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH SECTIONS AND DETAILS

DENOVA HOMES
RANCHO MEADOWS
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

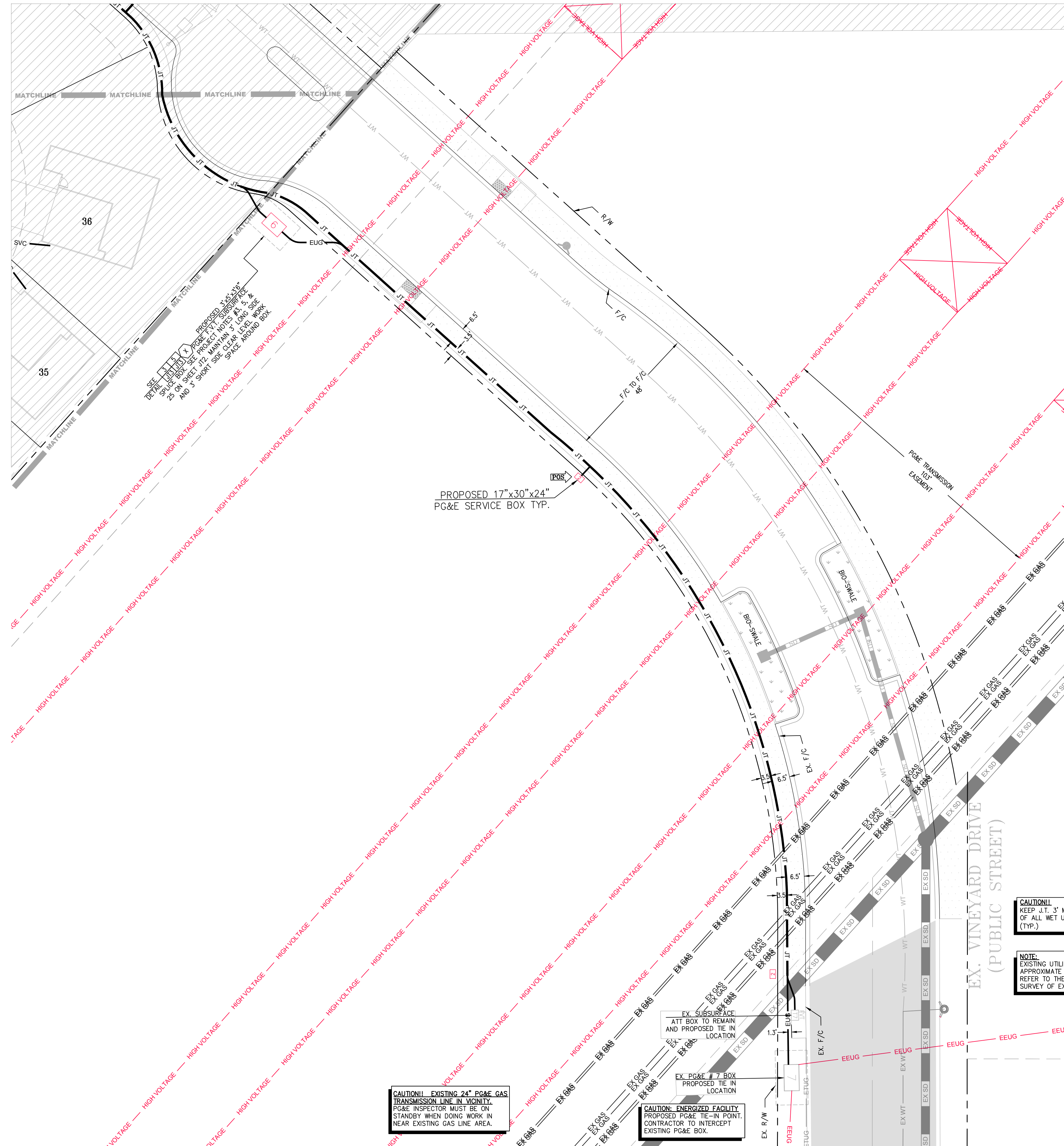
DATE: JUNE 2024	DATE LAST WORKED ON: 11/20/2024
SCALE: NOT TO SCALE	DRAWN: LGR CHECKED: ND
JOB NO.: 224086	PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT	



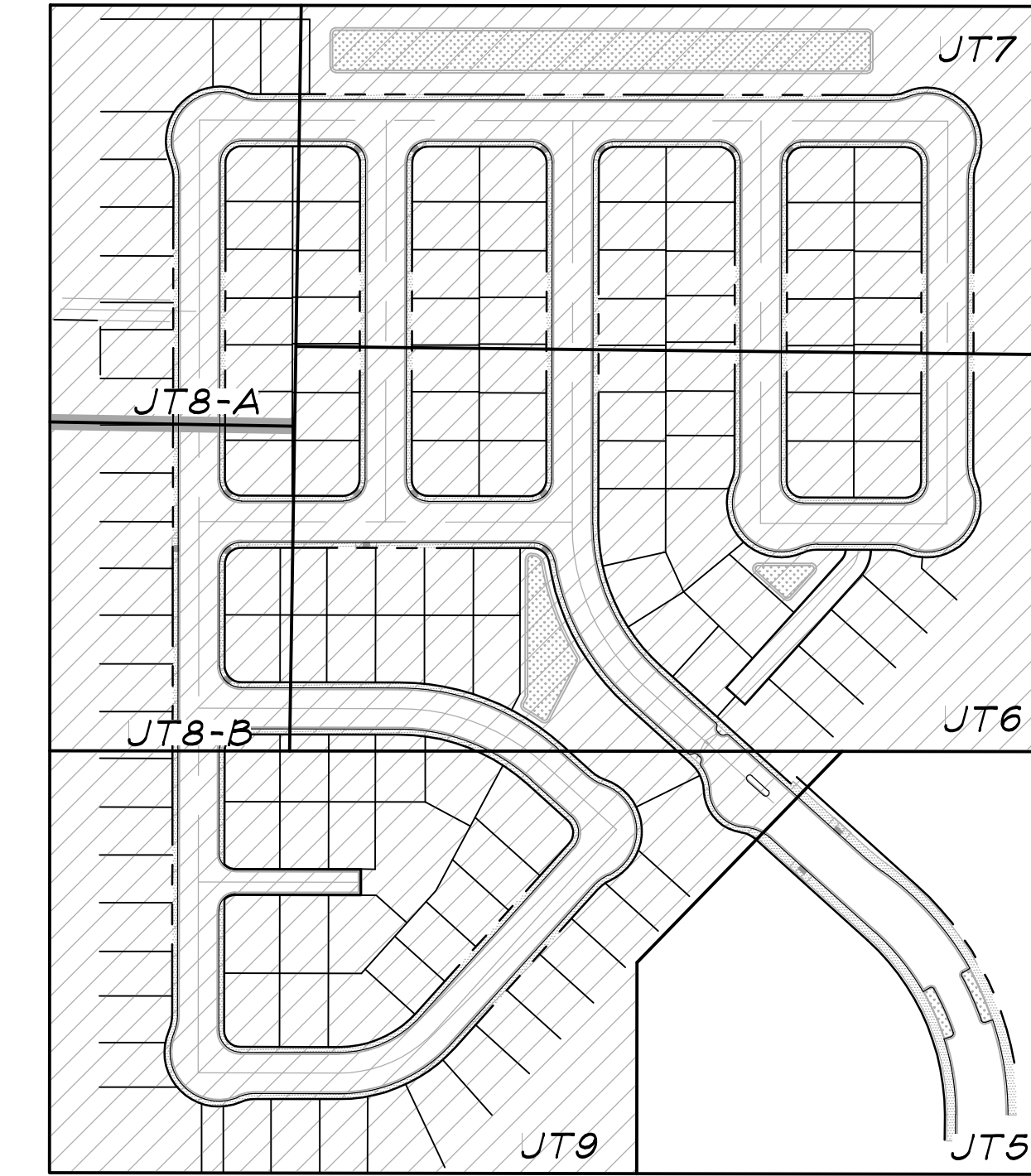
SHEET
JT4
OF
JT9
SHEETS

MATCH LINE - SEE SHEET JT6

MATCH LINE - SEE SHEET JT9



KEY MAP
NOT TO SCALE



CAUTION !! CAUTION !! CAUTION !!
EX. JOINT TRENCH AND EX. GAS AND ALL OTHER UTILITY LOCATIONS ARE SHOWN BASED UPON INFORMATION PROVIDED BY OTHERS AND FIELD OBSERVATION. JOINT TRENCH CONTRACTOR TO VERIFY EXACT LOCATION OF ALL EXISTING FACILITIES PRIOR TO ANY JOINT TRENCH CONSTRUCTION. POTHOLE IF NECESSARY. CONTACT U.S.A. DIG ALERT 2 WORKING DAYS IN ADVANCE.

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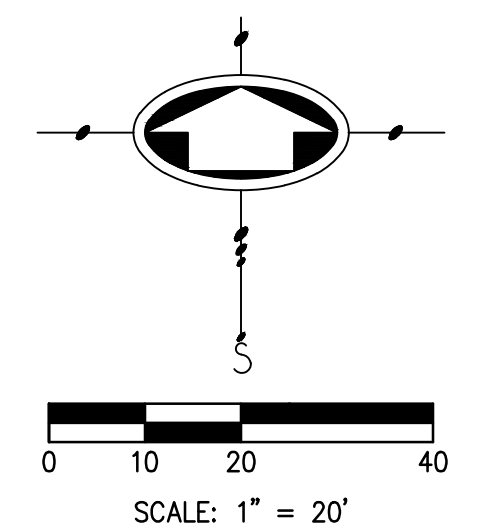
JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TELEPHONE	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CABLE T.V.	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC SEC.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC PRI.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY

CAUTION!!
KEEP J.T. 3' MIN. CLEAR OF ALL WET UTILITIES (TYP.)

NOTE:
EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND FOR CLARITY. PLEASE REFER TO THE CIVIL DRAWINGS FOR SURVEY OF EXACT LOCATIONS.



CAUTION!! EXISTING 24\"/>

CAUTION: ENERGIZED FACILITY
PROPOSED PG&E TIE-IN POINT. CONTRACTOR TO INTERCEPT EXISTING PG&E BOX.

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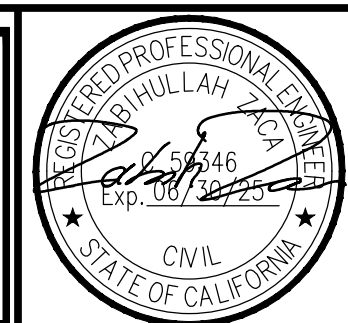
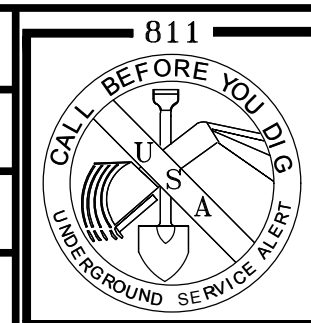


- Planning
- Design
- Estimating
- Joint Trench
- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- H. E. P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH COMPOSITE PLAN
DENOVA HOMES
RANCHO MEADOWS
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: JUNE 2024
SCALE: 1:20
JOB NO.: 224086
DATE LAST WORKED ON: 11/25/2024
DRAWN: LGR
CHECKED: ND
PRELIMINARY
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SHEET
JT5
OF
JT9
SHEETS

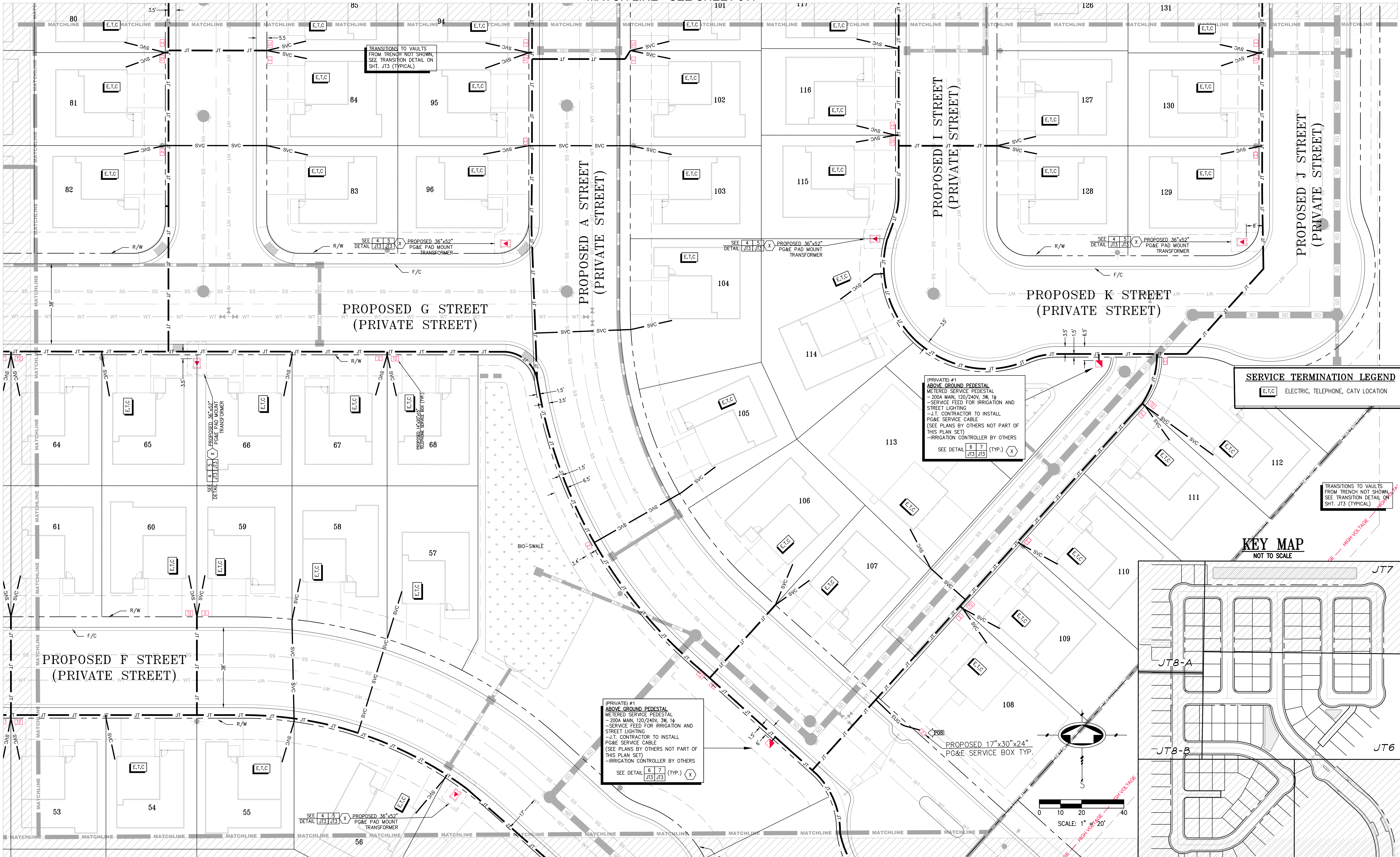
MATCH LINE - SEE SHEET JT7

MATCH LINE - SEE SHEET JT8

MATCH LINE - SEE SHEET JT8

MATCH LINE - SEE SHEET JT5

MATCH LINE - SEE SHEET JT9



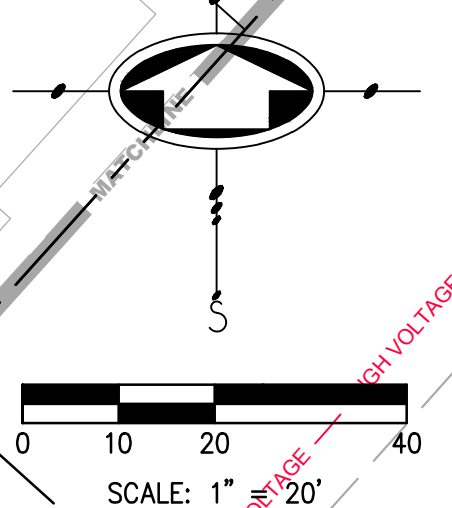
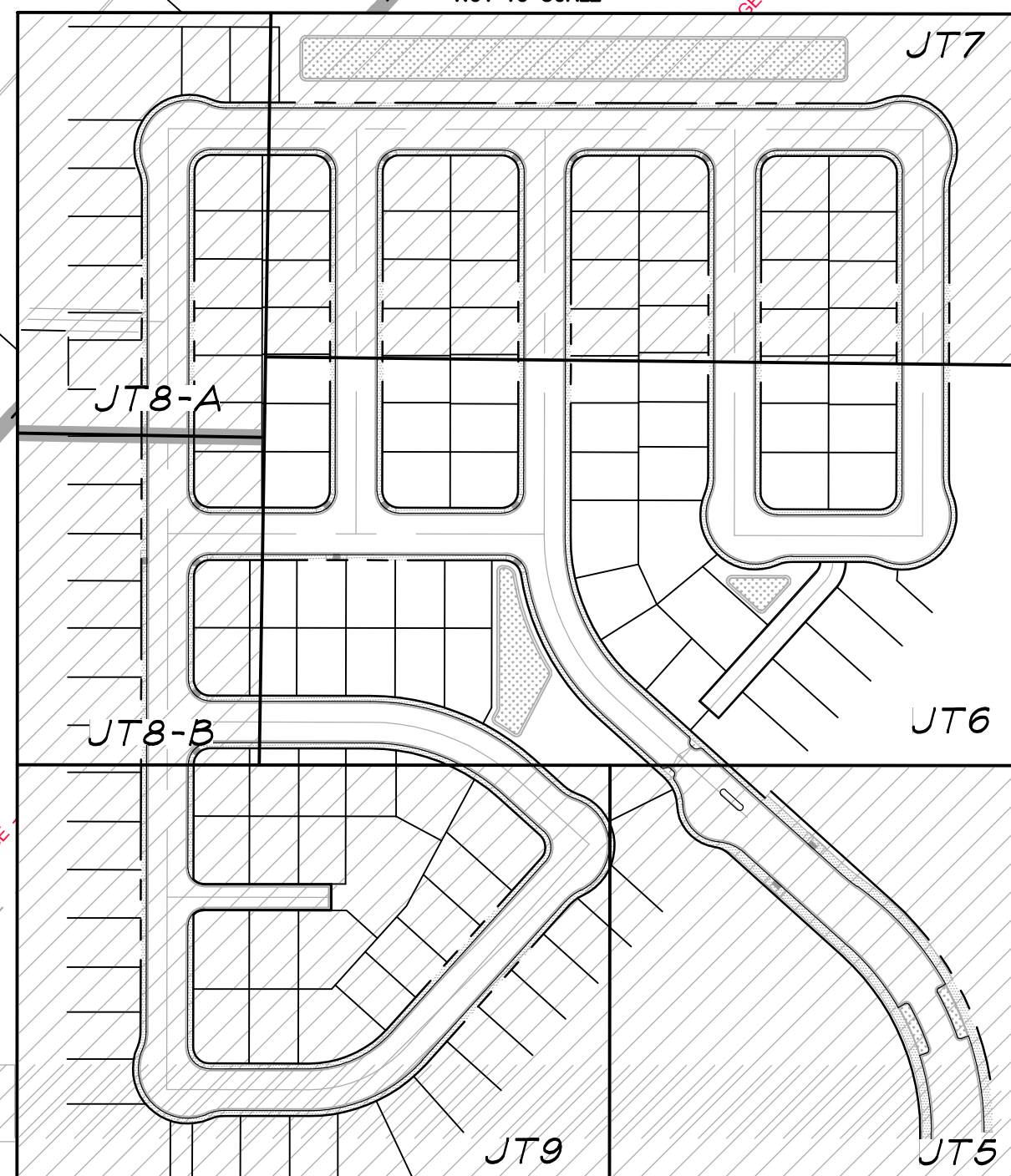
SERVICE TERMINATION LEGEND
 E.T.C. ELECTRIC, TELEPHONE, CATV LOCATION

(PRIVATE) #1 ABOVE GROUND PEDESTAL METERED SERVICE PEDESTAL
 - 200A MAIN, 120/240V, 3W, 1Ø
 - SERVICE FEED FOR IRRIGATION AND STREET LIGHTING
 - J.T. CONTRACTOR TO INSTALL PG&E SERVICE CABLE (SEE PLANS BY OTHERS NOT PART OF THIS PLAN SET)
 - IRRIGATION CONTROLLER BY OTHERS
 SEE DETAIL 6 7 (TYP.) (X)
 JT3 JT3

(PRIVATE) #1 ABOVE GROUND PEDESTAL METERED SERVICE PEDESTAL
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 SEE DETAIL 6 7 (TYP.) (X)
 JT3 JT3

TRANSITIONS TO VAULTS FROM TRENCH NOT SHOWN. SEE TRANSITION DETAIL ON SHT. JT3 (TYPICAL)

KEY MAP
 NOT TO SCALE



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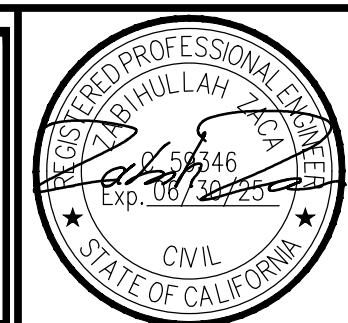
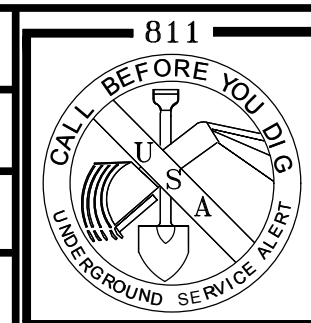


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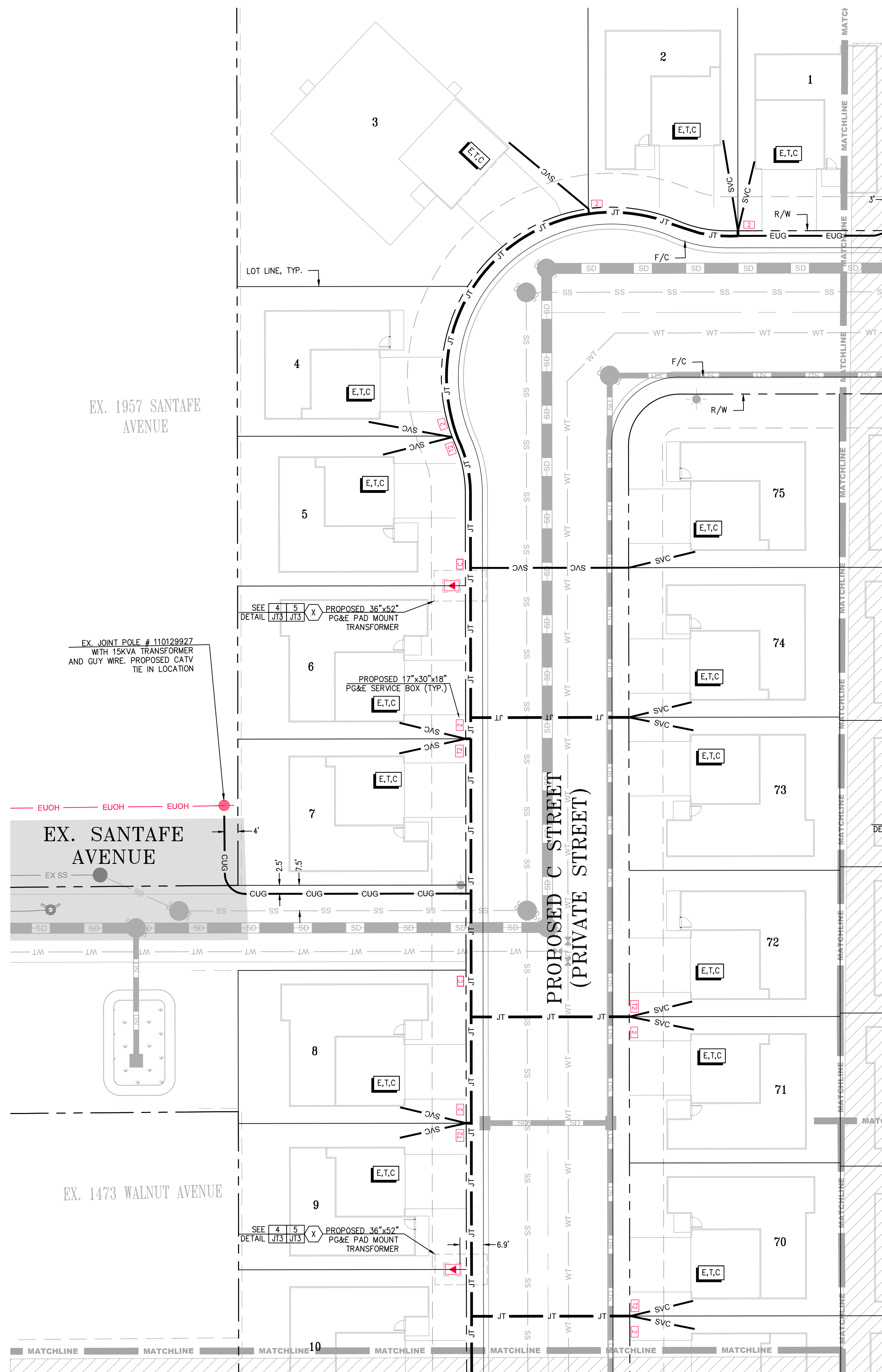
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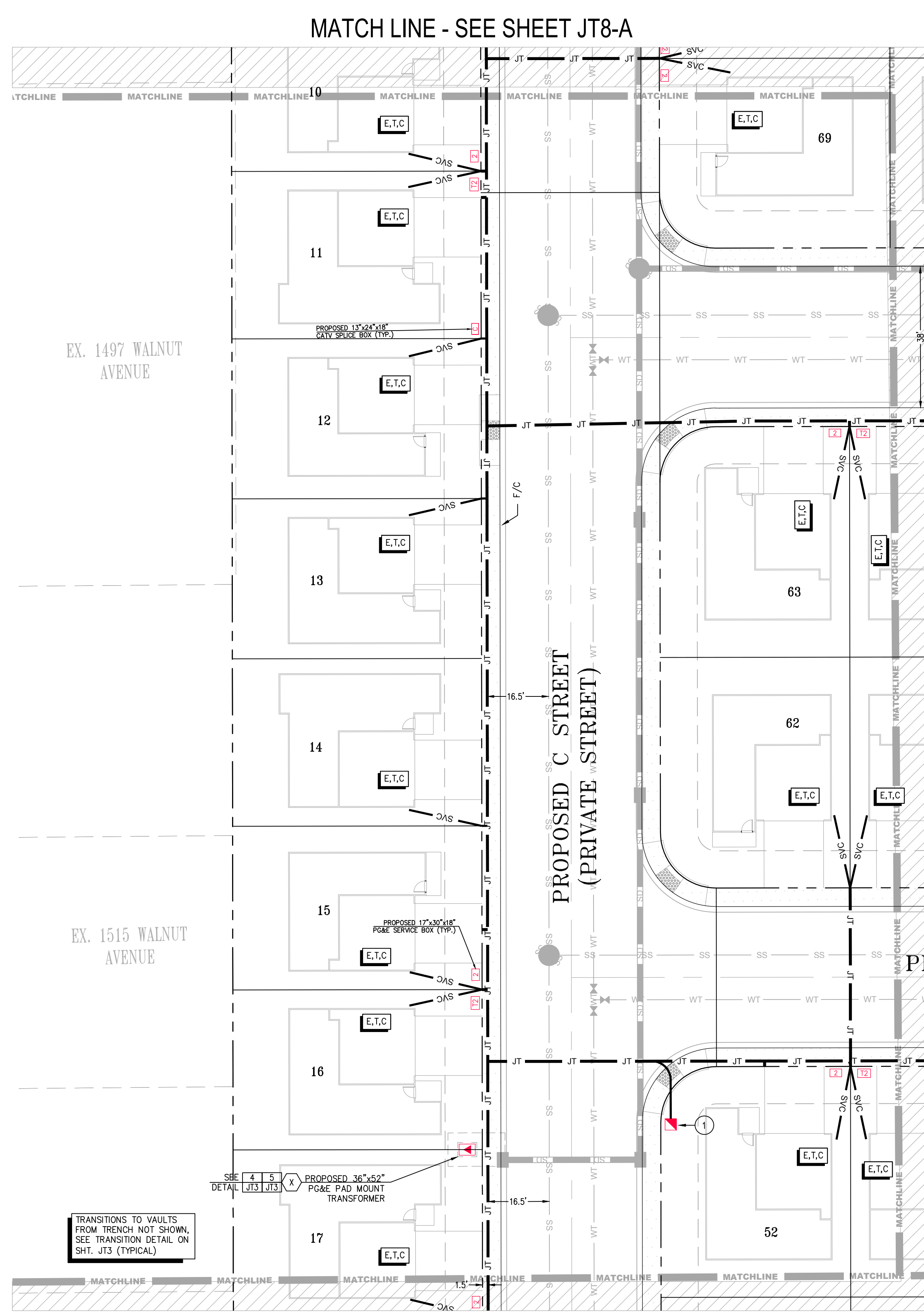


SHEET
JT6
 OF
JT9
 SHEETS



MATCH LINE - SEE SHEET JT8-B

MATCH LINE - SEE SHEET JT



MATCH LINE - SEE SHEET JT9

1 PRIVATE #2 ABOVE GROUND PEDESTAL METERED SERVICE PEDESTAL - 200A MAIN, 120/240V, 3W, 1φ - SERVICE FEED FOR STREET LIGHTING - J.T. CONTRACTOR TO INSTALL PG&E SERVICE CABLE (SEE PLANS BY OTHERS NOT PART OF THIS PLAN SET) SEE DETAIL 7 8 JT3 JT3 (TYP.) (X)

TRANSITIONS TO VAULTS FROM TRENCH NOT SHOWN, SEE TRANSITION DETAIL ON SHT. JT3 (TYPICAL)

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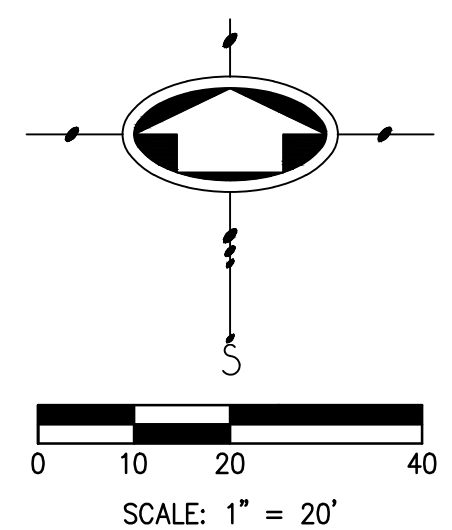
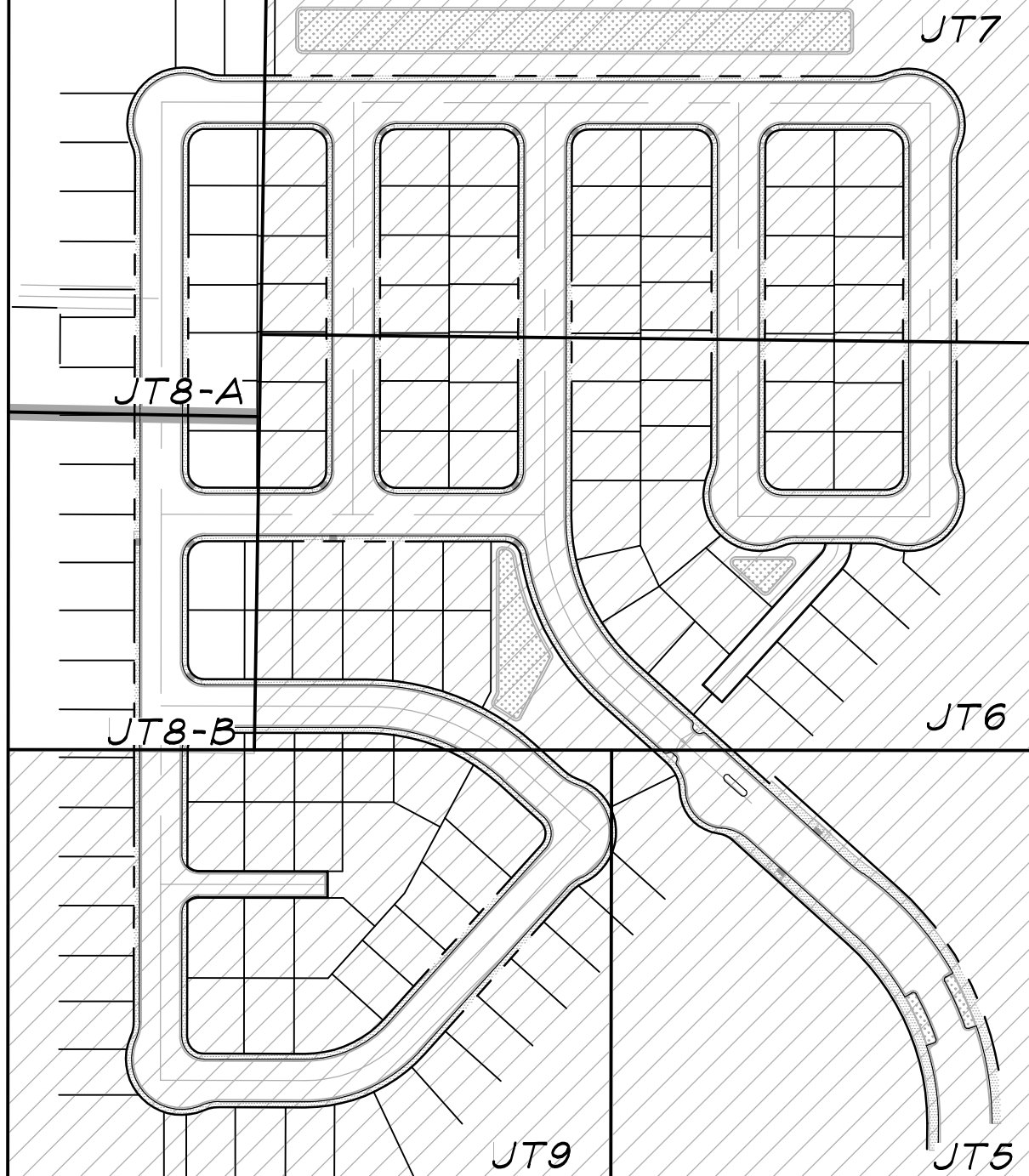
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TELEPHONE	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CABLE T.V.	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC SEC.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC PRI.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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SERVICE TERMINATION LEGEND
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KEY MAP
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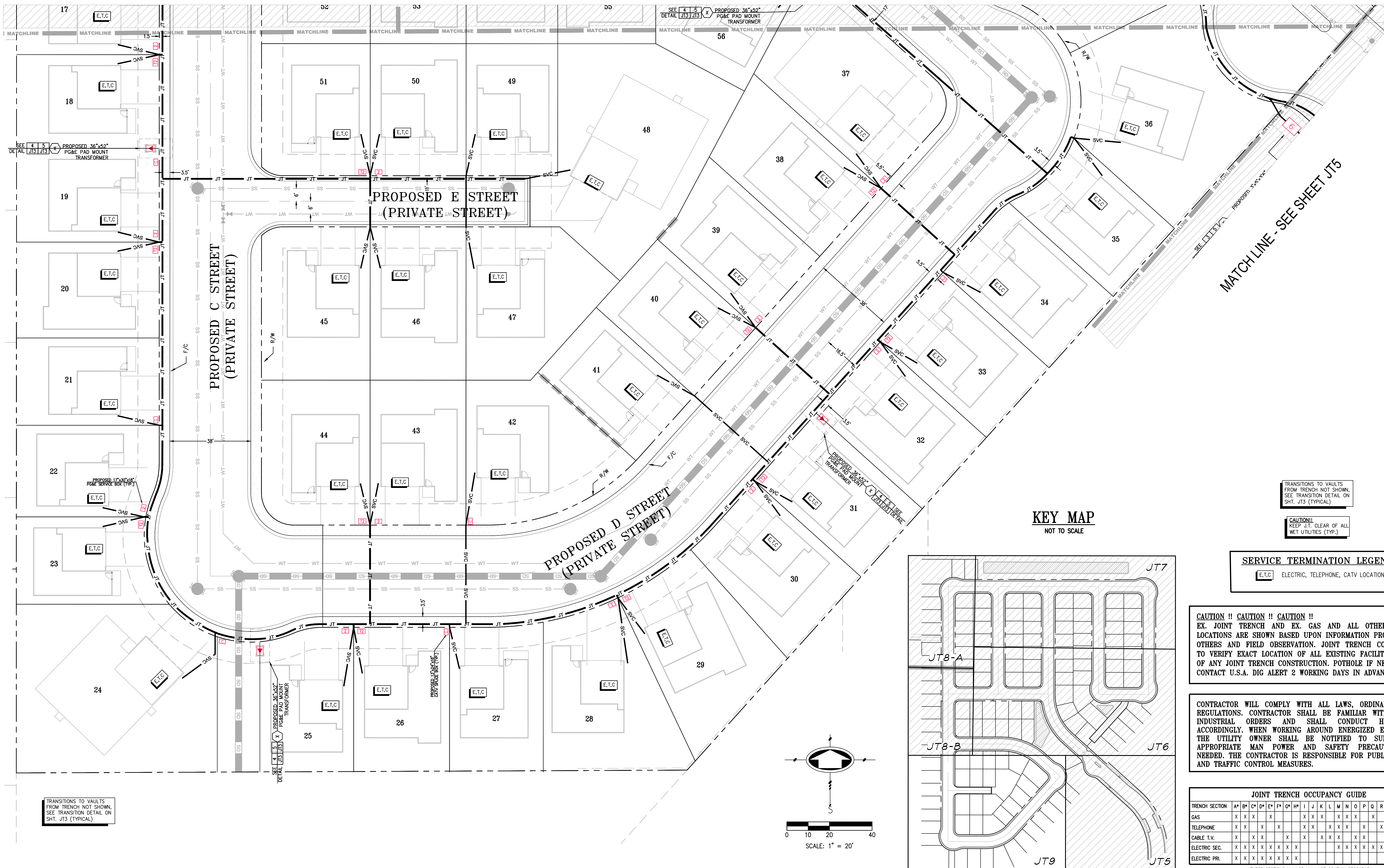
811
 CALL BEFORE YOU DIG
 UNDERGROUND SERVICE TREATMENT

PROFESSIONAL ENGINEER
 HUSSEIN H. HULLAH
 No. 446
 Exp. 08/31/2025
 CIVIL
 STATE OF CALIFORNIA

SHEET
JT8
 OF
JT9
 SHEETS

MATCH LINE - SEE SHEET JT8-B

MATCH LINE - SEE SHEET JT6



MATCH LINE - SEE SHEET JT5

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TELEPHONE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CABLE T.V.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC SEC.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELECTRIC PRI.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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811 CAL BEFORE YOU DIG UNDERGROUND SERVICE TREAT

PROFESSIONAL ENGINEER STATE OF CALIFORNIA CIVIL No. 44664 Exp. 06/30/2025

JT9

JT9

OF SHEETS