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   2. GIS
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   4. Limited field reconnaissance

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2. Service laterals for potable water, sanitary sewer and natural gas are not shown.

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## High Voltage Transmission Line Relocation Notes:

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3. Electrical transmission towers/poles subject to additional clearance need by utility owner.

4. Proposed HV transmission towers represented conceptually.

5. Negative feeder wire distance above top rail: 30' for 2 track configuration, 35' for 3 or more track configuration.

## Drainage System and Relocation Notes:

Existing storm drainage pipes, culverts, or channels are shown for information only. Refer to grading and drainage plans for detailed drainage information.

---

**Utility Owners**

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---

**DRAINAGE SYSTEM AND RELocation Notes:**

Existing storm drainage pipes, culverts, or channels are shown for information only. Refer to grading and drainage plans for detailed drainage information.
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.
8. PROPOSED 4" FIRE WATER LINE PARALLELS ALIGNMENT FROM STATION 18307+67 TO 19104+40.
CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE
REFINED CCNM DESIGN OPTION
COMPOSITE UTILITY PLAN
STA 18320+00 TO 18345+00
PLAN

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DATE: 01/24/2020

DESIGNED BY: D. ARUTA
DRAWN BY: J. LOPEZ
CHECKED BY: J. TURRELL
IN CHARGE: G. CAMPBELL

RECORD: PEPS
SUBMITTAL: NOT FOR CONSTRUCTION

UT-C4702
1/22/2020
11:15:53 PM
javier.lopez@tylin.com

Projects/701206.00_CHSRBP/00 CADD/CCNM Option D/Sheets/UT/UT-C4702
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**Match Line STA 18620+00**

- CHSR SB Alignment "RFND CCNM"
- CHSR NB Alignment "RFND CCNM"

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**Match Line STA 18645+00**

- CHSR Tunnel

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**Projects\701206.00_CHSRBP\00 CADD\CCNM Option D\Sheets\UT\BP-UT-C4714**

11:16:30 PM 1/22/2020 javier.lopez@tylin.com

---

**California High-Speed Rail Project**

**Bakersfield to Palmdale**

**Refined CCNM Design Option**

**Composite Utility Plan**

STA 18620+00 TO 18645+00

**Plan**

---

**Date**

01/24/2020

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**Record**

PEPD

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**Submit**

NOT FOR CONSTRUCTION
UTILITY INFORMATION

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CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE

REFINED CCNM DESIGN OPTION
COMPOSITE UTILITY PLAN
STA 18645+00 TO 18670+00 PLAN

DESIGNED BY: D. ARUTA
DRAWN BY: J. LOPEZ
CHECKED BY: J. TURRELL
IN CHARGE: G. CAMPBELL
DATE: 01/24/2020
RECORD: PEPD
SUBMITTAL: NOT FOR CONSTRUCTION

Projects/701206.00_CHSRBP/00 CADD/CCNM Option D/Sheets/UT/BP-UT-C4715 11:18:51 PM 1/22/2020 javier.lopez@tylin.com
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MATCH LINE STA 18745+00 TO 18770+00

MATCH LINE STA 18745+00
SEE SHEET UT-C4718
MATCH LINE STA 18770+00
SEE SHEET UT-C4720

UTILITY INFORMATION

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DESIGNED BY
D. ARUTA

DRAWN BY
J. LOPEZ

CHECKED BY
J. TURRELL

IN CHARGE
G. CAMPBELL

DATE
01/24/2020

RECORD
PEPD SUBMITTAL

NOT FOR CONSTRUCTION

CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE

REFINED CCNM DESIGN OPTION
COMPOSITE UTILITY PLAN
STA 18745+00 TO 18770+00
PLAN

01/24/2020
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TEMACHAPI CREEK FAULT ZONE

E CHSR NB ALIGNMENT "RFND CCNM"

PROP CHSR R/W

PPEF

PTEF

CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE

REFINED CCNM DESIGN OPTION
COMPOSITE UTILITY PLAN
STA 18770+00 TO 18795+00
PLAN

CONTRACT NO. HSR13-44
DRAWING NO. UT-C4720
SCALE AS SHOWN
SHEET NO.

0
100
200
1"=100' HOR

SCALE APPLICABLE FOR FULL SIZE ONLY

1
8
7
7
0
+0
187
9
5
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+0
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CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE
REFINED CCNM DESIGN OPTION
COMPOSITE UTILITY PLAN
STA 18995+00 TO 19020+00
PLAN

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TEHACHAPI CREEK FAULT ZONE

CHSR TUNNEL

CHSR NB ALIGNMENT "RFND CCNM"

CHSR SB ALIGNMENT "RFND CCNM"

TEHACHAPI CREEK FAULT ZONE

UTILITY INFORMATION

### # FACILITY SIZE OWNER DISPOSITION
1. FIRE WATER 4" CHSR NEW

**Projects**

- UT-00 CADD/CCNM Option D/Sheets/UT/BP-UT-C4729
- 11:19:55 PM 1/22/2020
- javier.lopez@tylin.com

**CALIFORNIA HIGH-SPEED RAIL PROJECT**
**BAKERSFIELD TO PALMDALE**
**REFINED CCNM DESIGN OPTION**
**COMPOSITE UTILITY PLAN**
**STA 18995+00 TO 19020+00**
**PLAN**
California High-Speed Rail Project
Bakersfield to Palmdale

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PTEF
PREF
PROP CHSR R/W
PROP ACCESS ROAD

Tehachapi Creek Fault Zone

Match Line STA 19045+00
See Sheet UT-C4730

Match Line STA 19070+00
See Sheet UT-C4732

Drawn By: J. Lopez
Checked By: J. Turrell
In Charge: G. Campbell
Date: 01/24/2020

Record: PEPD
Submital: NOT FOR CONSTRUCTION

California High-Speed Rail Authority

Projects\701206.00_CHSRBP\00 CADD\CCNM Option D\Sheets\UT\BP-UT-C4731
11:19:59 PM 1/22/2020 javier.lopez@tylin.com

BAKERSFIELD TO PALMDALE
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**DESIGNED BY**  D. ARUTA  
**DRAWN BY**  J. LOPEZ  
**CHECKED BY**  J. TURRELL  
**IN CHARGE**  G. CAMPBELL  
**DATE**  01/24/2020  
**RECORD**  PEPD  
**SUBMITTAL**  NOT FOR CONSTRUCTION