

**Appendix 3B**  
**Route Description**

## Appendix 3B

### Route Description

This route description is reported in survey or station format to enhance precision. The format is given in feet from Galena Park (e.g., 21+20 = 2120 feet [ft]). To translate stationing in feet to milepost (MP), simply divide by 5,280 (e.g., 21+20 = MP 0.31).

#### **GALENA PARK STATION TO SATSUMA STATION: MP 0.0 TO MP 34.1**

Harris County (MP 0.0 to MP 34.1)

The pipeline route begins at Galena Park Station heading north, crossing Clinton Drive, then crossing under 19th Street and the Port of Houston Railroad right-of-way (ROW) at #93+00. At this point, the route is adjacent to the Cowboy Pipeline and transmission lines within the Houston Lighting and Power (HLP) ROW up to an unnamed ditch at 142+19. The pipeline continues north in the HLP ROW, crossing under Munn Street to the crossing of Market Street and Missouri Railroad at 174+00 by directional drill. The route continues under Interstate 10 (I-10) at 192+83 in the HLP ROW, then crosses an unnamed bayou at 208+20 and again at 211+44.

The pipeline route continues north, crossing under Wallisville Road at 284+75. At 310+88, the route turns to the east under Citgo, Exxon, and Arco pipelines following the HLP ROW to 340+04 and then north again along HLP ROW.

The route crosses Greens Bayou at 357+40 by directional drill, continues north to 375+92, turning east, then back north over the 12-inch diameter pipeline and HLP transmission line at 395+34 and railroad (RR) spur at 408+91. The pipeline continues north, crossing under US Highway 90 (US 90) (443+41) and running parallel to Heather Lane. The route continues north along the HLP ROW to the centerline of Green River Road at 481+27, then turns northwest crossing Redbird Road and Ralston Road, through a subdivision, before entering a golf course at the Greens Bayou crossing at 524+50.

At this juncture, the route meets up with the existing refurbished 20-inch diameter pipeline at MP 9.1. This area has 0.312- to 0.375-inch wall thicknesses, Grade B pipe, and a coating of hot coal tar, asbestos felt, and glass fiber. The pipeline passes through several more small subdivisions, crossing under Farm-to-Market Road (FM) 527 at 631+94. The route continues through small subdivisions, crossing under Langley Road (752+95) and Homestead Road (761+78). The pipeline continues west through subdivisions under Hirsch Road (807+75) and under United Road and Ell Road, a Harris County drainage ditch, and Keith Road, Winetka Roads, and the US 59 crossings between 824+00 and 849+89.

The pipeline continues west through another subdivision crossing under Cedar Hill Street, Holbrook Lane, Rosemary Street, Cohutta Lane, Mohawk Street, Bentley Road, Wardmount Street, and Mooney Road before crossing Halls Bayou at 908+33. The pipeline

continues westerly under Lewis Lane and Westfield Road through a semi-rural subdivision before re-entering an Exxon Pipeline ROW at 942+79.

The pipeline crosses under Hardy Road, adjacent to a trailer park, before crossing under Airline Drive at 1066+98. The route continues between subdivisions to US 75 crossing before running parallel to Bertrand Street, eventually crossing Steubner-Airline Road at 1154+58, then under West Gulf Bank Road, Ella Boulevard, Burford Lane, Braunston Lane, and Cora Street within a subdivision.

The pipeline continues cross-country under Cordoba Drive and West Montgomery Road and eventually running parallel to West Mount Houston Road at 1297+70. The pipeline continues parallel to West Mount Houston Road in the south shoulder, under Antoine Drive adjacent to several subdivisions. The pipeline continues west to Rosslyn Drive at 1397+36, crosses under the Burlington-Rhode Island Railroad and Harris County Drainage Canal. The route continues west through open-wooded lands to the crossing of Fairbanks-North Houston Road at 1490+93 and through wooded areas under Reed Road and Winfern Road before crossing under the Harris County Flood Control District Channel at 1564+59.

The pipeline continues under Beltway 8 and runs adjacent to a new subdivision. The route crosses under New Road, Willowbridge Park Boulevard, and Iron Lane to the crossing of West Fork of Little White Oak Bayou at 1637+35.

The pipeline continues west in a ROW with other pipelines, under Rio Grande Road, two small canals, and Jones Road. The pipeline continues through relatively open land to Savile Lane, Cannack Chase, and the crossing of US 290 at 1771+08 and into the Satsuma Station.

#### **SATSUMA STATION TO CRANE STATION: MP 34.1 TO MP 458**

Harris County (MP 34.1 to MP 50.2)

Starting at Satsuma Station, the 18-inch diameter pipeline heads west crossing State Highway (SH) 6, passing through Fairview Colony Farms subdivision, then under Huffmeister Road and Park Drive before passing under a Harris County Flood Control District Ditch and Barker Cypress County Road. The route crosses under Cypress Creek at 2484+84 and leaves Harris County at 2652+35.

Waller County (MP 50.2 to MP 64.0)

The pipeline crosses from Harris to Waller County, then under Moon Creek. At 2896+32, the pipeline crosses SH FM 362 just west of Cypress Creek, and continues to FM 359 and FM 1887 crossings at 3160+76 and 3304+37, respectively. At the Brazos River (3376+79), the pipeline crosses into Austin County. This whole section is rural/grazing land.

Austin County (MP 64.0 to MP 94.5)

Just west of the Brazos River, the pipeline enters the abandoned Exxon Raccoon Bend Station.

The 18-inch diameter pipeline continues west under two small creeks before crossing under SH 159 at 3649+70. The route passes under an unnamed creek and Langberg Road, then another unnamed creek before crossing under FM 1456 at 3800+01.

The pipeline continues westward passing under another unnamed creek, Center Hill Road, and three more creeks before the SH 36 crossing at 4023+42. The route crosses four more unnamed creeks before crossing Field Road at 4176+00.

The pipeline passes under East Mill Creek (4286+78) and then under SH 2502 just north of Bleiberville and just south of Welcome at SH 109. This area is primarily rural. The route continues west to FM1457 and just north of Shelby at the Austin-Fayette county line at 4987+02.

#### Fayette County (MP 94.5 to MP 119.7)

In Fayette County, the pipeline passes under Klaus Road and Nassau Road before going between a series of gravel pits at 5140+00. The pipeline passes under Jacks Creek and Cummins Creek before crossing under SH 237 (5343+79) between Round Top and Warrenton. The pipeline crosses under FM 1291 and FM 2145 before running parallel to FM 3011 between the south side of the road and Rocky Creek. The routing continues between Rocky Creek to the south and Owl Creek to the north before crossing Rabbs Creek and under US 77 and into the Warda Station (5958+43). The route continues west toward SH 448; passing under the railroad and under Little Pin Oak Creek toward the Fayette-Bastrop county lines at 6322+29.

#### Bastrop County (MP 119.7 to MP 153.5)

The pipeline continues northwest between Indian Lake and SH 153 and through a portion of Buescher State Park just north of Buescher Lake, between 6733+38 and 6798+84. The pipeline turns west-southwest at SH 71/95 near the Hardeman Bend of the Colorado River, and crosses the Colorado between Red Bluffs and the juncture of the river with Cedar Creek at 7100+33. The route then turns west-northwest and crosses under SH 1319 (7386+76) and into the abandoned Bastrop Station at approximately 7489+41 east of SH 20. The pipeline continues west to the Bastrop-Travis county line at 8103+79.

#### Travis County (MP 153.5 to MP 181.3)

The route continues west-northwest toward FM 812 at 8462+27 and under SH 29 at 8502+20. It crosses under US 183 at Pilot Knob, under Cottonmouth Creek, under Scenic Loop Road, then spans Marble Creek just south of Onion Creek (8658+67). The pipeline passes through Onion Creek District Park and enters into Austin proper. At this point, the character of the area surrounding the pipeline changes from a rural to urban subdivision setting.

The route continues, passing under I-35 and South Congress Avenue just north of Boggy Creek. The pipeline runs parallel to Dittmar Road and passes through a series of developments before crossing Manchaca Road. The pipeline crosses under Boggy Creek at Manchaca Road and continues west through a trailer park and west, parallel to Slaughter Creek, before crossing under the creek just east of SH 1826. The route crosses under SH 1 at approximately 9070+00. The pipeline route continues westward passing under US 290 at 9347+38 and through rolling

wooded hills west and south of Austin parallel to Fitzhugh Road to a crossing of Barton Creek at the county line at 9573+88.

#### Hays County (MP 181.3 to MP 192.6)

The pipeline departs Travis County and into Hays County at a crossing of Barton Creek, then into the Cedar Valley Pump Station at 9592+72. The route traverses rural Hays County west-northwest across hill country and a more rural-ranching land use toward the Hays-Blanco county line at 10167+56.

#### Blanco County (MP 192.6 to 217.5)

Just past the county line, the route passes just south of the southern portions of Pedernales Falls State Park towards a crossing of the Pedernales River (10494+04), approximately 2 miles southwest of the park boundary. The route continues west-northwest, then west under Cottonwood Creek and parallel to the Pedernales River. The pipeline crosses under Salter Spring Creek at US 281-290 (10811+06) approximately 3 miles north of Johnson City, then continuing west under White Oak Creek and Dry Creek and crossing into Gillespie County at 11484+96 near the crossing of SH 1323.

#### Gillespie County (MP 217.5 to MP 242.7)

The pipeline passes 1.5 miles north of Willow City and under SH 16 before entering the abandoned Eckert Station at 12027+56. The route crosses under Crabapple Creek and then under SH 965 at 12318+42 and toward SH 2323 at Buckhouse Creek (12812+94) near the juncture of Gillespie-Llano and Mason counties.

#### Mason County (MP 242.7 to MP 274.3)

In Mason County, the pipeline passes under US 87 (12920+09), crosses under Spring Creek twice before crossing FM 783 at 13313+49. The route crosses the James River just north of the juncture of the river with Salt Creek (13933+84) and continues west-northwest toward James River Road and towards the crossing of SH 1871 (14344+94). Just west of the SH 1871 crossing, the route passes an unnamed creek and into Kimble County (14484+56).

#### Kimble County (MP 274.3 to MP 309.1)

In Kimble County, the pipeline crossing of the Llano River (14601+41) is just south of the Big Saline Creek juncture. The route crosses under US 377 approximately 2 miles south of London and continues west-northwest and under US 83 at 15437+88, approximately 2 miles south of the Kimble-Menard county lines (16319+59). The route continues west and enters Kimble County Pump Station property at 15582+31 and then passes under three forks of Bear Creek and SH 2291 before entering Menard County at 16319+59.

#### Menard County (MP 309.1 to MP 312.8)

The pipeline bends north toward the Menard County line and crosses the extreme southwest corner of the county before passing into Schleicher County at 16517+27 near Colston Draw and the SH 1674 road crossing.

#### Schleicher County (MP 312.8 to MP 366.4)

The route crosses under FM 1952 and passes through the abandoned Exxon McKavett Pump Station at 16999+11. The pipeline crosses under SH 864 at Terrett Draw and continues west toward Eldorado. The route crosses SH 2596 and US 277 (18174+61) approximately 1.5 miles south of Eldorado and crosses under US 190. The pipeline continues west-northwest under SH 1828 for several miles before crossing the Schleicher-Crockett county line at 19343+41 just east of the Devils River Draw crossing.

#### Crockett County (MP 366.4 to MP 392.3)

The route passes through the Proposed Big Lake Pump Station at 19718+98 and crosses US 163 approximately 7 miles south of Barnhart. The pipeline crosses University of Texas lands and turns northwest at Howard Draw crossing the Crockett-Reagan county line (20712+21).

#### Reagan County (MP 392.3 to MP 420.3)

The route crosses US 137 approximately 3 miles south of the town of Big Lake and into the abandoned Kemper Pump Station Site at 21353+52. The pipeline then turns northwest from the abandoned station parallel to the Atchison-Topeka-Santa Fe (AT&SF) Railroad, crossing US 67 near Best, and across Garrison Draw. The route continues northwest across SH 1555 (21996+42) and crosses from Reagan to Upton county (22191+67) near the AT&SF Railroad ROW and into Sevenmile Corner at the SH 349/1555 juncture.

#### Upton County (MP 420.3 to MP 455)

The pipeline crosses SH 349 at 22737+33 and then crosses under SH 329 twice before passing north of Crane, at US 385.

### **CRANE STATION TO EL PASO TERMINAL: MP 458 TO MP 694**

#### Crane County (MP 455 to MP 481.5)

New construction on the pipeline began at the Exxon Crane Station (24061+61). Approximately 800 ft of 18-inch diameter pipeline was laid to Longhorn's Crane Station. This portion of the pipeline crosses under US 385 (24109+13) and continues beyond Crane Station west parallel to an existing 10-inch diameter Chevron pipeline. The pipeline makes two crossings of Landreth Draw before the passing under FM 1601 (24450+53) parallel to an existing Texas-New Mexico 12-inch diameter pipeline. The route passes through a series of oil fields and continues west to the crossing into Ward County (25425+22).

#### Ward County (MP 481.5 to MP 525.4)

The pipeline continues west through undeveloped and energy development lands. The route passes under SH 18 (25759+32) FM 1776 and SH 1219 (25992+81), approximately 17 miles south of Monahans. It continues westward, passing under FM 1927 and toward I-20. The pipeline crosses the upper reaches of Quito Draw and Rock Quarry Draw before reaching the I-20 crossing (27158+12). At the I-20 crossing, the pipeline was directionally drilled beneath the highway ROW, then continues west. The route parallels an irrigation canal, crosses under the canal and then continues to FM 516, County Road 148, and a lateral to the canal. The pipeline is bored under the road and canal (27531+69) and continues west under FM 873. The route continues through agricultural (primarily cotton) lands and crosses under canal laterals two and one, eventually crossing under the Pecos River approximately 3 miles north of Pecos, where it enters Reeves County. The pipeline was directionally drilled under the Pecos River (27742+61).

#### Reeves County (MP 525.4 to MP 559.2)

The route continues through agricultural lands, passes under FM 1216 (27777+93) and US 285 and County Road 424 (27978+50). The pipeline continues westward, crossing agricultural fields, and crosses under FM 2119, County Road 232, and County Road 222 before reaching Coalson Draw, a tributary of Cottonwood Creek, and then Cottonwood Creek (29387+78). The pipeline was installed by open cut at Cottonwood Creek, after which it continues westward to the Culberson county line (29527+49).

#### Culberson County (MP 559.2 to MP 610.8)

The route continues across undeveloped lands westward through rolling terrain. The pipeline crosses Cottonwood Creek again (29842+56) near its junction with Paint Horse Draw and Big Canyon Draw. Several miles farther west, the route parallels an existing El Paso Natural Gas pipeline. As the pipeline passes through a small mountainous area (generally between 31246+09 and 31609+17), several other pipelines converge. These pipelines remain parallel to the pipeline under US 54 and into Hudspeth County (32252+75).

#### Hudspeth County (MP 610.8 to MP 677.7)

The pipeline continues parallel to an El Paso Natural Gas pipeline and an Arkansas Oklahoma Gas (AOG) pipeline and eventually departs from those pipelines. The pipeline then proceeds parallel to a Shell pipeline and eventually a Chevron pipeline before reaching the El Paso County line (35785+18). The route passes south of US 62/180 and series of salt basins (approximately 32445+84). The route crosses under Antelope Gulch and Antelope Draw at the crossing of FM 1111 (33735+57). The route continues west-northwest, roughly parallel to US 62/180.

#### El Paso County (MP 677.7 to MP 693.9)

The pipeline crosses four platted subdivisions that have not yet been built or otherwise developed. The route crosses into El Paso County (35785+18) roughly parallel with four other

pipelines. The pipeline continues west-northwest through Mountain Shadow Estates near the four other pipelines. The route continues through Horizon City Estates before turning westward alongside a water pipeline and an AOG pipeline. The pipeline crosses under Fourmile Draw, bearing northwest toward El Paso. The route continues west and then north through Hill Crest Estates (beginning at 36579+69) before crossing US 62/180 and entering the El Paso Terminal (36640+44).

## **EL PASO LATERAL PROPOSED PIPELINES**

### **Proposed Fort Bliss Route**

The connecting pipelines to Chevron and Kinder Morgan begin at El Paso Terminal, exiting Longhorn property near the northwest corner of that property onto Fort Bliss (0+57). The laterals would run generally west approximately 5.2 miles, enter the ROW of SH 375 (275+64), cross under the highway, and then run parallel to the west side of the SH 375 ROW (278+01). The connecting pipelines continue generally in a northwest direction for 3.1 miles before reaching the connection point with Chevron and Kinder Morgan pipelines (approximately 440+61). The connection point will be within a 250-foot by 250-foot (approximate site configuration) meter station site enclosure.

### **Montana Avenue Alternative**

The alternate route for the lateral pipelines to Chevron and Kinder Morgan begins at the El Paso Terminal and exits the Longhorn property near the southwest corner (0+15). The pipelines cross US 62/180, then turn generally west parallel to and within the highway ROW (2+25) for approximately 1.9 miles. The laterals then turn north (100+10), cross under the highway, turn west parallel to and within the highway ROW (101+77) for approximately 1.2 miles, and cross under SH 375 (approximately 165+65). The route then continues west parallel to US 62/180 for approximately 4.3 miles. The laterals then turn north (394+65) off the highway ROW for approximately 300 ft, then turn west (approximately 398+99) approximately 1.2 miles to the connection point with Chevron and Kinder Morgan pipelines (approximately 463+79) on the El Paso International Airport property.

Odessa Lateral: Begins at Crane Station MP 358 and goes from Odessa Lateral MP 0 to MP 27.7.

### **Crane County**

The Crane to Odessa lateral begins inside Crane Station (0+00) and exits (17+52) bearing westward. The lateral turns generally north (38+03), then begins to parallel existing pipeline(s) (55+37) west of US 385, continuing northward. The lateral crosses two aqueducts (approximately 89+94 & 181+30) and Landreth Draw (approximately 216+00) before crossing under SH 1233 (424+52). The lateral continues to parallel existing pipelines and passes west of the Concho Bluff Oil Field before crossing into Ector County (858+84).



## Ector County

In Ector County, the pipeline continues northward west of US 385, then crosses under SH 1787 (Apple Street 958+10) before crossing to the east side of US 385 (approximately 1052+17). The route crosses under another aqueduct (1175+70) and crosses under SH 338 Loop (1412+10) before terminating near the south bank of Monahans Draw. The pipeline terminates approximately 2,500 ft from a planned meter station (1462+46). After construction of the additional 2,500 ft, the Longhorn meter station will be tied into an existing Equilon Terminal.