

Fresno to Bakersfield

COORDINATION SET
LOCALLY GENERATED ALTERNATIVE (LGA)

UTILITY PLANS
January 2021



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

GENERAL AND UTILITIES

DRAWING NO.	REV NO.	DRAWING DESCRIPTION
UT-B0001		INDEX OF DRAWINGS & UTILITY OWNER ABBREVIATIONS
UT-B0002		LEGEND, SYMBOLS, ABBREVIATIONS & NOTES
UT-B0003		KEY MAP
UT-B0004		KEY MAP
UT-B0005		UTILITY CROSSING CLEARANCES AT GRADE
UT C1001		COMPOSITE UTILITY PLAN STA 5880+00 TO 5890+00
UT C1002		COMPOSITE UTILITY PLAN STA 5890+00 TO 5910+00
UT C1003		COMPOSITE UTILITY PLAN STA 5910+00 TO 5946+00
UT C1004		COMPOSITE UTILITY PLAN STA 5946+00 TO 5974+00
UT C1005		COMPOSITE UTILITY PLAN STA 5974+00 TO 6002+00
UT C1006		COMPOSITE UTILITY PLAN STA 6002+00 TO 6030+00
UT C1007		COMPOSITE UTILITY PLAN STA 6030+00 TO 6050+00
UT C1008		COMPOSITE UTILITY PLAN STA 6050+00 TO 6086+00
UT C1009		COMPOSITE UTILITY PLAN STA 6086+00 TO 6114+00
UT C1010		COMPOSITE UTILITY PLAN STA 6114+00 TO 6142+00
UT C1011		COMPOSITE UTILITY PLAN STA 6142+00 TO 6170+00
UT C1012		COMPOSITE UTILITY PLAN STA 6170+00 TO 6198+00
UT C1013		COMPOSITE UTILITY PLAN STA 6198+00 TO 6226+00
UT C1014		COMPOSITE UTILITY PLAN STA 6226+00 TO 6254+00
UT C1015		COMPOSITE UTILITY PLAN STA 6254+00 TO 6282+00
UT C1016		COMPOSITE UTILITY PLAN STA 6282+00 TO 6310+00
UT C1017		COMPOSITE UTILITY PLAN STA 6310+00 TO 6338+00
UT C1018		COMPOSITE UTILITY PLAN STA 6338+00 TO 6366+00
UT C1019		COMPOSITE UTILITY PLAN STA 6366+00 TO 6394+00
UT C1020		COMPOSITE UTILITY PLAN STA 6394+00 TO 6422+00
UT C1021		COMPOSITE UTILITY PLAN STA 6422+00 TO 6450+00
UT C1022		COMPOSITE UTILITY PLAN STA 6450+00 TO 6478+00
UT C1023		COMPOSITE UTILITY PLAN STA 6478+00 TO 6506+00
UT C1024		COMPOSITE UTILITY PLAN STA 6506+00 TO 6534+00
UT C1025		COMPOSITE UTILITY PLAN STA 6534+00 TO 6562+00
UT C1026		COMPOSITE UTILITY PLAN STA 6562+00 TO 6590+00
UT C1027		COMPOSITE UTILITY PLAN STA 6590+00 TO 6618+00
UT C1028		COMPOSITE UTILITY PLAN STA 6618+00 TO 6646+00
UT C1029		COMPOSITE UTILITY PLAN STA 6646+00 TO 6674+00
UT C1030		COMPOSITE UTILITY PLAN STA 6674+00 TO 6702+00
UT C1031		COMPOSITE UTILITY PLAN STA 6702+00 TO 6731+00
UT C1032		COMPOSITE UTILITY PLAN STA 6731+00 TO 6759+00
UT C1033		COMPOSITE UTILITY PLAN STA 6759+00 TO 6786+00
UT C1034		COMPOSITE UTILITY PLAN STA 6786+00 TO 6814+00
UT-C1035		COMPOSITE UTILITY PLAN STA 6814+00 TO 6842+00
UT-C1036		COMPOSITE UTILITY PLAN STA 6842+00 TO 6870+00
UT-C1037		COMPOSITE UTILITY PLAN STA 6870+00 TO 6898+00
UT-C1038		COMPOSITE UTILITY PLAN STA 6898+00 TO 6926+00
UT-C1039		COMPOSITE UTILITY PLAN STA 6926+00 TO 6954+00
UT-C1040		COMPOSITE UTILITY PLAN STA 6954+00 TO 6982+00
UT-C1041		COMPOSITE UTILITY PLAN STA 6982+00 TO 7010+00
UT-C1042		COMPOSITE UTILITY PLAN STA 7010+00 TO 7038+00
UT-C1043		COMPOSITE UTILITY PLAN STA 7038+00 TO 7066+00
UT-C1044		COMPOSITE UTILITY PLAN STA 7066+00 TO 7094+00
UT-C1045		COMPOSITE UTILITY PLAN STA 7094+00 TO 7100+00
UT C1501		COMPOSITE UTILITY PLAN POPLAR AVENUE
UT C1502		COMPOSITE UTILITY PLAN POPLAR AVENUE
UT C1503		COMPOSITE UTILITY PLAN RIVERSIDE STREET
UT C1504		COMPOSITE UTILITY PLAN 7TH STANDARD ROAD
UT C1505		COMPOSITE UTILITY PLAN 7TH STANDARD ROAD
UT-C1506		COMPOSITE UTILITY PLAN F STREET
UT-C1507		COMPOSITE UTILITY PLAN 34TH STREET
UT-Y4505		HH&D FACILITY SCHEDULE

UTILITY OWNERS	
OWNER	ABBREVIATION
ALON BAKERSFIELD PROP	ALON
AT&T	AT&T TRANS
AT&T/PACIFIC BELL	PACBELL
BRIGHT HOUSE NETWORKS	BRIGHT HOUSE
CALIFORNIA RESOURCE CORP	CRC
CALIFORNIA WATER SERVICE	CALWATER
CALTRANS	CALTRANS
CAWELO WATER DISTRICT	CWD
CENTURYLINK COMMUNICATIONS	CENTURYLINK
CHEVRON PIPE LINE COMPANY	CHEVRON (CPL)
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY	CHEVRON (CEMC)
CITY OF SHAFTER	CITY OF SHAFTER
CITY OF BAKERSFIELD	CITY OF BAKERSFIELD
COUNTY OF KERN	COUNTY OF KERN
CVIN LLC	CVIN
FRIANT WATER AUTHORITY	FWA
KERN COUNTY WATER AGENCY	KCWA
KERN DELTA WATER DISTRICT	KDWD
KERN SANITATION AUTHORITY	KSA
LEVEL 3 COMMUNICATIONS	LEVEL3
NORTH OF RIVER SANITATION DISTRICT	NORS
NORTH KERN WATER STORAGE DISTRICT	NKWS
OILDALE MUTUAL WATER	OMW
PACIFIC GAS AND ELECTRIC - DISTRIBUTION	PG&E DIST
PACIFIC GAS AND ELECTRIC - TRANSMISSION	PG&E TRANS
PHILLIPS 66	PHILLIPS66
SHAFTER-WASCO IRRIGATION DISTRICT	SWID
SHELL PIPELINE COMPANY	SHELL
SOUTHERN CALIFORNIA GAS COMPANY/ SEMPRA - DISTRIBUTION	SEMPRA DIST
SOUTHERN CALIFORNIA GAS COMPANY/ SEMPRA - TRANSMISSION	SEMPRA TRANS
SPRINT	SPRINT
SUNESYS, LLC	SUNESYS
VERIZON	VERIZON

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
DRAWN BY
T. SWEITZER
CHECKED BY
D. CONYERS
IN CHARGE
E. WINTERS
DATE
10/28/2016

**RECORD SET
PEPD DESIGN
SUBMISSION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD**
LOCALLY GENERATED ALTERNATIVE
UTILITIES
COMPOSITE UTILITY PLAN
INDEX OF DRAWINGS & UTILITY OWNER ABBREVIATIONS

CONTRACT NO.
HSR13-44
DRAWING NO.
UT-B0001
SCALE
NO SCALE
SHEET NO.
156

LEGEND AND SYMBOLS

ABBREVIATIONS

EXISTING	NEW	DESCRIPTION
---e---	---E---	ELECTRICAL UNDERGROUND
---e---(oh)---	---E---(OH)---	ELECTRICAL OVERHEAD
----gs-----gs---	----GS-----GS---	GAS
---g-----g---	---G-----G---	NATURAL GAS
---iw-----iw---	---IW-----IW---	INDUSTRIAL WASTE
---o-----o---	---O-----O---	OIL
---sd-----sd---	---SD-----SD---	STORM DRAIN
---s-----s---	---S-----S---	SEWER
---st-----st---	---ST-----ST---	STEAM
---tc---(oh)---	---TC---(OH)---	TELECOMMUNICATION OVERHEAD
---tc-----tc---	---TC-----TC---	TELECOMMUNICATION UNDERGROUND
---t---(oh)---	---T---(OH)---	TELEPHONE OVERHEAD
---t-----t---	---T-----T---	TELEPHONE UNDERGROUND
---tv---(oh)---	---TV---(OH)---	TELEVISION OVERHEAD
---tv-----tv---	---TV-----TV---	TELEVISION UNDERGROUND
---w-----w---	---W-----W---	WATER
---fo---(oh)---	---FO---(OH)---	FIBER OPTIC OVERHEAD
---fo-----fo---	---FO-----FO---	FIBER OPTIC
---irr-----irr---	---IRR-----IRR---	IRRIGATION
		IRRIGATION WELL, WEIR, TURNOUT, PUMP
		SEWER, STORM DRAIN MANHOLE
		UTILITY POLE
		FIRE HYDRANT
		DROP INLET
		POWER TRANSMISSION TOWER
		STREET LIGHT
		NORTH ARROW
		PROP CHSR RIGHT-OF-WAY
		HST TRACK CENTER LINE
		RETAINING WALL
		STRUCTURE FOUNDATION
		PTEF
		PPEF
		UTILITY TO BE REMOVED OR RELOCATED
		RETENTION BASIN
		KEY NOTE, UTILITY NUMBER
		ROADWAY EASEMENT

AB	AGGREGATE BASE	FH	FIRE HYDRANT	R	RADIUS
ABN	ABANDON	FM	FORCE MAIN	RCP	REINFORCED CONCRETE PIPE
AC	ASPHALT CONCRETE	F-B	FRESNO TO BAKERSFIELD	RD	ROAD
ACB	ASPHALT CONCRETE BASE	FO	FIBER OPTIC	RDWY	ROADWAY
ACP	ASBESTOS CEMENT PIPE	FUT	FUTURE	REQD	REQUIRED
A/G	AT GRADE			RR	RAILROAD
APPROX	APPROXIMATE	G	GAS	RT	RIGHT
AVE	AVENUE	GALV	GALVANIZED	RTE	ROUTE
		GB	GRADE BREAK	R/W, ROW	RIGHT-OF-WAY
BEG	BEGIN	GIS	GEOGRAPHICAL INFORMATION SYSTEM	RWY	RAILWAY
BLDG	BUILDING				
BLVD	BOULEVARD	GND	GROUND	S	SOUTH
BNSF	BURLINGTON NORTHERN SANTA FE	GTR	GUTTER	SB	SOUTHBOUND
BO	BLOW-OFF	GV	GAS VALVE	SD	STORM DRAIN
				SDMH	STORM DRAIN MANHOLE
CB	CATCH BASIN	HOR	HORIZONTAL	SF	SQUARE FEET
CD	CURB DRAIN	HSR	HIGH-SPEED RAIL	SHLD	SHOULDER
C&G	CURB AND GUTTER	HST	HIGH-SPEED TRAIN	SR	STATE ROUTE
CHSR	CALIFORNIA HIGH-SPEED RAIL			SS	SANITARY SEWER
CHST	CALIFORNIA HIGH-SPEED TRAIN	IN	INCH	SSMH	SANITARY SEWER MANHOLE
CIP	CAST IRON PIPE	INV	INVERT	ST	STREET
CL	CENTERLINE, CLASS	IRR	IRRIGATION	STA	STATION
CL	CENTERLINE			SW	SIDEWALK
CLSM	CONTROLLED LOW STRENGTH MATERIAL	L	LENGTH	SWR	SEWER
		LT	LEFT		
CMP	CORRUGATED METAL PIPE			T	TELEPHONE, TOTAL
CTV	CABLE TELEVISION	MAX	MAXIMUM	TC	TELECOMMUNICATION
CV	CURVE	MIN	MINIMUM	TCE	TEMPORARY CONSTRUCTION EASEMENT
				TEL	TELEPHONE
D	DEPTH	N	NORTH, NEW	TOR	TOP OF RAIL
DI	DRAINAGE INLET	NA	NOT APPLICABLE	TS	TRAFFIC SIGNAL
DIA	DIAMETER	NB	NORTHBOUND	TYP	TPICAL
DIP	DUCTILE IRON PIPE	NIC	NOT IN CONTRACT		
DIST	DISTANCE	NO	NUMBER	UG, U/G	UNDERGROUND
DWG	DRAWING	NTS	NOT TO SCALE	UNK	UNKNOWN
				UPRR	UNION PACIFIC RAILROAD
E	ELECTRICAL, EAST				
EB	EASTBOUND			VAR	VARIES
EL	ELEVATION	PROP, (P)	PROPOSED	VC	VERTICAL CURVE
ELEC	ELECTRIC	PED	PEDESTRIAN	VCP	VITRIFIED CLAY PIPE
EP	EDGE OF PAVEMENT	PPEF	PROPOSED PERMANENT ENVIRONMENTAL FOOTPRINT		
EXIST, (E)	EXISTING	PTEF	PROPOSED TEMPORARY ENVIRONMENTAL FOOTPRINT	W	WEST, WATER
				W/	WITH
		PVC	POLYVINYL CHLORIDE	WB	WESTBOUND
		PVMT	PAVEMENT	WM	WATER MAIN
				WV	WATER VALVE

GENERAL NOTES:

- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION THESE PLANS. THE LOCATION OF EXISTING UTILITIES ARE BASED ON FOUR SOURCES:
 - TOPOGRAPHIC SURVEY
 - GIS
 - AS-BUILT DRAWINGS
 - LIMITED FIELD RECONNAISSANCE
 THE CONTRACTOR SHALL CONDUCT ITS OWN SURVEY AND VERIFY THE LOCATION OF EXISTING UTILITIES AND RECONCILE THE SURVEY DATA AND GIS DATA.
- SERVICE LATERALS FOR POTABLE WATER, SANITARY SEWER AND NATURAL GAS ARE NOT SHOWN.
- EXISTING UTILITIES IDENTIFIED WITH THE DISPOSITION 'RELOCATE' AND 'REMOVE' PERTAIN TO ONLY THAT PORTION OF THE UTILITY WITHIN THE PROPOSED CHSR ROW OR IMPACTED BY PROPOSED IMPROVEMENTS.

HIGH VOLTAGE TRANSMISSION LINE RELOCATION NOTES:

- ELECTRICAL TOWER AND WIRE HEIGHTS ARE NOT BASED ON FIELD SURVEY AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS.
- CPUC VERTICAL CLEARANCE FROM OCS POLE NEGATIVE FEEDER WIRE TO LOWEST HIGH VOLTAGE ELECTRICAL CONDUCTOR: CPUC GO 95 RULE 38 TABLE 2 (CASE 12).
- ELECTRICAL TRANSMISSION TOWERS/POLES SUBJECT TO ADDITIONAL CLEARANCE REQD BY UTILITY OWNER.
- PROPOSED HV TRANSMISSION TOWERS REPRESENTED CONCEPTUALLY.
- NEGATIVE FEEDER WIRE DISTANCE ABOVE TOP RAIL: 30' FOR 2 TRACK CONFIGURATION, 35' FOR 3 OR MORE TRACK CONFIGURATION.

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DESIGNED BY D. SALGADO
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DATE 10/28/2016

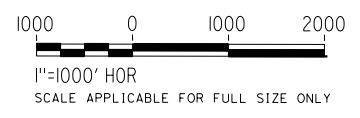
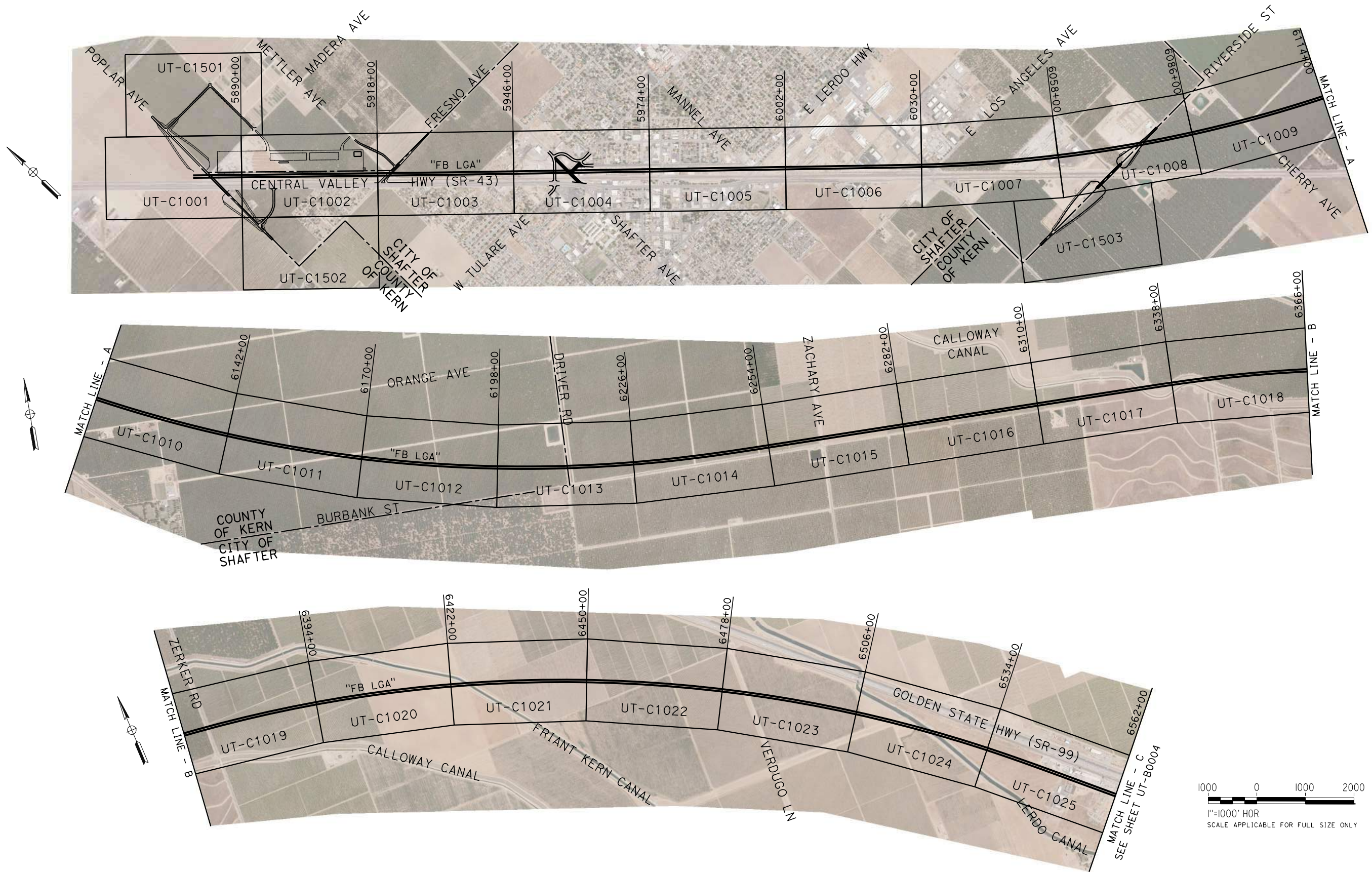
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CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 LEGEND, SYMBOLS, ABBREVIATIONS & NOTES

CONTRACT NO. HSR13-44
DRAWING NO. UT-B0002
SCALE NO SCALE
SHEET NO. 157

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10/28/2016

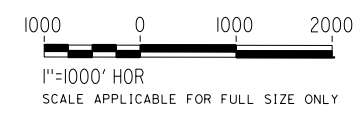
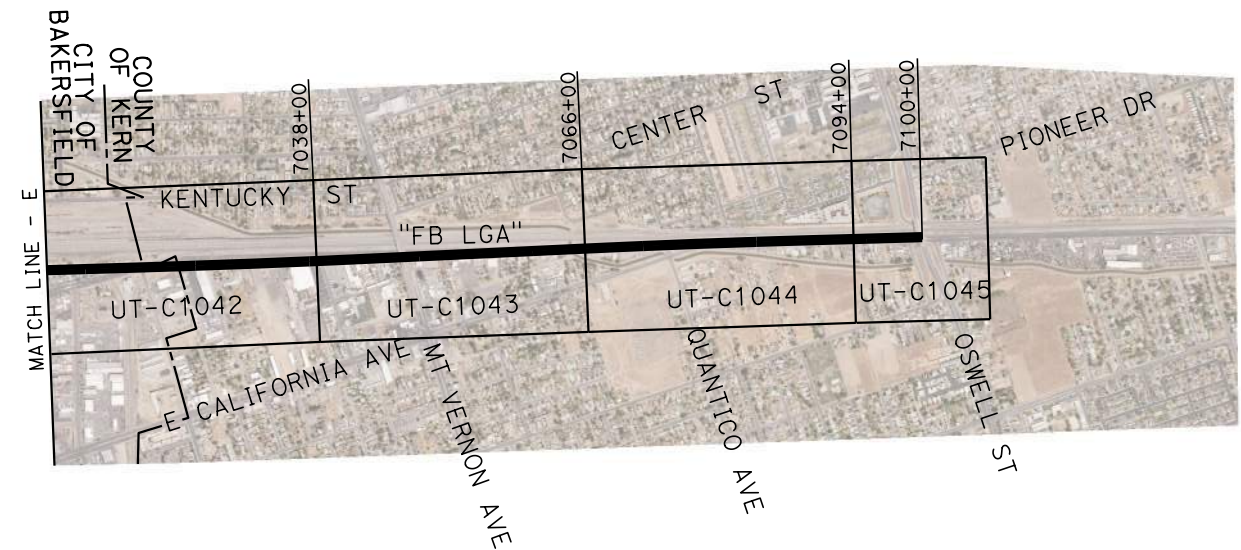
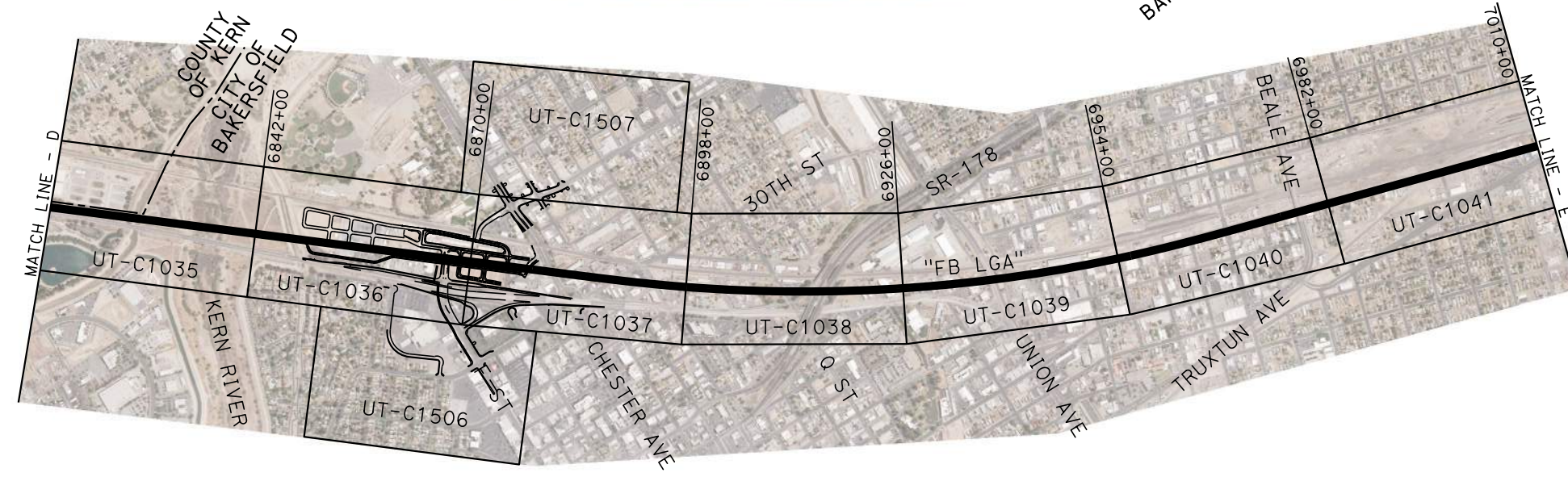
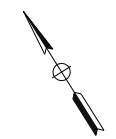
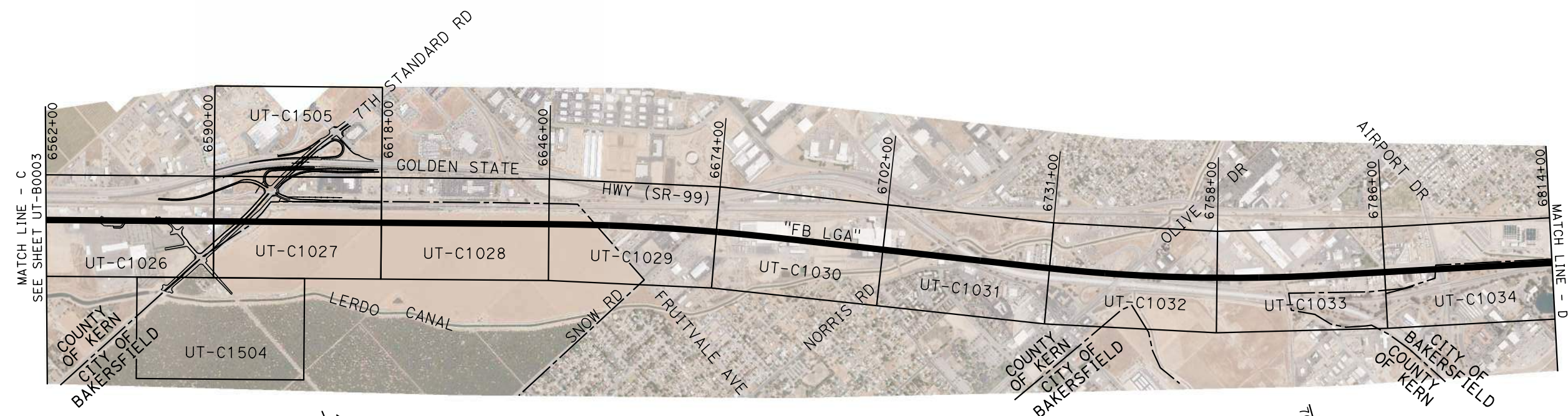
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**CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD**
LOCALLY GENERATED ALTERNATIVE
UTILITIES
COMPOSITE UTILITY PLAN
KEY MAP (SHEET 1 OF 2)

CONTRACT NO.
HSR13-44
DRAWING NO.
UT-B0003
SCALE
AS SHOWN
SHEET NO.
158

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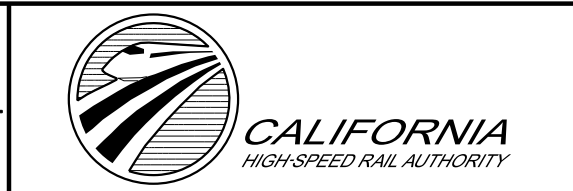


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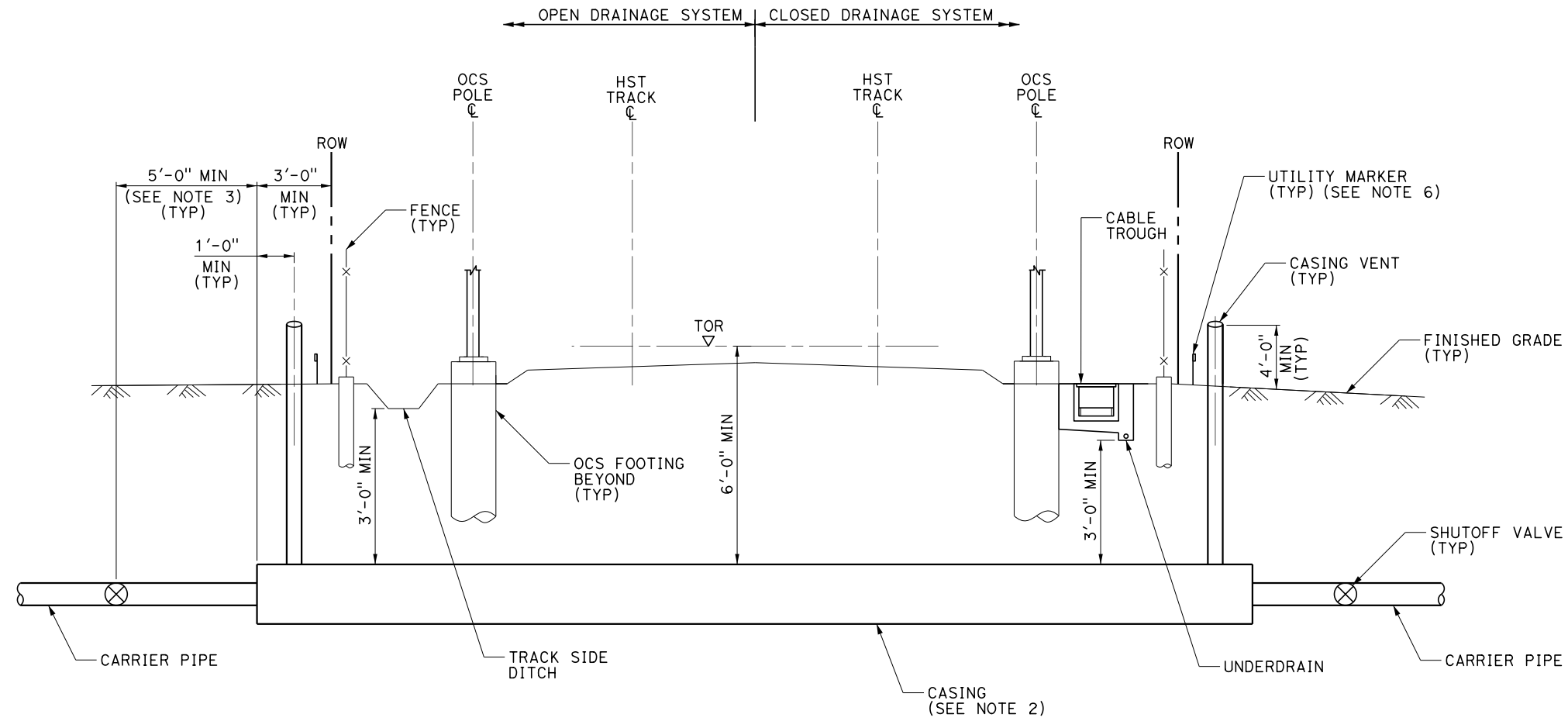
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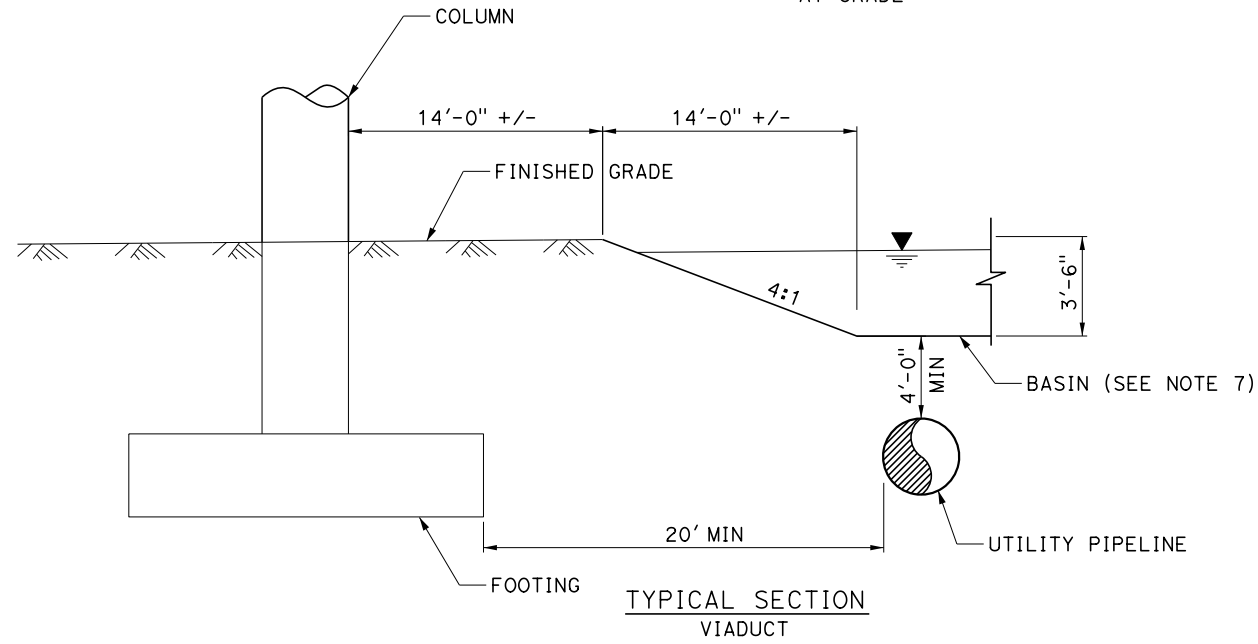
**CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD**
LOCALLY GENERATED ALTERNATIVE
UTILITIES
COMPOSITE UTILITY PLAN
KEY MAP (SHEET 2 OF 2)

CONTRACT NO.
HSR13-44
DRAWING NO.
UT-B0004
SCALE
AS SHOWN
SHEET NO.
159

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TYPICAL SECTION AT GRADE



TYPICAL SECTION VIADUCT

NOTES:

1. TRACK, SYSTEMS, DRAINAGE, AND STRUCTURES ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. FOR ADDITIONAL PIPE CASING REQUIREMENTS, SEE AREMA MANUAL.
3. SHUTOFF VALVE MUST BE ACCESSIBLE FROM OUTSIDE THE RIGHT-OF-WAY. IT MAY NOT BE NEEDED ON BOTH SIDES.
4. THE CASING SHALL CONTINUE MINIMUM 3'-0" BEYOND THE RIGHT-OF-WAY.
5. TRANSVERSE UTILITIES SHALL BE LOCATED AWAY FROM MANHOLES, OCS FOOTINGS, AND OTHER HST SUBSURFACE ELEMENTS.
6. UTILITY MARKER TO INDICATE LOCATION OF UTILITY CROSSING AT RIGHT-OF-WAY.
7. INFILTRATION BASIN WHERE SHOWN ON THE PLANS.

REV	DATE	BY	CHK	APP	DESCRIPTION

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TYLIN INTERNATIONAL

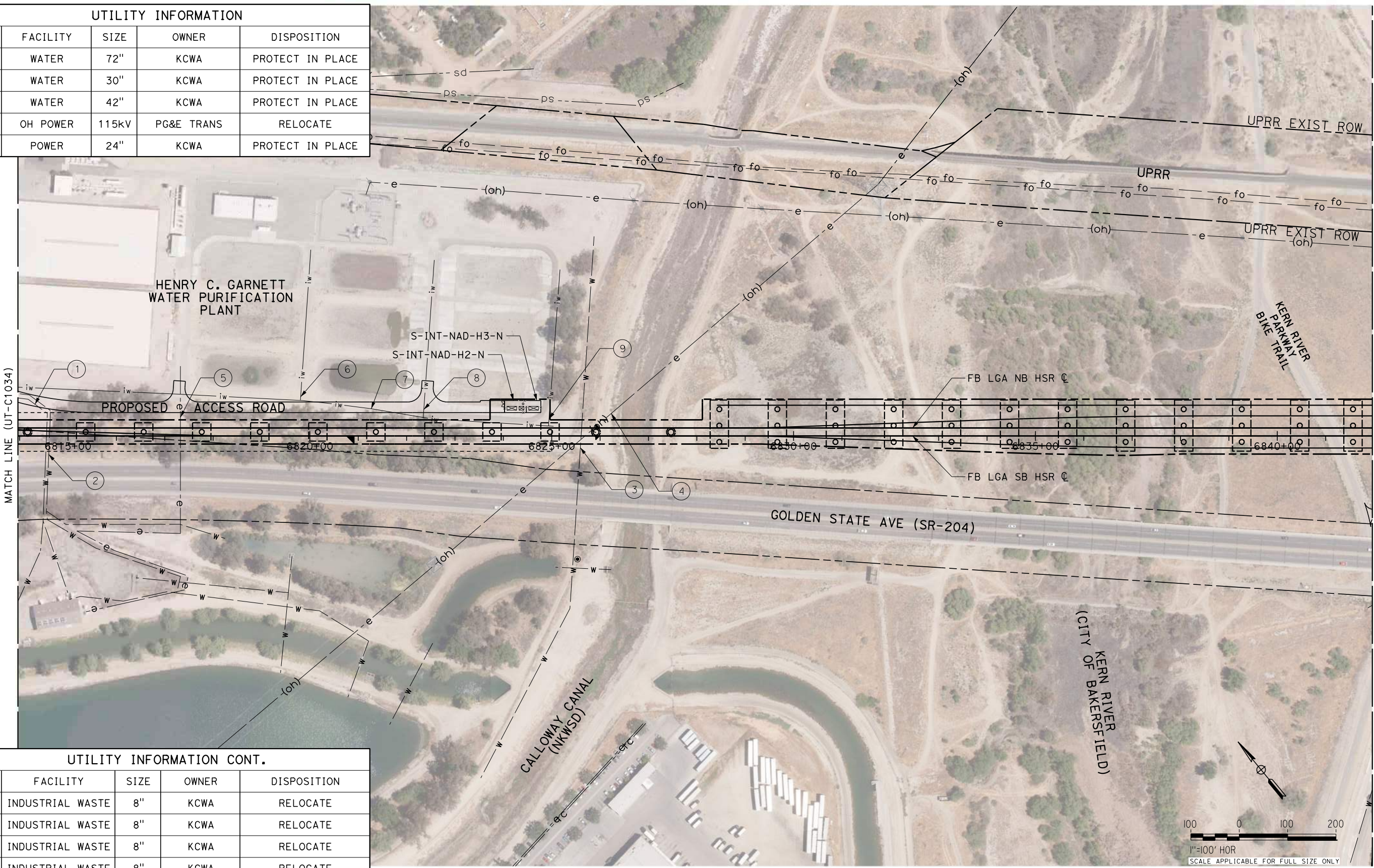


CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD
LOCALLY GENERATED ALTERNATIVE
UTILITIES
COMPOSITE UTILITY PLAN
UTILITY CROSSING CLEARANCES

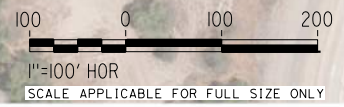
CONTRACT NO.
HSR13-44
DRAWING NO.
UT-B0005
SCALE
NO SCALE
SHEET NO.
160

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	WATER	72"	KCWA	PROTECT IN PLACE
②	WATER	30"	KCWA	PROTECT IN PLACE
③	WATER	42"	KCWA	PROTECT IN PLACE
④	OH POWER	115KV	PG&E TRANS	RELOCATE
⑤	POWER	24"	KCWA	PROTECT IN PLACE



UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
⑥	INDUSTRIAL WASTE	8"	KCWA	RELOCATE
⑦	INDUSTRIAL WASTE	8"	KCWA	RELOCATE
⑧	INDUSTRIAL WASTE	8"	KCWA	RELOCATE
⑨	INDUSTRIAL WASTE	8"	KCWA	RELOCATE



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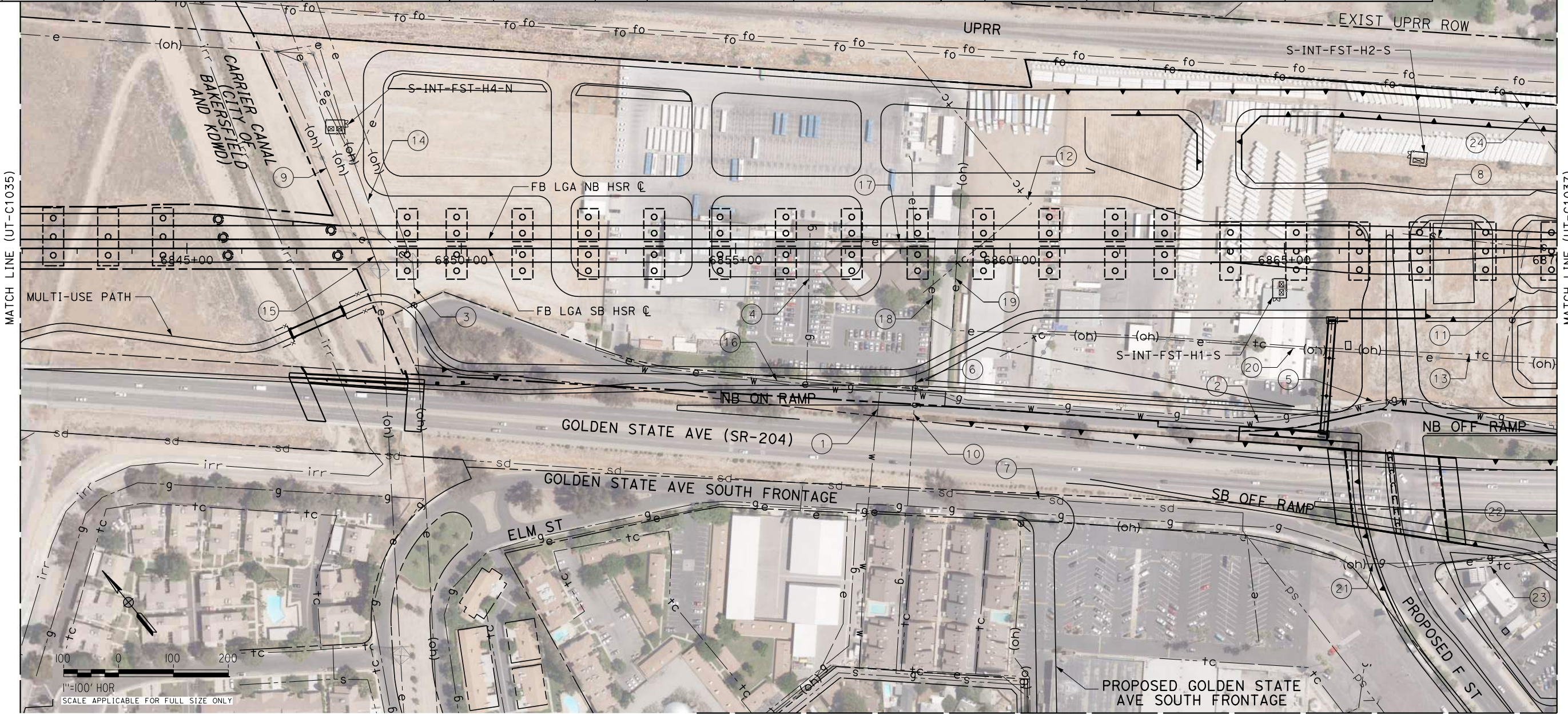
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**CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD**
LOCALLY GENERATED ALTERNATIVE
UTILITIES
COMPOSITE UTILITY PLAN
STA 6814+00 TO 6842+00

CONTRACT NO.
HSR13-44
DRAWING NO.
UT-C1035
SCALE
AS SHOWN
SHEET NO.
161

UTILITY INFORMATION					UTILITY INFORMATION CONT.					UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION	NO.	FACILITY	SIZE	OWNER	DISPOSITION	NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	WATER	12"	CALWATER	PROTECT IN PLACE	9	OH POWER	70kV	PG&E TRANS	RELOCATE	17	POWER	12kV	PG&E DIST	REMOVE
2	WATER	8"	CALWATER	RELOCATE	10	NATURAL GAS	12"	PG&E TRANS	PROTECT IN PLACE	18	POWER	12kV	PG&E DIST	REMOVE
3	OH POWER	115kV	PG&E TRANS	RELOCATE	11	OH POWER	12kV	PG&E DIST	REMOVE	19	OH POWER	12kV	PG&E DIST	REMOVE
4	NATURAL GAS	1"	PG&E DIST	REMOVE	12	TELECOM	UNK	PACBELL	REMOVE	20	OH POWER	12kV	PG&E DIST	REMOVE
5	NATURAL GAS	3"	PG&E DIST	RELOCATE	13	OH TELECOM	UNK	PACBELL	REMOVE	21	OH POWER	12kV	PG&E DIST	PROTECT IN PLACE
6	NATURAL GAS	12"	PG&E TRANS	REMOVE	14	OH POWER	70kV	PG&E TRANS	RELOCATE	22	NATURAL GAS	12"	PG&E TRANS	PROTECT IN PLACE
7	STORM DRAIN	27"	CITY OF BAKERSFIELD	PROTECT IN PLACE	15	OH POWER	115kV	PG&E TRANS	RELOCATE	23	TELECOM	UNK	PACBELL	PROTECT IN PLACE
8	SEWER	6"	CITY OF BAKERSFIELD	REMOVE	16	POWER	12kV	PG&E DIST	REMOVE	24	FIBER OPTIC	UNK	AT&T TRANS	RELOCATE



1"=100' HOR
SCALE APPLICABLE FOR FULL SIZE ONLY

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
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 DATE
10/28/2016

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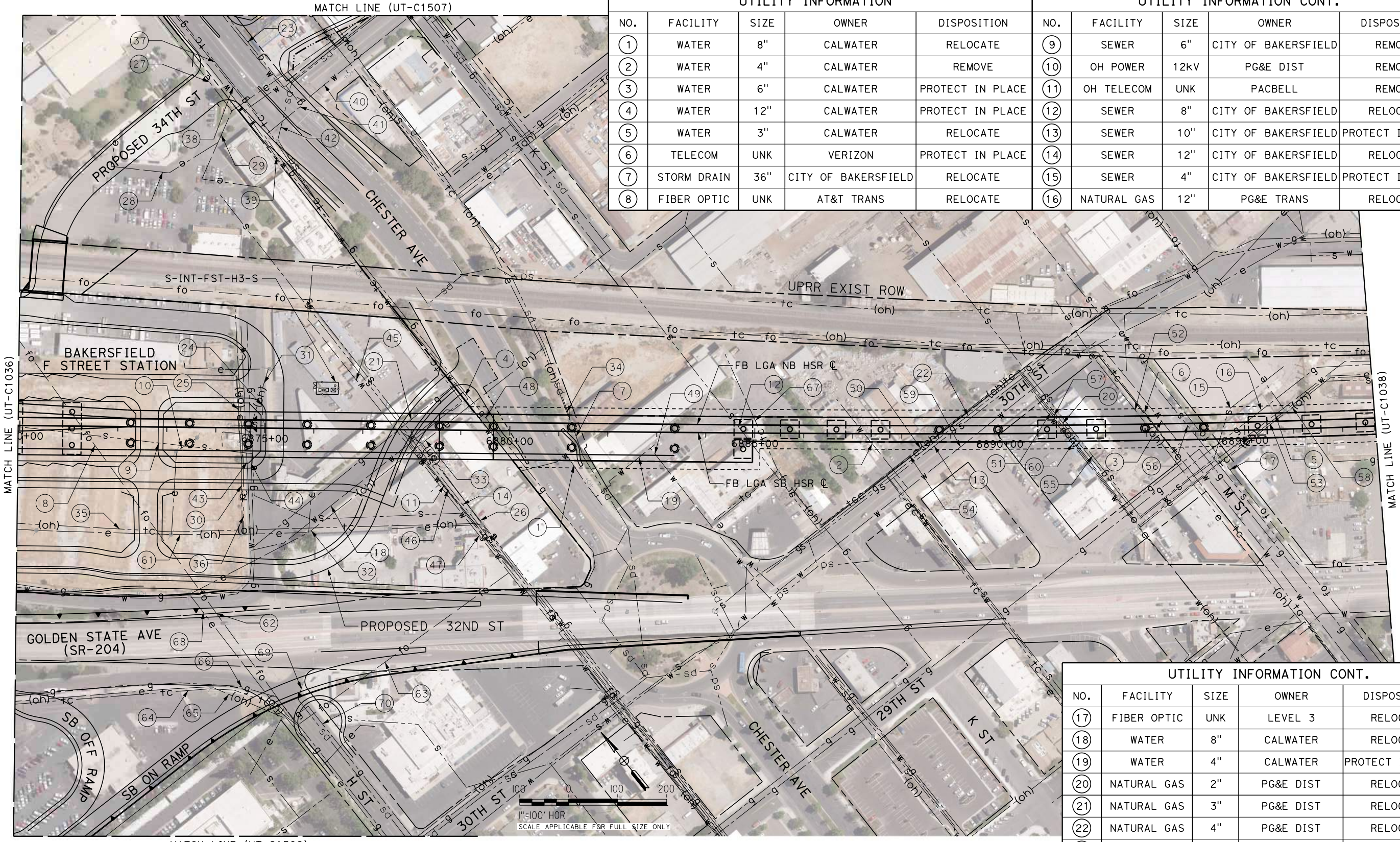


CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 6842+00 TO 6870+00

CONTRACT NO.
 HSR13-44
 DRAWING NO.
 UT-C1036
 SCALE
 AS SHOWN
 SHEET NO.
 162

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UTILITY INFORMATION					UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION	NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	WATER	8"	CALWATER	RELOCATE	9	SEWER	6"	CITY OF BAKERSFIELD	REMOVE
2	WATER	4"	CALWATER	REMOVE	10	OH POWER	12KV	PG&E DIST	REMOVE
3	WATER	6"	CALWATER	PROTECT IN PLACE	11	OH TELECOM	UNK	PACBELL	REMOVE
4	WATER	12"	CALWATER	PROTECT IN PLACE	12	SEWER	8"	CITY OF BAKERSFIELD	RELOCATE
5	WATER	3"	CALWATER	RELOCATE	13	SEWER	10"	CITY OF BAKERSFIELD	PROTECT IN PLACE
6	TELECOM	UNK	VERIZON	PROTECT IN PLACE	14	SEWER	12"	CITY OF BAKERSFIELD	RELOCATE
7	STORM DRAIN	36"	CITY OF BAKERSFIELD	RELOCATE	15	SEWER	4"	CITY OF BAKERSFIELD	PROTECT IN PLACE
8	FIBER OPTIC	UNK	AT&T TRANS	RELOCATE	16	NATURAL GAS	12"	PG&E TRANS	RELOCATE



UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
17	FIBER OPTIC	UNK	LEVEL 3	RELOCATE
18	WATER	8"	CALWATER	RELOCATE
19	WATER	4"	CALWATER	PROTECT IN PLACE
20	NATURAL GAS	2"	PG&E DIST	RELOCATE
21	NATURAL GAS	3"	PG&E DIST	RELOCATE
22	NATURAL GAS	4"	PG&E DIST	RELOCATE
23	NATURAL GAS	10"	PG&E DIST	PROTECT IN PLACE

NOTE: FOR CONTINUATION OF UTILITY INFORMATION SEE DWG UT-C1506.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

**RECORD SET
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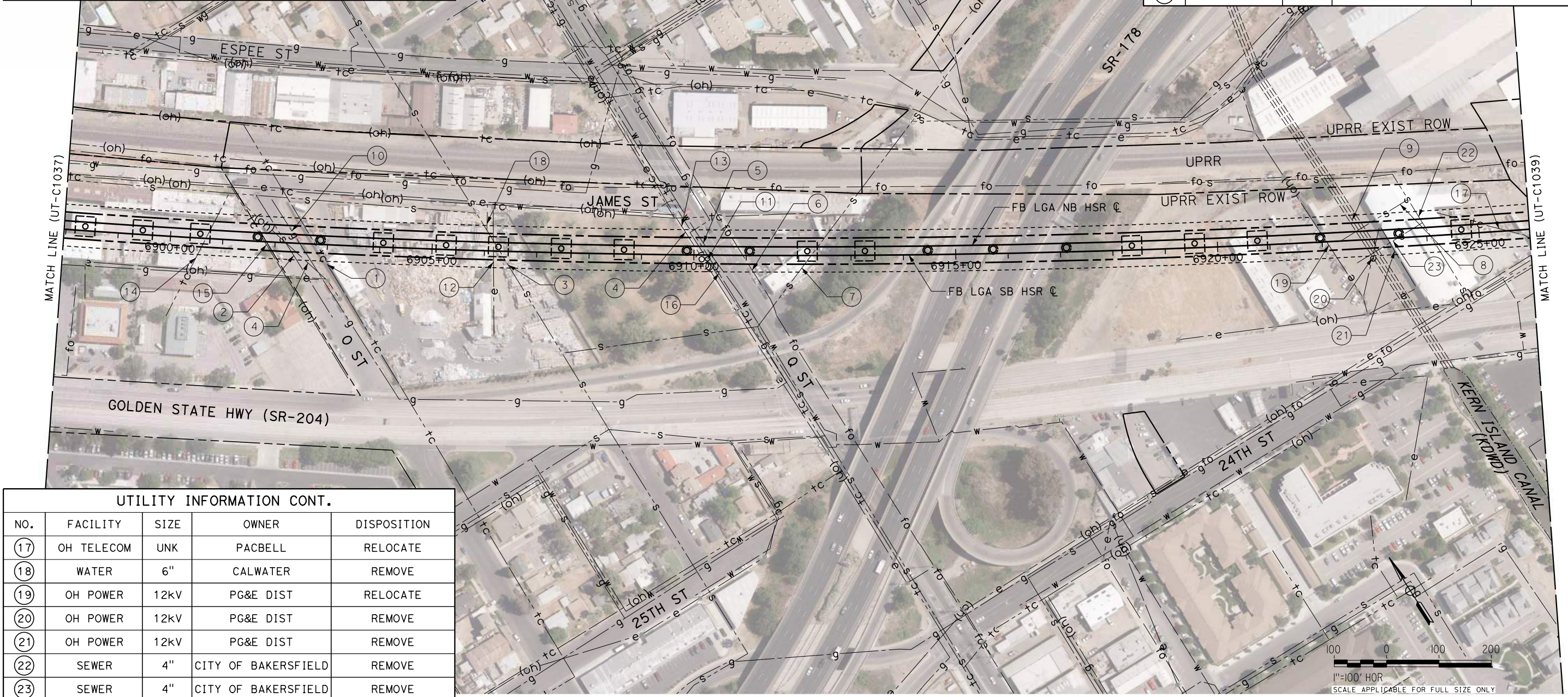
**CALIFORNIA HIGH-SPEED RAIL PROJECT
 FRESNO TO BAKERSFIELD**
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 6870+00 TO 6898+00

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1037
 SCALE
AS SHOWN
 SHEET NO.
163

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	TELECOM	UNK	VERIZON	RELOCATE
2	SEWER	8"	CITY OF BAKERSFIELD	PROTECT IN PLACE
3	SEWER	12"	CITY OF BAKERSFIELD	RELOCATE
4	OH POWER	12KV	PG&E DIST	RELOCATE
5	WATER	6"	CALWATER	PROTECT IN PLACE
6	FIBER OPTIC	UNK	CVIN	PROTECT IN PLACE
7	SEWER	27"	CITY OF BAKERSFIELD	RELOCATE
8	SEWER	4"	CITY OF BAKERSFIELD	REMOVE

UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
9	IRRIGATION	2-66"	KDWD	PROTECT-IN-PLACE
10	NATURAL GAS	2"	PG&E DIST	PROTECT IN PLACE
11	NATURAL GAS	4"	PG&E DIST	RELOCATE
12	POWER	12KV	PG&E DIST	RELOCATE
13	OH POWER	21KV	PG&E DIST	RELOCATE
14	OH TELECOM	UNK	PACBELL	RELOCATE
15	OH TELECOM	UNK	PACBELL	RELOCATE
16	OH TELECOM	UNK	PACBELL	RELOCATE



UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
17	OH TELECOM	UNK	PACBELL	RELOCATE
18	WATER	6"	CALWATER	REMOVE
19	OH POWER	12KV	PG&E DIST	RELOCATE
20	OH POWER	12KV	PG&E DIST	REMOVE
21	OH POWER	12KV	PG&E DIST	REMOVE
22	SEWER	4"	CITY OF BAKERSFIELD	REMOVE
23	SEWER	4"	CITY OF BAKERSFIELD	REMOVE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

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 PEPP DESIGN
 SUBMISSION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
 FRESNO TO BAKERSFIELD**
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 6898+00 TO 6926+00

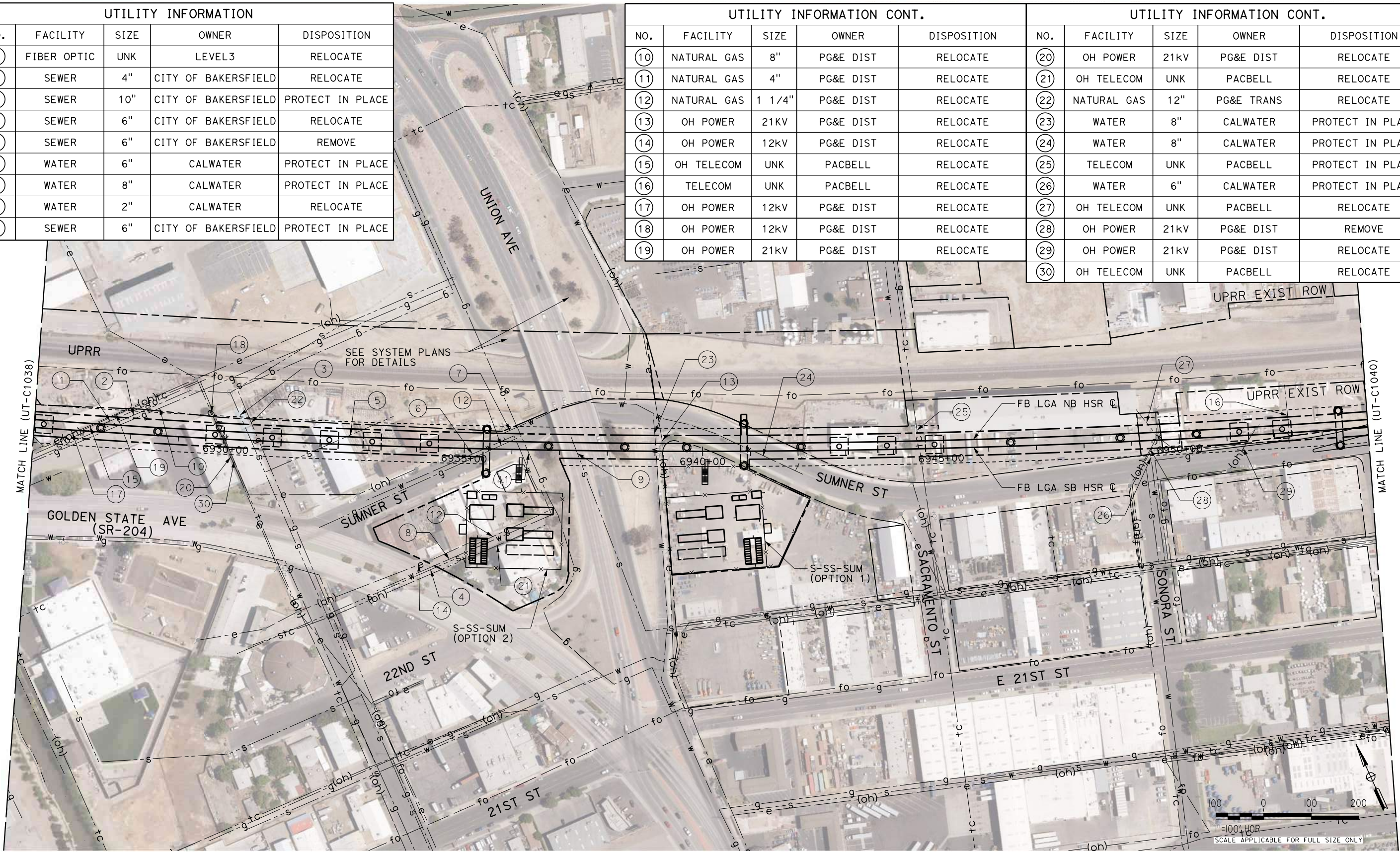
CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1038
 SCALE
AS SHOWN
 SHEET NO.
164

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	FIBER OPTIC	UNK	LEVEL3	RELOCATE
2	SEWER	4"	CITY OF BAKERSFIELD	RELOCATE
3	SEWER	10"	CITY OF BAKERSFIELD	PROTECT IN PLACE
4	SEWER	6"	CITY OF BAKERSFIELD	RELOCATE
5	SEWER	6"	CITY OF BAKERSFIELD	REMOVE
6	WATER	6"	CALWATER	PROTECT IN PLACE
7	WATER	8"	CALWATER	PROTECT IN PLACE
8	WATER	2"	CALWATER	RELOCATE
9	SEWER	6"	CITY OF BAKERSFIELD	PROTECT IN PLACE

UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
10	NATURAL GAS	8"	PG&E DIST	RELOCATE
11	NATURAL GAS	4"	PG&E DIST	RELOCATE
12	NATURAL GAS	1 1/4"	PG&E DIST	RELOCATE
13	OH POWER	21KV	PG&E DIST	RELOCATE
14	OH POWER	12KV	PG&E DIST	RELOCATE
15	OH TELECOM	UNK	PACBELL	RELOCATE
16	TELECOM	UNK	PACBELL	RELOCATE
17	OH POWER	12KV	PG&E DIST	RELOCATE
18	OH POWER	12KV	PG&E DIST	RELOCATE
19	OH POWER	21KV	PG&E DIST	RELOCATE

UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
20	OH POWER	21KV	PG&E DIST	RELOCATE
21	OH TELECOM	UNK	PACBELL	RELOCATE
22	NATURAL GAS	12"	PG&E TRANS	RELOCATE
23	WATER	8"	CALWATER	PROTECT IN PLACE
24	WATER	8"	CALWATER	PROTECT IN PLACE
25	TELECOM	UNK	PACBELL	PROTECT IN PLACE
26	WATER	6"	CALWATER	PROTECT IN PLACE
27	OH TELECOM	UNK	PACBELL	RELOCATE
28	OH POWER	21KV	PG&E DIST	REMOVE
29	OH POWER	21KV	PG&E DIST	RELOCATE
30	OH TELECOM	UNK	PACBELL	RELOCATE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

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 SUBMISSION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
 FRESNO TO BAKERSFIELD**
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 6926+00 TO 6954+00

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1039
 SCALE
AS SHOWN
 SHEET NO.
165

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	WATER	12"	CALWATER	PROTECT IN PLACE
②	WATER	6"	CALWATER	RELOCATE
③	WATER	2"	CALWATER	REMOVE
④	FIBER OPTIC	UNK	LEVEL3	RELOCATE
⑤	WATER	10"	CALWATER	PROTECT IN PLACE
⑥	SEWER	12"	CITY OF BAKERSFIELD	PROTECT IN PLACE
⑦	NATURAL GAS	1 1/4"	PG&E DIST	PROTECT IN PLACE
⑧	NATURAL GAS	4"	PG&E DIST	PROTECT IN PLACE
⑨	NATURAL GAS	2"	PG&E DIST	RELOCATE

UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
⑩	OH POWER	UNK	PG&E DIST	RELOCATE
⑪	OH POWER	21KV	PG&E DIST	RELOCATE
⑫	TELECOM	UNK	PACBELL	RELOCATE
⑬	OH TELECOM	UNK	PACBELL	RELOCATE
⑭	TELECOM	UNK	PACBELL	PROTECT IN PLACE
⑮	OH POWER	21KV	PG&E DIST	RELOCATE
⑯	TELECOM	UNK	PACBELL	RELOCATE
⑰	SEWER	12"	CITY OF BAKERSFIELD	PROTECT IN PLACE
⑱	OH FIBER OPTIC	UNK	SUNESYS	RELOCATE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

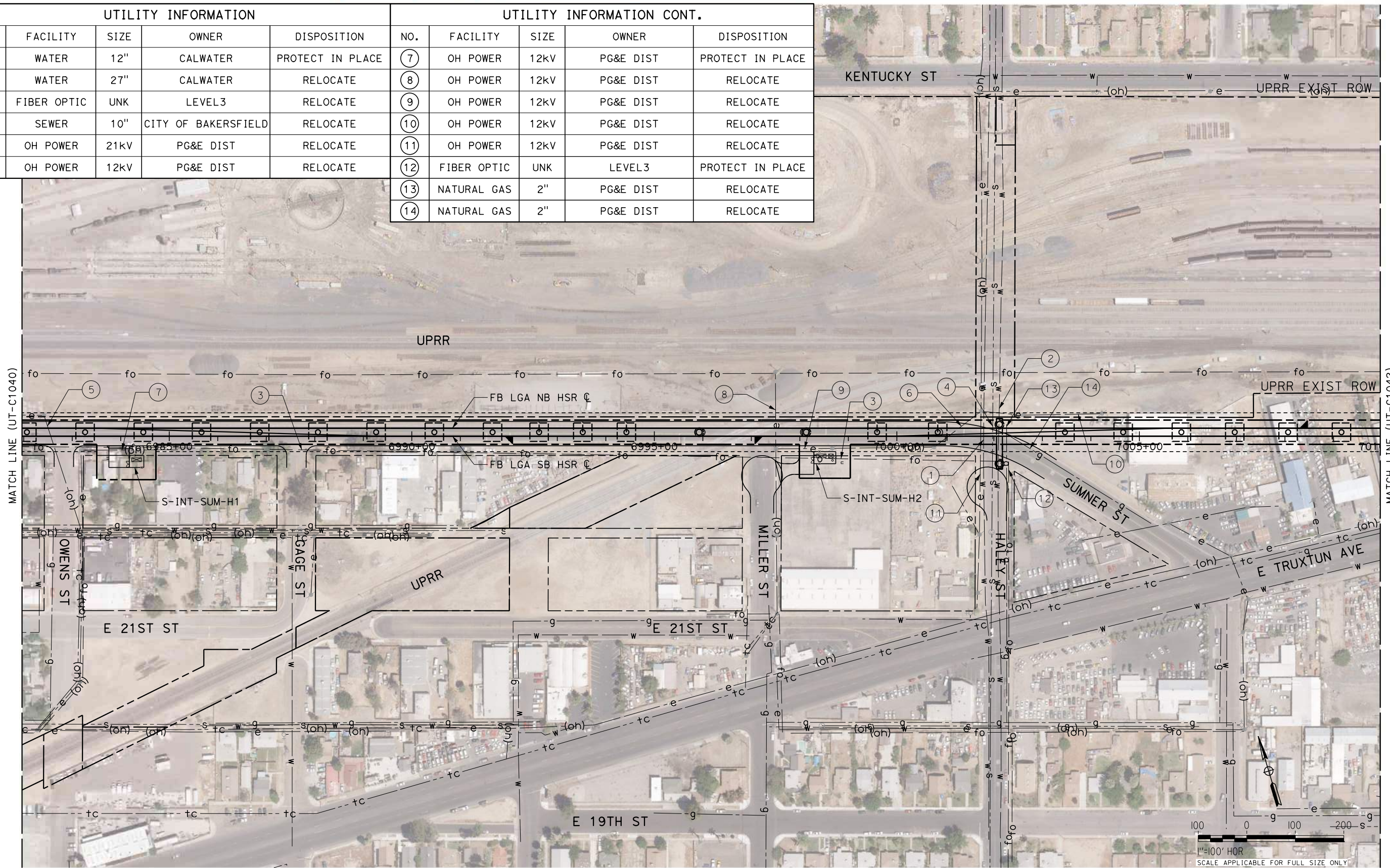
**RECORD SET
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**CALIFORNIA HIGH-SPEED RAIL PROJECT
 FRESNO TO BAKERSFIELD**
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 6954+00 TO 6982+00

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1040
 SCALE
AS SHOWN
 SHEET NO.
166

UTILITY INFORMATION					UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION	NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	WATER	12"	CALWATER	PROTECT IN PLACE	⑦	OH POWER	12KV	PG&E DIST	PROTECT IN PLACE
②	WATER	27"	CALWATER	RELOCATE	⑧	OH POWER	12KV	PG&E DIST	RELOCATE
③	FIBER OPTIC	UNK	LEVEL3	RELOCATE	⑨	OH POWER	12KV	PG&E DIST	RELOCATE
④	SEWER	10"	CITY OF BAKERSFIELD	RELOCATE	⑩	OH POWER	12KV	PG&E DIST	RELOCATE
⑤	OH POWER	21KV	PG&E DIST	RELOCATE	⑪	OH POWER	12KV	PG&E DIST	RELOCATE
⑥	OH POWER	12KV	PG&E DIST	RELOCATE	⑫	FIBER OPTIC	UNK	LEVEL3	PROTECT IN PLACE
					⑬	NATURAL GAS	2"	PG&E DIST	RELOCATE
					⑭	NATURAL GAS	2"	PG&E DIST	RELOCATE



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D. SALGADO
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T. SWEITZER
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D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

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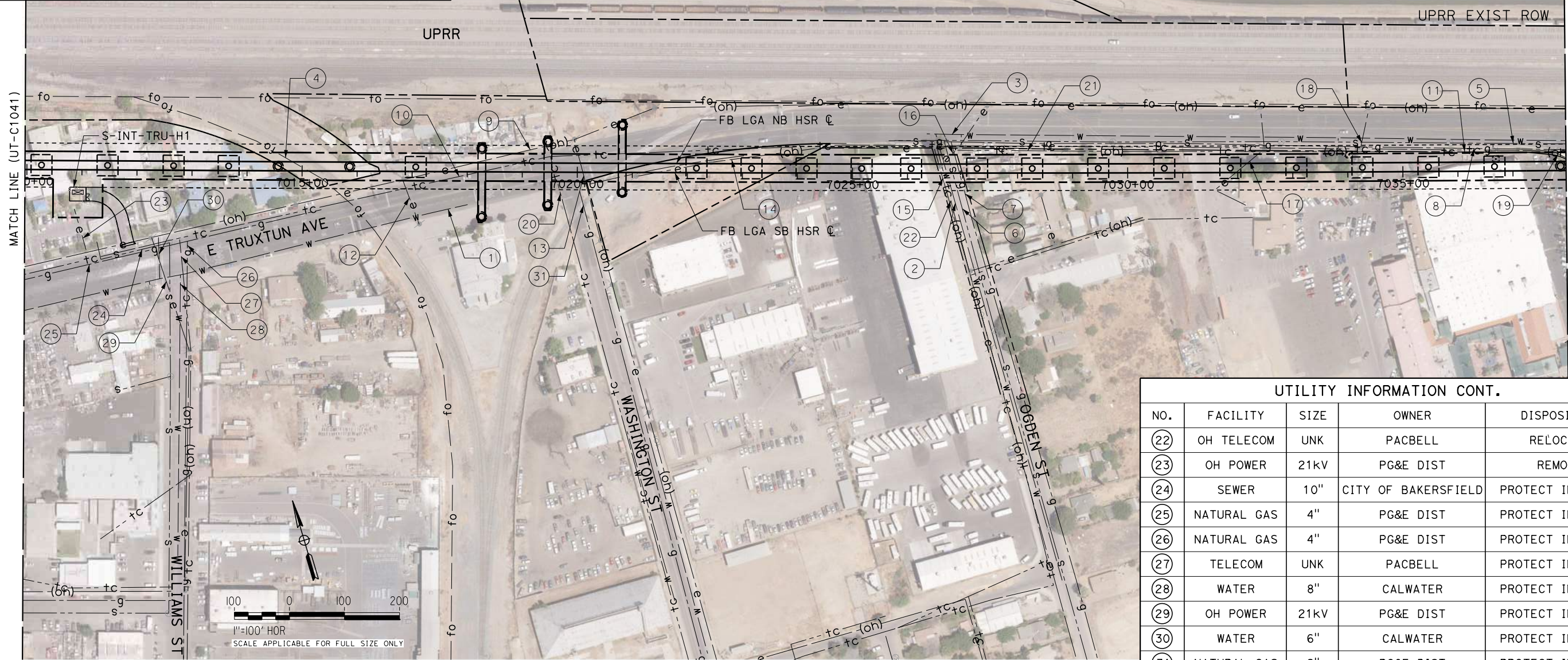
CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 6982+00 TO 7010+00

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1041
 SCALE
AS SHOWN
 SHEET NO.
167

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	WATER	8"	CALWATER	PROTECT IN PLACE
②	WATER	6"	CALWATER	PROTECT IN PLACE
③	WATER	8"	CALWATER	PROTECT IN PLACE
④	FIBER OPTIC	UNK	LEVEL3	PROTECT IN PLACE
⑤	SEWER	8"	KSA	RELOCATE
⑥	SEWER	8"	KSA	RELOCATE
⑦	NATURAL GAS	3"	PG&E DIST	RELOCATE
⑧	NATURAL GAS	4"	PG&E DIST	RELOCATE
⑨	OH POWER	21KV	PG&E DIST	RELOCATE
⑩	TELECOM	UNK	PACBELL	PROTECT IN PLACE
⑪	OH TELECOM	UNK	PACBELL	RELOCATE

UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
⑫	OH POWER	21KV	PG&E DIST	RELOCATE
⑬	OH POWER	21KV	PG&E DIST	RELOCATE
⑭	OH POWER	21KV	PG&E DIST	RELOCATE
⑮	OH POWER	21KV	PG&E DIST	RELOCATE
⑯	OH POWER	21KV	PG&E DIST	RELOCATE
⑰	OH POWER	21KV	PG&E DIST	RELOCATE
⑱	OH POWER	21KV	PG&E DIST	PROTECT IN PLACE
⑲	OH POWER	21KV	PG&E DIST	RELOCATE
⑳	TELECOM	UNK	PACBELL	PROTECT IN PLACE
㉑	TELECOM	UNK	PACBELL	RELOCATE



UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
⑳	OH TELECOM	UNK	PACBELL	RELOCATE
㉑	OH POWER	21KV	PG&E DIST	REMOVE
㉒	SEWER	10"	CITY OF BAKERSFIELD	PROTECT IN PLACE
㉓	NATURAL GAS	4"	PG&E DIST	PROTECT IN PLACE
㉔	NATURAL GAS	4"	PG&E DIST	PROTECT IN PLACE
㉕	TELECOM	UNK	PACBELL	PROTECT IN PLACE
㉖	WATER	8"	CALWATER	PROTECT IN PLACE
㉗	OH POWER	21KV	PG&E DIST	PROTECT IN PLACE
㉘	WATER	6"	CALWATER	PROTECT IN PLACE
㉙	NATURAL GAS	2"	PG&E DIST	PROTECT IN PLACE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

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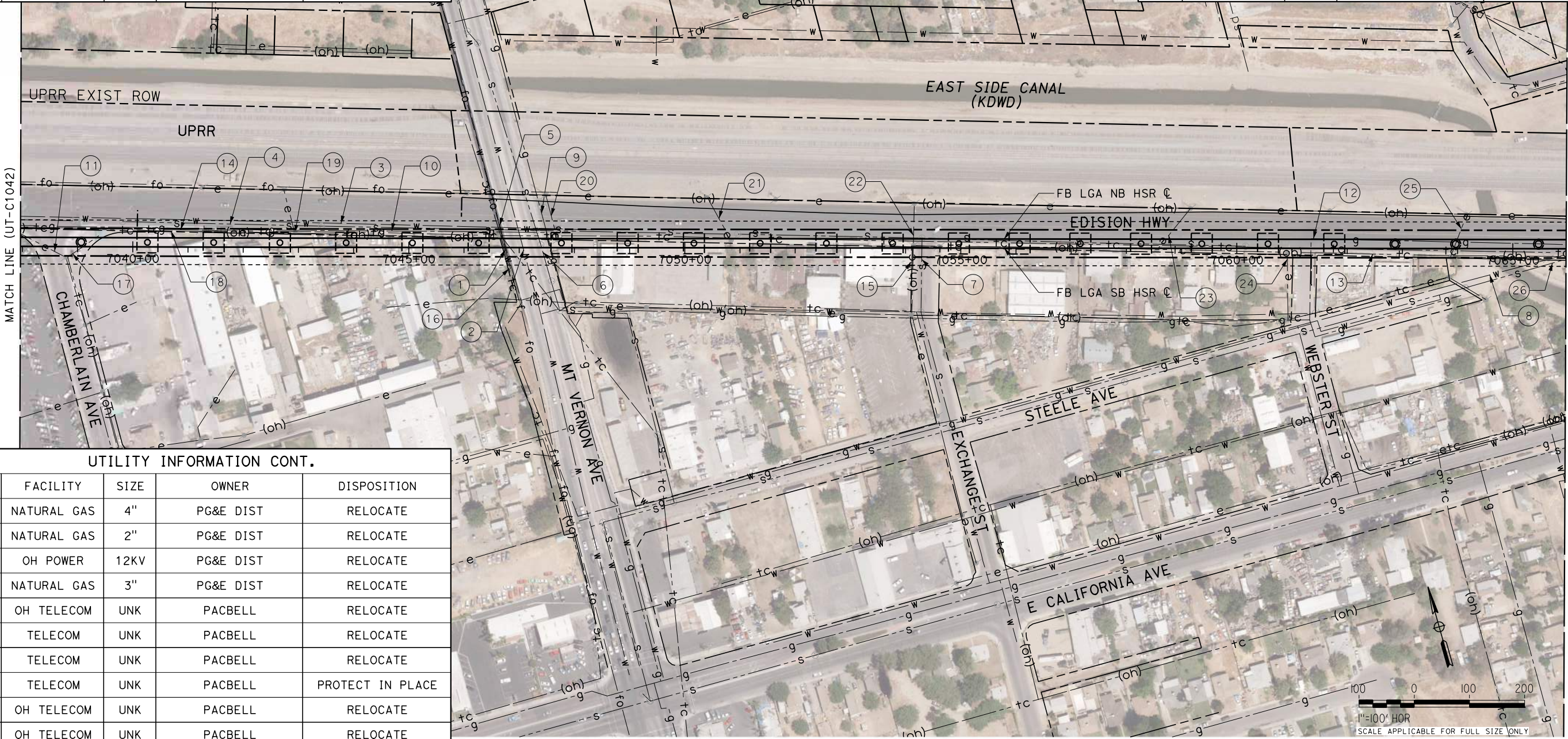
CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 7010+00 TO 7038+00

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1042
 SCALE
AS SHOWN
 SHEET NO.
168

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	FIBER OPTIC	UNK	CVIN	PROTECT IN PLACE
2	WATER	16"	CALWATER	PROTECT IN PLACE
3	WATER	8"	CALWATER	PROTECT IN PLACE
4	SEWER	8"	KSA	PROTECT IN PLACE
5	WATER	21"	CALWATER	PROTECT IN PLACE
6	SEWER	18"	KSA	PROTECT IN PLACE
7	SEWER	8"	KSA	PROTECT IN PLACE
8	WATER	12"	CALWATER	PROTECT IN PLACE

UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
19	OH POWER	12KV	PG&E DIST	REMOVE
20	OH POWER	12KV	PG&E DIST	RELOCATE
21	OH POWER	12KV	PG&E DIST	REMOVE
22	OH POWER	12KV	PG&E DIST	RELOCATE
23	OH POWER	12KV	PG&E DIST	RELOCATE
24	OH POWER	12KV	PG&E DIST	RELOCATE
25	OH POWER	12KV	PG&E DIST	RELOCATE
26	SEWER	8"	KSA	RELOCATE



UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
9	NATURAL GAS	4"	PG&E DIST	RELOCATE
10	NATURAL GAS	2"	PG&E DIST	RELOCATE
11	OH POWER	12KV	PG&E DIST	RELOCATE
12	NATURAL GAS	3"	PG&E DIST	RELOCATE
13	OH TELECOM	UNK	PACBELL	RELOCATE
14	TELECOM	UNK	PACBELL	RELOCATE
15	TELECOM	UNK	PACBELL	RELOCATE
16	TELECOM	UNK	PACBELL	PROTECT IN PLACE
17	OH TELECOM	UNK	PACBELL	RELOCATE
18	OH TELECOM	UNK	PACBELL	RELOCATE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

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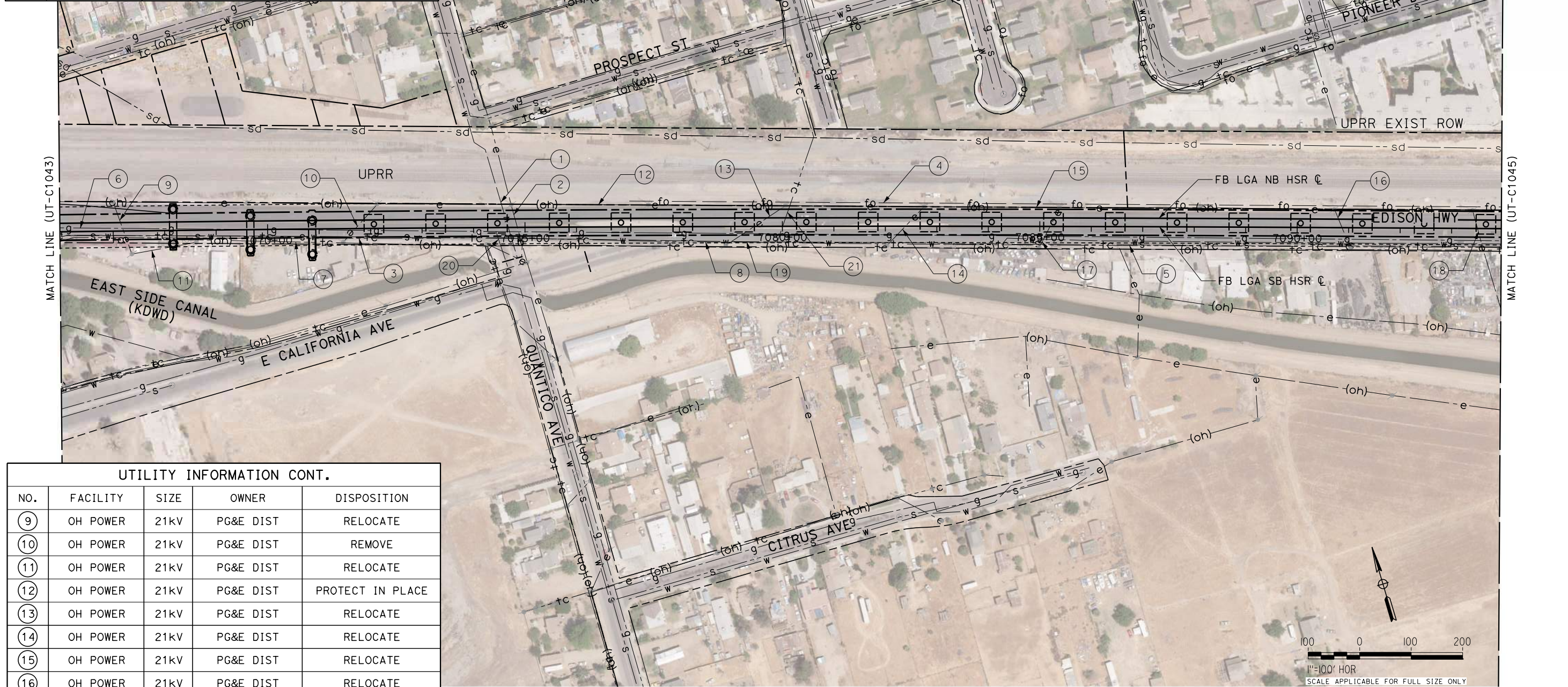


**CALIFORNIA HIGH-SPEED RAIL PROJECT
 FRESNO TO BAKERSFIELD**
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 7038+00 TO 7066+00

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1043
 SCALE
AS SHOWN
 SHEET NO.
169

UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	WATER	12"	CALWATER	RELOCATE
②	OH POWER	21KV	PG&E DIST	RELOCATE
③	SEWER	8"	KSA	RELOCATE
④	FIBER OPTIC	UNK	LEVEL3	PROTECT IN PLACE
⑤	SEWER	8"	KSA	PROTECT IN PLACE
⑥	NATURAL GAS	3"	PG&E DIST	RELOCATE
⑦	OH TELECOM	UNK	PACBELL	RELOCATE
⑧	TELECOM	UNK	PACBELL	PROTECT IN PLACE

UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
⑬	OH POWER	21KV	PG&E DIST	RELOCATE
⑭	OH POWER	21KV	PG&E DIST	RELOCATE
⑮	WATER	12"	CALWATER	PROTECT IN PLACE
⑯	NATURAL GAS	3"	PG&E DIST	RELOCATE
⑰	TELECOM	UNK	PACBELL	RELOCATE



UTILITY INFORMATION CONT.				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
⑨	OH POWER	21KV	PG&E DIST	RELOCATE
⑩	OH POWER	21KV	PG&E DIST	REMOVE
⑪	OH POWER	21KV	PG&E DIST	RELOCATE
⑫	OH POWER	21KV	PG&E DIST	PROTECT IN PLACE
⑬	OH POWER	21KV	PG&E DIST	RELOCATE
⑭	OH POWER	21KV	PG&E DIST	RELOCATE
⑮	OH POWER	21KV	PG&E DIST	RELOCATE
⑯	OH POWER	21KV	PG&E DIST	RELOCATE

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
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D. CONYERS
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E. WINTERS
 DATE
10/28/2016

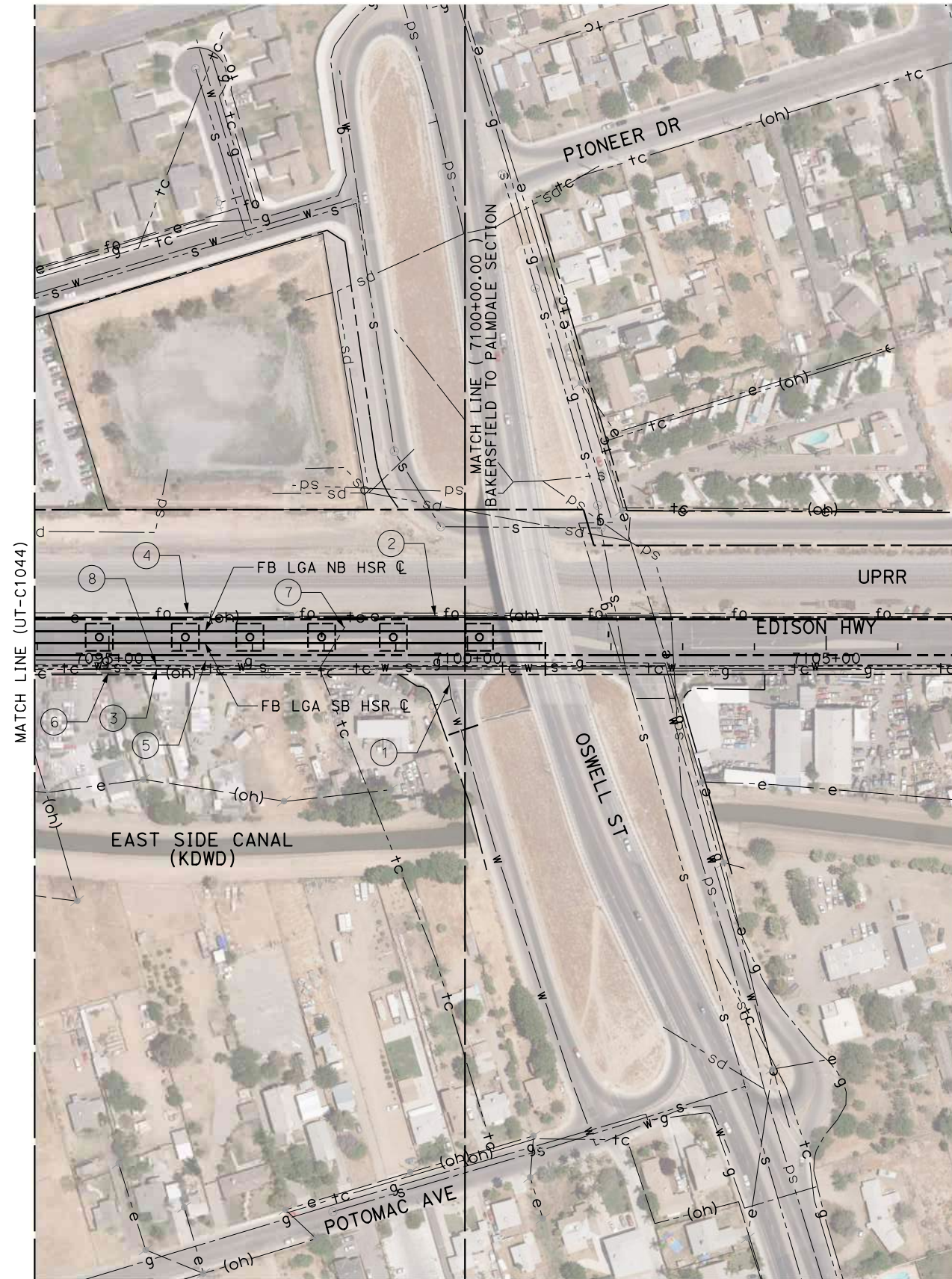
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SUBMISSION



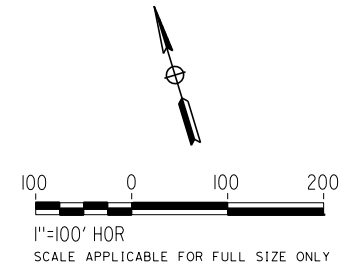
CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 STA 7066+00 TO 7094+00

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1044
 SCALE
AS SHOWN
 SHEET NO.
170

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	WATER	12"	CALWATER	PROTECT IN PLACE
②	OH POWER	21kV	PG&E DIST	RELOCATE
③	SEWER	8"	KSA	REMOVE
④	FIBER OPTIC	UNK	LEVEL3	PROTECT IN PLACE
⑤	NATURAL GAS	3"	PG&E DIST	RELOCATE
⑥	OH TELECOM	UNK	PACBELL	PROTECT IN PLACE
⑦	TELECOM	UNK	PACBELL	RELOCATE
⑧	WATER	12"	CALWATER	RELOCATE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
DRAWN BY
T. SWEITZER
CHECKED BY
D. CONYERS
IN CHARGE
E. WINTERS
DATE
10/28/2016

**RECORD SET
PEPD DESIGN
SUBMISSION**

TYLIN INTERNATIONAL



**CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD**
LOCALLY GENERATED ALTERNATIVE
UTILITIES
COMPOSITE UTILITY PLAN
STA 7094+00 TO 7100+00

CONTRACT NO.
HSR13-44
DRAWING NO.
UT-C1045
SCALE
AS SHOWN
SHEET NO.
171

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MATCH LINE (UT-C1036)

MATCH LINE (UT-C1037)

UTILITY INFORMATION CONT. FROM DWG UT-C1037				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
24	SEWER	6"	CITY OF BAKERSFIELD	REMOVE
25	SEWER	6"	CITY OF BAKERSFIELD	REMOVE
26	SEWER	6"	CITY OF BAKERSFIELD	REMOVE
27	OH POWER	12kV	PG&E DIST	RELOCATE
28	OH POWER	12kV	PG&E DIST	RELOCATE
29	OH POWER	12kV	PG&E DIST	PROTECT IN PLACE
30	OH POWER	12kV	PG&E DIST	REMOVE
31	OH POWER	12kV	PG&E DIST	REMOVE
32	OH POWER	12kV	PG&E DIST	RELOCATE
33	OH POWER	12kV	PG&E DIST	RELOCATE
34	OH POWER	12kV	PG&E DIST	RELOCATE
35	OH TELECOM	UNK	PACBELL	REMOVE
36	OH TELECOM	UNK	PACBELL	REMOVE
37	TELECOM	UNK	AT&T DIST	PROTECT IN PLACE
38	NATURAL GAS	2"	PG&E DIST	PROTECT IN PLACE
39	WATER	12"	CALWATER	PROTECT IN PLACE
40	WATER	6"	CALWATER	PROTECT IN PLACE
41	NATURAL GAS	4"	PG&E DIST	PROTECT IN PLACE
42	STORM DRAIN	36"	CITY OF BAKERSFIELD	RELOCATE
43	WATER	8"	CALWATER	REMOVE
44	NATURAL GAS	2"	PG&E DIST	REMOVE
45	WATER	4"	CALWATER	REMOVE
46	NATURAL GAS	3"	PG&E DIST	REMOVE
47	WATER	8"	CALWATER	RELOCATE
48	NATURAL GAS	4"	PG&E DIST	PROTECT IN PLACE
49	WATER	4"	CALWATER	PROTECT IN PLACE
50	OH POWER	12kV	PG&E DIST	RELOCATE
51	OH POWER	12kV	PG&E DIST	RELOCATE
52	OH POWER	12kV	PG&E DIST	RELOCATE
53	OH POWER	12kV	PG&E DIST	RELOCATE
54	OH TELECOM	UNK	PACBELL	RELOCATE
55	SEWER	6"	CITY OF BAKERSFIELD	PROTECT IN PLACE
56	SEWER	6"	CITY OF BAKERSFIELD	PROTECT IN PLACE
57	OH TELECOM	UNK	PACBELL	RELOCATE
58	OH TELECOM	UNK	PACBELL	RELOCATE
59	WATER	6"	CALWATER	PROTECT IN PLACE



UTILITY INFORMATION CONT. FROM DWG UT-C1037				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
60	WATER	4"	CALWATER	RELOCATE
61	OH POWER	12kV	PG&E DIST	REMOVE
62	FIBER OPTIC	UNK	AT&T TRANS	RELOCATE
63	FIBER OPTIC	UNK	AT&T TRANS	RELOCATE
64	OH POWER	12kV	PG&E DIST	RELOCATE
65	OH POWER	12kV	PG&E DIST	RELOCATE
66	OH POWER	12kV	PG&E DIST	RELOCATE
67	OH TELECOM	UNK	PACBELL	RELOCATE
68	OH POWER	12kV	PG&E DIST	RELOCATE
69	STORM DRAIN	36"	CITY OF BAKERSFIELD	RELOCATE
70	NATURAL GAS	3"	PG&E DIST	PROTECT IN PLACE

UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	OH POWER	12kV	PG&E DIST	PROTECT-IN-PLACE
2	NATURAL GAS	2"	PG&E DIST	PROTECT-IN-PLACE
3	NATURAL GAS	2"	PG&E DIST	PROTECT-IN-PLACE
4	STORM DRAIN	27"	CITY OF BAKERSFIELD	PROTECT-IN-PLACE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
DRAWN BY
T. SWEITZER
CHECKED BY
D. CONYERS
IN CHARGE
E. WINTERS
DATE
10/28/2016

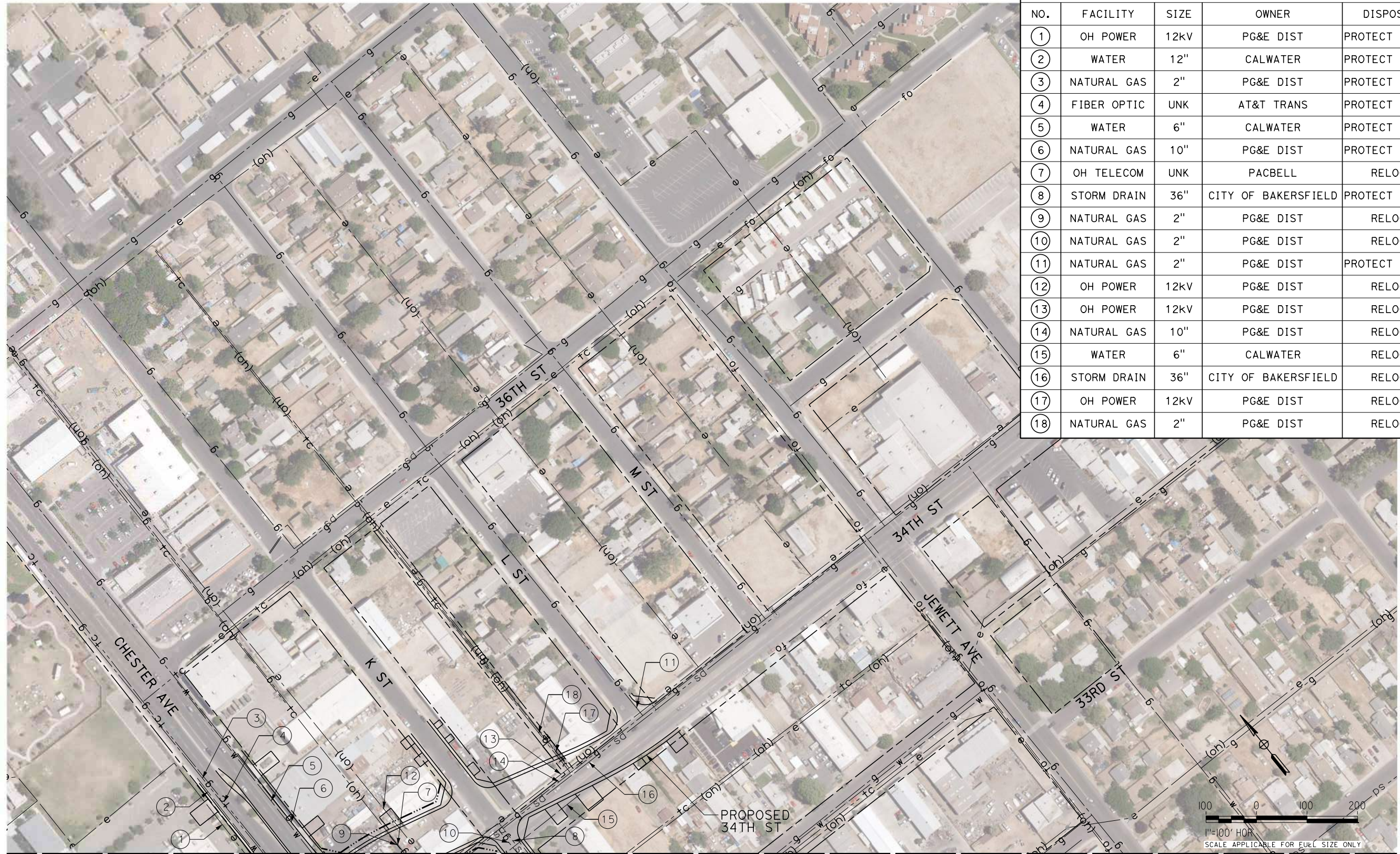
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PEPD DESIGN
SUBMISSION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD**
LOCALLY GENERATED ALTERNATIVE
UTILITIES
COMPOSITE UTILITY PLAN
F STREET

CONTRACT NO.
HSR13-44
DRAWING NO.
UT-C1506
SCALE
AS SHOWN
SHEET NO.
172

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UTILITY INFORMATION				
NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	OH POWER	12KV	PG&E DIST	PROTECT IN PLACE
②	WATER	12"	CALWATER	PROTECT IN PLACE
③	NATURAL GAS	2"	PG&E DIST	PROTECT IN PLACE
④	FIBER OPTIC	UNK	AT&T TRANS	PROTECT IN PLACE
⑤	WATER	6"	CALWATER	PROTECT IN PLACE
⑥	NATURAL GAS	10"	PG&E DIST	PROTECT IN PLACE
⑦	OH TELECOM	UNK	PACBELL	RELOCATE
⑧	STORM DRAIN	36"	CITY OF BAKERSFIELD	PROTECT IN PLACE
⑨	NATURAL GAS	2"	PG&E DIST	RELOCATE
⑩	NATURAL GAS	2"	PG&E DIST	RELOCATE
⑪	NATURAL GAS	2"	PG&E DIST	PROTECT IN PLACE
⑫	OH POWER	12KV	PG&E DIST	RELOCATE
⑬	OH POWER	12KV	PG&E DIST	RELOCATE
⑭	NATURAL GAS	10"	PG&E DIST	RELOCATE
⑮	WATER	6"	CALWATER	RELOCATE
⑯	STORM DRAIN	36"	CITY OF BAKERSFIELD	RELOCATE
⑰	OH POWER	12KV	PG&E DIST	RELOCATE
⑱	NATURAL GAS	2"	PG&E DIST	RELOCATE

MATCH LINE (UT-C1037)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
D. SALGADO
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

**RECORD SET
 PECD DESIGN
 SUBMISSION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
 FRESNO TO BAKERSFIELD**
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 34TH STREET

CONTRACT NO.
HSR13-44
 DRAWING NO.
UT-C1507
 SCALE
AS SHOWN
 SHEET NO.
173

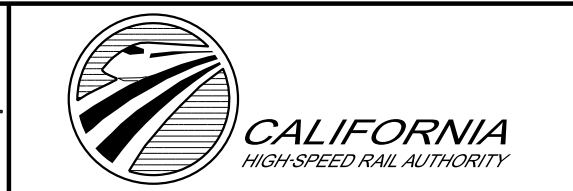
ZONE	COUNTY	HST ALIGN	EASTING	NORTHING	POINT ID	STATION	PROPOSED FACILITY SIZE (FT)	PROPOSED/EXISTING FEATURE CROSSED	CROSSING ANGLE	ROW WIDTH WEST OF CL (FT)	ADDITIONAL WIDTH EACH SIDE (FT)	TOTAL LENGTH OF CHANNEL SPANNED BY CULVERT (FT)	EXISTING INVERT ELEVATION	PROPOSED TO OF RAIL ELEVATION	HEIGHT TO TOP OF RAIL (FT)
11S	KER	FB LGA	6175957.63	2378746.29		5882+92	5x5	HYDRAULIC CROSS CULVERT	90	60	0	128	345.00	355.57	10.57
11S	KER	FB LGA	6176255.70	2378455.89		5886+08	5x5	HYDRAULIC CROSS CULVERT	90	56	0	142	343.59	355.57	11.98
11S	KER	FB LGA	6177285.61	2377431.38		5900+61	5x5	HYDRAULIC CROSS CULVERT	90	55	0	185	344.84	355.57	10.73
11S	KER	FB LGA	6177919.07	2376771.85		5909+82	5x5	HYDRAULIC CROSS CULVERT	90	57	0	183	343.76	355.57	11.81
11S	KER	FB LGA	6179133.17	2375581.43		5926+75	5x5	HYDRAULIC CROSS CULVERT	90	68	0	256	345.05	359.86	14.81
11S	KER	FB LGA	6180108.03	2374542.00		5941+00	5x5	HYDRAULIC CROSS CULVERT	90	81	0	209	344.78	371.91	27.13
11S	KER	FB LGA	6196646.90	2361623.15		6153+17	5x5	HYDRAULIC CROSS CULVERT	90	67	0	143	349.39	362.83	13.44
11S	KER	FB LGA	6198075.49	2361150.06		6168+22	5x5	HYDRAULIC CROSS CULVERT	90	56	0	126	350.05	362.05	12.00
11S	KER	FB LGA	6199864.57	2360671.15		6185+75	5x5	HYDRAULIC CROSS CULVERT	90	59	0	134	350.69	363.78	13.08
11S	KER	FB LGA	6202447.90	2360194.91		6213+05	5x5	HYDRAULIC CROSS CULVERT	90	76	0	142	353.19	375.52	22.33
11S	KER	FB LGA	6205007.76	2359963.78		6238+76	5x5	HYDRAULIC CROSS CULVERT	90	78	0	147	363.70	377.29	13.58
11S	KER	FB LGA	6206326.01	2359931.02		6251+95	5x5	HYDRAULIC CROSS CULVERT	90	84	0	163	366.58	393.12	26.55
11S	KER	FB LGA	6207010.86	2359919.27		6258+80	5x5	HYDRAULIC CROSS CULVERT	90	93	0	178	365.86	395.94	30.08
11S	KER	FB LGA	6207631.55	2359901.64		6265+00		BRIDGE OVER ZACHARY AVE	90		0	213	366.13	400.47	34.33
11S	KER	FB LGA	6208977.51	2359888.65		6278+46	5x5	HYDRAULIC CROSS CULVERT	90	102	0	203	368.93	404.81	35.87
11S	KER	FB LGA	6211621.60	2359851.59		6304+91	5x5	HYDRAULIC CROSS CULVERT	90	103	0	203	374.86	411.04	36.18
11S	KER	FB LGA	6212288.54	2359840.99		6311+58	5x5	HYDRAULIC CROSS CULVERT	90	99	0	198	377.15	411.58	34.42
11S	KER	FB LGA	6213029.75	2359827.89		6318+99	5x5	HYDRAULIC CROSS CULVERT	90	102	0	201	378.08	412.17	34.09
11S	KER	FB LGA	6214232.80	2359805.02		6331+00		CANAL	65		0	44	381.04	413.10	32.07
11S	KER	FB LGA	6218205.35	2359541.42		6371+00		BRIDGE OVER ZERKER RD	90		0	50	393.83	416.33	32.50
11S	KER	FB LGA	6220178.95	2359197.70		6390+91	5x5	HYDRAULIC CROSS CULVERT	80	104	0	205	383.21	417.93	34.71
11S	KER	FB LGA	6221481.94	2358890.19		6404+29	5x5	HYDRAULIC CROSS CULVERT	78	102	0	206	384.30	419.02	34.71
11S	KER	FB LGA	6223463.41	2358283.59		6425+00		CANAL	90		0	50	382.87	424.39	41.53
11S	KER	FB LGA	6224101.74	2358066.16		6431+77	5x5	HYDRAULIC CROSS CULVERT	74	100	0	206	387.23	427.35	40.13
11S	KER	FB LGA	6225531.33	2357489.60		6447+57	5x5	HYDRAULIC CROSS CULVERT	90	103	0	210	394.01	435.16	41.15
11S	KER	FB LGA	6226071.77	2357251.84		6453+10	5x5	HYDRAULIC CROSS CULVERT	65	103	0	235	396.90	438.02	41.12
11S	KER	FB LGA	6226735.52	2356932.65		6460+45	5x5	HYDRAULIC CROSS CULVERT	65	100	0	233	402.16	441.56	39.40
11S	KER	FB LGA	6227393.14	2356599.65		6467+82	5x5	HYDRAULIC CROSS CULVERT	65	107	0	285	406.11	444.86	38.75
11S	KER	FB LGA	6228717.23	2355851.05		6483+00		BRIDGE OVER VERDUGO LN	90		0	50	414.86	452.36	37.51
11S	KER	FB LGA	6230703.04	2354561.25		6520+80	5x5	HYDRAULIC CROSS CULVERT	63	136	0	285	426.99	470.38	43.39
11S	KER	FB LGA	6231367.06	2354060.17		6515+00		CANAL	90		0	50	429.86	486.00	56.14
11S	KER	FB LGA	6253821.22	2332614.91		6826+00		CANAL	90	63	0	118	397.58	462.44	64.86
11S	KER	FB LGA	6254592.50	2331978.41		6836+00		BRIDGE OVER KERN RIVER	90		0	118	394.86	459.86	65.00

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. YIM
 DRAWN BY
T. SWEITZER
 CHECKED BY
D. CONYERS
 IN CHARGE
E. WINTERS
 DATE
10/28/2016

RECORD SET
PEPD DESIGN
SUBMISSION



CALIFORNIA HIGH-SPEED RAIL PROJECT
FRESNO TO BAKERSFIELD
 LOCALLY GENERATED ALTERNATIVE
 UTILITIES
 COMPOSITE UTILITY PLAN
 HH&D FACILITY SCHEDULE

CONTRACT NO.
 HSR13-44
 DRAWING NO.
 UT-Y4505
 SCALE
 NO SCALE
 SHEET NO.
 174