HARRIS COUNTY MAY HAVE EXISTING UNDERGROUND / OVERHEAD UTILITIES WITHIN THE PROPOSED PROJECT LIMITS. PLEASE CONTACT THE CALL CENTER AT 713-881-3210, OR SUBMIT A WORK ORDER REQUESTS THROUGH https://www.eng.hctx.net/SignalOut to obtain field locates.

48 HOUR NOTICE:
CONTRACTOR SHALL NOTIFY HARRIS COUNTY PRIOR TO COMMENCING CONSTRUCTION AND/OR BACKFILLING ANY UTILITIES. CONTRACTOR(S) TO CONTACT PUBLIC REVIEW DEPARTMENT @ (713-274-3937) OR Public.review@hcpid.org

CITY OF HOUSTON
HOUSTON PUBLIC WORKS
CAPITAL PROJECTS
CRMP PACKAGE 6 - AREA 1 - BASIN IB043

WBS NO. R-001000-0031-3

***Construction in Harris County Flood Control District Right-of-Way requires:**

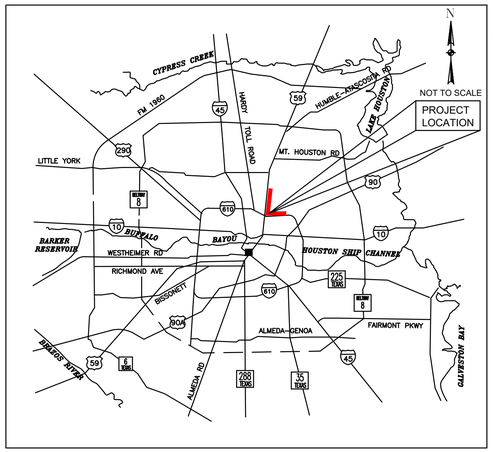
Site plans must be approved prior to obtaining the required HCFCD Right-of-Way Notification. Be advised that the HCFCD Right-of-Way Notification is separate from the site development permit package

1.) HCFCD Right-of-Way Notification (permit)
2.) HCFCD 48-hr Pre-Construction Notice

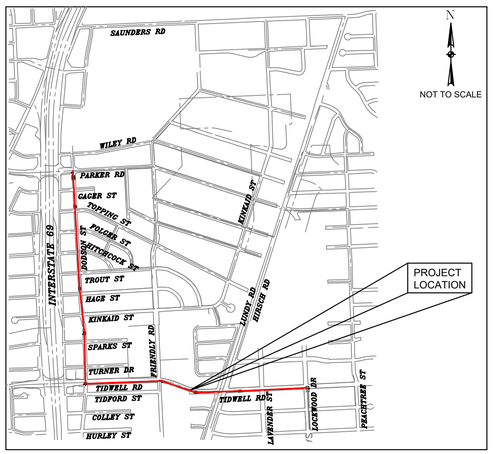
Both are required prior to entering or working within Harris County Flood Control District right-of-way. The HCFCD Right-of-Way Notification and 48-hour notice must be provided to HCFCD at dcid@hcfcd.hctx.net.

To apply for the HCFCD Right-of-Way Notification please go to http://apps.harriscountytx.gov/EPermits and apply for the HCFCD ROW under ROW Notification.

Failure to provide both items could result in project delays.



LOCATION MAP



VICINITY MAP
KEY MAP NO 414X, 454B & 454C
GIMS MAP NO 5461b, 5461d, 5561c

TDLR EABPR _____

MAYOR
JOHN WHITMIRE

CONTROLLER
CHRIS HOLLINS

DISTRICT COUNCIL MEMBERS

AMY PECK, DISTRICT A
TARSHA JACKSON, DISTRICT B
JOE PANZARELLO, DISTRICT C
CAROLYN EVANS-SHABAZZ, DISTRICT D
FRED FLICKINGER, DISTRICT E
TIFFANY D. THOMAS, DISTRICT F
MARY NAN HUFFMAN, DISTRICT G
MARIO CASTILLO, DISTRICT H
JOAQUIN MARTINEZ, DISTRICT I
EDWARD POLLARD, DISTRICT J
MARTHA CASTEX-TATUM, DISTRICT K

COUNCIL MEMBERS AT-LARGE

JULIAN RAMIREZ, POSITION 1
WILLIE DAVIS, POSITION 2
TWILA CARTER, POSITION 3
ALEJANDRA SALINAS, POSITION 4
SALLIE ALCORN, POSITION 5

G-001

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY, STE 400
HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

SURVEYED BY: RODS, INC
FB NO. _____

PARKS-FORESTRY DEPT.

METRO

HOUSTON WATER

TRANSPORTATION & DRAINAGE OPERATIONS

CAPITAL PROJECTS

SURVEY

CITY ENGINEER DATE

DIRECTOR OF HOUSTON PUBLIC WORKS DATE

FOR CITY OF HOUSTON USE ONLY

SHEET NO 1 OF 192 SHEETS

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\@M
PLOTTED: 4/21/2026 11:15 AM

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\002-SHEET-INDEX.dwg

SHEET INDEX

SHEET NO.	DRAWING NO.	SHEET TITLE
GENERAL		
1	G-001	COVER SHEET
2	G-002	SHEET INDEX
3	G-003	HCED EXPRESS REVIEW SHEET
4	G-004	HCFCD EXPRESS REVIEW SHEET
5	G-005	ABBREVIATIONS
6	G-006	SYMBOLS
7	G-007	GENERAL NOTES (SHEET 1 OF 3)
8	G-008	GENERAL NOTES (SHEET 2 OF 3)
9	G-009	GENERAL NOTES (SHEET 3 OF 3)
10	G-010	VICINITY AND EXISTING FLOODPLAIN MAP
SURVEY CONTROL MAP		
11	V-100	SURVEY CONTROL MAP (SHEET 1 OF 2)
12	V-101	SURVEY CONTROL MAP (SHEET 2 OF 2)
13	V-102	SWING TIES
14	V-103	TEMPORARY CONSTRUCTION EASEMENT
OVERALL LAYOUT AND TYPICAL SECTIONS		
15	G-100	OVERALL PROJECT LAYOUT SHEET
16	G-101	TYPICAL SECTION PLAN 1
17	G-102	TYPICAL SECTION PLAN 2
SANITARY SEWER PLAN AND PROFILE – DODSON STREET		
18	C-201-PL	BASELINE A – DODSON ST SEWER – BEGIN TO STA 13+00 PLAN
19	C-201-PR	BASELINE A – DODSON ST SEWER – BEGIN TO STA 13+00 PROFILE
20	C-202-PL	BASELINE A – DODSON ST SEWER – STA 13+00 TO 18+00 PLAN
21	C-202-PR	BASELINE A – DODSON ST SEWER – STA 13+00 TO 18+00 PROFILE
22	C-203-PL	BASELINE A – DODSON ST SEWER – STA 18+00 TO 23+00 PLAN
23	C-203-PR	BASELINE A – DODSON ST SEWER – STA 18+00 TO 23+00 PROFILE
24	C-204-PL	BASELINE A – DODSON ST SEWER – STA 23+00 TO 28+00 PLAN
25	C-204-PR	BASELINE A – DODSON ST SEWER – STA 23+00 TO 28+00 PROFILE
26	C-205-PL	BASELINE A – DODSON ST SEWER – STA 28+00 TO 33+00 PLAN
27	C-205-PR	BASELINE A – DODSON ST SEWER – STA 28+00 TO 33+00 PROFILE
28	C-206-PL	BASELINE A – DODSON ST SEWER – STA 33+00 TO 38+00 PLAN
29	C-206-PR	BASELINE A – DODSON ST SEWER – STA 33+00 TO 38+00 PROFILE
30	C-207-PL	BASELINE A – DODSON ST SEWER – STA 38+00 TO 43+00 PLAN
31	C-207-PR	BASELINE A – DODSON ST SEWER – STA 38+00 TO 43+00 PROFILE
32	C-208-PL	BASELINE A – DODSON ST SEWER – STA 43+00 TO 48+00 PLAN
33	C-208-PR	BASELINE A – DODSON ST SEWER – STA 43+00 TO 48+00 PROFILE
34	C-209-PL	BASELINE A – DODSON ST SEWER – STA 48+00 TO END PLAN
35	C-209-PR	BASELINE A – DODSON ST SEWER – STA 48+00 TO END PROFILE
SANITARY SEWER PLAN AND PROFILE – TIDWELL ROAD		
36	C-210-PL	BASELINE B – TIDWELL RD SEWER – BEGIN TO 53+50 PLAN
37	C-210-PR	BASELINE B – TIDWELL RD SEWER & WATER – BEGIN TO 53+50 PROFILE
38	C-211-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 53+50 TO STA 58+50 PLAN
39	C-211-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 53+50 TO STA 58+50 PROFILE
40	C-212-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 58+50 TO STA 63+50 PLAN
41	C-212-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 58+50 TO STA 63+50 PROFILE
42	C-213-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 63+50 TO STA 68+50 PLAN
43	C-213-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 63+50 TO STA 68+50 PROFILE
44	C-214-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 68+50 TO STA 73+50 PLAN
45	C-214-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 68+50 TO STA 73+50 PROFILE
46	C-215-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 73.+50 TO STA 78+50 PLAN
47	C-215-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 73.+50 TO STA 78+50 PROFILE
SANITARY SEWER PLAN AND PROFILE – TIDWELL ROAD		
48	C-216-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 78+50 TO STA 83+50 PLAN
49	C-216-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 78+50 TO STA 83+50 PROFILE
50	C-217-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 83+50 TO STA 88+50 PLAN
51	C-217-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 83+50 TO STA 88+50 PROFILE
52	C-218-PL	BASELINE B – TIDWELL RD SEWER & WATER – STA 88+50 TO END PLAN
53	C-218-PR	BASELINE B – TIDWELL RD SEWER & WATER – STA 88+50 TO END PROFILE
INTERSECTION/TEMPORARY BYPASS SEWER PLAN AND PROFILE		
54	C-219-PL	BASELINE A –DODSON/PARKER TEMPORARY BYPASS SEWER PLAN
55	C-219-PR	BASELINE A– DODSON/PARKER TEMPORARY BYPASS SEWER PROFILE
56	C-220-PL	BASELINE B– TIDWELL/FRIENDLY INTERSECTION SEWER PLAN
57	C-220-PR	BASELINE B– TIDWELL/FRIENDLY INTERSECTION SEWER PROFILE
58	C-221-PL	BASELINE B– TIDWELL/HIRSCH PROP 16" WL CONNECTION PLAN
59	C-221-PR	BASELINE B– TIDWELL/HIRSCH PROP 16" WL CONNECTION PROFILE
UTILITY RELOCATION PLAN AND PROFILE		
60	C-301-PL & PR	BASELINE A – DODSON ST PROP 12" WL BASELINE B – TIDWELL RD PROP 16" WL
DEMOLITION PLANS		
61	C-401-PL	DEMOLITION PLAN – DODSON ST BEGIN TO STA 13+00
62	C-402-PL	DEMOLITION PLAN – DODSON ST STA 13+00 TO STA 18+00
63	C-403-PL	DEMOLITION PLAN – DODSON ST STA 18+00 TO STA 23+00
64	C-404-PL	DEMOLITION PLAN – DODSON ST STA 23+00 TO STA 28+00
65	C-405-PL	DEMOLITION PLAN – DODSON ST STA 28+00 TO STA 33+00
66	C-406-PL	DEMOLITION PLAN – DODSON ST STA 33+00 TO STA 38+00
67	C-407-PL	DEMOLITION PLAN – DODSON ST STA 38+00 TO STA 43+00
68	C-408-PL	DEMOLITION PLAN – DODSON ST STA 43+00 TO STA 48+00
69	C-409-PL	DEMOLITION PLAN – DODSON ST STA 48+00 TO END & TIDWELL RD BEGIN TO STA 53+50
70	C-410-PL	DEMOLITION PLAN – TIDWELL RD STA 53+50 TO STA 58+50
71	C-411-PL	DEMOLITION PLAN – TIDWELL RD STA 58+50 TO STA 63+50
72	C-412-PL	DEMOLITION PLAN – TIDWELL RD STA 63+50 TO STA 68+50
73	C-413-PL	DEMOLITION PLAN – TIDWELL RD STA 68+50 TO STA 73+50
74	C-414-PL	DEMOLITION PLAN – TIDWELL RD STA 73+50 TO STA 78+50
75	C-415-PL	DEMOLITION PLAN – TIDWELL RD STA 78+50 TO STA 83+50
76	C-416-PL	DEMOLITION PLAN – TIDWELL RD STA 83+50 TO STA 88+50
77	C-417-PL	DEMOLITION PLAN – TIDWELL RD STA 88+50 TO END

SHEET INDEX

SHEET NO.	DRAWING NO.	SHEET TITLE
TRAFFIC CONTROL AND TEMPORARY SIGNAL PLANS		
78	TCP01	TCP NARRATIVE
79	TCP02	ADVANCE WARNING SIGNS
80	TCP03	ADVANCE WARNING SIGNS
81	TCP04	OVERALL TCP PLAN
82	TCP05	OVERALL TCP PLAN
83	TCP06	PHASE I STEP 3 TRAFFIC CONTROL PLAN
84	TCP07	PHASE I STEP II TRAFFIC CONTROL PLAN
85	TCP08	PHASE I STEP 3 TRAFFIC CONTROL PLAN
86	TCP09	PHASE I STEP 3 TRAFFIC CONTROL PLAN
87	TCP10	PHASE I STEP II TRAFFIC CONTROL PLAN
88	TCP11	PHASE I STEP 3 TRAFFIC CONTROL PLAN
89	TCP12	TCP TYPICAL SECTIONS PHASE 1 STEP 2
90	TCP13	PHASE 2 TRAFFIC CONTROL PLAN
91	TCP14	PHASE 2 TRAFFIC CONTROL PLAN
92	TCP15	PHASE 2 TRAFFIC CONTROL PLAN
93	TCP16	PHASE 3 TRAFFIC CONTROL PLAN
94	TCP17	PHASE 3 TRAFFIC CONTROL PLAN
95	TCP18	PHASE 4 TRAFFIC CONTROL PLAN
96	TCP19	PHASE VI TRAFFIC CONTROL PLAN
97	TCP20	PHASE I STEP 3 DETOURS
98	TCP21	PHASE I STEP 3 DETOURS
99	TCP22	PHASE I STEP 3 DETOURS
100	TCP23	PHASE I STEP 3 DETOURS
101	TCP24	PHASE I STEP 3 DETOURS
102	TCP25	PHASE I STEP 3 DETOURS
103	TCP26	PHASE I STEP 3 DETOURS
104	TCP27	PHASE I STEP 3 DETOURS
105	TCP28	PHASE 2 DETOURS
106	TCP29	PHASE 2 DETOURS
107	TCP30	PHASE 2 DETOURS
108	TCP31	PHASE 2 DETOURS
109	TCP32	PHASE 3 DETOURS
110	TCP33	PHASE 3 DETOURS
111	TCP34	PHASE 3 DETOURS
112	TCP35	PHASE 3 DETOURS
113	TCP36	PHASE 4 DETOURS
114	TCP37	PHASE 4 DETOURS
115	TCP38	PHASE 4 DETOURS
116	TCP39	TEMPORARY TRAFFIC SIGNAL PHASE 1 STEP 3
117	TCP40	TEMPORARY TRAFFIC SIGNAL PHASE 1 STEP 3
118	TCP41	TEMPORARY TRAFFIC DETAILS
119	TCP42	TCP NOTES CHANNELIZING DEVICES AND BARRICADES
120	TCP43	TCP OVERALL TRAFFIC CONTROL LAYOUT
121	TCP44	TRAFFIC CONTROL LAYOUT
122	TCP45	TCP ONE LANE CLOSURE PHASE 1 & 2
123	TCP46	TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 1 OF 4
124	TCP47	TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 2 OF 4
125	TCP48	TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 3 OF 4
126	TCP49	TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 4 OF 4
127	TCP50	TRAFFIC CONTROL PLAN FOR SIGNAL CONSTRUCTION
TREE PRESERVATION PLANS		
128	TPP01	TREE PRESERVATION OVERALL SITE ORIENTATION PLAN
129	TPP02	TREE PRESERVATION PLAN – DODSON ST. SHEET 1 OF 8 STA: BEGIN WORK TO STA: 13+00
130	TPP03	TREE PRESERVATION PLAN – DODSON ST. SHEET 2 OF 8 STA: 13+00 TO STA: 18+00
131	TPP04	TREE PRESERVATION PLAN – DODSON ST. SHEET 3 OF 8 STA: 18+00 TO STA: 23+00
132	TPP05	TREE PRESERVATION PLAN – DODSON ST. SHEET 4 OF 8 STA: 23+00 TO STA: 28+00
133	TPP06	TREE PRESERVATION PLAN – DODSON ST. SHEET 5 OF 8 STA: 28+00 TO STA: 33+00
134	TPP07	TREE PRESERVATION PLAN – DODSON ST. SHEET 6 OF 8 STA: 33+00 TO STA: 38+00
135	TPP08	TREE PRESERVATION PLAN – DODSON ST. SHEET 7 OF 8 STA: 38+00 TO STA: 43+00
136	TPP09	TREE PRESERVATION PLAN – DODSON ST. SHEET 8 OF 8 STA: 43+00 TO STA: 48+00
137	TPP10	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 1 OF 9 STA: BEGIN WORK TO STA: 53+50
138	TPP11	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 2 OF 9 STA: 53+50 TO STA: 58+50
139	TPP12	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 3 OF 9 STA: 58+50 TO STA: 63+50
140	TPP13	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 4 OF 9 STA: 63+50 TO STA: 68+50
141	TPP14	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 5 OF 9 STA: 68+50 TO STA: 73+50
142	TPP15	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 6 OF 9 STA: 73+50 TO STA: 78+50
143	TPP16	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 7 OF 9 STA: 78+50 TO STA: 83+50
144	TPP17	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 8 OF 9 STA: 83+50 TO STA: 88+50
145	TPP18	TREE PRESERVATION PLAN – TIDWELL RD. SHEET 9 OF 9 STA: 88+50 TO STA: END WORK
146	TPP19	TREE PRESERVATION AND MITIGATION TREE INVENTORY (1 OF 1)
147	TPP20	TREE PRESERVATION AND MITIGATION TREE REMOVAL SUMMARY (1 OF 1)
148	TPP21	TREE PRESERVATION DETAILS (1 OF 4)
149	TPP22	TREE PRESERVATION DETAILS (2 OF 4)
150	TPP23	TREE PRESERVATION DETAILS (3 OF 4)
151	TPP24	TREE PRESERVATION DETAILS (4 OF 4)
STORM WATER POLLUTION PREVENTION PLANS		
152	SW3P01	SWPPP STANDARD GENERAL NOTES & DETAIL
153	SW3P02	SWPPP STA 8+44 TO STA 18+00
154	SW3P03	SWPPP STA 18+00 TO STA 28+00
155	SW3P04	SWPPP STA 28+00 TO STA 38+00
156	SW3P05	SWPPP STA 38+00 TO STA 47+50
157	SW3P06	SWPPP STA 48+56 TO STA 58+50
158	SW3P07	SWPPP STA 58+50 TO STA 68+50
159	SW3P08	SWPPP STA 68+50 TO STA 78+50
160	SW3P09	SWPPP STA 78+50 TO STA 88+50
161	SW3P10	SWPPP STA 88+50 TO END
162	SW3P11	SWPPP STANDARD DETAILS (COH)

SHEET INDEX

SHEET NO.	DRAWING NO.	SHEET TITLE
COH CIVIL STANDARD DETAIL SHEETS		
163	DT-001	CIVIL DETAILS SHEET 1 OF 30
164	DT-002	CIVIL DETAILS SHEET 2 OF 30
165	DT-003	CIVIL DETAILS SHEET 3 OF 30
166	DT-004	CIVIL DETAILS SHEET 4 OF 30
167	DT-005	CIVIL DETAILS SHEET 5 OF 30
168	DT-006	CIVIL DETAILS SHEET 6 OF 30
169	DT-007	CIVIL DETAILS SHEET 7 OF 30
170	DT-008	CIVIL DETAILS SHEET 8 OF 30
171	DT-009	CIVIL DETAILS SHEET 9 OF 30
172	DT-010	CIVIL DETAILS SHEET 10 OF 30
173	DT-011	CIVIL DETAILS SHEET 11 OF 30
174	DT-012	CIVIL DETAILS SHEET 12 OF 30
175	DT-013	CIVIL DETAILS SHEET 13 OF 30
176	DT-014	CIVIL DETAILS SHEET 14 OF 30
177	DT-015	CIVIL DETAILS SHEET 15 OF 30
178	DT-016	CIVIL DETAILS SHEET 16 OF 30
179	DT-017	CIVIL DETAILS SHEET 17 OF 30
180	DT-018	CIVIL DETAILS SHEET 18 OF 30
181	DT-019	CIVIL DETAILS SHEET 19 OF 30
182	DT-020	CIVIL DETAILS SHEET 20 OF 30
183	DT-021	CIVIL DETAILS SHEET 21 OF 30
184	DT-022	CIVIL DETAILS SHEET 22 OF 30
185	DT-023	CIVIL DETAILS SHEET 23 OF 30
186	DT-024	CIVIL DETAILS SHEET 24 OF 30
187	DT-025	CIVIL DETAILS SHEET 25 OF 30
188	DT-026	CIVIL DETAILS SHEET 26 OF 30
189	DT-027	CIVIL DETAILS SHEET 27 OF 30
190	DT-028	CIVIL DETAILS SHEET 28 OF 30
191	DT-029	CIVIL DETAILS SHEET 29 OF 30
192	DT-030	CIVIL DETAILS SHEET 30 OF 30

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SHEET INDEX

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 2 OF 192	

60% SUBMITTAL

1. PAVING

(FOR EXISTING OR PROPOSED HC PUBLIC R.O.W.)

CONCRETE

DESIGN THICKNESS OF PAVING (IN.)	STABILIZED SUBGRADE DEPTH (IN.)	DESIGN STRENGTH OF CONCRETE (PSI)	STEEL SPACING LONG. (IN.)	STEEL SPACING TRANS. (IN.)	REINFORCE STEEL SIZE (#4 MIN.)
N/A – WORK OUTSIDE OF H.C. ROW					

ASPHALT

DESIGN SURFACE COURSE THICKNESS (IN.)	DESIGN SURFACE COURSE TYPE (MATERIAL)	DESIGN BASE COURSE THICKNESS (IN.)	DESIGN BASE COURSE TYPE (MATERIAL)	STABILIZED SUBGRADE DEPTH (IN.)	STABILIZED SUBGRADE TYPE (MATERIAL)
N/A – WORK OUTSIDE OF H.C. ROW					

DRIVEWAYS (IN EXISTING OR PROPOSED HC PUBLIC R.O.W.)

I. NUMBER OF DRIVEWAY APPROACHES PROPOSED INCLUDING WIDENING OR REPAVING EXISTING DRIVEWAYS

DRWY	WIDTH	MATERIAL	CULVERT (Y/N)	CULVERT LENGTH	NEAREST CROSS–STREET	DISTANCE TO CROSS–STREET
1	N/A – WORK OUTSIDE OF H.C. ROW					
2						
3						
4						
5						

II. HARRIS COUNTY STANDARD DRIVEWAY DETAIL APPEARS ON SHEET(S): _____

III. ADDITIONAL DRIVEWAY TABLE (AS APPLICABLE) APPEARS ON SHEET(S): _____

FIRE APPARATUS ACCESS ROAD

☐ REQUIRED AND SHOWN ON SHEET(S): _____

☒ NOT REQUIRED DUE TO: WORK OUTSIDE OF H.C. ROW

CURBING

☐ STANDARD 6" CURBING PROPOSED

☐ 4" x 12" CURBING PROPOSED EXCEPT AT MEDIANS AND ISLANDS

2. TRAFFIC

I. MEDIAN CUTS

☐ MEDIAN MODIFICATIONS ARE SHOWN ON SHEET(S): _____

☒ NO MEDIAN CUT OR RELOCATION IS PROPOSED

II. LEFT / RIGHT TURN LANE

☐ LEFT / RIGHT TURN LANE IS SHOWN ON SHEET(S): _____

☒ NO LEFT / RIGHT TURN LANE IS PROPOSED

III. TRAFFIC CONTROL PLAN

☒ TRAFFIC CONTROL SHOWN ON SHEET(S): TCP01–TCP50

☐ NO WORK IN HC RIGHT OF WAY

IV. TRAFFIC SIGNAL

☒ EXISTING TRAFFIC SIGNAL DEVICES (BOXES AND LOOPS) SHOWN ON SHEET(S): C–215–PL; C–218–PL

☐ NEW ☐ REBUILT ☐ MODIFIED TRAFFIC SIGNAL SHOWN ON SHEET(S): _____

☐ HC FIBER PRESENT

☐ NO TRAFFIC SIGNAL

V. TRAFFIC IMPACT ANALYSIS

☐ TRAFFIC IMPACT ANALYSIS APPROVED ON DATE: _____ PROJECT NO.: _____

☒ NO TRAFFIC IMPACT ANALYSIS REQUIRED AND HC APPROVED

☐ NO NEW TRIPS GENERATED

VI. TRAFFIC VARIANCE

☐ TRAFFIC VARIANCE APPROVED ON DATE: _____ PROJECT NO.: _____

3. DESCRIPTION OF PROPERTY

I. LEGAL DESCRIPTION

A. ACREAGE: _____

B. ☒ SUBDIVISION: LT 3 BLK 1, SPARKS STREET ESTATES

☐ SURVEY & ABSTRACT: _____

C. ADJACENT ROADS: _____

II. PLATTING

A. SUBDIVISION PLAT (CHECK APPLICABLE)
- ☐ PROPOSED PLAT / REPLAT
- ☐ RECORDED PLAT / REPLAT
- ☐ EXEMPT FROM PLAT / REPLAT

B. STREETS PROPOSED
- ☐ PUBLIC
- ☐ PRIVATE
- ☐ PUBLIC & PRIVATE
- ☐ NONE

PLAT NAME: _____

NOTE: FINAL CPC101 REQUIRED FOR PLAN APPROVAL, RECORDED PLAT REQUIRED FOR FINAL INSPECTION.

III. JURISDICTIONS

☒ CITY OF HOUSTON

☐ ETJ, CITY OF HOUSTON

☐ ETJ, CITY OF _____

☐ NO ETJ

IV. HCAD ACCOUNT NOS. (ALL)

1490980010002, 1490980010003, 0650880060001, 1210590010001, 0720220200599

V. UNOBSTRUCTED VISIBILITY EASEMENT (U.V.E.)

☐ REQUIRED PER PLANNING COMMISSION / HC REGULATIONS SHOWN ON SHEET(S): _____

☒ NOT REQUIRED PER PLANNING COMMISSION / HC REGULATIONS

4. RESIDENTIAL / SUBDIVISION / STREET DEDICATION DRAINAGE

I. PROPOSED DRAINAGE SYSTEM TYPE

☐ STORM SEWER

☐ ROADSIDE DITCH

☐ LOW IMPACT DEVELOPMENT (LID)

II. DESIGN METHOD USED

☐ CITY OF HOUSTON _____YEAR FREQUENCY

☐ OTHER: _____

III. DRAINAGE SYSTEM OUTFALLS DIRECTLY TO EXISTING

☐ DETENTION BASIN (APPROVED HC PROJECT NO.): _____ DETENTION BASIN MAINTAINED BY: _____

☐ HCFCD DRAINAGE DITCH UNIT NO.: _____

☐ HC ROADSIDE DITCH (ROAD NAME): _____

☐ HC STORM SEWER (APPROVED HC PROJECT NO.): _____

IV. HC OUTFALL CALCULATIONS

☐ ROADSIDE DITCH OUTFALL:
ALLOWABLE OUTFALL RATE: 0.0027 x _____ LF FRONTAGE = _____ (CFS)
PROPOSED OUTFALL RATE: _____(CFS), CALCULATIONS PROVIDED ON SHEET(S): _____

☐ STORM SEWER OUTFALL
CAPACITY ALLOCATED TO TRACT FROM D. A. MAP: _____(CFS)
FROM DRAINAGE AREA MAP DATED: _____
PREPARED BY: _____
APPROVED HC PROJECT NO.: _____
ACTUAL OUTFALL RATE: _____(CFS), CALCULATIONS PROVIDED ON SHEET(S): _____

V. DETENTION PROVIDED BY

☐ DETENTION BASIN IS PART THIS PLAN SET. SERVICE AREA MAP IS ON SHEET(S): _____

☐ REGIONAL DETENTION BASIN SYSTEM (APPROVED HC PROJECT NO.): _____

PROPOSED STORM SEWER IS SUBMERGED (AGREEMENT MUST BE PROVIDED). STATIC W.S.E. @ OUTFALL IS _____

5. COMMERCIAL / OTHER SITE DRAINAGE

I. PROPOSED DRAINAGE AREA

☐ NEW DEVELOPMENT AREA: _____

☐ RE–DEVELOPMENT AREA (NET NEW DEVELOPED AREA): _____

☐ LOW IMPACT DEVELOPMENT (LID)

II. DETENTION VOLUME

NEW AREA _____ X * = _____ ACRE FEET
DETENTION REQUIRED

*☐ .65 (CHANNEL)
*☐ .75 (STM SWR)
*☐ 1.00 (RD. DITCH)
*☐ OTHER:

PROPOSED DETENTION VOLUME = _____ACRE FEET

PROPOSED DETENTION VOLUME CALCULATIONS ARE SHOWN ON SHEET(S): _____

DETENTION VOLUME PROVIDED BY EXISTING DETENTION BASIN

APPROVED HC PROJECT NO.: _____

DETENTION BASIN SERVICE AREA MAP IS PROVIDED ON SHEET(S): _____

III. OUTFALL

OUTFALL TO ☐ HC ROADSIDE DITCH ☐ EXISTING HC STORM SEWER ☐ OTHER: _____

☐ HC ROADSIDE DITCH OUTFALL:
PROPOSED OUTFALL RATE: _____ (CFS), CALCULATIONS PROVIDED ON SHEET(S): _____
ALLOWABLE OUTFALL RATE: 0.0027 x _____ LF FRONTAGE = _____(CFS)

☐ HC STORM SEWER OUTFALL:
CAPACITY ALLOCATED TO TRACT FROM D. A. MAP: _____(CFS)
FROM DRAINAGE AREA MAP DATED: _____
PREPARED BY: _____
APPROVED HC PROJECT NO.: _____
ACTUAL OUTFALL RATE: _____(CFS), CALCULATIONS PROVIDED ON SHEET(S): _____

IV. PUMPED DETENTION FACILITIES

VOLUME THAT GRAVITY FLOWS: _____ ACRE FEET

VOLUME THAT IS PUMPED: _____ ACRE FEET

ENTRANCE VELOCITY INTO ROADSIDE DITCH OR STORM SEWER: _____

PUMP SPECIFICATIONS AND AUTOMATIC SHUTOFF PLANS FOR ROADSIDE DITCH & STORM SEWER OUTFALLS APPEAR ON SHEET(S): _____

V. FLOW RESTRICTOR SIZE

OUTFALL PIPE SIZE: _____

RESTRICTOR PIPE SIZE: _____

ON SHEET(S): _____

6. OFFSITE SHEET FLOW (100 YEAR)

OFFSITE SHEET FLOW MAPPING, TOTAL DISCHARGE CALCULATIONS, AND DESIGN ACCOMMODATIONS ARE SHOWN ON SHEET(S): _____

TOTAL ACREAGE = _____ (AC.)

TOTAL DISCHARGE = _____(CFS)

☐ ALL OFFSITE SHEET FLOW FROM ADJACENT PROPERTIES IDENTIFIED AND PROPERLY ACCOUNTED FOR IN THE PROJECT.

☐ SIGNING ENGINEER HEREBY CERTIFIES THAT THESE AREAS HAVE BEEN ADDRESSED.

7. STORMWATER QUALITY

I. SWPPP: CONSTRUCTION MEASURES (COMPLETE FOR ALL PROJECTS)

NUMBER OF ACRES DISTURBED: _____

☒ DISTURBS >1AC. SITE PLAN & DETAILS ON SHEET(S): SW3P01–SW3P11

☐ DISTURBS <1AC. N/A

II. APPLICABILITY FOR PERMANENT FEATURES (COMPLETE FOR ALL PROJECTS)

EXEMPT NEW DEVELOPMENT:

☐ PROJECT IS ON A PARCEL, WITHIN A LARGER COMMON PLAN OF DEVELOPMENT OR SALE, LESS THAN 5 ACRES.
THIS EXEMPTION IS VERIFIED WITH THE PLAT AND/OR GENERAL PLAN ON THE PROPERTY.

EXEMPT REDEVELOPMENT:

☒ THE INCREASE IN THE TOTAL AMOUNT OF IMPERVIOUS SURFACE, CURRENT PROJECT AND ANY SINCE 10/01/2001, ON A PREVIOUSLY DEVELOPED 5 ACRE OR LARGER PARCEL, INDIVIDUALLY AND/OR CONTIGUOUSLY OWNED, IS LESS THAN 1 ACRE.

NEW IMPERVIOUS:

CURRENT PROJECT	PREVIOUS PROJECT(S) TOTAL	TOTAL (CURRENT+PREVIOUS)

EXEMPT GRANDFATHERED:

☐ DRAINAGE FROM THIS PROJECT OUTFALLS DIRECTLY INTO AN EXISTING AND APPROVED DRAINAGE SYSTEM PRIOR TO 10/01/2001 WITH NO NEW DETENTION REQUIREMENT. INCLUDE THE ORIGINAL DRAINAGE AREA MAP OF THAT SYSTEM FOR VERIFICATION.
D.A. MAP NAME: _____ DATE: _____ APPROVED HC PROJECT NO.: _____

III. GENERAL

☒ PROJECT'S SWQ REQUIREMENTS FALL WITHIN THE JURISDICTION OF: CITY OF HOUSTON (ONLY COMPLETE IF OUTSIDE OF UNINCORPORATED HARRIS COUNTY)

☐ STORMWATER QUALITY PERMIT REQUIREMENT IS COVERED BY:

☐ EXISTING SWQMP

PROJECT TITLE: _____

HC PROJECT NO.: _____ HC SWQ PERMIT NO.: _____

SWQ SERVICE AREA MAP INCLUDED ON SHEET(S): _____

☐ INDUSTRIAL PERMITTING. (IAC AND SUPPORTING DOCUMENTATION MUST BE SUBMITTED)

PERMIT NO: _____

IF THE PROJECT IS NOT EXEMPT, OUTSIDE OF HARRIS COUNTY'S JURISDICTION, OR COVERED BY AN EXISTING SWQMP, A STORMWATER QUALITY MANAGEMENT PLAN IS REQUIRED.

IV. PERMANENT SWQ FEATURES (COMPLETE IF NOT EXEMPT)

☐ SITE PLAN ON SHEET(S): _____

☐ VEGETATIVE CONTROLS USED: (FILTER STRIP, GRASSY SWALE, URBAN FORESTRY, LID)
DETAILS AND CALCULATIONS APPEAR ON SHEET(S): _____

☐ BASIN STRUCTURE USED (WET, DRY, WETLANDS)
STRUCTURAL CONTROL IN BASIN: _____
DETAILS/CALCULATIONS ON SHEET(S): _____

☐ HYDRODYNAMIC TYPE SEPARATOR MODEL: _____
DETAILS/CALCULATIONS ON SHEET(S): _____

☐ OTHER(S):
STRUCTURAL CONTROL(S): _____
DETAILS/CALCULATIONS ON SHEET(S): _____

8. FLOODPLAIN STATUS

I. GENERAL INFORMATION

FIRM PANEL(S) FOR PROPERTY: 48201C068L

FIRM PANEL(S) DATE: 6/18/2026

STATUS OF PROPERTY ON MAP

☐ ENTIRELY LOCATED IN UNSHADED ZONE X

☒ LOCATED PARTIALLY OR ENTIRELY IN ANY A ZONE OR SHADED ZONE X, DELINEATE FLOODPLAIN BOUNDARY ON CONSTRUCTION DRAWINGS (DRAINAGE LAYOUT PG. NO._____) (1% BASE FLOOD LEVEL 57.49') (0.2% BASE FLOOD LEVEL_____)

☐ SITE REMOVED FROM FLOODPLAIN BY LOMR, LOMR–F, LOMA CASE NO._____ REVISED FLOODPLAIN IS SHOWN ON SHEET(S): _____

II. ELEVATION INFORMATION

BENCHMARK USED

☒ HARRIS COUNTY FLOODPLAIN REFERENCE MARK

☐ HARRIS–GALVESTON COASTAL SUBSIDENCE DISTRICT BENCHMARK (FOR COASTAL AREAS)

DESCRIPTION OF BENCHMARK INCLUDING ELEVATION, DATUM AND YEAR OF ADJUSTMENT (2001 ADJ.) _____

III. FLOODPLAIN DETERMINATION BASED ON GROUND ELEVATION

☐ PROPERTY LIES ENTIRELY ABOVE THE 1% BASE FLOOD LEVEL AND IN SHADED ZONE X

☒ PROPERTY LIES PARTIALLY OR ENTIRELY BELOW THE 1% BASE FLOOD LEVEL

IV. FLOODPLAIN STORAGE SUMMARY (APPLIES ONLY TO PORTION OF LAND LOCATED WITHIN FLOODPLAIN AS DELINEATED BY FIRM PANEL)

A. TOTAL VOLUME OF MATERIAL PROPOSED TO BE MOVED OR PLACED WITHIN THE FIRM DELINEATED FLOODPLAIN (FILL, BASE, CONCRETE, ASPHALT, ETC.): BELOW 0.2% BASE FLOOD ELEVATION_____(2001 ADJ.)_____ CUBIC YARDS

B. TOTAL VOLUME OF MATERIAL PROPOSED TO BE REMOVED FROM THE FIRM DELINEATED FLOODPLAIN: BELOW 0.2% BASE FLOOD ELEVATION_____ (2001 ADJ.)_____ CUBIC YARDS

C. FILL AREA & VOLUME CALCULATIONS ARE SHOWN ON SHEET(S): _____

9. WATER AND WASTEWATER

I. COMMERCIAL PROJECTS

DOES THE PROPERTY HAVE UTILITIES?
☒ PROPOSED ☒ EXISTING ☐ NO

CHECK APPLICABLE

☒ PUBLIC WATER & SANITARY

☐ PRIVATE WATER WELL & SEPTIC SYSTEM

☐ PUBLIC WATER & PRIVATE SEPTIC SYSTEM

☐ PRIVATE WATER WELL & PUBLIC SANITARY

☐ LETTER FROM THE DISTRICT / MUNICIPALITY AUTHORIZING MUNICIPALITY AUTHORIZING SERVICE & CONNECTION.
UTILITY DISTRICT / MUNICIPALITY NAME: _____

☐ PROPOSED OR EXISTING SEPTIC TANK(S) AND DISPOSAL AREA(S) SHOWN ON SHEET(S): _____

☐ ALL EXISTING AND PROPOSED UTILITIES ACCURATELY SHOWN & LABELED ON THE SITE PLANS.

NOTE: SEPTIC SYSTEMS REQUIRE HC WASTEWATER REVIEW

HC SEPTIC PERMIT/REQUEST NO. _____

NOTE: DEDICATED UNDERGROUND FIRE LINES MUST BE SUBMITTED TO THE HARRIS COUNTY FIRE PROTECTION GROUP FOR REVIEW AND PERMITTING BY THE UNDERGROUND FIRE LINE CONTRACTOR. CIVIL REVIEW DOES ***NOT*** REVIEW OR APPROVE UNDERGROUND FIRE LINES FOR THE FIRE PROTECTION SYSTEMS.

WASTEWATER TREATMENT PLANTS

HC WWTP REVIEW:

☐ NEW WWTP SITE OR REHAB / EXPANSION OF AN EXISTING WWTP SITE

☐ HARRIS COUNTY DOMESTIC WASTEWATER TREATMENT PLANT EXPRESS REVIEW SHEET ATTACHED AND COMPLETED ACCORDING TO INSTRUCTIONS

10. SIDEWALKS

☐ SIDEWALKS ARE PROPOSED IN THIS DEVELOPMENT

☒ NO SIDEWALKS ARE PROPOSED IN THIS DEVELOPMENT

11. LANDSCAPING

☐ COMMERCIAL BUILDING(S) PROPOSED AND LANDSCAPING SHOWN ON SHEET(S): _____

☒ NO COMMERCIAL BUILDING(S) PROPOSED

12. PERMITS REQUIRED

☐ STORM WATER QUALITY
☐ ORIGINAL ☐ AMENDMENT TO PERMIT NO.: _____

☐ SEPTIC (EXISTING) ☐ SEPTIC (PROPOSED)

☐ CIVIL SITE WORK (PHASE II PERMIT CLASS I (UNSHADED X ZONE))

☒ CIVIL SITE WORK (PHASE II PERMIT CLASS II (ALL OTHER ZONES))

☐ DRIVEWAY WITH CULVERT ☐ DRIVEWAY WITH CURB AND GUTTER

☐ BUILDING(S) IS A CRITICAL FACILITY

☐ BUILDING PERMITS (NO. OF BUILDINGS = _____)

☐ SUBDIVISION INFRASTRUCTURE PHASE II (NO. OF LOTS = _____)

☐ NOTICE OF DETENTION AFFIDAVIT REQUIRED

☐ MUD MAINTENANCE AGREEMENT REQUIRED

☐ STREET DEDICATION

WORK IN HARRIS COUNTY R.O.W.

☐ UTILITY WORK N/A

☐ TURN LANE N/A

☐ OTHER CONSTRUCTION N/A

VIOLATIONS

☐ EXISTING VIOLATIONS ON PROPERTY
VIOLATION NUMBER(S): _____

NOTES:

A PERMIT IS REQUIRED FOR EACH SCOPE OF WORK ON SITE.
A R.O.W. NOTIFICATION IS REQUIRED FOR EACH SCOPE OF WORK IN HC OR HCFCD R.O.W.

BENCHMARK REQUIREMENTS FOR PROPOSED BRIDGES AND OR NEW RESIDENTIAL SUBIDIVSIONS

When the County Engineer has determined that a new benchmark will be required to be established for the proposed project, the developer shall be required to install a benchmark per section 8.0, part 2 of the Harris County Infrastructure Regulations.

Is a new Benchmark required for this project? (*to be determined by Harris County*) [__] yes [__] no

If a new Benchmark is required, the proposed benchmark information is shown on sheet(s): ____

FOR PROJECTS LOCATED IN ANY FLOODPLAIN

Development constructed or placed in accordance with these plans will comply with all provisions of the Regulations of Harris County, Texas for Floodplain Management.

No net fill is allowed in the flood plain and no fill is allowed in the floodway.

FOUNDATION NOTES: (*Applies to only buildings or building additions requiring a class II permit*)

All water heaters, furnaces, air conditioning units, electrical distribution panels, and any other mechanical or electrical equipment must be elevated in accordance with Section 4.05 of Harris County Floodplain regulations.

Any electrical circuit serving a light switch or outlet located below the base (100-year) flood elevation shall be dropped from above and be on a separate breaker.

All materials used below the (100-year) base flood elevation are on approved FEMA Technical Bulletin 2-08 as Class 5 water-resistant, and approved in accordance with FEMA Technical Bulletin 1-08 for foundation openings.

Critical facilities located in the 0.2% or 500yr floodplain or 1% or 100yr floodplain shall have the lowest floor elevated to 3 feet or more above the 0.2% flood elevation, or 24 inches above the crown of the adjacent road, which ever results in a higher elevation.

Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.

Access routes elevated to or above the level of the base flood shall be provided to all critical facilities to the extent possible.

A completed as-built certificate must be submitted after the structure is complete and before it is occupied.

The County Engineer's Office will post a final inspection notice on the structure once all requirements have been met.

No fill may be used to elevate structures in the 1% or 100yr floodplain. Structures may be constructed on an open foundation, such as piers, or on continuous foundation walls with properly sized and located openings. All foundations are required to be designed by a registered professional engineer.

All structures shall be designed to withstand a three second gust basic wind speed of 120mph.

*Completed ***Elevation Certificates** to be submitted: one at permitting, a second after the slab is poured or sub-floor is installed and before the framing starts, and a third is required once construction is finished. *(PER CURRENT FIRM PANEL)*

HARRIS COUNTY OFFICE OF THE COUNTY ENGINEER - PERMIT OFFICE NOTE:

THE PERMIT MANAGER SIGNATURE REPRESENTS THE FOLLOWING:
- THE COMPLETION OF REVIEW OF THESE PLANS
- INTERPOSE NO OBJECTION TO THE PROPOSED DESIGN ON PRIVATE PROPERTY
- APPROVAL OF WORK IN HARRIS COUNTY MAINTAINED RIGHT OF WAY
- APPROVAL OF WORK IN PROPOSED HARRIS COUNTY RIGHT OF WAY THAT IS TO BE ACCEPTED BY THE COUNTY

HCOCE SIGNATURE BLOCK:

THE PROJECT WAS REVIEWED, HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE ENGINEER'S RESPONSIBILITY AND ACCOUNTABILITY. THIS DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH APPROPRIATE FEDERAL, STATE AND LOCAL ENVIRONMENTAL RULES, LAWS, AND REGULATIONS AND ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO LAND DEVELOPMENT. IF THE CITY SIGNATURES ARE REQUIRED BY ORDINANCE, COUNTY PERMITS WILL NOT BE ISSUED UNTIL SUCH SIGNATURES ARE OBTAINED. PLAN APPROVAL EXPIRATION TO BE IN ACCORDANCE WITH LOCAL GOVERNEMENT CODE CH. 245.

ENGINEER'S CERTIFICATION

I, ROEL E. HUERTA , A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND THAT I AM NOT VIOLATING ANY PROVISION OF THE CURRENT TEXAS ENGINEERING PRACTICE ACT AND RULES CONCERNING THE PRACTICE OF ENGINEERING AND PROFESSIONAL ENGINEERING LICENSURE. I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THE PLANS IN THEIR ENTIRETY ARE DESIGNED PER THE HARRIS COUNTY ENGINEERING STANDARDS, REGULATIONS, AND GUIDELINES UNLESS PROVIDED A VARIANCE BY THE COUNTY ENGINEER OR HIS DESIGNEE. SHOULD IT BE DEEMED BY HCED STAFF, THAT THE PLANS DO NOT MEET THE COUNTY'S STANDARDS, REGULATIONS AND GUIDELINES AND DID NOT RECEIVE AN APPROVED VARIANCE, THE APPROVAL OF SAID PLANS BECOMES NULL AND VOID AND THE DESIGN PLANS MUST BE CORRECTED AT NO CHARGE TO THE COUNTY.

SEAL

THE COMPLETED PROJECT CONSISTS OF DRAWING SHEETS _____ THRU _____

SIGNATURE _____ DATE _____

REVISIONS

NOTE: REVISION BLOCK IS TO BE USED ONLY FOR CHANGES MADE AFTER PLANS HAVE BEEN APPROVED BY HARRIS COUNTY.

REV. NO.	DATE	SHEET NO.	DESCRIPTION	P.E. INITIAL	HC APPROVED DATE	HC INITIAL

HARRIS COUNTY
OFFICE OF THE COUNTY ENGINEER
REVIEW SHEET

VERSION 21.0 FEBRUARY 20, 2025

HC PROJECT NO. _____ HCFCD PROJECT NO. _____

1. PROPERTY DESCRIPTION

I. LOCATION INFORMATION

A. HARRIS COUNTY COMMISSIONER'S PRECINCT:
☒ 1 ☐ 2 ☐ 3 ☐ 4

B. KEY MAP: 454B

C. ADDRESS: 3615 SPARKS ST,
HOUSTON, TX 77093

II. LEGAL DESCRIPTION

A. ACREAGE: _____

B. ☐ SUBDIVISION: _____

☐ SURVEY & ABSTRACT: _____

C. ADJACENT ROADS: _____

III. PLATTING

A. SUBDIVISION PLAT
☐ PROPOSED PLAT / REPLAT
☐ RECORDED PLAT / REPLAT

PLAT NAME: _____

B. STREETS PROPOSED
☐ PUBLIC
☐ PRIVATE
☐ PUBLIC & PRIVATE
☐ NONE

IV. JURISDICTIONS

☒ CITY OF HOUSTON
☐ ETJ, CITY OF HOUSTON
☐ ETJ, CITY OF _____
☐ NO ETJ
☐ UTILITY DISTRICT (NAME)_____

V. HCAD ACCOUNT NOS. (ALL)

1490980010002, 1490980010003, 0650880060001,
1210590010001, 0720220200599

2. SITE DETENTION DRAINAGE

I. PROPOSED DRAINAGE AREA

☐ NEW DEVELOPMENT AREA: _____
☐ RE-DEVELOPMENT AREA (AMOUNT INCREASED IMPERVIOUS AREA): _____
☐ LOW IMPACT DEVELOPMENT (LID)
METHOD/DESCRIPTION _____

II. METHODOLOGY

HCFCD PCPM DETENTION METHOD USED:
☐ METHOD 1 (LESS THAN 20 ACRES)
☐ METHOD 2 (20 ACRES TO 640 ACRES)
☐ METHOD 3 (GREATER THAN 640 ACRES)
☐ OTHER _____

III. DETENTION VOLUME & OUTFALL

OUTFALL TO:
☐ .65, H.C.F.C.D. CHANNEL, (H.C.F.C.D. UNIT NO.) _____
☐ .75, EXISTING STORM SEWER (OWNER & OPERATOR) _____
☐ 1.00, ROADSIDE DITCH, (OWNER & ROAD NAME) _____
☐ OTHER (OWNER & OPERATOR) _____

IV. STORMWATER DETENTION BASIN INFORMATION

A. HCFCD PCPM SUMMARY TABLE SEE SHEET _____ OF THESE PLANS.

DETENTION BASIN SERVICE AREA		acres	
STORM EVENT	50% EXCEEDANCE (2-YEAR)	10% EXCEEDANCE (10-YEAR)	1% EXCEEDANCE (100-YEAR)
MAXIMUM ALLOWABLE OUTFLOW (PRE-DEVELOPMENT PEAK FLOW)			
MAXIMUM OUTFLOW PROVIDED (PEAK FLOW FROM BASIN)			
LOWEST NATURAL/FINISHED GROUND OR FINISHED FLOOR ELEVATION ESTIMATE			
DESIGN WATER SURFACE ELEVATION			
MINIMUM STORAGE REQUIRED (ac-ft)			
DETENTION STORAGE PROVIDED (ac-ft)			
STORAGE RATE PROVIDED (ac-ft/ac)			
OUTFLOW VELOCITY INTO CHANNEL (ft/sec)			
DRAIN TIME - 1% ONLY (hours)			
EMERGENCY OVERFLOW (TYPE, SIZE, ELEVATION, ETC.)			

B. DETENTION BASIN TO BE MAINTAINED BY _____

C. DETENTION SERVICE AREA MAP ON SHEET _____

D. ADDITIONAL CRITERIA FOR PUMPED DETENTION BASINS
VOLUME OF PUMPED 1% EXCEEDANCE STORAGE VOLUME = _____ ACFT _____ % OF TOTAL VOLUME
MAXIMUM DESIGN OUTFLOW VELOCITY INTO HCFCD CHANNEL = _____ FT/SEC
DRAIN TIME FOR BASIN = _____ HOURS BASED ON _____HEAD CONDITIONS

V. DETENTION PROVIDED IN OTHER PLANS:

HCFCD PROJECT No. _____ DATE SIGNED BY HCFCD: _____
PLAN TITLE _____
DETENTION POND SERVICE AREA MAP IS PROVIDED ON SHEET _____
ENGINEERING FIRM _____
DETENTION BASIN MAINTAINED BY: _____

VI. FLOW RESTRICTOR SIZE

OUTFALL PIPE SIZE: _____
RESTRICTOR PIPE SIZE: _____
RESTRICTOR PLATE DIMENSION: _____

VII. DETENTION PROVIDED BY

☐ REGIONAL DETENTION BASIN SYSTEM (APPROVED H.C. PRJ NO.): _____

FOR PROJECTS LOCATED IN ANY FLOODPLAIN

Development constructed or placed in accordance with these plans will comply with all provisions of the designated Floodplain Administrator.
No net fill is allowed in the flood plain and no fill is allowed in the floodway.

OFFSITE SHEET FLOW: (100 YEAR)

OFFSITE SHEET FLOW MAPPING, TOTAL DISCHARGE CALCULATIONS, AND DESIGN ACCOMODATIONS ARE SHOWN ON SHEET ____ OR, AS PRESENTED IN THE APPROVED DRAINAGE STUDY ENTITLED _____.

TOTAL ACREAGE = ____
TOTAL DISCHARGE = ____

NOTE: ALL OFFSITE SHEET FLOW FROM ADJACENT PROPERTIES MUST BE IDENTIFIED AND PROPERLY ACCOUNTED FOR IN THE PROJECT. THE SIGNING ENGINEER HEREBY CERTIFIES THAT THESE AREAS HAVE BEEN ADDRESSED.

3. SWQ DISCHARGE INTO FCD FACILITY

I. SWPPP: CONSTRUCTION MEASURES. (Must complete)

☒ DISTURBS >1AC. SITE PLAN & DETAILS ON SHEET(S)
SW3P01 – SW3P11
☐ DISTURBS <1AC. N/A

*II. APPLICABILITY FOR PERMANENT FEATURES. (Must complete)

EXEMPT NEW DEVELOPMENT:
☐ PROJECT IS ON A PARCEL (A COMMON PLAN OF DEVELOPMENT) LESS THAN 5 ACRES. (Must be verified with plat)

EXEMPT REDEVELOPMENT:
☒ PROJECT DOES NOT MEET THE DEFINITION OF SIGNIFICANT REDEVELOPMENT (Part A,Sec. 2.39 of Regulations of Harris County, Texas for Stormwater Quality Management)

EXEMPT GRANDFATHERED:
☐ PROJECT'S DRAINAGE TIES DIRECTLY INTO AN EXISTING DRAINAGE SYSTEM PRIOR TO OCTOBER 1, 2001.
(FOR VERIFICATION: PROVIDE ORIGINAL DRAINAGE AREA MAP INCLUDING CALCULATIONS)

GENERAL:
☒ PROJECT'S SWQ REQUIREMENTS FALL WITHIN THE JURISDICTION OF:
CITY OF HOUSTON
☐ STORMWATER QUALITY PERMIT REQUIREMENT IS COVERED BY AN EXISTING SWQMP WITHIN PROJECT TITLE:
_____
HARRIS COUNTY PROJECT No _____ & SWQ PERMIT No.

STORMWATER QUALITY MANAGEMENT PLAN:
☐ SITE PLAN ON SHEET(S)

III. PERMANENT SWQ FEATURES. (COMPLETE IF NOT EXEMPT)

☐ VEGETATIVE CONTROLS USED: (FILTER STRIP, GRASSY SWALE, URBAN FORESTRY DETAILS AND CALCULATIONS APPEAR ON SHEET(S) _____
☐ POND STRUCTURE USED (WET, DRY, WETLANDS) DETAILS AND CALCULATIONSAPPEAR ON SHEET(S)_____
☐ HYDRODYNAMIC TYPE SEPARATOR MODEL: _____
☐ OTHER(S): _____

4. FLOOD PLAIN STATUS

I. GENERAL INFORMATION

FIRM PANEL(S) FOR PROPERTY: 48201C0680L
FIRM PANEL(S) DATE: 6/18/2007
STATUS OF PROPERTY ON MAP
☐ ENTIRELY LOCATED IN UNSHADED ZONE "X"
☒ LOCATED PARTIALLY OR ENTIRELY IN ANY "A" ZONE OR SHADED ZONE "X", DELINEATE FLOODPLAIN BOUNDARY ON CONSTRUCTION DRAWINGS
(DRAINAGE LAYOUT PG. NO._____) (1% BASE FLOOD LEVEL 57.49')
(0.2% BASE FLOOD LEVEL_____)
☐ SITE REMOVED FROM FLOODPLAIN BY LOMR, LOMR-F, LOMA
CASE NO._____ REVISED FLOODPLAIN IS SHOWN ON SHEET____

ELEVATION INFORMATION
BENCHMARK USED
☒ HARRIS COUNTY FLOODPLAIN REFERENCE MARK
☐ HARRIS-GALVESTON COASTAL SUBSIDENCE DISTRICT BENCHMARK (FOR COASTAL AREAS)
DESCRIPTION OF BENCHMARK INCLUDING ELEVATION, DATUM AND YEAR OF ADJUSTMENT *(2001 ADJ.)* _____

II. FLOOD PLAIN DETERMINATION BASED ON GROUND ELEVATION

☒ PROPERTY LIES ENTIRELY ABOVE THE BASE FLOOD LEVEL AND IN SHADED ZONE "X"
☐ PROPERTY LIES PARTIALLY OR ENTIRELY BELOW THE BASE FLOOD LEVEL

III. FLOODPLAIN STORAGE SUMMARY

(APPLIES ONLY TO PORTION OF LAND LOCATED WITHIN FEMA REGULATORY FLOODPLAIN).

A. TOTAL VOLUME OF MATERIAL PROPOSED TO BE MOVED OR PLACED WITHIN THE FIRM DELINEATED FLOODPLAIN (FILL, BASE, CONCRETE, ASPHALT, ETC.):
BELOW 0.2% BASE FLOOD ELEVATION (2001 ADJ.) ____ CUBIC YARDS 0.00

B. TOTAL VOLUME OF MATERIAL PROPOSED TO BE REMOVED FROM THE FIRM DELINEATED FLOODPLAIN:
BELOW 0.2% BASE FLOOD ELEVATION (2001 ADJ.) ____ CUBIC YARDS 0.00
INCLUDING CALCULATIONS)

C. FILL AREA & VOLUME CALCULATIONS ARE SHOWN ON SHEET 0.00

5. WORK IN HCFCD RIGHT-OF-WAY

I. TYPE OF WORK TO BE PERFORMED IN HCFCD HCFCD ROW

A. BOND/NOTIFICATION INFORMATION
☒ HCFCD WATERSHED HALLS BAYOU
☒ HCFCD UNIT No. P118-12-00
☐ NUMBER OF OUTFALLS _____
☒ UTILITY CROSSING
☐ ROADWAY BRIDGE/CULVERT CROSSING
☐ FILL ACTIVITY
☐ REHABILITATION OF CHANNEL
☐ MAINTENANCE
☐ TEMPORARY CROSSING
☐ TRAIL (LENGTH) _____
☐ OTHER _____
COST OF WORK IN HCFCD ROW _____

II. USACE ENVIRONMENTAL PERMIT

☐ US ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER(S) _____
☐ US ARMY CORPS OF ENGINEERS INDIVIDUAL PERMITS
☐ OTHER
☒ NO PERMITS REQUIRED
EXPLAIN:
CROSSING BAYOU VIA TRENCHLESS METHODS

III. REFERENCE / BASIS OF DETERMINATION

☐ ENVIRONMENTAL CONSULTANT REPORT
BY _____
REPORT TITLE _____
REPORT DATE _____
☐ OTHER _____

NOTES:
I. – III. REQUIRED ON PROJECTS WITH WORK IN A HCFCD CHANNEL. PLEASE REFERENCE SECTION 17 OF THE FLOOD CONTROL DISTRICT POLICY, CRITERIA, AND PROCEDURE MANUAL FOR MORE INFORMATION.

IV. HCFCD STANDARD NOTES: SEE SHEET G-009 OF THESE PLANS.

V. HCFCD STANDARD DETAILS: SEE SHEET N/A OF THESE PLANS.

VI. HCFCD ACCESS PLAN: SEE SHEET N/A OF THESE PLANS.

VII. REFER TO THE FOLLOWING PLAN SHEETS: _____
FOR EXISTING AND PROPOSED RIGHT(S) OF WAY INCLUDING DELINEATION AND RECORDING INFORMATION PER HCFCD POLICY, CRITERIA, & PROCEDURE MANUAL (i.e., DRAINAGE EASEMENT, FEE STRIP, ETC.) AND GRANTEE (e.g. COH, HCFCD, PUBLIC, TXDOT, ETC.)

6. REPORTS/AGREEMENTS

I. HCFCD ACCEPTED REPORTS (ALL)

STORMWATER DRAINAGE DESIGN REPORT
REPORT TITLE _____
HCFCD PROJECT #_____
ENGINEERING FIRM _____
REPORT ACCEPTANCE DATE _____

GEOTECHNICAL INVESTIGATION REPORT
REPORT TITLE _____
HCFCD PROJECT #_____
ENGINEERING FIRM _____
REPORT ACCEPTANCE DATE _____

HCFCD APPROVED VARIANCE
DESCRIPTION OF VARIANCE _____
DOCUMENT ID #_____
VARIANCE ACCEPTANCE DATE _____

II. AGREEMENT TYPE & No.:

☐ INTERLOCAL (ILA): _____
☐ HCFCD MAINTENANCE _____
☐ TURF ESTABLISHMENT _____
☐ OTHER _____

HCFCD SIGNATURE BLOCK

PROJECT NAME: _____

ADDRESS: sefswef

WAS ACCEPTED BY HARRIS COUNTY FLOOD CONTROL DISTRICT FOR THE PURPOSES LISTED BELOW:

HARRIS COUNTY FLOOD CONTROL DISTRICT

INTERPOSE NO OBJECTION
BY_____
FOR ITEMS LOCATED OUTSIDE OF HCFCD RIGHT-OF-WAY

APPROVED:
BY_____
FOR ITEMS LOCATED WITHIN EXISTING HCFCD RIGHT-OF-WAY

APPROVED:
BY_____
FOR ITEMS LOCATED WITHIN PROPOSED HCFCD RIGHT-OF-WAY

NO REVIEW REQUIRED:
BY_____
FINAL PERMITTING BY OTHERS

ADDITIONAL COMMENTS:
_____
_____
_____
_____
_____

THE PROJECT WAS REVIEWED, HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE ENGINEER'S RESPONSIBILITY AND ACCOUNTABILITY. THIS DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH APPROPRIATE FEDERAL, STATE AND LOCAL ENVIRONMENTAL RULES, LAWS, AND REGULATIONS AND ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO LAND DEVELOPMENT. IF THE CITY SIGNATURES ARE REQUIRED BY ORDINANCE, COUNTY PERMITS WILL NOT BE ISSUED UNTIL SUCH SIGNATURES ARE OBTAINED. PLAN APPROVAL EXPIRATION TO BE IN ACCORDANCE WITH LOCAL GOVERNEMENT CODE CH. 245.

ENGINEER'S CERTIFICATION

I, ROEL E. HUERTA , A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND THAT I AM NOT VIOLATING ANY PROVISION OF THE CURRENT TEXAS ENGINEERING PRACTICE ACT AND RULES CONCERNING THE PRACTICE OF ENGINEERING AND PROFESSIONAL ENGINEERING LICENSURE.

ANY VIOLATIONS WILL BE FORWARDED TO THE HARRIS COUNTY DISTRICT ATTORNEY'S OFFICE FOR PROSECUTION.

THE COMPLETED PROJECT CONSISTS OF DRAWING SHEETS _____ THRU _____.

SEAL

_____ _____
SIGNATURE DATE

REVISIONS

NOTE: REVISION BLOCK IS TO BE USED ONLY FOR CHANGES MADE AFTER PLANS HAVE BEEN APPROVED BY HARRIS COUNTY FLOOD CONTROL.

DATE	SHEET NO.	DESCRIPTION	P.E. INITIAL	H.C.F.C.D APPROVED DATE

HARRIS COUNTY FLOOD CONTROL PROJECT NO.

HARRIS COUNTY
FLOOD CONTROL DISTRICT
REVIEW SHEET

VERSION 1.0 OCTOBER 2019

ABBREVIATIONS:

&	AND
@	AT
AB	ALL BELL
ABAN	ABANDONED
AC	ACRE / ASBESTOS CEMENT
AI/VR	AIR INLET / VACUUM RELIEF
APPROX	APPROXIMATELY
ASPH	ASPHALT
AVE	AVENUE
AT&T	AMERICAN TELEGRAPH AND TELEPHONE CO.
℄	BASELINE
B/B	BACK TO BACK
BC	BACK OF CURB
BFV	BUTTERFLY VALVE
BL	BUILDING LINE
BLDG	BUILDING
BLVD	BOULEVARD
BRG	BEARING
℄	CENTER LINE
C/C	CENTER TO CENTER
CCCHCT	CLERK COUNTY COURT HARRIS COUNTY TAXES
CGMP	CORRUGATED GALVANIZED METAL PIPE
CHD DIST	CHORD DISTANCE
CHD BRG	CHORD BEARING
CM	CONTROLLING MONUMENT
CMP	CORRUGATED METAL PIPE
CIP	CAST IRON PIPE
CLR	CLEARANCE
CO	CLEAN OUT
COH	CITY OF HOUSTON
CONC	CONCRETE
CONSTR	CONSTRUCTION
CP	CONTROL POINT
CPEE	CENTERPOINT ENERGY ELECTRIC
CPEG	CENTERPOINT ENERGY GAS
CPP	CORRUGATED PLASTIC PIPE
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DIST	DISTANCE
DOC	DEPTH OF COVER
DR	DRIVE
DWG	DRAWING
DWY	DRIVEWAY
E	EAST
EL	ELEVATION
EP	EDGE OF PAVEMENT
E/R	END OF RADIUS
ESMT	EASEMENT
ESP	ELASTIC STRAIN PRELOAD
EXST	EXISTING
FC	FACE OF CURB
F/F	FACE TO FACE
FH	FIRE HYDRANT
℄ ,FL	FLOW LINE
FM	FORCE MAIN
FNC	FENCE
FND	FOUND
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FEET
GIS	GEOGRAPHIC INFORMATION SYSTEM
GM	GAS METER
GPS	GLOBAL POSITIONING SYSTEM
GUY	GUY ANCHOR
GV	GATE VALVE
GV&B	GATE VALVE AND BOX
HC	HARRIS COUNTY
HCCF	HARRIS COUNTY CLERKS FILE
HCDR	HARRIS COUNTY DEED RECORDS
HCFCD	HARRIS COUNTY FLOOD CONTROL DISTRICT
HCMR	HARRIS COUNTY MAP RECORDS
HDPE	HIGH-DENSITY POLYETHYLENE
HDW	HEADWALL
HGL	HYDRAULIC GRADE LINE
HP	HIGH PRESSURE
INV EL	INVERT ELEVATION
IP	INTERMEDIATE PRESSURE/IRON ROD
IR	IRON ROD

ABBREVIATIONS:

J-BOX	JUNCTION BOX
JT	JOINT
JUNCT	JUNCTION
LF	LINEAR FEET
LN	LANE
LPT	LOW POINT
LT	LEFT
LS	LIFT STATION
MAX	MAXIMUM
METRO	METROPOLITAN TRANSIT AUTHORITY
MH	MANHOLE
MIN	MINIMUM
MON	MONUMENT
MPH	MILES PER HOUR
MRHCT	MAP RECORDS HARRIS COUNTY TAXES
N	NORTH
NA	NOT APPLICABLE
NAVD	NORTH AMERICAN VERTICAL DATUM
NG	NATURAL GROUND
NO	NUMBER
NTS	NOT TO SCALE
OCC	ZERO CURB CUT
OS	OFFSET
OH	OVERHEAD
OPRRPHCT	OFFICIAL PUBLIC RECORDS REAL PROPERTY HARRIS COUNTY TAXES
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVATURE
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
PERM	PERMANENT
PG	PAGE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE/PIPELINE
PNT	POINT
PPCA	POTENTIALLY PETROLEUM CONTAMINATED AREA
PRC	POINT OF REVERSE
PROP	PROPOSED
PSI	POUND PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE / POINT OF VERTICAL CURVATURE
PVMT	PAVEMENT
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY

ABBREVIATIONS:

Ⓡ	RECORD DRAWING
R	RADIUS
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REINF	REINFORCED
REM	REMOVABLE
RJ	RESTRAINED JOINT
RM	REFERENCE MARKER
ROW	RIGHT OF WAY
RR	RAILROAD
RRPM	REFLECTIVE REMOVABLE PAVEMENT MARKERS
RT	RIGHT
S	SOUTH
SAN	SANITARY
SCHED	SCHEDULE
SF	SQUARE FEET
SHT	SHEET
SSE	SANITARY SEWER EASEMENT
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STM	STORM
SWBT	SOUTHWESTERN BELL TELEPHONE
SWR	SEWER
SY	SQUARE YARD
TAN	TANGENT
TBM	TEMPORARY BENCHMARK
TEMP	TEMPORARY
TOB	TOP OF BANK
TOC	TOP OF CURB
TOG	TOP OF GRATE
TOP	TOP OF PAVEMENT
TOS	TOP OF STACK
TRANS	TRANSFORMER
TS&V	TAPPING SLEEVE AND VALVE
TXDOT	TEXAS DEPARTMENT OF TRANSPORTATION
TYP	TYPICAL
UE	UTILITY EASEMENT
UGND	UNDERGROUND
VC	VERTICAL CURVE
VPI	VERTICAL POINT OF INTERSECTION
VOL	VOLUME
W	WEST
W/	WITH
WL	WATER LINE
WLE	WATER LINE EASEMENT
WM	WATER METER
WP	WOOD POLE
WSEL	WATER SURFACE ELEVATION
WV	WATER VALVE
WWTP	WASTE WATER TREATMENT PLANT

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

ABBREVIATIONS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 5 OF 192	

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\005-ABBREVIATIONS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\006-SYMBOLS.dwg

EXISTING PLAN VIEW

- WATER METER
- WATER VALVE (GATE)
- WATER VALVE (BUTTERFLY)
- FIRE HYDRANT/FLUSHING VALVE
- TAPPING SLEEVE & VALVE
- REDUCER (8" W — 6" W)
- ROUND CONNECTION
- SANITARY SEWER CLEANOUT & MANHOLE (CO — SAN — SAN MH)
- STORM SEWER MANHOLE (STM — STM MH)
- STORM SEWER INLETS ('B' 'B–B' 'C' 'C–1' 'C–2' 'C–2A' 'GRATE')
- CULVERT PIPE AND HEADWALL
- TOP OF CURB ELEVATION (TC=XX.XX)
- GUTTER ELEVATION (G=XX.XX)
- TOP OF PAVEMENT ELEVATION (TP=XX.XX)
- CONTOUR LINE (XX.X')
- ROW LINE
- PROPERTY LINE
- LOT LINES
- EASEMENT LINE
- CENTER LINE OF ROW
- TRANSIT LINE
- EDGE OF DITCHES
- CENTER LINE OF DITCHES
- EDGE OF DITCHES
- FENCE LINE, WOOD
- FENCE LINE, CHAIN LINK
- FENCE LINE, BARBED WIRE
- FENCE LINE, HOG WIRE
- EDGE OF CONCRETE
- CURB LINE
- CONCRETE WALK
- EDGE OF ASPHALT
- EDGE OF SHELL OR GRAVEL
- DIMENSION LINE (28" 3–17)
- AERIAL POWER LINE (P — P)
- UNDERGROUND POWER LINE (UGP)
- GAS LINE (GAS)
- UNKNOWN UNDERGROUND LINE (MISC)
- OIL PIPELINE ((IDENTIFY CONDUIT) OGP)
- UNDERGROUND TELECOMM LINE W/VAULT (UGT)
- AERIAL TELECOMM LINE (T — T)
- RAILROAD LINE
- WATER LINE (20" (AND SMALLER) WATER; 24" (LARGER THAN 20") WATER)
- SANITARY SEWER LINE (24" (AND SMALLER) SANITARY SEWER; 30" (LARGER THAN 24") SANITARY SEWER)
- STORM SEWER LINE (24" (AND SMALLER) STORM SEWER; 30" (LARGER THAN 24") STORM SEWER)
- SANITARY SEWER FORCE MAIN (FM — FM)
- RECLAIMED WATER LINE (RWL)
- NON–POTABLE WATER LINE (NPW)
- GAS METER (GAS)
- GAS VALVE (GAS)
- PROPANE LINE (PROPANE)
- STEAM LINE (STEAM)
- MISC UNDERGROUND PIPELINE LABLE (A2)

PROPOSED PLAN VIEW

- WATER METER (WM)
- WATER VALVE (GATE) (WV)
- WATER VALVE (BUTTERFLY) (BFWV)
- FIRE HYDRANT/FLUSHING VALVE (FH, WV)
- TAPPING SLEEVE & VALVE (TS&V)
- REDUCER (12" W — 8" W)
- ROUND CONNECTION
- SANITARY SEWER CLEANOUT & MANHOLE (SAN — CO — SAN MH)
- STORM SEWER MANHOLE (STM — STM MH)
- STORM SEWER INLETS ('B' 'B–B' 'C' 'C–1' 'C–2' 'C–2A' 'GRATE')
- CULVERT PIPE AND HEADWALL
- TOP OF CURB ELEVATION (TC=XX.XX)
- GUTTER ELEVATION (G=XX.XX)
- TOP OF PAVEMENT ELEVATION (TP=XX.XX)
- CONTOUR LINE (XX.X')
- ROW LINE
- PROPERTY LINE
- LOT LINES
- EASEMENT LINE
- CENTER LINE OF ROW
- TRANSIT LINE
- EDGE OF DITCHES
- CENTER LINE OF DITCHES
- EDGE OF DITCHES
- FENCE LINE, WOOD
- FENCE LINE, CHAIN LINK
- FENCE LINE, BARBED WIRE
- FENCE LINE, HOG WIRE
- EDGE OF CONCRETE
- CURB LINE
- CONCRETE WALK
- EDGE OF ASPHALT
- EDGE OF SHELL OR GRAVEL
- DIMENSION LINE (28" 3–17)
- AERIAL POWER LINE (P — P)
- UNDERGROUND POWER LINE (UGP)
- GAS LINE (GAS)
- UNKNOWN UNDERGROUND LINE (MISC)
- OIL PIPELINE ((IDENTIFY CONDUIT) OGP)
- UNDERGROUND TELCOMM LINE W/ VAULT (UGT)
- AERIAL TELECOMM LINE (T — T)
- RAILROAD LINE
- WATER LINE (20" (AND SMALLER) WATER; 24" (LARGER THAN 20") WATER)
- SANITARY SEWER LINE (24" (AND SMALLER) SANITARY SEWER; 30" (LARGER THAN 24") SANITARY SEWER)
- STORM SEWER LINE (24" (AND SMALLER) STORM SEWER; 30" (LARGER THAN 24") STORM SEWER)
- SANITARY SEWER FORCE MAIN (FM — FM)
- RECLAIMED WATER LINE (RWL)
- NON–POTABLE WATER LINE (NPW)
- GAS METER (GAS)
- GAS VALVE (GAS)
- PROPANE LINE (PROPANE)
- STEAM LINE (STEAM)
- MISC UNDERGROUND PIPELINE LABLE (A2)
- MATCH LINE

EXISTING PLAN VIEW

- PAVING HEADER
- BUILDING, RESIDENTIAL (RES. 1–STORY BR. BLDG.)
- BUILDING, COMMERCIAL (COMM. 1–STORY BR. BLDG.)
- TREE
- HEDGE
- IRON PIPE OR IRON ROD MONUMENT (3/4" IP)
- POINT OF INTERSECTION (PI)
- POINT OF CURVE (PC)
- POINT OF TANGENCY (PT)
- POWER POLE (P — P)
- POWER POLE W/DOWN GUY (P — P)

EXISTING PROFILE VIEW

- NORTH OR EAST PROPERTY LINE
- SOUTH OR WEST PROPERTY LINE
- NORTH OR EAST CURB
- SOUTH OR WEST CURB
- NORTH OR EAST DITCH
- SOUTH OR WEST DITCH
- NORTH OR EAST NATURAL GROUND
- SOUTH OR WEST NATURAL GROUND
- NORTH OR EAST CULVERT (CULVERT)
- SOUTH OR WEST CULVERT (CULVERT)
- CENTERLINE OF ROW
- CENTERPOINT ENERGY CONDUIT (UGP CENTERPOINT ENERGY CONDUIT)
- GAS LINE (GAS GAS LINE)
- WESTERN UNION (OGP WESTERN UNION)
- AT&T CONDUIT (UGT AT&T CONDUIT)
- WATER LINE (W 20" (AND SMALLER) WATER LINE W; W 24" (LARGER THAN 20") WATER)
- SANITARY SEWER LINE (SAN 24" (AND SMALLER) SANITARY SEWER SAN; SAN 30" (LARGER THAN 24") SANITARY SEWER)
- STORM SEWER LINE (STM 24" (AND SMALLER) STORM SEWER STM; STM 30" (LARGER THAN 24") STORM SEWER)
- SANITARY SEWER FORCE MAIN (FM — FM)
- RECLAIMED WATER LINE (RWL)
- NON–POTABLE WATER LINE (NPW)
- CENTERPOINT ENERGY MANHOLE
- AT&T MANHOLE
- WATER LINE MANHOLE (W — W)
- SANITARY SEWER MANHOLE & CLEANOUT
- STORM SEWER MANHOLE
- STORM SEWER INLET

PROPOSED PLAN VIEW

- PAVING HEADER
- BUILDING, RESIDENTIAL (RES. 1–STORY BR. BLDG.)
- BUILDING, COMMERCIAL (COMM. 1–STORY BR. BLDG.)
- TREE
- HEDGE
- IRON PIPE OR IRON ROD MONUMENT (3/4" IP)
- POINT OF INTERSECTION (PI)
- POINT OF CURVE (PC)
- POINT OF TANGENCY (PT)
- POWER POLE (P — P)
- POWER POLE W/DOWN GUY (P — P)

PROPOSED PROFILE VIEW

- NORTH OR EAST PROPERTY LINE
- SOUTH OR WEST PROPERTY LINE
- NORTH OR EAST CURB
- SOUTH OR WEST CURB
- NORTH OR EAST DITCH
- SOUTH OR WEST DITCH
- NORTH OR EAST NATURAL GROUND
- SOUTH OR WEST NATURAL GROUND
- NORTH OR EAST CULVERT (CULVERT)
- SOUTH OR WEST CULVERT (CULVERT)
- CENTERLINE OF ROW
- CENTERPOINT ENERGY CONDUIT (UGP CENTERPOINT ENERGY CONDUIT)
- GAS LINE (GAS GAS LINE)
- WESTERN UNION (OGP WESTERN UNION)
- AT&T CONDUIT (UGT AT&T CONDUIT)
- WATER LINE (W 20" (AND SMALLER) WATER LINE W; W 24" (LARGER THAN 20") WATER)
- SANITARY SEWER LINE (SAN 24" (AND SMALLER) SANITARY SEWER SAN; SAN 30" (LARGER THAN 24") SANITARY SEWER)
- STORM SEWER LINE (STM 24" (AND SMALLER) STORM SEWER STM; STM 30" (LARGER THAN 24") STORM SEWER)
- SANITARY SEWER FORCE MAIN (FM — FM)
- RECLAIMED WATER LINE (RWL)
- NON–POTABLE WATER LINE (NPW)
- CENTERPOINT ENERGY MANHOLE
- AT&T MANHOLE
- WATER LINE MANHOLE (W — W)
- SANITARY SEWER MANHOLE & CLEANOUT
- STORM SEWER MANHOLE
- STORM SEWER INLET

MISC STANDARD ELEMENTS

- COH NORTH ARROW (N, Z)
- COH BAR SCALE (0' 10' 20' 40'; SCALE: 1"=20')
- REVISION CLOUDS/DELTA (1)
- DETAIL/SECTION TITLE (1 VIEW TITLE; SCALE: 1:1)
- SECTION CALLOUT (1 / XX)
- DETAIL CALLOUT (1 / XX)

PROJECT LEGEND:

PROPOSED UTILITIES

- TEMPORARY CONSTRUCTION EASEMENT
- PROPOSED SANITARY SEWER PIPE (SAN SAN)
- PROPOSED PIPE CASING (SAN SAN)
- TUNNEL SHAFTS *
- MINIMUM AREA OF DISTURBANCE *

* CONFIGURATION TO BE DETERMINED BY CONTRACTOR MEANS AND METHOD.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SYMBOLS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 6 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\007-009-GENERAL-NOTES.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

GENERAL NOTES–INSIDE CITY LIMITS NOTES:

1. UNLESS OTHERWISE NOTED AND APPROVED ON DRAWINGS, CONSTRUCT CIVIL INFRASTRUCTURE IN ACCORDANCE WITH THE EFFECTIVE EDITION OF THE HOUSTON PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, STANDARD CONSTRUCTION DETAILS, AND SUPPLEMENTS, ADDENDA AND AMENDMENTS THERETO. THE LATEST EDITION OF THE ABOVE PUBLICATIONS CAN BE FOUND AT: HTTP://WWW.HOUSTONPERMITTINGCENTER.ORG/OFFICE-CITY-ENGINEER/DESIGN-AND-CONSTRUCTION-STANDARDS.
2. THE DESIGN MUST BE CONSISTENT WITH THE EFFECTIVE EDITION OF HOUSTON PUBLIC WORKS INFRASTRUCTURE DESIGN MANUAL AND TCEQ (TEXAS COMMISSION ON ENVIRONMENTAL QUALITY) REQUIREMENTS.
3. THE GEOTECHNICAL INVESTIGATION FOR THIS PROJECT WAS CONDUCTED IN ACCORDANCE WITH CHAPTER 11 OF THE LATEST EDITION OF THE PUBLICATION INFRASTRUCTURE DESIGN MANUAL, PUBLISHED BY HOUSTON PUBLIC WORKS. SOILS REPORT WAS PREPARED BY [GEOTECHNICAL ENGINEERING FIRM] REPORT NO. [NO. OF REPORT], DATED [DATE OF REPORT].
4. UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL NOTIFY TEXAS ONE CALL AT 713-223-4567/811 OR 800-344-8377 AND LONE STAR NOTIFICATION CENTER AT 800-669-8344 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION. UTILITIES MARKED WITHIN THE PUBLIC RIGHT OF WAY OR IN EASEMENTS SHALL COMPLY WITH TAC TITLE 16, PART 1, CHAPTER 18, RULE §18.6 AND THE AMERICAN PUBLIC WORKS ADMINISTRATION (APWA) UNIFORM COLOR CODE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER, STORM WATER LINES AND TRAFFIC CONTROL DEVICES. DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE EFFECTIVE EDITION OF HOUSTON PUBLIC WORKS, STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEM, WATER LINES, STORM DRAINAGE, STREET PAVING, AND TRAFFIC AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, STREET PAVING, AND TRAFFIC, REFERENCED ABOVE AND SUPPLEMENTS, ADDENDA AND AMENDMENTS THERETO, AT NO ADDITIONAL COST TO THE CITY OF HOUSTON.
6. CONTRACTOR SHALL NOTIFY THE OFFICE OF THE CITY ENGINEER, HOUSTON PUBLIC WORKS @ 832-394-9098 OR VIA FAX AT 832-395-4424 FOR INSPECTION AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
7. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION OF THE OWNING AUTHORITY.
8. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION.
9. CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
10. CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS AND RECORD AS-BUILT CONDITIONS DURING CONSTRUCTION. THESE AS-BUILT DRAWINGS WILL BE SUBMITTED TO THE DESIGN CONSULTANT WHO WILL MAKE THE CHANGES ON THE ORIGINAL TRACINGS, LABEL EACH SHEET IN THE SET AS "RECORD DRAWINGS", AND RETURN IT TO THE OFFICE OF THE CITY ENGINEER.
11. LOCATION, ELEVATIONS AND DIMENSION OF EXISTING UTILITIES, STRUCTURES, OTHER FEATURES AND PROPOSED WORK ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS, THERE MAY BE OTHER IMPROVEMENTS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. IT SHALL BE THE CONTRACTOR RESPONSIBILITY PRIOR TO BIDDING TO VERIFY THE EXACT LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THESE PLANS AFFECTING THEIR WORK, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE RESTRICTIONS.
12. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REVIEW THE POTENTIAL IMPACTS TO THE EXISTING TREES WITH THEIR CERTIFIED ARBORIST, AND INCLUDE ANY AND ALL RECOMMENDED TREES PROTECTION MEASURES IN THEIR BID.

STORM CONSTRUCTION NOTES:

1. STORM SEWER SHALL BE REINFORCED CONCRETE PIPE (C-76, CLASS III), AND SHALL BE INSTALLED, BEDDED, AND BACK FILLED IN ACCORDANCE WITH THE CITY OF HOUSTON DRAWING NOS. 2317-02, 02317-3, 02317-05, 02317-06, AND 02317-07 (JULY 2019) AS APPLICABLE UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
2. ALL STORM SEWER CONSTRUCTED IN SIDE LOT EASEMENT SHALL BE R.C.P (C-76, CLASS III) AND SHALL BE EMBEDDED IN ACCORDANCE WITH THE CITY OF HOUSTON DRAWING NOS. 02317-02, 02317-03, 02317-05, 02317-06, AND 02317-07 AS APPLICABLE.
3. ALL SEWER UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE BACKFILLED WITH 1-1/2 SACK CEMENT/C.Y. STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE. THE REMAINING DEPTH OF TRENCH SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL.
4. ALL TRENCH BACKFILL SHALL BE IN 8" LIFTS, WITH TESTS TAKEN AT 100 FOOT INTERVALS IN EACH LIFT, AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-698/AASHTO T99).
5. CIRCULAR AND ELLIPTICAL REINFORCED CONCRETE PIPE SHALL BE INSTALLED USING RUBBER GASKET JOINT CONFORMING TO ASTM C443 AND ASTM C877 RESPECTIVELY.
6. ALL STORM SEWER PIPES AND INLET LEADS SHALL BE 24" AND LARGER R.C.P. (C-76, CLASS III).
7. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES AND INLET LEADS ARE TO BE PLUGGED WITH 8" BRICK WALLS UNLESS OTHERWISE NOTED.
8. MINIMUM HORIZONTAL CLEARANCE BETWEEN ANY STORM PIPE AND BOX SHALL BE AT LEAST 48-INCHES FROM EXTERIOR OF THE STORM PIPE OR BOX TO THE EXTERIOR OF THE EXISTING OR PROPOSED PUBLIC OR PRIVATE UTILITY AND OTHER APPURTENANCES. MINIMUM VERTICAL CLEARANCE BETWEEN ANY STORM PIPE AND BOX SHALL BE AT LEAST 24-INCHES FROM EXTERIOR OF THE STORM PIPE OR BOX TO THE EXTERIOR OF THE EXISTING OR PROPOSED PUBLIC OR PRIVATE UTILITY AND OTHER APPURTENANCES.
9. ADJUST MANHOLE COVERS TO GRADE CONFORMING TO REQUIREMENTS OF SECTION 02086-ADJUSTING MANHOLES, INLETS, AND VALVE BOXES TO GRADE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING, AND RESTORING ANY BACK SLOPE DRAINAGE SYSTEM DISTURBED AS A RESULT OF THIS WORK.
11. ALL DITCHES SHALL BE GRADED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED. ALL DISTURBED AREA SHALL BE REGRADED, SEEDED, AND FERTILIZED.
12. ALL DRIVEWAYS WILL BE LOCATED TO AVOID EXISTING CURB INLET STRUCTURES

SANITARY SEWERS CONSTRUCTION NOTES:

1. ALL SEWERS SHALL BE SUBJECT TO A STANDARD EXFILTRATION TEST. TESTS ARE TO BE PERFORMED ON THE TOTAL FOOTAGE OF SEWER LINE INCLUDED IN THE PROJECT. REQUIREMENTS OF TEXAS ADMINISTRATIVE CODE, TITLE 30 CHAPTER 217, "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS" SHALL GOVERN WHERE CONFLICTS EXIST EXCEPT WHERE CITY REQUIREMENTS ARE MORE STRINGENT.
2. ALL MANHOLES ARE TO BE PER CITY OF HOUSTON STANDARD DETAILS DRAWING NUMBERS 02082-01, 02082-02, 02082N-02, 02082-03, AND 02082N-03 UNLESS OTHERWISE NOTED. USE THE LATEST VERSION AS APPLICABLE.
3. SANITARY SEWER MANHOLES WILL HAVE BEDDING AND BACKFILL PER CITY OF HOUSTON STANDARD DETAILS DRAWING NO. 02317-08 UNLESS OTHERWISE NOTED.
4. THE SANITARY SEWER PVC PIPE SHALL BE ASTM D 3034 TYPE PSM SDR 26 GRAVITY SEWER PIPE, ASTM D2241 SDR 26 PRESSURE RATED SEWER PIPE OR AWWA C-900 DR-18 GREEN PVC PRESSURE RATED SEWER PIPE BASED ON CONSTRUCTION CONDITION REQUIREMENT AND CONFORMING TO ASTM D1784 AND CITY OF HOUSTON STANDARD SPECIFICATION SECTION 02506 POLYVINYL CHLORIDE PIPE.
5. WHEN SS PRESSURE RATED PVC PIPE IS USED ON WATERLINE (WL) CROSSING UNDER CONDITION 1 OF COH IDM TABLE 7.3, THE SAME TYPE OF D2241 SDR 26 PVC PIPE OR C-900 GREEN DR-18 PVC GREEN PRESSURED TO BE UTILIZING IN-BETWEEN TWO SS MH'S. OR TO UTILIZE A DI TRANSITION ADAPTER FOR THE CONNECTING OF ASTM D-3034 PVC GRAVITY PIPE TO DI-OD AWWA C-900 PVC PIPE CENTERED AT WL WHEN CONNECTING TWO DIFFERENT TYPES OF PVC PIPES FOR SEWER CONSTRUCTION.
6. AWWA C-900 DR-18 PVC PIPE USES EITHER AWWA C900 DR-18 PVC FITTINGS OR DIP FITTINGS.
7. ALL SANITARY SEWER LINES UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL HAVE BEDDING PER CITY OF HOUSTON STANDARD DETAILS DRAWING NUMBERS 02317-01, 02317-02, OR 02317-03 AS APPLICABLE, WITH 1 ½ SACK CEMENT/CY STABILIZED SAND BACKFILL UP TO THE BOTTOM OF THE PAVEMENT SUBGRADE. 100 PSI PERFORMANCE RESULTS ARE STILL REQUIRED.
8. ALL NEW SANITARY SEWERS CROSSING WATER LINES WITH A CLEARANCE BETWEEN 12 INCHES AND 9 FEET SHALL HAVE A MINIMUM OF ONE 18' JOINT OF DUCTILE IRON OR (GREEN) C900 PVC PIPE MEETING ASTM SPECIFICATION D2241 CENTERED ON WATER LINE. WHEN WATER LINE IS BELOW SANITARY SEWER, PROVIDE MINIMUM 2 FOOT SEPARATION.
9. CONTRACTOR SHALL PROVIDE A MINIMUM HORIZONTAL CLEARANCE OF 9' FEET BETWEEN WATER LINES AND SANITARY SEWER MANHOLES AND LINES.
10. SANITARY SEWER MANHOLE RIMS OUTSIDE OF PROPOSED PAVING WILL BE SET 3" – 6" ABOVE THE SURROUNDING LEVEL FINISHED GRADE AFTER PAVING WITH SLOPED BACKFILL ADDED FOR STORM WATER TO DRAIN AWAY FROM MANHOLE RIM.
11. IN WET STABLE TRENCH AREAS USE BEDDING PER CITY OF HOUSTON STANDARD DETAILS DRAWING NUMBER 02317-02.
12. DEFLECTION TEST: DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND SEMI-RIGID SEWER PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5% IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED AS PER 30 TAC 217.57 LATEST AMENDMENT AND WITHOUT MECHANICAL PULLING DEVICES. NO BALL-TYPE MANDREL IS ALLOWED.
13. INFILTRATION, EXFILTRATION OR LOW-PRESSURE AIR TEST: EITHER OF THE FOLLOWING TESTS SHALL BE PERFORMED AS PER TAC, TITLE 30 217.57 WITHIN THE SPECIFIED TOLERANCES ON ALL GRAVITY SEWERS.

A. INFILTRATION OR EXFILTRATION TEST: TOTAL LEAKAGE AS DETERMINED BY A HYDROSTATIC HEAD TEST SHALL NOT EXCEED 50 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO (2) FEET.

B. LOW-PRESSURE AIR TEST: PERFORM TEST ACCORDING TO UNI-B-6-90 OR OTHER APPROPRIATE PROCEDURES. FOR SECTIONS OF PIPE LESS THAN 36" (INCH) AVERAGE INSIDE DIAMETER, THE MINIMUM ALLOWABLE TIME FOR PRESSURE DROP FROM 3.5 P.S.I.G. TO 2.5 P.S.I.G. SHALL BE AS FOLLOWS:

- 6" 340 SECONDS OR 0.855(L) FOR TEST LENGTHS GREATER THAN 398'
- 8" 454 SECONDS OR 1.520(L) FOR TEST LENGTHS GREATER THAN 298'
- 10" 567 SECONDS OR 2.374(L) FOR TEST LENGTHS GREATER THAN 239'
- 12" 680 SECONDS OR 3.419(L) FOR TEST LENGTHS GREATER THAN 199'
- 15" 850 SECONDS OR 5.342(L) FOR TEST LENGTHS GREATER THAN 159'
- 18" 1020 SECONDS OR 7.693(L) FOR TEST LENGTHS GREATER THAN 133'

WHERE L = LENGTH OF LINE OF SAME PIPE SIZE IN FEET.

14. "SAN. S. E." INDICATES "SANITARY SEWER EASEMENT"
15. FOR SANITARY MANHOLE (MH) RIMS SET INSIDE OF OR @ CURB & GUTTER PAVEMENT AND/OR BELOW T.C., MH RIMS WILL BE SET FLUSHED WITH AN ABUTTING PAVED SURFACE. THE (VALCUN, NEENAH OR EQUAL) HEAVY DUTY BOLTED SOLID MH COVER SHALL BE PROPERLY (AND SECURELY) ATTACHED AND SEALED TO ITS COMPATIBLE GASKETED FRAME BY USING BOTH A NEOPRENE GASKET AND (AT LEAST) 4 COUNTER-SUNK HEX-HEAD COARSE THREADED ½"-13 UNC STAINLESS STEEL BOLTS. THE HEAVY DUTY FRAME MH COVER SHALL BE SOLID (NO AIR HOLES). SAID FRAME SHALL BE BOTH EMBEDDED INTO THE MH'S TOP ALSO SECURELY ANCHORED TO THE UNDERLYING MH STRUCTURE WITH EITHER SECURELY ATTACHED EMBEDDED ANCHOR BOLTS OR THE CONCRETE MH'S EXPOSED REBARS WELDED TO THE FRAME OR OTHER EQUALLY SECURED METHODS TO PREVENT MH COVER/FRAME BLOW-OFFS/EJECTIONS.

WATER LINE CONSTRUCTION NOTES:

1. WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CITY OF HOUSTON INFRASTRUCTURE DESIGN MANUAL, STANDARD SPECIFICATIONS, AND CONSTRUCTION DETAILS.
2. ALL 4 THROUGH 12 WATER LINE TO BE AWWA C-900 OR C-909 DR-18 PVC PRESSURE RATED WATER MAIN WITH 2" SMALLER WATER SERVICE LINE TO BE AWWA C-901 DR-9 HDPE UNLESS OTHERWISE NOTED ON PLANS. SERVICE CONNECTIONS SHALL BE INSTALLED USING BRASS SADDLES AND CORPORATION STOPS FOR ALL PVC MAINS. ALL FITTINGS SHALL CONFORM TO AWWA STANDARDS WITH MECHANICAL JOINTS.
3. RESTRAINED JOINT SHALL BE PROVIDED AS NECESSARY TO PREVENT PIPE MOVEMENT. USE RESTRAINED JOINTS WHERE PREVENTING MOVEMENT OF PIPE BY OTHER MEANS IS NOT POSSIBLE.
4. ALL WATER LINES BORED PROPOSED ON PUBLIC R.O.W.'S AND TO A POINT OF 10' (OR 20') BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED IN STEEL CASING PIPE SIZED TO PROVIDE FREE FLOW ANNULAR SPACE BETWEEN STEEL CASING I.D. AND CARRIER PIPE O.D.
5. ALL WATER LINES ARE TO BE DISINFECTED IN CONFORMANCE WITH AWWA C651 AND THE TEXAS STATE DEPARTMENT OF HEALTH AT LEAST ONE BACTERIOLOGICAL SAMPLE SHALL BE COLLECTED FOR EVERY 1000 LINEAR FEET OF WATER LINE AND SHALL BE REPORTED IF CONTAMINATION PERSISTS.
6. ALL BURIED GATE VALVES SHALL HAVE CAST IRON VALVE BOXES WITH A CAST IRON COVER, EXCEPT WHERE PLANERS ARE CALLED OUT ON THE PLANS OR OTHERWISE NOTED.
7. FIRE HYDRANTS USED WILL COMPLY WITH CURRENT UNDERWRITERS LABORATORY REQUIREMENTS PER ANSI/A21/3, OR FOWM DIMENSIONS PER ANSI/A21/3, AS NOTED ON PLANS.
8. CORPORATION STOPS WILL NOT EXTEND PAST THE ENTIRE FACE DIMENSION IN ACCORDANCE WITH THE LATEST CITY OF HOUSTON STANDARD CONSTRUCTION DETAILS FOR FLUSHING PURPOSES; THEY WILL REMAIN FLUSH WITHIN FACE WHEN INCLUDED IN FIRE HYDRANTS.
9. SEWER LINES MUST CONFORM TO CITY STANDARD SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS; SEWER SERVICES MUST CONFORM TO CITY STANDARD SPECIFICATIONS NOTED ABOVE; STANDARD MANHOLES MUST CONFORM TO COH/CEB/CESV STANDARDS UNLESS OTHERWISE SPECIFIED BY ENGINEER'S DRAWINGS; ALL MANHOLES MUST HAVE AN APPROVED FRAME & COVER MEETING COH STANDARDS UNLESS OTHERWISE SPECIFIED BY ENGINEER'S DRAWINGS.
10. EACH AREA SERVED BY SEWER LINE(S) MUST FIRST RECEIVE SITE GRADING PRIOR ACCEPTANCE INTO SERVICE; THIS AREA MUST PASS STANDARD PROCTOR DENSITY PRIOR ACCEPTANCE INTO SERVICE WHEN NO FILL AREA HAS BEEN FILLED & COMPACTED WITHIN TWO WEEKS FROM DATE FINAL EXAM WAS PERFORMED.
11. UTILITY CONTRACTOR SHALL PROVIDE TEMPORARY SILT BARRIER FENCE AT ALL NON-CURBED STREETS WHICH WILL REMAIN IN PLACE AFTER UNDERGROUND UTILITIES ARE INSTALLED UNTIL PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED.
12. CONTRACTOR IS RESPONSIBLE FOR ANY CURB REPAIRS.
13. ANY EXISTING CURBS, DRIVEWAYS, SIDEWALKS DAMAGED OR REMOVED DURING CONSTRUCTION SHOULD BE REPLACED ACCORDING TO CITY SPECIFICATIONS.
14. ADEQUATE BARRICADES SHOULD ALWAYS PROTECT OPEN TRENCHES DURING CONSTRUCTION ACTIVITIES.
15. ADEQUATE DRAINAGE SHOULD ALWAYS MAINTAIN AROUND ANY OPEN TRENCH EXCAVATION OR ANY DRAINAGE DITCH STRUCTURE DISTURBED DURING CONSTRUCTION ACTIVITIES.
16. CONTRACTOR SHOULD TAKE NECESSARY PRECAUTIONS AGAINST DAMAGE FROM HEAVY EQUIPMENT OPERATIONS SUCH AS HORIZONTAL BORING DRILLS USED NEAR EXISTING STRUCTURES LIKE BUILDINGS ETC., INCLUDING BUT NOT LIMITED TO: PROTECTING SOFT SOILS UNDER THESE STRUCTURES FROM EXCESSIVE LOADING CONDITIONS CAUSED BY HEAVY EQUIPMENT OPERATIONS OVER THEM WITHOUT PROPER SUPPORT UNDERNEATH THEM BEFOREHAND IF NEEDED BASED UPON SOIL CONDITIONS PRESENT THERE BEFORE STARTING WORK THEREON ACCORDINGLY.
17. CONTRACTOR SHOULD COMPLY WITH CITY REGULATIONS REGARDING EXCAVATION/TRENCHING SAFETY STANDARDS SET FORTH THEREIN.
18. CONTRACTOR SHOULD ENSURE THAT ALL UTILITY CROSSINGS MEET MINIMUM DEPTH REQUIREMENTS SPECIFIED THEREIN.
19. CONTRACTOR SHOULD ENSURE THAT PROPER BACKFILL MATERIAL USED MEETS MINIMUM COMPACTION REQUIREMENTS SPECIFIED THEREIN.
20. FINAL GRADE STREET ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES AFTER COMPLETION THEREOF.

SWPPP CONSTRUCTION NOTES:

1. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
2. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
3. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FORM THE EXCAVATED AREA.
4. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
5. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
   - . DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
   - . AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
   - . STRUCTURAL CONTROL MEASURES.
   - . LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
6. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

GENERAL NOTES
SHEET 1 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 7 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\007-009-GENERAL-NOTES.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

PRIVATE UTILITY NOTES:

COMCAST FACILITIES:

1. THE LOCATIONS OF COMCAST CABLE FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND LINES FIELD LOCATED.
2. THE CONTRACTOR WILL CALL TEXAS ONE-CALL AT 1-800-245-4545 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF COMCAST CABLE FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE COMCAST CABLE FACILITIES.
4. WHEN COMCAST CABLE FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES, THE CONTRACTOR WILL BRACE THE POLE FOR SUPPORT.
5. THE CONTRACTOR WILL DETERMINE THE EXACT LOCATION OF THE UNDERGROUND FACILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ALL DAMAGES CAUSED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND FACILITIES.

AT&T TEXAS/ SWBT FACILITIES:

1. THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL CALL 1-800-344-8377 (TEXAS 811) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.
4. WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.
6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER ROOSEVELT LEE JR. AT (713) 567-4552 OR EMAIL HIM AT RL7259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATING NEAR OUR AT&T TEXAS/SWBT FACILITIES.

CENTERPOINT ENERGY NOTES:

CAUTION: UNDERGROUND GAS FACILITIES

1. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.
   -WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL 713-945-8036 OR 713-945-8037 (7:00 AM TO 4:30 PM) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
   -WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
   -WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
   -FOR EMERGENCIES REGARDING GAS LINES CALL 713-659-3552 OR 713-207-4200
2. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL LINES:

1. OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:
   -ANY ACTIVITY WHERE PERSONS OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
   -OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.
2. PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT 713-207-2222.

WARNING: UNDERGROUND ELECTRICAL LINES:

1. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- ALL INFORMATION CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTORS ARE RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND PIPELINES, CONDUITS, AND STRUCTURES BY CONTACTING OWNERS OF UNDERGROUND UTILITIES OR BY EXCAVATING IN ADVANCE OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES WHEN AND WHERE THEY FALL IN THE PATH OF CONSTRUCTION.
- THE CONTRACTOR IS ALSO RESPONSIBLE FOR CONTACTING THE UTILITY COORDINATING COMMITTEE AT (713) 223-4567 AND TEXAS ONE CALL AT 1-800-245-4545, FORTY EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION.
- THE LOCATION OF ANY CENTERPOINT ENERGY UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. THEY AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
- ALL PROPOSED FACILITIES SHALL MAINTAIN 12" CLEAR FROM ALL EXISTING UTILITIES.

ACTIVITIES ON/OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

1. NO APPROVAL TO USE, CROSS, OR OCCUPY NO CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING AND RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769

METRO

1. THE CONTRACTOR SHALL CONTACT METRO BUS OPERATIONS BY EMAIL 10 BUSINESS DAYS IN ADVANCE OF WORK SCHEDULED THAT WOULD IMPACT A METRO BUS ROUTE OR BUS STOP EMAIL SHALL BE SENT TO ZELLA.RUBIO@HOUSTONTX.GOV TANGELO.MOY@RIDEMETRO.ORG DAN.LARSON@RIDEMETRO.ORG ADD COPY TO PROJECT MANAGER CALL METRO AT 713-635-4000 WITH QUESTIONS

HARRIS COUNTY

RECORD DRAWINGS TO BE SUBMITTED TO THE HARRIS COUNTY ENGINEERING DEPARTMENT PERMITS OFFICE THESE DRAWINGS CAN BE SUBMITTED TO APCELECTRONICPLAN@HCTX.NET

APPENDIX D – CONSTRUCTION NOTES TO DO ON ALL PROJECTS

1. WATER LINES, WASTEWATER COLLECTION SYSTEMS, AND STORM DRAINAGE SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CITY OF HOUSTON DEPARTMENT PUBLIC WORKS AND ENGINEERING DESIGN MANUAL, STANDARD SPECIFICATIONS AND DETAILS FOR WASTEWATER COLLECTION SYSTEM, WATER LINES, STORM DRAINAGE AND STREET PAVING.

2. ALL EXCAVATION, BACKFILL, BEDDING MATERIAL (ITEM 02317) AND HAUL OFF SHALL BE INSTALLED, BEDDED, BACKFILLED IN ACCORDANCE WITH ITEM 02317.

3. ALL PIPE ZONE MATERIAL (ITEM 02317) USED ON THIS PROJECT SHALL BE APPROVED PRIOR TO INSTALLATION.

4. ALL STORM SEWERS CONSTRUCTED INSIDE LOOP EAST EXEMPTIONS SHALL BE RCP CLASS III MINIMUM FERTILITY (2000) LEADERS SHALL BE REMOVED.

5. THE OUTSIDE FACE CURB RETURN RADIUS SHALL BE NO LESS THAN 25 FT EXCEPT WHERE OTHERWISE INDICATED IN PLANS. FOOT ANGLE TYPE DRIVEWAYS ONLY ALLOWED FOR RESIDENTIAL LOT FRONTAGES LESS THAN 40 FT WIDTH.

6. CONTRACTORS ARE RESPONSIBLE TO MAINTAIN POSITIVE DRAINAGE DURING ENTIRE PHASE OF CONSTRUCTION UNTIL FINAL ACCEPTANCE OF PROJECT.

7. CONTRACTORS ARE RESPONSIBLE FOR COORDINATING LOCATES WITH UTILITY COMPANIES PRIOR TO BEGINNING WORK. UTILITIES INCLUDE BUT ARE NOT LIMITED TO ELECTRIC, TELEPHONE, GAS, CABLE TV, OTHER PRIVATE UTILITIES. CALL TEXAS ONE CALL CENTER (713)223-4567 WRITTEN NOTICE 48 HOURS REQUIRED BEFORE BEGINNING EXCAVATION.

8. CONTRACTORS ARE RESPONSIBLE TO OBTAIN PERMIT FROM CITY OF HOUSTON PUBLIC WORK TRAFFIC OPERATION DIVISION PRIOR TO BEGINNING ANY WORK REQUIRING LANE CLOSURES, DETOURS ETC.

9. CONTRACTORS MUST HAVE LATEST EDITION TEXAS MANUAL UNIFORM TRAFFIC CONTROL DEVICES TXDOT REVISIONS AVAILABLE AT JOBSITE.

10. ANY DAMAGE TO EXISTING ROADWAY FACILITIES RESULTING FROM CONSTRUCTION ACTIVITIES MUST BE REPAIRED TO SATISFACTION OF HCENG DEPT AT EXPENSE OF CONTRACTOR.

11. NO TREES, SHRUBBERY OR OTHER LANDSCAPING DISTURBED DURING THIS PROJECT SHALL BE REMOVED WITHOUT WRITTEN PERMISSION FROM HCENG DEPT.

12. THE OWNER IS RESPONSIBLE FOR OBTAINING NECESSARY RIGHT OF WAY ACQUISITIONS REQUIRED FOR PROPOSED WORK WITHIN INDICATED LIMIT. RIGHT OF WAY ACQUISITIONS MUST BE COMPLETED PRIOR TO ADVERTISING BID OPENING DATE. FAILURE TO PROVIDE DOCUMENTATION OF RIGHT OF WAY ACQUISITION WILL RESULT IN NOTIFICATION THAT BID OPENING DATE GREEN SHEET COMMENTS WILL BE ISSUED UNTIL DOCUMENTATION IS RECEIVED. CONTACT PUBLIC INFORMATION OFFICE HTTP://WWW.HCPID.ORGPUBLICWEB/SITE/PUBLIC/FUND-PAGE?FUND=PUBLIC-NOTIFICATION-OF-CONSTRUCTION-IN-THE-RIGHT-ROW

STREET & BRIDGE CONSTRUCTION NOTES:

1. FILL AREAS ON PLANS SHALL BE FILLED IN LAYERS NOT EXCEEDING 8" IN DEPTH AND EACH COMPACTED TO NOT LESS THAN 95% STANDARD PROCTOR DENSITY PRIOR TO INSTALLATION OF WATER LINE AND FILL AREA SHALL BE SEEDED AND FERTILIZED WITHIN 10 WORKING DAYS.
2. UTILITY CONTRACTOR SHALL PROVIDE TEMPORARY SILT BARRIER FENCE ON ALL NON-CURBED INLETS WHICH WILL REMAIN IN PLACE AFTER UNDERGROUND CONTRACT IS COMPLETE.
3. CONTRACTOR SHALL PROVIDE SILT BARRIER FENCE ON ALL STAGE 1 CURB INLETS.
4. EXISTING PAVEMENTS, CURBS, DRIVEWAYS, AND SIDEWALKS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED TO CITY OF HOUSTON STANDARDS, WITH LATEST ADDENDA AND AMENDMENTS THERETO.
5. CONDITION OF THE ROAD AND/OR RIGHT-OF-WAY UPON COMPLETION OF JOB SHALL BE AS GOOD AS OR BETTER THAN PRIOR TO STARTING WORK.
6. EXPOSED 15" OF REINFORCING STEEL AT PROPOSED SAWED JOINT IF NO REINFORCING STEEL EXISTS, USE HORIZONTAL DOWELS. HORIZONTAL DOWELS SHALL BE #6 BARS 24" LONG 24" C-C DRILLED AND EMBEDDED 8" INTO THE CENTER OF THE EXISTING SLAB WITH "PO ROC" OR EQUAL.
7. WHEELCHAIR RAMPS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF HOUSTON STANDARDS AT ALL INTERSECTIONS WHERE SIDEWALKS EXIST AND THE EXISTING CURB OR SIDEWALK IS DAMAGED OR REMOVED DURING CONSTRUCTION.
8. PRIOR TO STREET CONSTRUCTION, THE CONTRACTOR SHALL CONTACT HOUSTON PUBLIC WORKS AT (PHONE) 832-394-9578 AND COMPLY WITH ALL REQUIREMENTS FOR THE ISSUANCE OF NECESSARY PERMITS/WORK ORDERS FOR STREET CONSTRUCTION.
9. DOUBLE REFLECTORIZED BLUE TRAFFIC MARKERS SHALL BE PLACED 6-INCHES OFFSET OF THE CENTERLINE OF ALL FIRE HYDRANT LOCATIONS BY THE PAVING CONTRACTOR. HYDRANTS LOCATED AT INTERSECTIONS SHALL HAVE A BUTTON PLACED ON EACH STREET.

TRAFFIC NOTES:

CONTRACTOR OR OWNER SHALL SUBMIT TRAFFIC CONTROL PLANS WITH THE MOBILITY PERMIT APPLICATION. THE PLANS SHALL BE DRAWN TO SCALE AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS.

THE GENERAL NOTES THAT SHALL BE INCLUDED ON THE TRAFFIC CONTROL PLAN CAN BE FOUND IN CHAPTER 15 (15.12 TRAFFIC CONTROL PLAN) OF THE CITY OF HOUSTON'S (CITY) INFRASTRUCTURE DESIGN MANUAL (IDM). BELOW ARE SEVERAL KEY NOTES FROM THE IDM TO BE AWARE OF:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) LATEST EDITION WITH REVISIONS DURING THE ENTIRE CONSTRUCTION PERIOD.
2. NO WORK SHALL BE PERFORMED IN RESIDENTIAL AREAS FROM 7:00PM TO 7:00AM.
3. CONTRACTOR SHALL MAINTAIN APPROVED NUMBER OF LANES OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION WORKING HOURS. TRAFFIC CONTROL PLANS SHALL INCLUDE ONE-WAY AND/OR DETOUR PLANS. CONTRACTOR SHALL MAINTAIN ADA COMPLAINT PEDESTRIAN ACCESS TO BUS STOPS AND ADEQUATE BUS ACCESS TO THE BUS STOP.
4. CONTRACTOR SHALL COVER OPEN PAVEMENT EXCAVATIONS FOR MINOR UTILITY WORK WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, OPEN LANES FOR NORMAL TRAFFIC FLOW WHEN FEASIBLE.
5. CONTRACTOR SHALL SECURE ROADWAY/SIDEWALK/STREET/BICYCLE FACILITY PERMITS AS DESCRIBED IN CITY OF HOUSTON ORDINANCE, CHAPTER 40 – STREETS & SIDEWALKS, SECTION 40-361 FROM HOUSTON PERMITTING CENTER (MOBILITY PERMIT SECTION AT HTTPS://GEOHUB.HOUSTONTX.GOV) BEFORE IMPLEMENTING THE TRAFFIC CONTROL PLAN. THE APPLICATION MUST BE SUBMITTED AT LEAST TEN BUSINESS DAYS PRIOR TO THE IMPLEMENTATION OF THE TRAFFIC CONTROL PLAN AND/OR BEGINNING CONSTRUCTION WORK. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, CONSTRUCTION SEQUENCING, AND CONSTRUCTION SCHEDULE WITH THE APPLICATION.
6. CONTRACTOR SHALL HAVE APPROVED TRAFFIC CONTROL PLAN AND PERMIT AT THE JOB SITE FOR INSPECTION AT ALL TIMES
7. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL CONES AND/OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAY, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE CITY OF HOUSTON.
8. ADDITIONAL OFF DUTY POLICE OFFICERS/FLAGGERS MAY BE REQUESTED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED AT THE DIRECTION OF THE CITY EVEN IF THEY ARE NOT SPECIFICALLY IDENTIFIED ON THE PROJECT PLANS.

TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222

For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground line can be marked. This Verification does not fulfill your obligation to call 811.

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy/Natural Gas Facilities Verification ONLY.
(This Signature verifies that you have shown CNP Natural Gas lines correctly – not to be used for conflict verification.) (Gas service lines are not shown.)
Signature Valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY.
(This signature verifies existing underground facilities – not to be used for conflict verification.) Signature Valid for six months.

G-008

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY.
(This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

GENERAL NOTES SHEET 2 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 8 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\007-009-GENERAL_NOTES.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

STANDARD NOTES FOR CONSTRUCTION DRAWINGS (HCFCD):

1. OBTAIN AND COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL PERMITS AND APPROVALS, WITH ASSISTANCE FROM ENGINEER, IF NECESSARY. OBTAIN PERMIT (CERTIFICATION) FROM HARRIS COUNTY ENGINEER TO ENTER HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY.
2. NOTIFY THE HARRIS COUNTY FLOOD CONTROL DISTRICT'S PROPERTY MANAGEMENT DEPARTMENT IN WRITING AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. SUBMIT THE HCFCD 48 HOUR PRE-CONSTRUCTION NOTIFICATION FORM, A COPY OF THE APPROVED CONSTRUCTION DRAWINGS, AND A COPY OF THE CORPS OF ENGINEERS INDIVIDUAL SECTION 404 PERMIT, IF APPLICABLE, TO HCFCD, 9900 NORTHWEST FREEWAY, HOUSTON, TEXAS 77092, ATTN: PROPERTY MANAGEMENT DEPT. BY HAND DELIVERY, OR FAX TO 713-684-4129 (FAX NUMBER).
3. ENGINEER SHALL SUBMIT CERTIFICATION LETTER AND RECORD DRAWINGS TO THE HARRIS COUNTY FLOOD CONTROL DISTRICT'S PROPERTY MANAGEMENT DEPARTMENT REQUESTING INSPECTION OF ITEMS CONSTRUCTED IN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY. PRIOR TO REQUESTING INSPECTION, THE DRAINAGE RIGHT-OF-WAY AND/OR EASEMENTS SHALL BE STAKED AND FLAGGED.
4. PROTECT, MAINTAIN, AND RESTORE EXISTING BACKSLOPE DRAINAGE SYSTEMS.
5. BACKSLOPE SWALE AND INTERCEPTOR STRUCTURE ELEVATIONS AND LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. FINAL ELEVATIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
6. ESTABLISH TURF GRASS ON ALL DISTURBED AREAS WITHIN THE CHANNEL OR DETENTION RIGHT-OF-WAY, EXCEPT THE CHANNEL BOTTOM AND WHERE STRUCTURAL EROSION MEASURES ARE USED. MINIMUM ACCEPTANCE CRITERIA ARE 75% COVERAGE OF LIVE BERMUDA GRASS AND NO EROSION OR RILLS DEEPER THAN 4".
7. BACKFILL IN ACCORDANCE WITH THE HARRIS COUNTY FLOOD CONTROL DISTRICT STANDARD SPECIFICATION, SECTION 02315 – EXCAVATING AND BACKFILLING, OR EQUIVALENT.
8. EXCAVATE CHANNEL FLOWLINE TO DESIGN ELEVATION AS SHOWN ON PLANS AND DOWNSTREAM, AS NECESSARY, TO ENSURE NO WATER REMAINS IN THE FACILITY (STORM SEWER, LATERAL CHANNEL, OR DRY BOTTOM DETENTION BASIN) DURING NORMAL WATER SURFACE CONDITIONS IN THE CHANNEL, SO THE FACILITY WILL FUNCTION AS INTENDED. FOR WET BOTTOM DETENTION BASINS, ENSURE NO WATER IS ABOVE THE DESIGN LEVEL IN THE WET BOTTOM DURING NORMAL WATER SURFACE CONDITIONS IN THE CHANNEL.
9. MAINTAIN FLOW IN CHANNEL DURING CONSTRUCTION AND RESTORE CHANNEL TO ORIGINAL CONDITION.
10. REMOVE ALL EXCAVATED MATERIAL FROM THE HARRIS COUNTY FLOOD CONTROL DISTRICT OR DRAINAGE RIGHT-OF-WAY. NO FILL IS TO BE PLACED WITHIN A DESIGNATED FLOOD PLAIN AREA WITHOUT FIRST OBTAINING A FILL PERMIT FROM THE APPROPRIATE JURISDICTIONAL AUTHORITY.

GRADING NOTES:

1. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
2. BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL VERIFY BENCHMARK ELEVATION AND NOTIFY ENGINEER IF ANY DISCREPANCY AND/OR CONFLICT IS FOUND.
3. CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS, AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
4. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
5. ALL EXISTING CONCRETE PAVING, SIDEWALK, AND CURB DEMOLITION SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR. DISPOSAL SHALL BE AT AN APPROVED OFF-SITE, LAWFUL LOCATION, UNLESS DIRECTED OTHERWISE BY THE OWNER.

HARRIS COUNTY TOLL ROAD AUTHORITY (HCTRA) & TXDOT CONSTRUCTION NOTES:

HCTRA NOTES

1. FIBER OPTIC DUCT BANKS OWNED BY TXDOT, HARRIS COUNTY, AND HCTRA MAY ALSO EXIST WITHIN THE PROJECT LIMITS. THESE FIBER DUCT BANKS ARE NOT PART OF THE TEXAS ONE CALL SYSTEM. THE CONTRACTOR SHALL CONTACT TXDOT, HARRIS COUNTY TRAFFIC AND HCTRA TO OBTAIN FIBER OPTIC DUCT BANK LOCATES AT THE FOLLOWING CONTACTS:
   - TXDOT: 713.802.5662
   - HARRIS COUNTY TRAFFIC SIGNAL HOTLINE: 713.881.3210
   - HCTRA VIA EMAIL: ITSMAN@HCTRA.ORG
2. THE CONTRACTOR SHALL CONTACT HCTRA MAINTENANCE DEPARTMENT AT 832.590.6936 48 HOURS PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE THE PROJECT SITE BACK TO ORIGINAL CONDITIONS OR BETTER.

TXDOT NOTES

1. THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) IS NOT A MEMBER OF 811. AT LEAST 72 HOURS BEFORE STARTING WORK, MAKE ARRANGEMENTS FOR LOCATING EXISTING TXDOT-OWNED ABOVE GROUND AND UNDERGROUND FIBER OPTIC, COMMUNICATIONS, POWER ILLUMINATION, AND TRAFFIC SIGNAL CABLING AND CONDUIT. DO THIS BY CALLING TXDOT'S HOUSTON DISTRICT TRAFFIC SIGNAL OPERATIONS OFFICE AT 713-802-5668 TO SCHEDULE MARKING OF UNDERGROUND LINES ON THE GROUND. USE CAUTION IF WORKING IN THESE AREAS TO AVOID DAMAGING OR INTERFERING WITH EXISTING FACILITIES.
2. CONTRACTOR OR SUB-CONTRACTOR IS REQUIRED TO CONTACT THE TXDOT MAINTENANCE SUPERVISOR A MINIMUM OF 72 HOURS PRIOR TO COMMENCING ANY WORK.

TXDOT MAINTENANCE SUPERVISORS OFFICE PHONE NUMBERS:

- HARRIS COUNTY INSIDE IH610 LOOP: (713) 636-7400
- HARRIS COUNTY NORTH: (281) 319-6400
- HARRIS COUNTY SOUTHEAST: (281) 464-5500
- HARRIS COUNTY WEST: (713) 934-5900
- TRAFFIC SIGNAL OPERATIONS: (713) 866-7101

DETAILS

CITY OF HOUSTON STANDARD DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATERLINES, STORM DRAINAGE, AND STREET PAVING ARE INCORPORATED IN PLANS BY REFERENCE AS IF COPIED VERBATIM. STANDARD DETAILS ARE AVAILABLE FOR DOWNLOAD AT THE FOLLOWING WEB ADDRESS:
HTTP://EDOCS.PUBLICWORKS.HOUSTONTX.GOV/ENGINEERING-AND-CONSTRUCTION/DRAWINGS/STANDARD-DETAILS.HTML
DETAILS INCLUDED IN PLAN SET SUPERSEDE FILED ON STANDARD DETAILS.

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

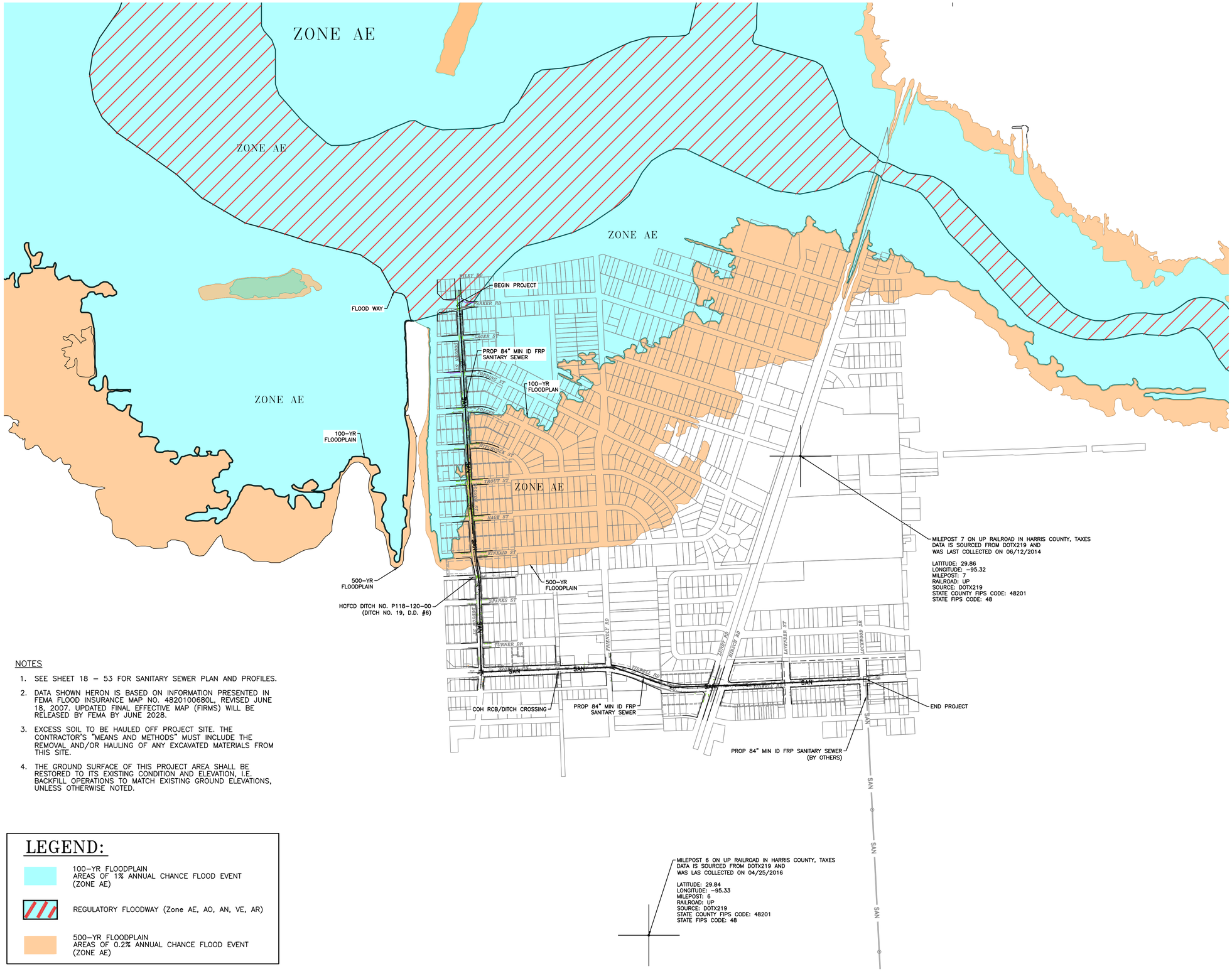
GENERAL NOTES
SHEET 3 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 9 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\010-FLOOD PLAIN.dwg



N

GRAPHIC SCALE

500 0 250 500 1000

HORIZONTAL: 1"=500'

NO.	DATE	REVISION	APP.

NOTES

1. SEE SHEET 18 – 53 FOR SANITARY SEWER PLAN AND PROFILES.
2. DATA SHOWN HERON IS BASED ON INFORMATION PRESENTED IN FEMA FLOOD INSURANCE MAP NO. 4820100680L, REVISED JUNE 18, 2007. UPDATED FINAL EFFECTIVE MAP (FIRMS) WILL BE RELEASED BY FEMA BY JUNE 2028.
3. EXCESS SOIL TO BE HAULED OFF PROJECT SITE. THE CONTRACTOR'S "MEANS AND METHODS" MUST INCLUDE THE REMOVAL AND/OR HAULING OF ANY EXCAVATED MATERIALS FROM THIS SITE.
4. THE GROUND SURFACE OF THIS PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS, UNLESS OTHERWISE NOTED.

LEGEND:

- 100-YR FLOODPLAIN AREAS OF 1% ANNUAL CHANCE FLOOD EVENT (ZONE AE)
- REGULATORY FLOODWAY (Zone AE, AO, AN, VE, AR)
- 500-YR FLOODPLAIN AREAS OF 0.2% ANNUAL CHANCE FLOOD EVENT (ZONE AE)

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

SURVEYED BY:
FB NO.

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

VICINITY AND EXISTING FLOODPLAIN MAP

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 10 OF 192	

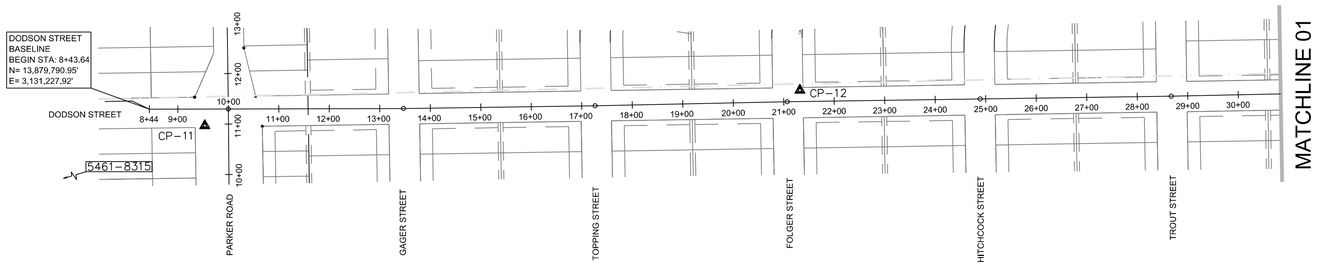
60% SUBMITTAL

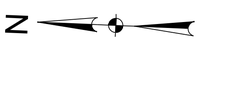
G-010

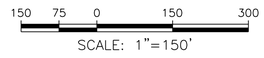
VICINITY MAP
(NOT TO SCALE)

NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NAD83) (2011 ADJ.; EPOCH 2010,00),.
2. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
6. THERE ARE NO NATURAL DRAINAGE COURSES ON THE SUBJECT TRACT.
7. MINERAL RIGHTS AND/OR LEASE RIGHTS ARE NOT SURVEY RELATED AND THEREFORE NOT A PART OF THIS SURVEY.
8. SURFACE OR SUBSURFACE FAULTING, HAZARDOUS WASTE OR OTHER ENVIRONMENTAL ISSUES HAVE NOT BEEN ADDRESSED WITHIN THE SCOPE OF THIS SURVEY.
9. THE SUBJECT TRACT DOES NOT LIE WITHIN DESIGNATED WETLAND AREAS PER THE U.S. FISH AND WILDLIFE SERVICE WETLANDS MAPPER; ALSO, NO DELINEATION MARKERS OF FIELD DELINEATION OF WETLANDS WERE OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
10. UNDERGROUND UTILITIES AS SHOWN HEREON ARE DERIVED FROM FIELD SURVEYS, RECORD DRAWINGS, AND/OR TONE MARKS PROVIDED BY 811. CONTRACTOR TO VERIFY ACTUAL LOCATION AND EXISTENCE OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
11. ALL QUALITY LEVEL B UTILITIES WERE OBTAINED BY GEOPHYSICAL METHODS.
12. THIS TRACT LIES PARTIALLY IN ZONE "X", DESIGNATED AS "AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD", PARTIALLY IN ZONE "X" (SHADED), DESIGNATED AS "AREAS OF THE 0.2% ANNUAL CHANCE FLOOD; AREAS OF THE 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD", AND THIS TRACT LIES PARTIALLY IN ZONE "AE", DEFINED AS "SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 0.1% ANNUAL CHANCE FLOOD EVENT, WHERE THE BASE FLOOD ELEVATIONS ARE DETERMINED", ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP AND COMMUNITY PANEL NUMBER 48201C0680L, LATEST AVAILABLE PUBLISHED REVISION DATED JUNE 18, 2007.
13. SURVEY PERFORMED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. THERE MAY BE ADDITIONAL BUILDING LINES, AND/OR EASEMENTS AFFECTING SUBJECT PROPERTY, NOT SHOWN HEREON. OWNERSHIP INFORMATION RELIED UPON SOURCED FROM HARRIS COUNTY APPRAISAL DISTRICT AND ABSTRACTING PERFORMED BY RODS INC. DURING THE MONTH OF DECEMBER 2025.
14. APPROXIMATE SURVEY LINES AS SHOWN DERIVED FROM GIS.

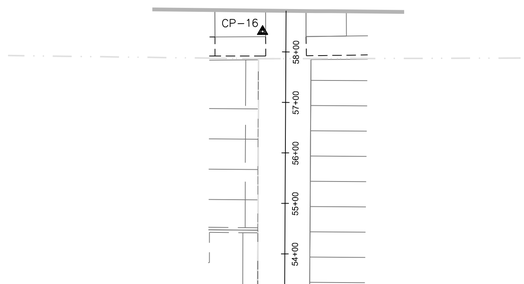


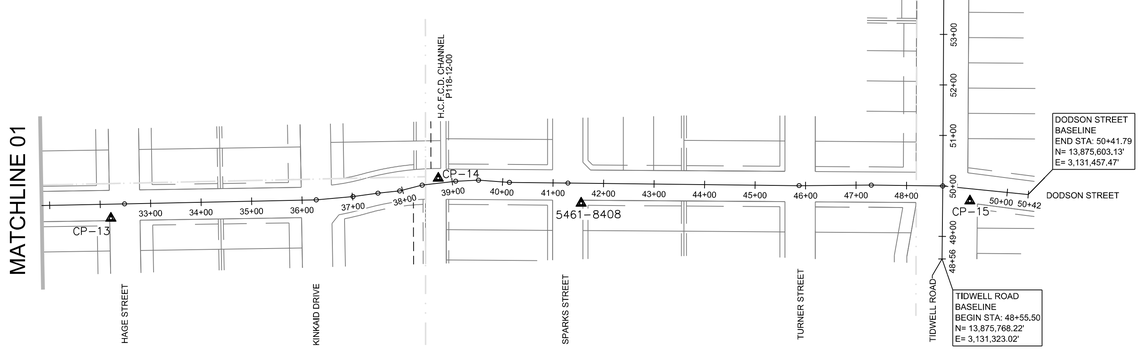




NO.	DATE	REVISION	APP.

MATCHLINE 02





ABBREVIATIONS
(ITEMS THAT MAY APPEAR IN DRAWING)

ABAN = ABANDONED
AC. = ACRES
ASPH. = ASPHALT
AT&T = AMERICAN TELEGRAPH AND TELEPHONE CO.
B.L. = BUILDING LINE
BRG = BEARING
CHD DIST = CHORD DISTANCE
CHD BRG = CHORD BEARING
C.M. = CONTROLLING MONUMENT
CMP = CORRUGATED METAL PIPE
CO = CLEANOUT
CONC. = CONCRETE
CP = CONTROL POINT
CPP = CORRUGATED PLASTIC PIPE
D.E. = DRAINAGE EASEMENT
DIST = DISTANCE
DOC = DEPTH OF COVER
DR = DRIVE
ESMT = EASEMENT
ESP = ELASTIC STRAIN PRELOAD
FH = FIRE HYDRANT
FL = FLOW LINE
FNC = FENCE
FND = FOUND
GIS = GEOGRAPHIC INFORMATION SYSTEM
GM = GAS METER
GUY = GUY ANCHOR
H.C. = HARRIS COUNTY
H.C.C.F. = HARRIS COUNTY CLERKS FILE
H.C.D.R. = HARRIS COUNTY DEED RECORDS
H.C.F.C.D. = HARRIS COUNTY FLOOD CONTROL DISTRICT
H.C.M.R. = HARRIS COUNTY MAP RECORDS
HDW = HEADWALL
IP = IRON PIPE
IR = IRON ROD
MH = MANHOLE
MON = MONUMENT
MPH = MILES PER HOUR
M.R.H.C.T. = MAP RECORDS HARRIS COUNTY TEXAS
OH = OVERHEAD ELECTRIC LINE
O.P.R.H.C.T. = OFFICIAL PUBLIC RECORDS HARRIS COUNTY TEXAS
PG. = PAGE
PI = POINT OF INTERSECTION
PL = PIPELINE
PVC = POLYVINYL CHLORIDE PIPE
RCP = REINFORCED CONCRETE PIPE
RM = REFERENCE MARKER
ROW = RIGHT-OF-WAY
SAN = SANITARY
S.F. = SQUARE FEET
TOG = TOP OF GRATE
TRANS = TRANSFORMER
U.E. = UTILITY EASEMENT
VOL. = VOLUME

SYBMOL LEGEND

- FND MONUMENT
- SET MONUMENT
- TxDOT TYPE II R.O.W. MONUMENT
- TYPICAL SUBDIVISION BLOCK
- CONTROL MONUMENT

LINE LEGEND

- APPROXIMATE SURVEY LINE AS SHOWN FROM GIS
- BUILDING LINE
- DRAINAGE EASEMENT LINE
- PROPERTY LINE
- R.O.W. LINE
- SUBDIVISION LINE
- UTILITY EASEMENT LINE
- RAILROAD LINE

CONTROL DATA									
Point	Grid North	Grid East	Surface North	Surface East	Elevation	Baseline	Station	Offset	Description
5461-8315	13,878,834.37	3,130,669.72	13,880,224.47	3,130,983.29	60.78'	N/A	OFF CHAIN	OFF CHAIN	FND BRASS CAP ON BRIDGE SIDEWALK
CP-11	13,878,289.91	3,130,886.46	13,879,679.96	3,131,200.05	54.91'	Parker Rd	10+97.17	46.92' LT	SET 5/8" IR w/RODS CAP
						Dodson St	9+53.27	32.85' RT	
CP-12	13,877,115.59	3,131,006.48	13,878,505.52	3,131,320.08	56.64'	Dodson St	21+32.28	22.49' LT	SET 5/8" IR w/RODS CAP
CP-13	13,876,026.11	3,131,020.08	13,877,415.92	3,131,333.68	57.25'	Dodson St	32+20.72	28.07' RT	SET 5/8" IR w/RODS CAP
CP-14	13,875,381.96	3,131,126.83	13,876,771.71	3,131,440.44	59.29'	Dodson St	38+73.36	9.91' LT	SET 5/8" IR w/RODS CAP
5461-8408	13,875,097.19	3,131,089.24	13,876,486.91	3,131,402.85	58.30'	Dodson St	41+56.03	39.70' RT	FND BRASS CAP IN CONCRETE
CP-15	13,874,328.40	3,131,126.37	13,875,718.05	3,131,439.99	58.39'	Dodson St	49+28.11	24.19' RT	SET 5/8" IR w/RODS CAP
						Tidwell Rd	49+70.78	53.96' RT	
CP-16	13,874,460.76	3,131,991.61	13,875,850.42	3,132,305.31	58.72'	Tidwell Rd	58+40.17	46.35' LT	SET 5/8" IR w/RODS CAP

TRAVERSE DATA			
From	To	Direction	Distance
CP-11	CP-12	S05°50'08"E	1,180.56'
CP-12	CP-13	S00°42'53"E	1,089.68'
CP-13	CP-14	S09°24'34"E	653.00'
CP-14	5461-8408	S07°31'07"W	287.26'
5461-8408	CP-15	S02°45'55"E	769.76'
CP-14	CP-15	S00°01'29"W	1,053.66'
CP-15	CP-16	N81°18'11"E	875.39'
CP-16	CP-17	S81°49'20"E	823.39'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

RODS
SURVEYING & UTILITIES
6810 LEE ROAD, STE. 100 TBPE F-10055
SPRING, TX 77379 TBPLS 10030700

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SURVEY CONTROL MAP
SHEET 1 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWN BY: JGK	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 11 OF 192	

CHELSEA LEGER, P.E.

V-100

N:\ATKINS 153\22323001\SURVEY\CADH&V Control\H&V Index Sheet 1.dgn

VICINITY MAP
(NOT TO SCALE)

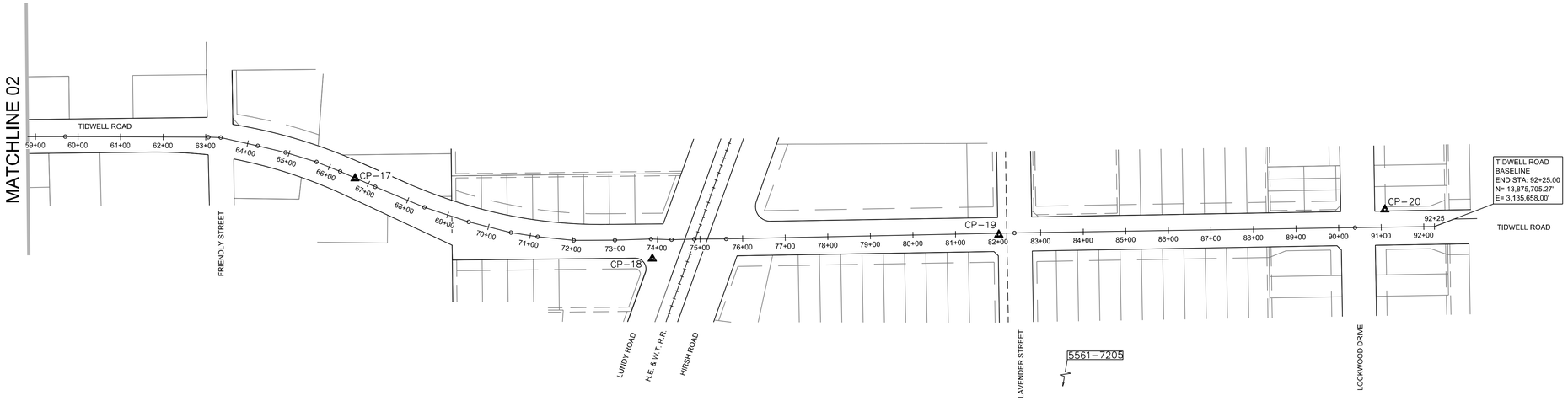
TRAVERSE DATA			
From	To	Direction	Distance
CP-16	CP-17	S81°49'20"E	823.39'
CP-17	CP-18	S76°48'37"E	723.24'
CP-18	CP-19	N84°07'38"E	815.98'
CP-19	5561-7205	S08°07'50"E	849.10'
CP-19	CP-20	N84°20'19"E	908.63'

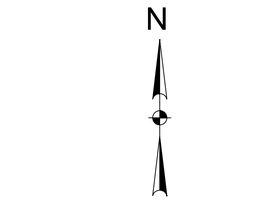
CONTROL DATA									
Point	Grid North	Grid East	Surface North	Surface East	Elevation	Baseline	Station	Offset	Description
CP-17	13,874,343.64	3,132,806.55	13,875,733.29	3,133,120.33	58.68'	Tidwell Rd	66+66.04	1.11' RT	SET 5/8" IR w/RODS CAP
CP-18	13,874,178.63	3,133,510.64	13,875,568.27	3,133,824.49	60.31'	Tidwell Rd	73+89.08	46.10' RT	SET 5/8" IR w/RODS CAP
CP-19	13,874,262.12	3,134,322.26	13,875,651.76	3,134,636.19	59.43'	Tidwell Rd	82+01.78	3.39' RT	SET 5/8" IR w/RODS CAP
5561-7205	13,873,421.64	3,134,442.33	13,874,811.20	3,134,756.27	59.70'	Tidwell Rd	82+80.41	849.01' RT	FND BRASS CAP IN CONCRETE
CP-20	13,874,351.74	3,135,226.36	13,875,741.39	3,135,540.38	59.75'	Tidwell Rd	91+09.22	41.64' LT	SET 5/8" IR w/RODS CAP

COH Survey Marker No.	Published Values Held		Published Coordinate Information			Measured Coordinate Information			Residuals (Published - Measured)		
	H	V	North	East	Elev.	North	East	Elev.	North	East	Elev.
5461 8315	✓	✓	13,877,444.41	3,130,356.18	60.78	13,877,444.41	3,130,356.18	60.78	0.00	0.00	0.00
5461 8408	✓	✓	13,873,707.61	3,130,775.66	58.30	13,873,707.58	3,130,775.65	58.30	0.02	0.01	0.00
5561 7205	✓	✓	13,872,032.22	3,134,128.42	59.70	13,872,032.22	3,134,128.43	59.70	0.01	-0.01	0.00

Notes:
1. Measured values shown hereon were established during October 2025 with redundant GPS VRS observations constrained to the published values of the City of Houston (COH) Survey Marker shown hereon and are based on NAD83 (2011), TXSC (4204), NAVD88 (Geoid 18) and an applied project combined scale factor (CSF) of 0.99989985044.

2. Published values and CSF shown hereon are according to a preliminary control layout sheet and datasheets thereof prepared by Landtech, Inc. for the COH public works department, titled CRMP Package 6, 7, 8, 10 Survey Control Monuments Overall, and having a plotted date thereon of 7/21/2025.





NO.	DATE	REVISION	APP.

ABBREVIATIONS
(ITEMS THAT MAY APPEAR IN DRAWING)

ABAN = ABANDONED
AC. = ACRES
ASPH. = ASPHALT
AT&T = AMERICAN TELEGRAPH AND TELEPHONE CO.
B.L. = BUILDING LINE
BRG = BEARING
CHD DIST = CHORD DISTANCE
CHD BRG = CHORD BEARING
C.M. = CONTROLLING MONUMENT
CMP = CORRUGATED METAL PIPE
CO = CLEANOUT
CONC. = CONCRETE
CP = CONTROL POINT
CPP = CORRUGATED PLASTIC PIPE
D.E. = DRAINAGE EASEMENT
DIST = DISTANCE
DOC = DEPTH OF COVER
DR = DRIVE
ESMT = EASEMENT
ESP = ELASTIC STRAIN PRELOAD
FH = FIRE HYDRANT
FL = FLOW LINE
FNC = FENCE
FND = FOUND
GIS = GEOGRAPHIC INFORMATION SYSTEM
GM = GAS METER
GUY = GUY ANCHOR
H.C. = HARRIS COUNTY
H.C.C.F. = HARRIS COUNTY CLERKS FILE
H.C.D.R. = HARRIS COUNTY DEED RECORDS
H.C.F.C.D. = HARRIS COUNTY FLOOD CONTROL DISTRICT
H.C.M.R. = HARRIS COUNTY MAP RECORDS
HDW = HEADWALL
IP = IRON PIPE
IR = IRON ROD
MH = MANHOLE
MON = MONUMENT
MPH = MILES PER HOUR
M.R.H.C.T. = MAP RECORDS HARRIS COUNTY TEXAS
OH = OVERHEAD ELECTRIC LINE
O.P.R.H.C.T. = OFFICIAL PUBLIC RECORDS HARRIS COUNTY TEXAS
PG. = PAGE
PI = POINT OF INTERSECTION
PL = PIPELINE
PVC = POLYVINYL CHLORIDE PIPE
RCP = REINFORCED CONCRETE PIPE
RM = REFERENCE MARKER
ROW = RIGHT-OF-WAY
SAN = SANITARY
S.F. = SQUARE FEET
TOG = TOP OF GRATE
TRANS = TRANSFORMER
U.E. = UTILITY EASEMENT
VOL. = VOLUME

SYBMOL LEGEND

- FND MONUMENT
- SET MONUMENT
- TxDOT TYPE II R.O.W. MONUMENT
- TYPICAL SUBDIVISION BLOCK
- CONTROL MONUMENT

LINE LEGEND

- APPROXIMATE SURVEY LINE AS SHOWN FROM GIS
- BUILDING LINE
- DRAINAGE EASEMENT LINE
- PROPERTY LINE
- R.O.W. LINE
- SUBDIVISION LINE
- UTILITY EASEMENT LINE
- RAILROAD LINE

NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET. DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
6. THERE ARE NO NATURAL DRAINAGE COURSES ON THE SUBJECT TRACT.
7. MINERAL RIGHTS AND/OR LEASE RIGHTS ARE NOT SURVEY RELATED AND THEREFORE NOT A PART OF THIS SURVEY.
8. SURFACE OR SUBSURFACE FAULTING, HAZARDOUS WASTE OR OTHER ENVIRONMENTAL ISSUES HAVE NOT BEEN ADDRESSED WITHIN THE SCOPE OF THIS SURVEY.
9. THE SUBJECT TRACT DOES NOT LIE WITHIN DESIGNATED WETLAND AREAS PER THE U.S. FISH AND WILDLIFE SERVICE WETLANDS MAPPER; ALSO, NO DELINEATION MARKERS OF FIELD DELINEATION OF WETLANDS WERE OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
10. UNDERGROUND UTILITIES AS SHOWN HEREON ARE DERIVED FROM FIELD SURVEYS, RECORD DRAWINGS, AND/OR TONE MARKS PROVIDED BY 811. CONTRACTOR TO VERIFY ACTUAL LOCATION AND EXISTENCE OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
11. ALL QUALITY LEVEL B UTILITIES WERE OBTAINED BY GEOPHYSICAL METHODS.
12. THIS TRACT LIES PARTIALLY IN ZONE "X", DESIGNATED AS "AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD". PARTIALLY IN ZONE "X" (SHADED), DESIGNATED AS "AREAS OF THE 0.2% ANNUAL CHANCE FLOOD; AREAS OF THE 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD", AND THIS TRACT LIES PARTIALLY IN ZONE "AE", DEFINED AS "SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 0.1% ANNUAL CHANCE FLOOD EVENT, WHERE THE BASE FLOOD ELEVATIONS ARE DETERMINED". ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP AND COMMUNITY PANEL NUMBER 48201C0680L, LATEST AVAILABLE PUBLISHED REVISION DATED JUNE 18, 2007.
13. SURVEY PERFORMED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. THERE MAY BE ADDITIONAL BUILDING LINES, AND/OR EASEMENTS AFFECTING SUBJECT PROPERTY, NOT SHOWN HEREON. OWNERSHIP INFORMATION RELIED UPON SOURCED FROM HARRIS COUNTY APPRAISAL DISTRICT AND ABSTRACTING PERFORMED BY RODS INC. DURING THE MONTH OF DECEMBER 2025.
14. APPROXIMATE SURVEY LINES AS SHOWN DERIVED FROM GIS.

V-101

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

RODS
HOUSTON • PALM BEACH • TAMPA • TIDEWATER
SURVEYING & UTILITIES
6810 LEE ROAD, STE. 100 TBPE F-10055
SPRING, TX 77379 TBPLS 10030700

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. 000000

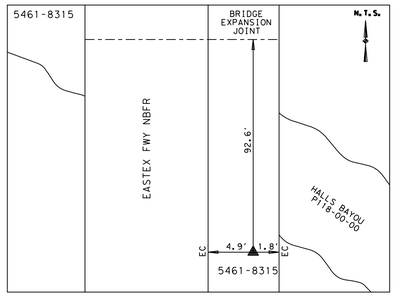
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

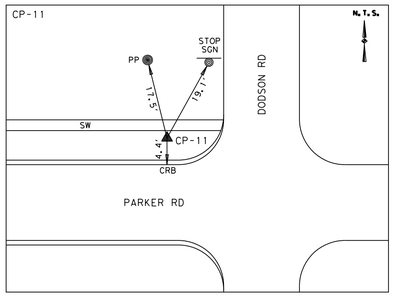
SURVEY CONTROL MAP
SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWN BY: JGK	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 12 OF 192	

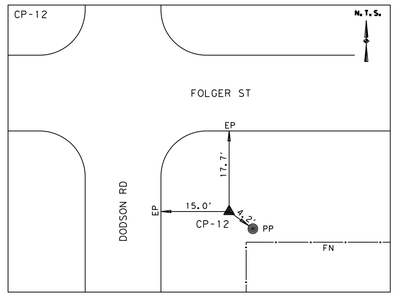
N:\ATKINS 153\223223001\SURVEY\CAD\H&V Control\H&V Index Sheet 2.dgn



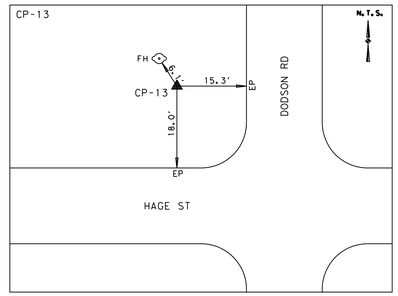
STATION IS LOCATED ON THE EAST SIDEWALK OF THE EASTEX FWY NBFR BRIDGE OVER HALLS BAYOU.



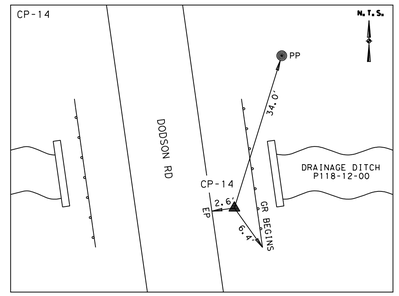
STATION IS LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF PARKER RD AND DODSON RD.



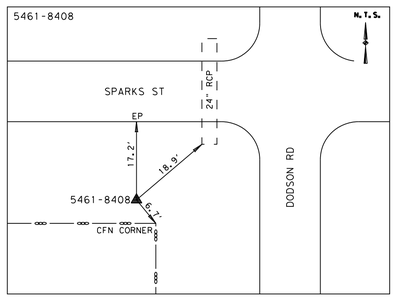
STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF FOLGER ST AND DODSON RD.



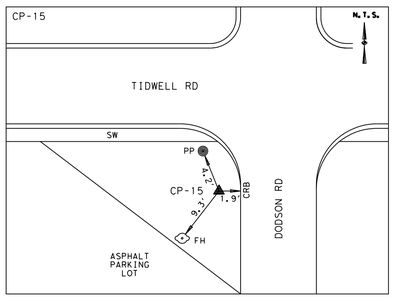
STATION IS LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF HAGE ST AND DODSON RD.



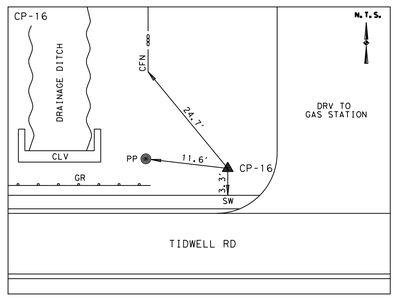
STATION IS LOCATED ON THE EAST SIDE OF DODSON RD, AND LYING 233' SOUTH OF KINKAID ST.



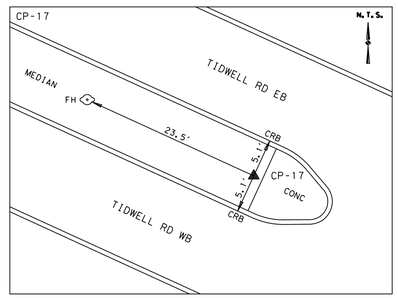
STATION IS LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF SPARKS ST AND DODSON RD.



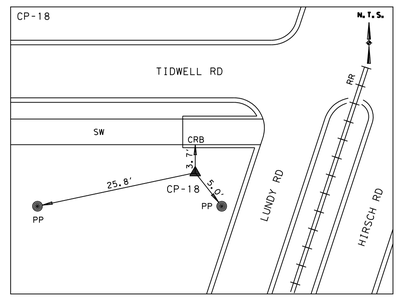
STATION IS LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF TIDWELL RD AND DODSON RD.



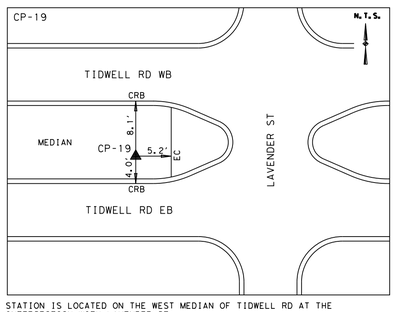
STATION IS LOCATED ON THE NORTH SIDE OF TIDWELL RD, AND LYING 460' WEST OF FRIENDLEY RD.



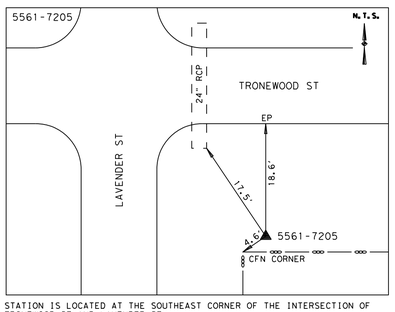
STATION IS LOCATED ON THE EAST END OF THE MEDIAN ON TIDWELL RD, AND LYING 309' EAST OF FRIENDLY RD.



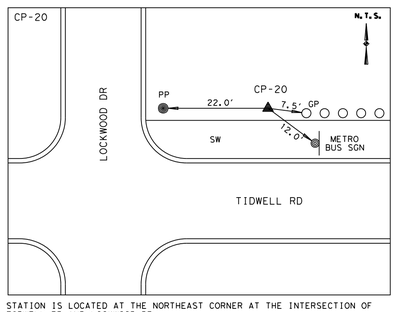
STATION IS LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF TIDWELL RD AND LUNDY RD.



STATION IS LOCATED ON THE WEST MEDIAN OF TIDWELL RD AT THE INTERSECTION WITH LAVENDER ST.



STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF TRONEWOOD ST AND LAVENDER ST.



STATION IS LOCATED AT THE NORTHEAST CORNER AT THE INTERSECTION OF TIDWELL RD AND LOCKWOOD DR.

	GRID		SURFACE						
Point	North	East	North	East	Elevation	Baseline	Station	Offset	Description
5461-8315	13,878,834.37	3,130,669.72	13,880,224.47	3,130,983.29	60.78'	N/A	OFF CHAIN	OFF CHAIN	FND BRASS CAP ON BRIDGE SIDEWALK
CP-11	13,878,289.91	3,130,886.46	13,879,679.96	3,131,200.05	54.91'	Parker Rd	10+97.17	46.92' LT	SET 5/8" IR W/RODS CAP
						Dodson St	9+53.27	32.85' RT	
CP-12	13,877,115.59	3,131,006.48	13,878,505.52	3,131,320.08	56.64'	Dodson St	21+32.28	22.49' LT	SET 5/8" IR W/RODS CAP
CP-13	13,876,026.11	3,131,020.08	13,877,415.92	3,131,333.68	57.25'	Dodson St	32+20.72	28.07' RT	SET 5/8" IR W/RODS CAP
CP-14	13,875,381.96	3,131,126.83	13,876,771.71	3,131,440.44	59.29'	Dodson St	38+73.36	9.91' LT	SET 5/8" IR W/RODS CAP
5461-8408	13,875,097.19	3,131,089.24	13,876,486.91	3,131,402.85	58.30'	Dodson St	41+56.03	39.70' RT	FND BRASS CAP IN CONCRETE
CP-15	13,874,328.40	3,131,126.37	13,875,718.05	3,131,439.99	58.39'	Dodson St	49+28.11	24.19' RT	SET 5/8" IR W/RODS CAP
						Tidwell Rd	49+70.78	53.96' RT	
CP-16	13,874,460.76	3,131,991.61	13,875,850.42	3,132,305.31	58.72'	Tidwell Rd	58+40.17	46.35' LT	SET 5/8" IR W/RODS CAP
CP-17	13,874,343.64	3,132,806.55	13,875,733.29	3,133,120.33	58.68'	Tidwell Rd	66+66.04	1.11' RT	SET 5/8" IR W/RODS CAP
CP-18	13,874,178.63	3,133,510.64	13,875,568.27	3,133,824.49	60.31'	Tidwell Rd	73+89.08	46.10' RT	SET 5/8" IR W/RODS CAP
CP-19	13,874,262.12	3,134,322.26	13,875,651.76	3,134,636.19	59.43'	Tidwell Rd	82+01.78	3.39' RT	SET 5/8" IR W/RODS CAP
5461-7205	13,873,421.64	3,134,442.33	13,874,811.20	3,134,756.27	59.70'	Tidwell Rd	82+80.41	849.01' RT	FND BRASS CAP IN CONCRETE
CP-20	13,874,351.74	3,135,226.36	13,875,741.39	3,135,540.38	59.75'	Tidwell Rd	91+09.22	41.64' LT	SET 5/8" IR W/RODS CAP

NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NAD83) (2011 ADJ.; EPOCH 2010.00).

2. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).

3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.

4. HORIZONTAL COORDINATES ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF CITY OF HOUSTON SURVEY MARKER NOS 5461-8315, 5461-8408 AND 5561-7205.

5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NOS 5461-8315, 5461-8408 AND 5561-7205.

NO.	DATE	REVISION	APP.

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

RODS
SURVEYING & UTILITIES
6810 LEE ROAD, STE. 100 TBPE F-10055
SPRING, TX 77379 TBPLS 10030700

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC.
FB NO. 000000

CITY OF HOUSTON

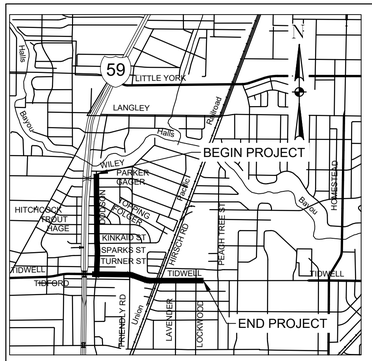
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWING TIES

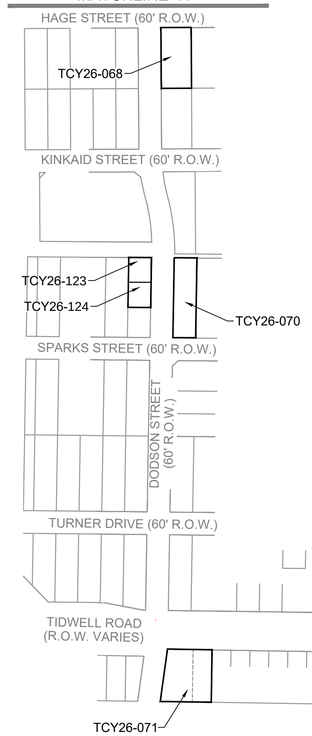
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWN BY: RA	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 13 OF 192	

N:\ATKINS 153\22323001\SURVEY\CAD\H&V Control\H&V Sketches.dgn

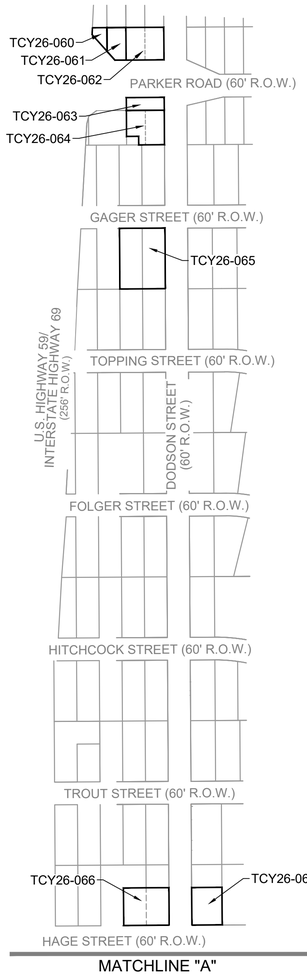


VICINITY MAP
(NOT TO SCALE)

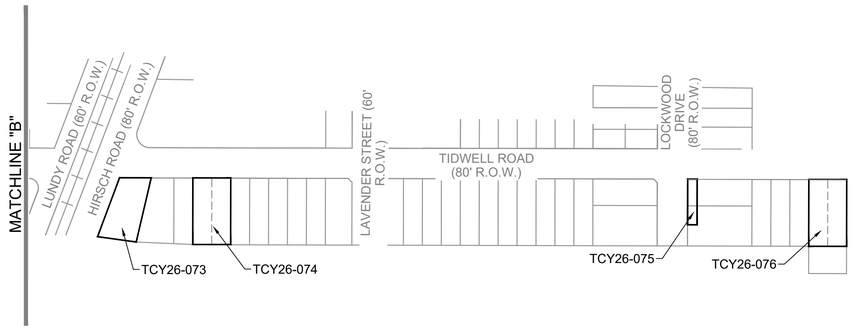
MATCHLINE "A"

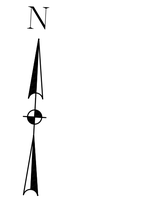


TCE NO.	HCAD #	PROPERTY OWNER
TCY26-060	0680430140288	VICTOR HUGO CRUZ REYES
TCY26-061	0680430140287	MELVIN SOWA
TCY26-062	0680430140285	MELVIN SOWA
TCY26-063	0680430150227	STATE OF TEXAS
TCY26-064	0680430150228	NORTHEAST HOUSTON BAPTIST CHURCH
TCY26-065	0720220080130	NORTHEAST HOUSTON BAPTIST CHURCH
TCY26-066	0720220160315	JAMES A. DRAKE
TCY26-067	0720220220560	JAMES A. DRAKE
TCY26-068	0720220210561	RAMOS UTILITY WORKS, LLC
TCY26-070	0650880060001	MARIO GONZALES AND KAREN MARINA BARRIOS ISAULA
TCY26-071	0660410020027	THE ARIEL GROUP, INC.
TCY26-072	0421000010082	RIVER OF JORDAN EVANGELICAL MINISTRY, INC.
TCY26-073	0731800030436	SCURLOCK FOUNDATION
TCY26-074	0731800030439	JOSE ROSARIO VERGARA AND MARIA DE JESUS VERGARA NORATO
TCY26-075	0731800020388	IN AND OUT TIDWELL LLC, A TEXAS LIMITED LIABILITY COMPANY
TCY26-076	1266990010001	IGLESIA LIBERTAD PENTECOSTAL
TCY26-123	1490980010003	NARSHA HARRIS GORDWIN, A MARRIED PERSON
TCY26-124	1490980010002	NARSHA HARRIS GORDWIN, A MARRIED PERSON



MATCHLINE "A"





NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

RODS
HOUSTON • SAN ANTONIO • AUSTIN • EDINBURG
SURVEYING & UTILITIES
6810 LEE ROAD, STE. 100 TBPE F-10055
SPRING, TX 77379 TBPLS 10030700

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

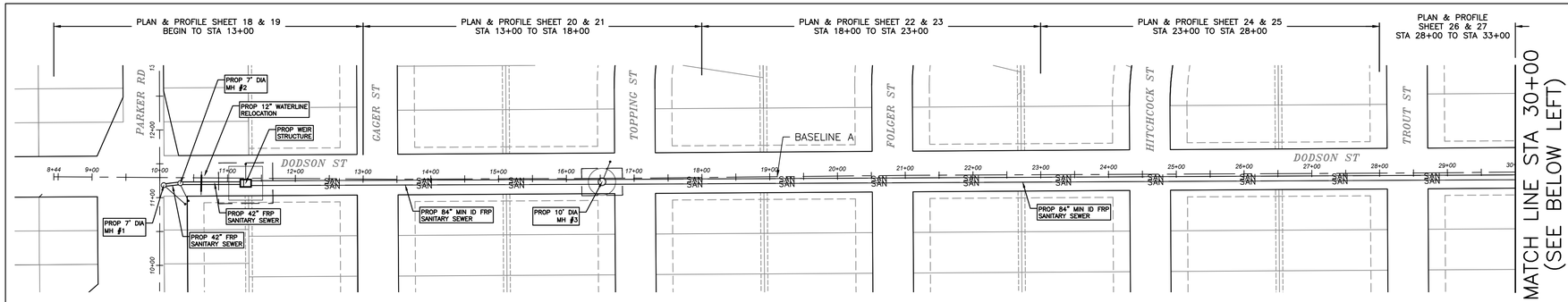
CRMP PACKAGE 6 – AREA 1–BASIN IB043

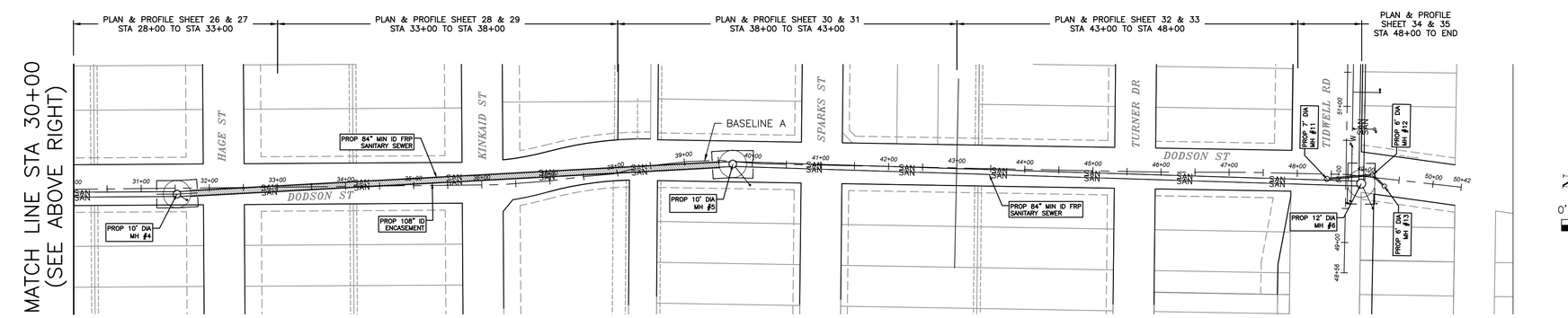
TEMPORARY CONSTRUCTION EASEMENTS

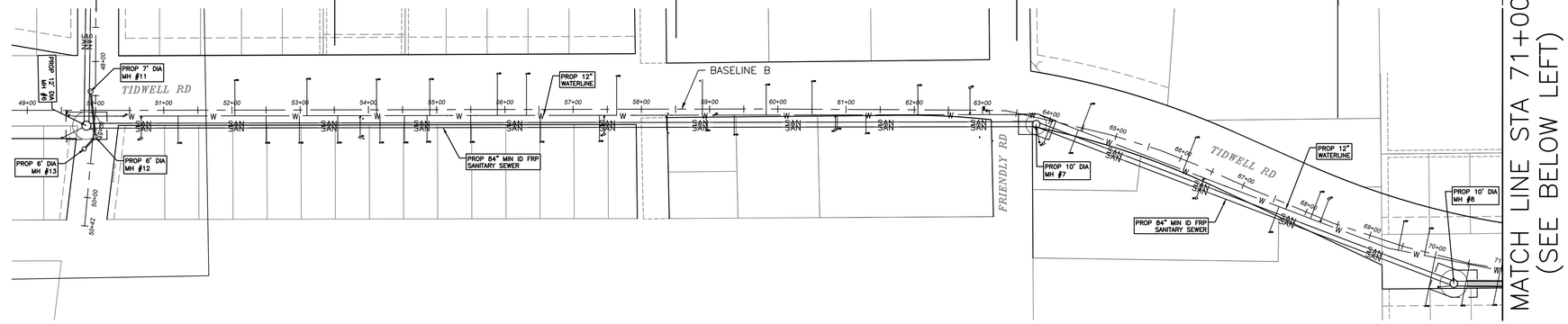
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWN BY: GJC & AHE	
1"=200' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 14 OF 192	

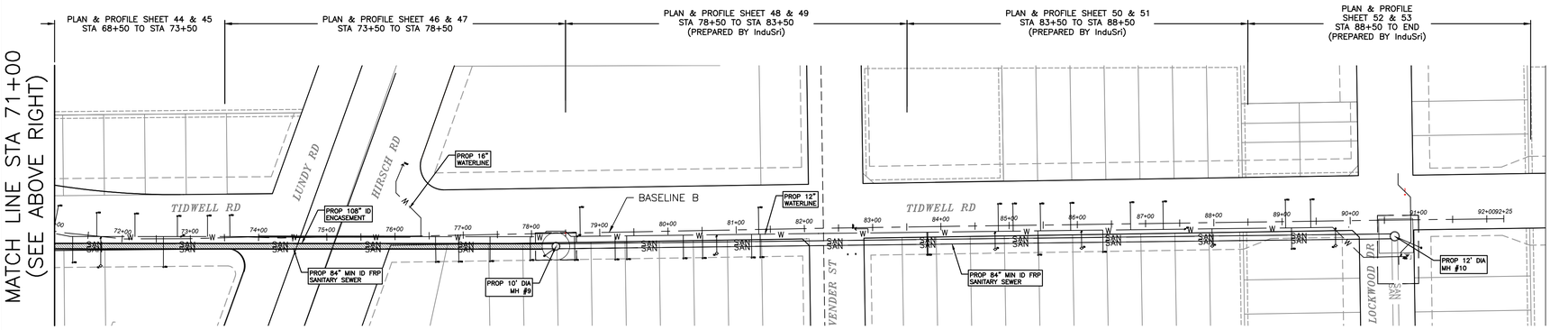
PLOTTED: 4/2/2026 9:42 AM
PLOT STYLE: Coh_ctb_230809.ctb
FILE PATH: N:\ATKINS 153\22323001\SURVEY\CAD\Easements\153-22323-001 Parcel Index.dwg

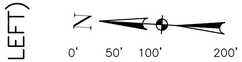
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\015-OVERALL PROJECT LAYOUT(S).dwg

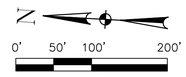


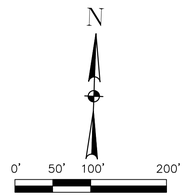


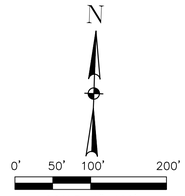












NOTES:

1. THIS SHEET IS FOR GENERAL LAYOUT OF SHEETS.
2. ALL STATION NOTED ARE DESIGN FOR BASELINE STATIONS.
3. FOR BORING INFORMATION, SEE GEOTECHNICAL INVESTIGATION REPORT NO. XXXXXXXXX.
4. THE CITY OF HOUSTON MAKE NO EXPRESSED OR IMPLIED GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF THE GEOTECHNICAL ENGINEERING STUDIES NOR OF THE INTERPRETATIONS THEREOF.

NO.	DATE	REVISION	APP.

LEGEND:

PROPOSED UTILITIES

- TEMPORARY CONSTRUCTION EASEMENT
- PROPOSED SANITARY SEWER PIPE
- PROPOSED PIPE CASING
- TUNNEL SHAFTS *
- MINIMUM AREA OF DISTURBANCE *

* CONFIGURATION TO BE DETERMINED BY CONTRACTOR MEANS AND METHOD.

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

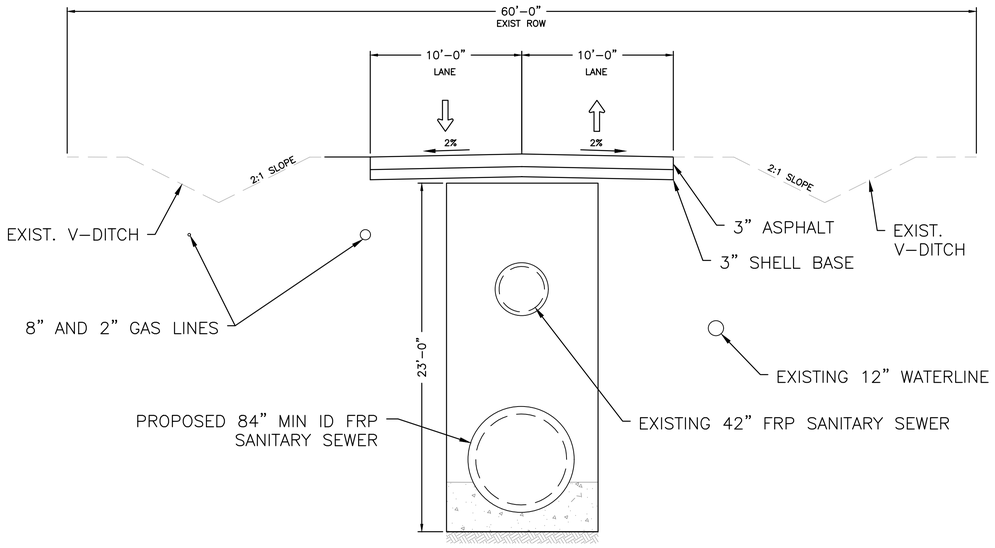
CRMP PACKAGE 6 – AREA 1–BASIN IB043

OVERALL SHEET LAYOUT PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=100' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 15 OF 192	

60% SUBMITTAL

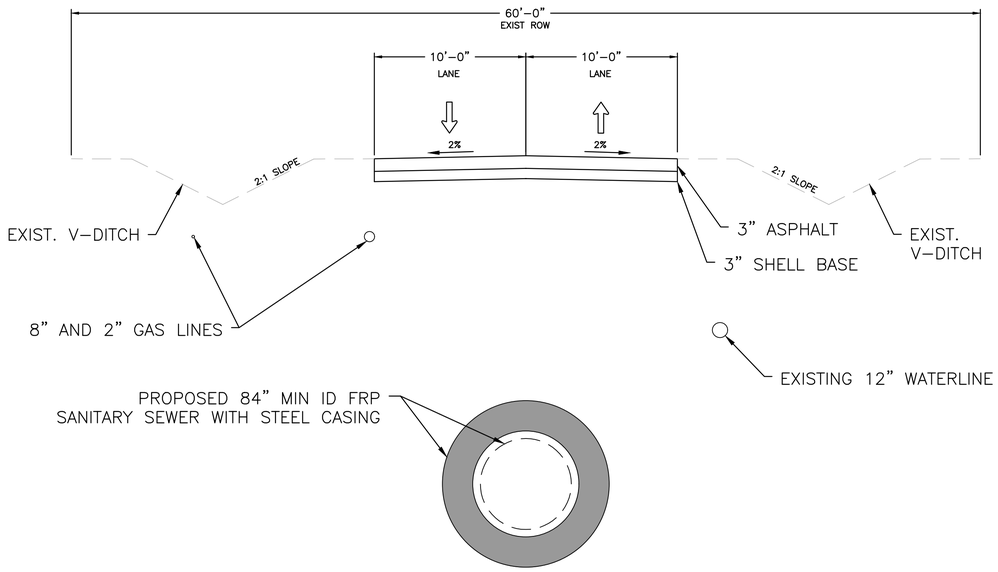
G-100



PROPOSED ALIGNMENT ALONG DODSON ST

STA 11+00

SCALE: 1"=5'

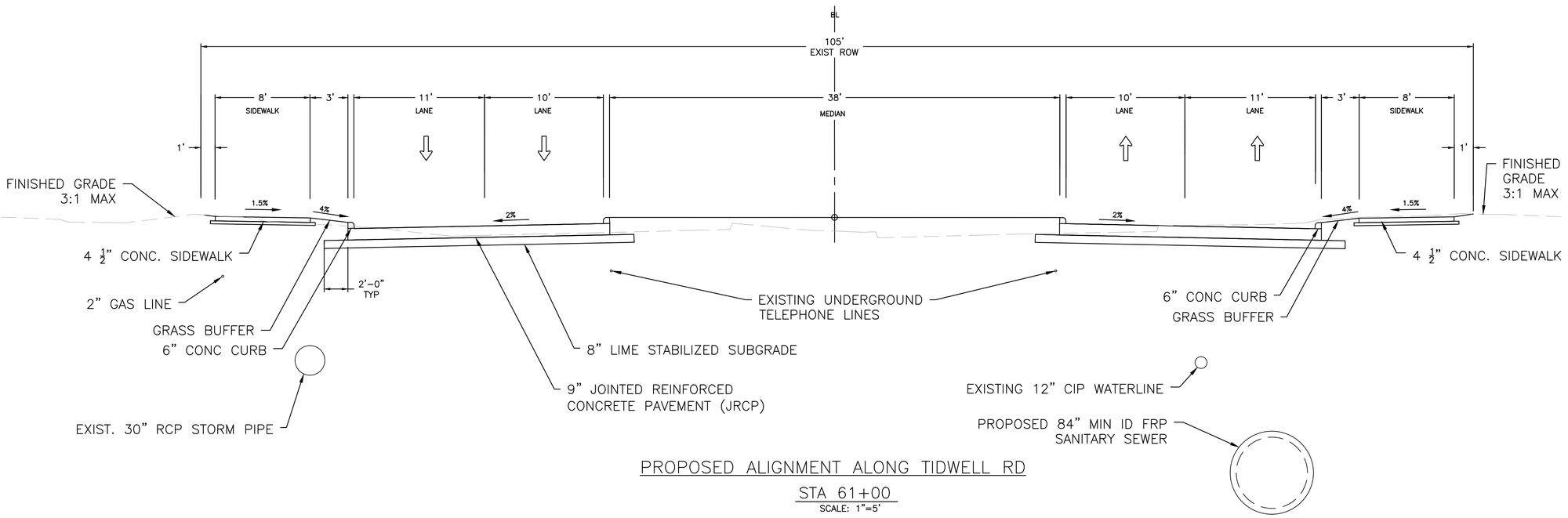


PROPOSED ALIGNMENT ALONG DODSON ST

STA 31+59 TO STA 39+65

SCALE: 1"=5'

SECTION CUT LOOKING DOWNSTREAM



PROPOSED ALIGNMENT ALONG TIDWELL RD

STA 61+00

SCALE: 1"=5'

SECTION CUT LOOKING DOWNSTREAM

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

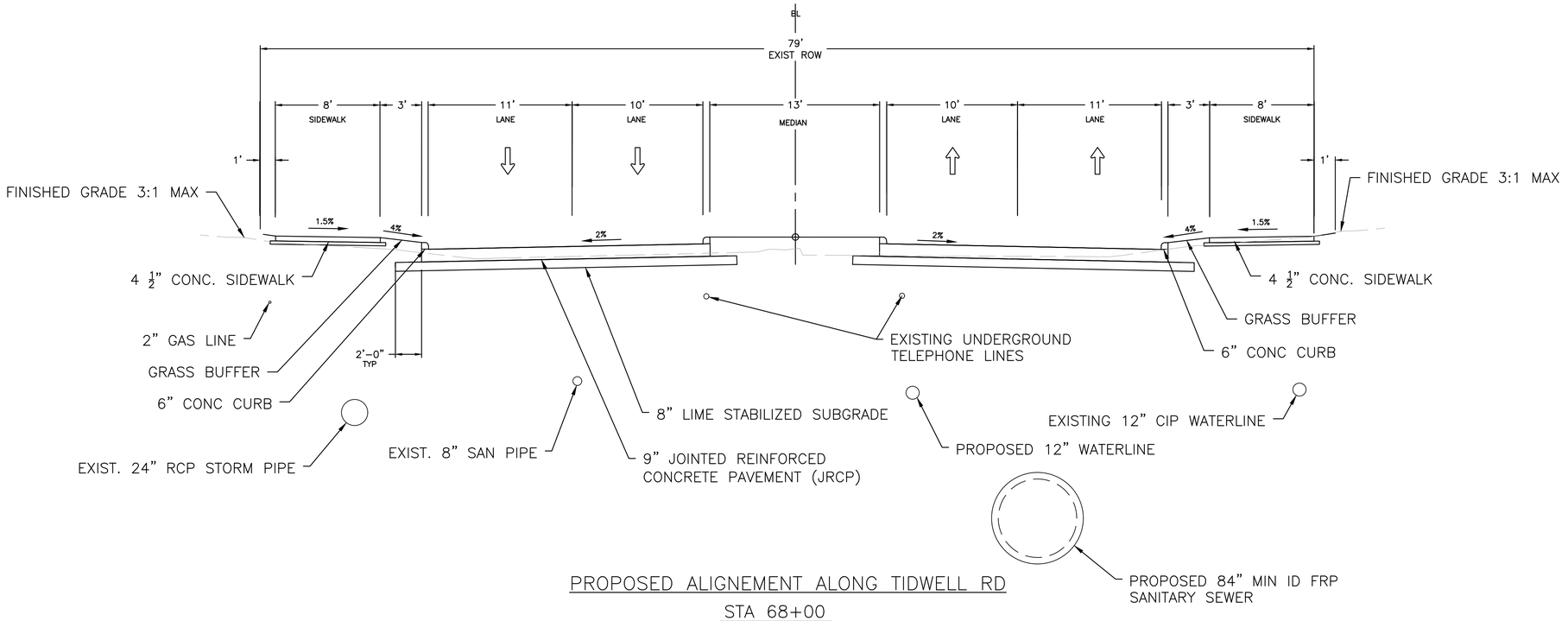
TYPICAL SECTION PLAN 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NOT TO SCALE	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 16 OF 192	

60% SUBMITTAL

G-101

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\016-017-TYPICAL-SECTION-PLAN.dwg

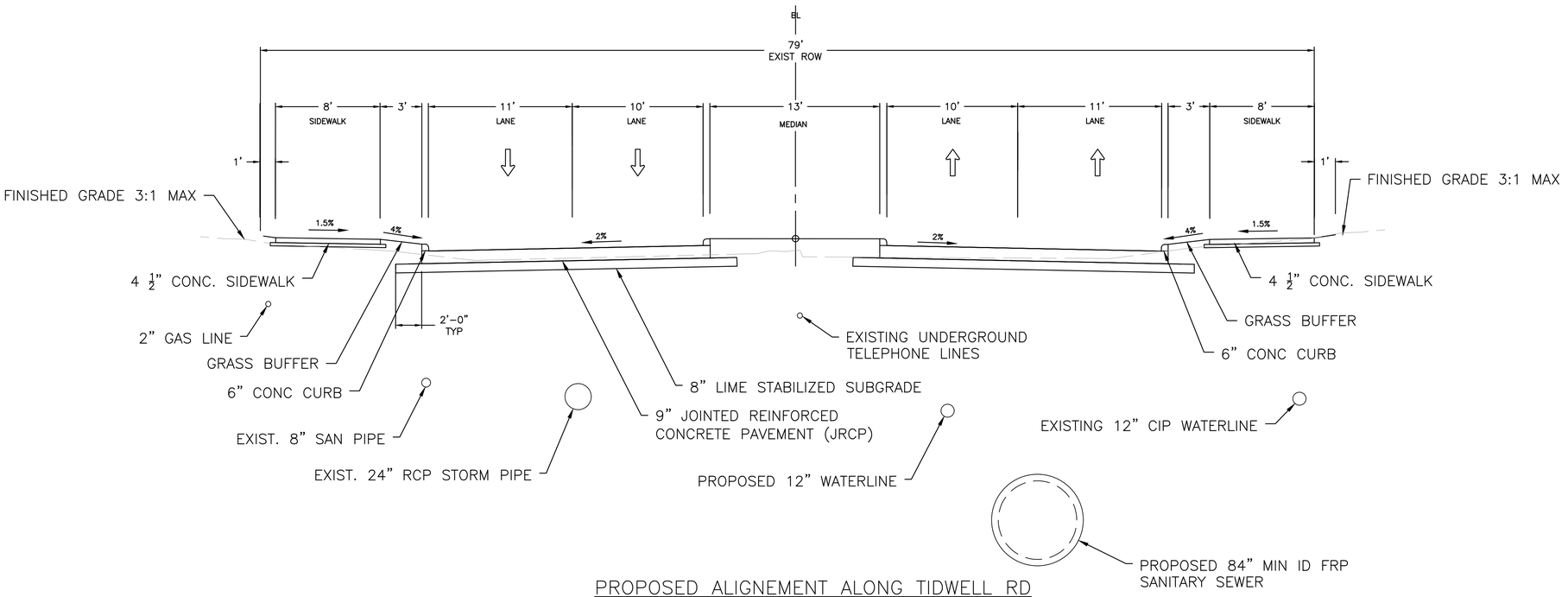


PROPOSED ALIGNEMENT ALONG TIDWELL RD

STA 68+00

SCALE: 1"=5'

SECTION CUT LOOKING DOWNSTREAM



PROPOSED ALIGNEMENT ALONG TIDWELL RD

STA 81+00

SCALE: 1"=5'

SECTION CUT LOOKING DOWNSTREAM

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TYPICAL SECTION PLAN 2

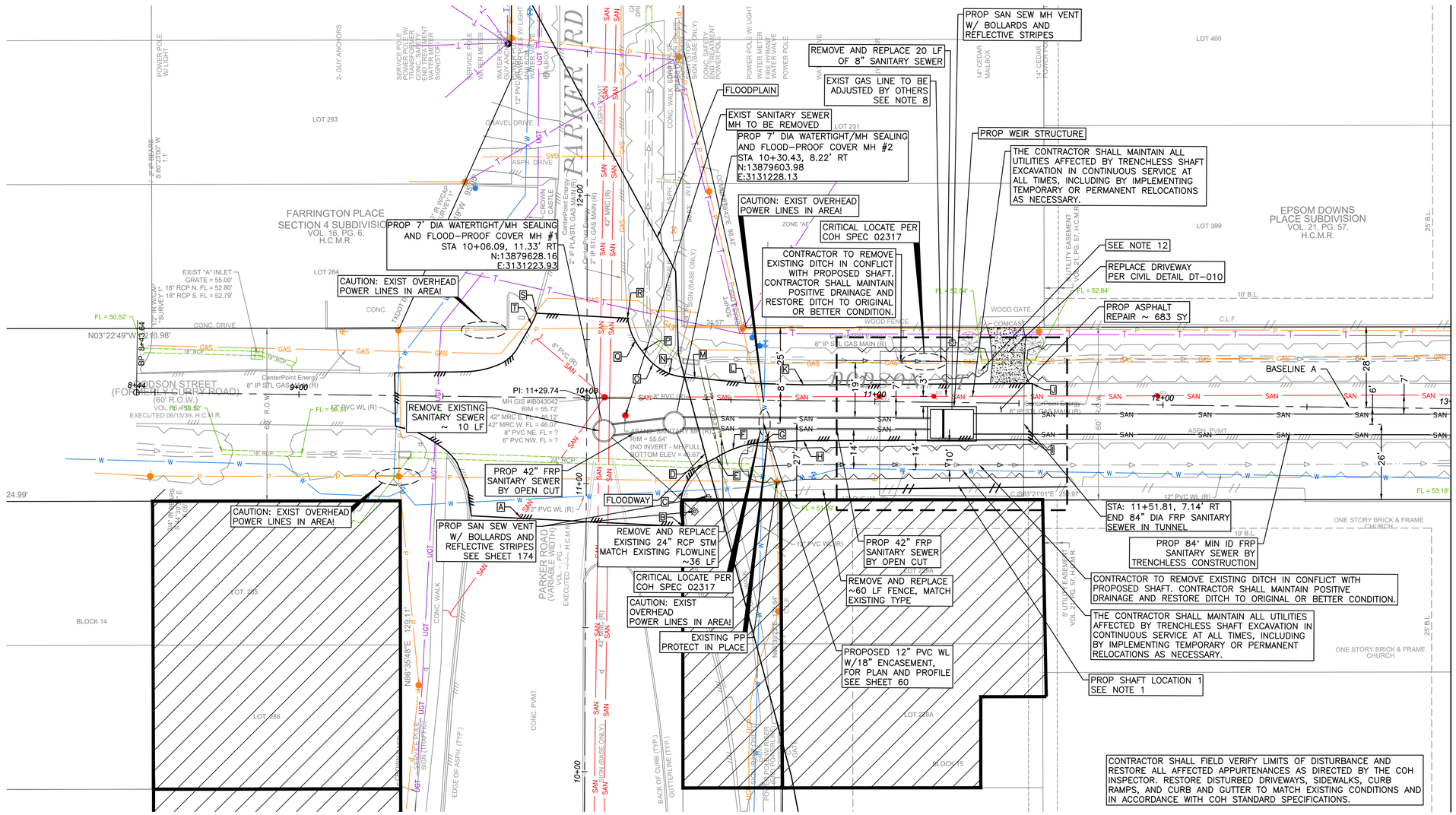
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NOT TO SCALE	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 17 OF 192	

60% SUBMITTAL

G-102

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\016-017-TYPICAL-SECTION-PLAN.dwg

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\018-022-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO DEMOLITION PLAN SHEETS 61 TO 77
10. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
11. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
12. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.

RESTORATION LEGEND:

- PAVEMENT
- CONCRETE DRIVEWAY
- V-DITCH

ASPHALT REPLACEMENT TABLE			ASPHALT REPLACEMENT TABLE			ASPHALT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION
A	9+77.42, 41.66' RT	55.02	I	11+54.79, 12.60' RT	55.44	Q	10+16.51, -20.00' LT	55.39
B	10+34.03, 44.21' RT	54.97	J	11+54.55, -6.89' LT	55.26	R	10+13.75, -27.80' LT	55.61
C	10+33.76, 32.05' RT	55.06	K	10+75.15, -5.48' LT	55.08	S	9+82.11, -29.23' LT	55.78
D	10+40.85, 22.46' RT	55.30	L	10+55.17, -5.85' LT	55.49	T	9+80.44, -25.36' LT	55.71
E	10+45.21, 20.11' RT	55.34	M	10+37.38, -7.45' LT	55.43			
F	10+50.96, 17.13' RT	55.43	N	10+28.48, -8.74' LT	55.29			
G	10+61.42, 14.67' RT	55.48	O	10+22.82, -12.24' LT	55.39			
H	10+75.38, 13.88' RT	55.37	P	10+18.97, -16.52' LT	55.40			

C-201-PL

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

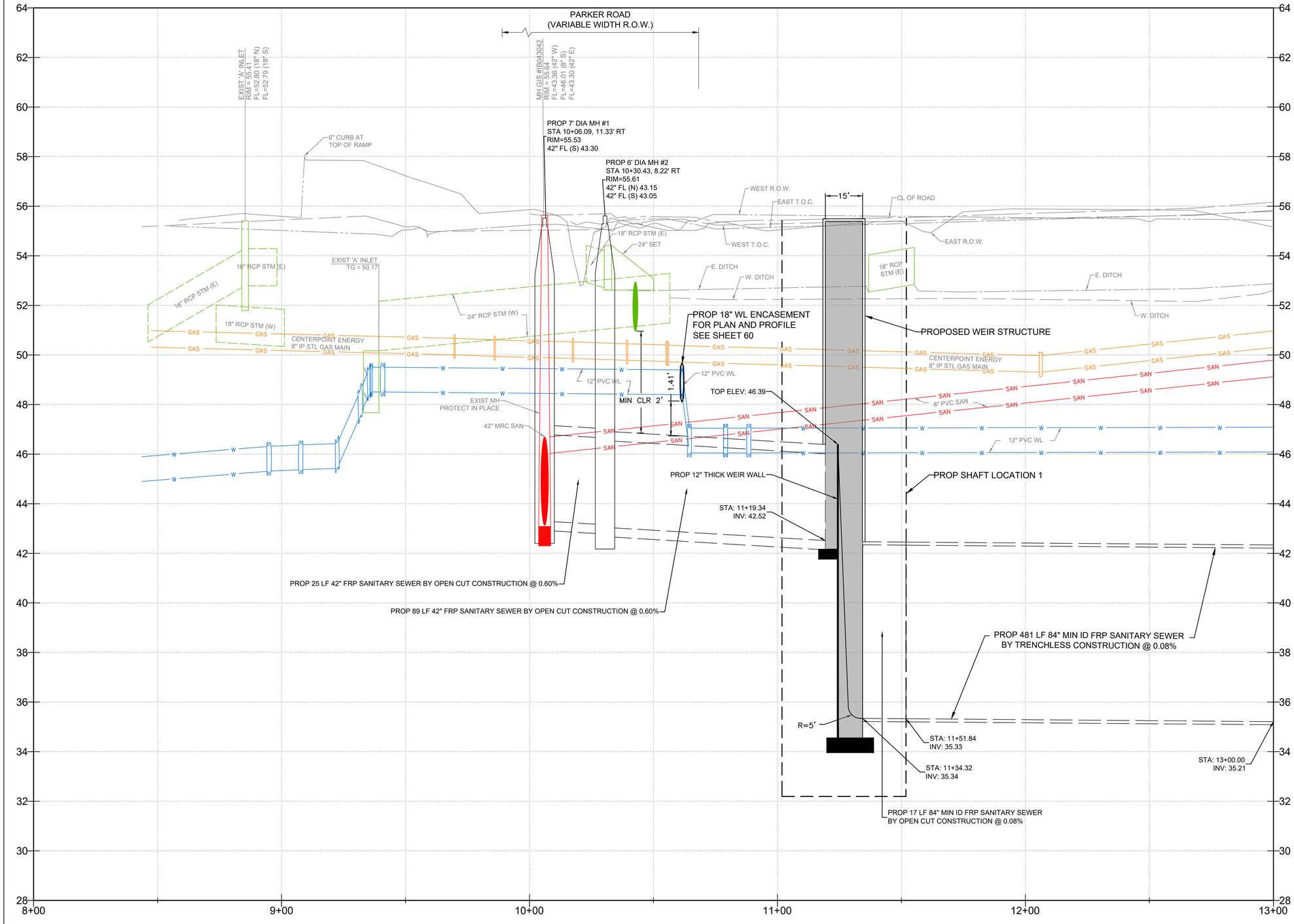
CRMP PACKAGE 6 – AREA 1-BASIN IB043

BASELINE A – DODSON ST SEWER BEGIN TO STA 13+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 18 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\019-023-DODSON-SEWER PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



C-201-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

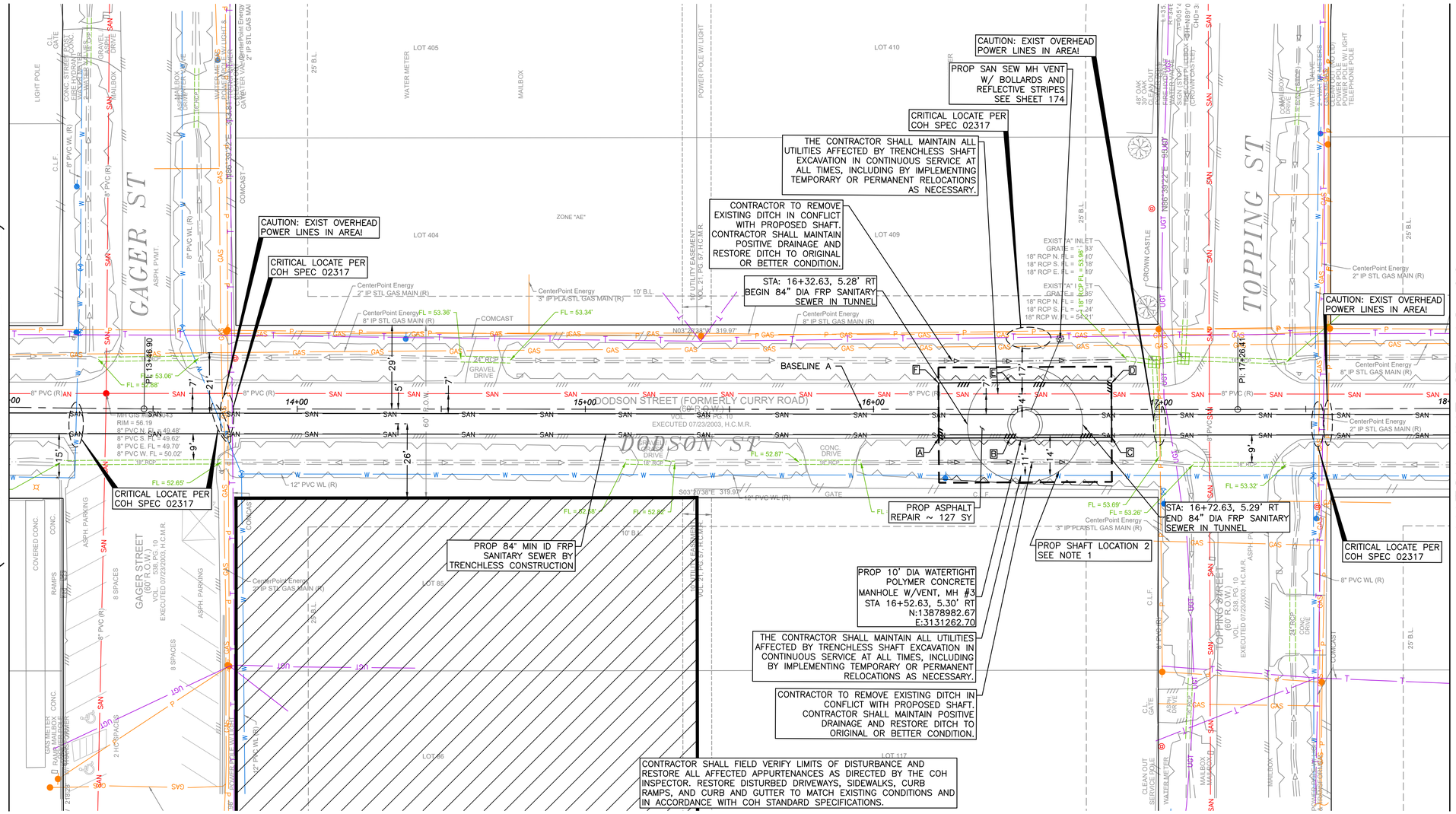
BASELINE A – DODSON ST SEWER BEGIN TO STA 13+00 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE: 1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM: CHELSEA LEGER, P.E.	
SHEET NO. 19 OF 192	60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DRK\CIVIL\DRK\18-022-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 13+00
(SEE DRAWING NO. C-201-PL)

MATCH LINE STA 18+00
(SEE DRAWING NO. C-203-PL)



SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO DEMOLITION PLAN SHEETS 61 TO 77
10. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
11. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
12. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.

RESTORATION LEGEND:

- PAVEMENT
- CONCRETE DRIVEWAY
- V-DITCH

ASPHALT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION
A	16+22.65, 9.97' RT	56.56
B	16+47.44, 9.88' RT	56.58
C	16+82.65, 9.66' RT	56.86
D	16+82.55, -9.11' LT	56.74
E	16+47.59, -9.32' LT	56.50
F	16+22.57, -9.17' LT	56.44

0' 10' 20' 40'
SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.
Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)
Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON ST SEWER STA 13+00 TO STA 18+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 20 OF 192	

C-202-PL

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\10011764 3-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\019-023-DODSON-SEWER PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

Elevation

GAGER STREET (60' R.O.W.)

TOPPING STREET (60' R.O.W.)

MH GIS #IB043043
RIM = 56.05
FL=49.48 (8" N)
FL=49.62 (8" W)
FL=49.64 (8" S)
FL=49.70 (8" E)

EXIST 'A' INLET
RIM = 56.44
FL=54.10 (18" N)
FL=54.24 (18" S)
FL=54.21 (18" W)

EXIST 'A' INLET
RIM = 56.54
FL=54.10 (18" N)
FL=54.18 (18" S)
FL=54.10 (18" E)

PROP 10' DIA MH #3
STA 16+52.63, 5.30' RT
RIM=56.77
84" FL (N) 34.93
84" FL (S) 34.83

CL OF ROAD
EAST R.O.W.
WEST R.O.W.
WEST T.O.C.
EAST T.O.C.
E. DITCH
W. DITCH

18" RCP STM (E)
18" RCP STM (W)
24" RCP STM (E)
EXIST. MH TO BE REMOVED (R)

CENTERPOINT ENERGY
8" IP STL GAS MAIN

8" PVC SAN
8" PVC WL
12" PVC WL
6" FH LEAD

MIN CLR 2'

PROP SHAFT LOCATION 2

PROP 481 LF 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION @ 0.08%

PROP 1460 LF 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION @ 0.11%

PROP 20 LF 84" MIN ID FRP SANITARY SEWER BY OPEN CUT CONSTRUCTION @ 0.08%

PROP 20 LF 84" MIN ID FRP SANITARY SEWER BY OPEN CUT CONSTRUCTION @ 0.11%

STA: 13+00.00
INV: 35.21

STA: 16+32.63
INV: 34.95

STA: 16+72.63
INV: 34.81

STA: 18+00.00
INV: 34.67

64 62 60 58 56 54 52 50 48 46 44 42 40 38 36 34 32 30 28

13+00 14+00 15+00 16+00 17+00 18+00

C-202-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON ST SEWER STA 13+00 TO STA 18+00 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 21 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\018-022-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 18+00
(SEE DRAWING NO. C-202-PL)

MATCH LINE STA 23+00
(SEE DRAWING NO. C-204-PL)

DODSON ST

FOLGER ST

BASELINE A

CAUTION: EXIST OVERHEAD POWER LINES IN AREA!

CRITICAL LOCATE PER COH SPEC 02317

PROP 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION

CAUTION: EXIST OVERHEAD POWER LINES IN AREA!

CRITICAL LOCATE PER COH SPEC 02317

CAUTION: EXIST OVERHEAD POWER LINES IN AREA!

LOT 458 LOT 459 LOT 461 LOT 460 LOT 462 LOT 498 LOT 499

LOT 119 LOT 120 LOT 157 LOT 156 LOT 156 LOT 158 LOT 159

ZONE "AE" ZONE "X" (SHADED)

10' UTILITY EASEMENT VOL. 21, PG. 57, H.C.M.R.

25' B.L. 10' B.L.

COMCAST CenterPoint Energy 8" IP STL GAS MAIN (R) CenterPoint Energy 2" IP STL GAS MAIN CenterPoint Energy 3" IP PLA/STL GAS MAIN (R)

8" PVC (R) 12" PVC WL (R) 8" PVC WL (R) 18" RCP 24" RCP 8" RCP

EXIST "A" INLET GRATE = 56.65' 18" RCP N. FL = 54.47' 18" RCP S. FL = 54.40'

EXIST "A" INLET GRATE = 56.83' 18" RCP N. FL = 53.18' 18" RCP S. FL = 53.27'

EXIST "A" INLET GRATE = 56.92' 18" RCP N. FL = 53.70' 18" RCP S. FL = 53.76'

8" PVC N. = 48.22' 8" PVC S. = 48.26' 8" PVC E. = 47.85' 8" PVC W. = 47.84'

RIM = 57.45'

PI: 21+06.74

N03°20'38"E 319.97'

N03°20'38"E 98.09'

N03°20'38"E 98.09'

FL = 54.96' FL = 53.95' FL = 53.71' FL = 53.97' FL = 53.70' FL = 53.78' FL = 54.22' FL = 54.74' FL = 54.62' FL = 54.51' FL = 54.78' FL = 54.16' FL = 53.97' FL = 54.60' FL = 54.44' FL = 54.76' FL = 54.58' FL = 53.66' FL = 53.07' FL = 53.49' FL = 53.97' FL = 53.98' FL = 54.01' FL = 54.89' 24" RCP FL = 53.88' 24" RCP FL = 54.01' FL = 53.03'

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

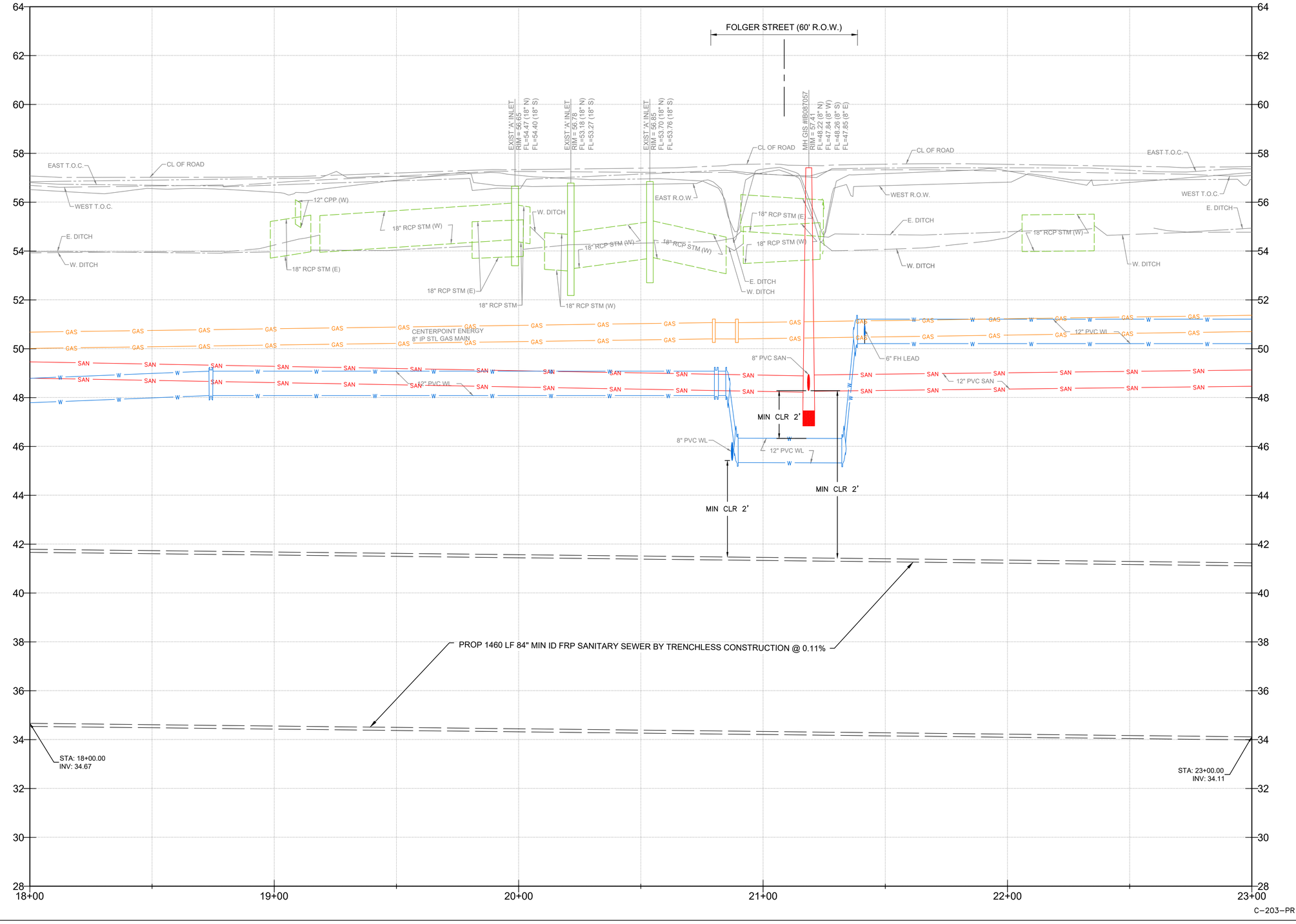
BASELINE A – DODSON ST SEWER STA 18+00 TO STA 23+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 22 OF 192	

60% SUBMITTAL

C-203-PL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\019-023-DODSON-SEWER PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



C-203-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON ST SEWER STA 18+00 TO STA 23+00 PROFILE

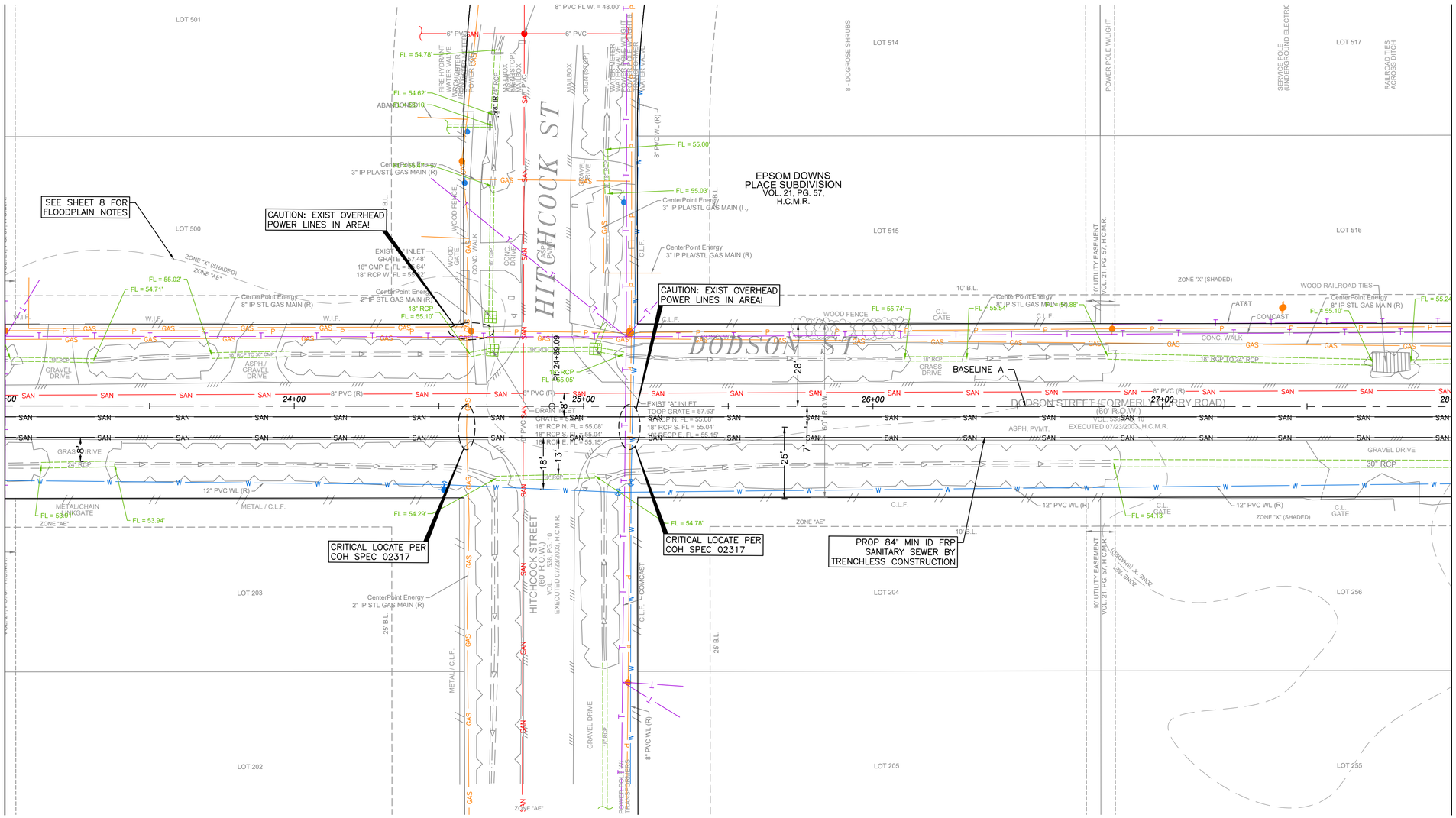
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 23 OF 192	

60% SUBMITTAL

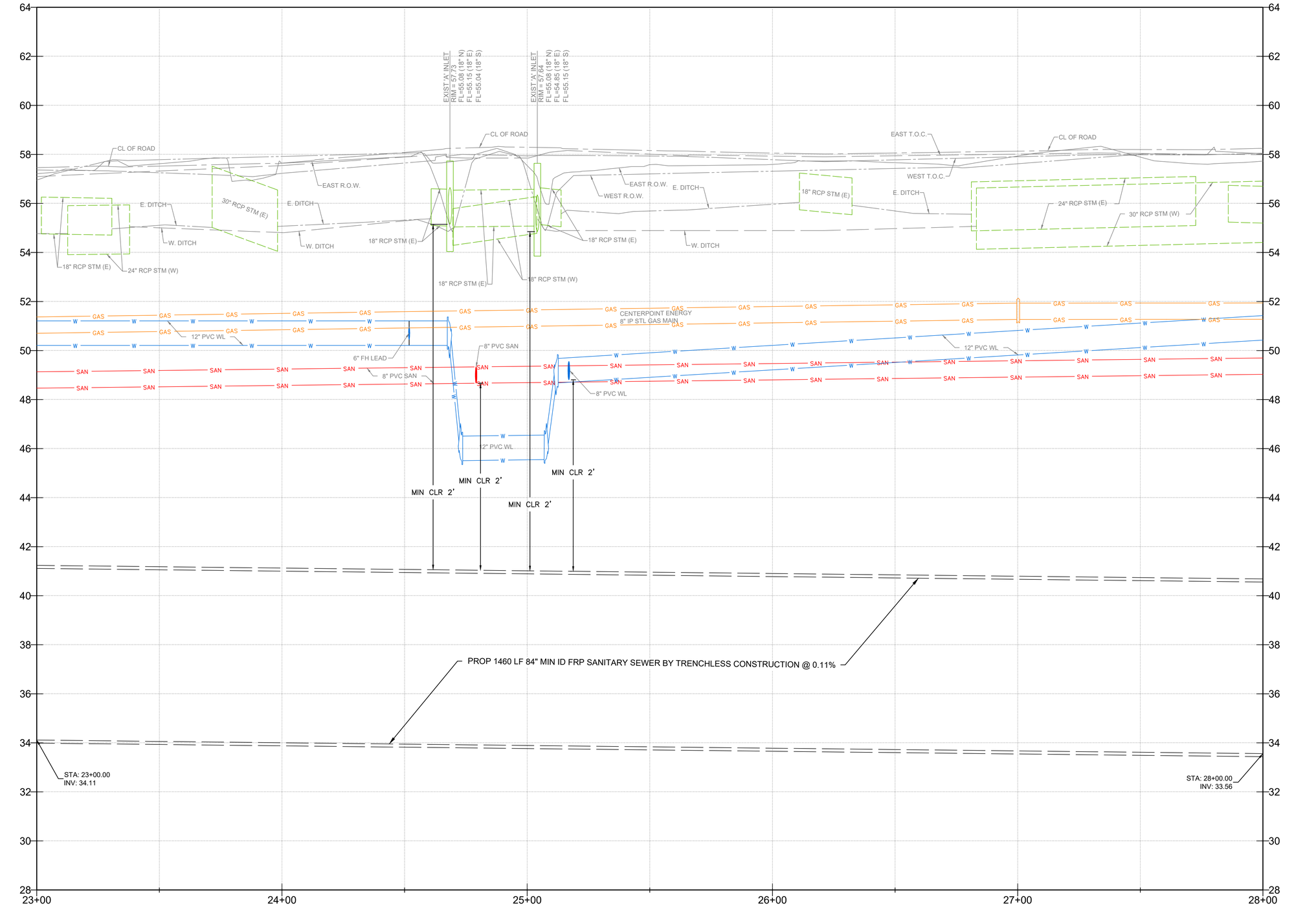
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DRAWINGS\CIVIL\DR\024-028-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 23+00
(SEE DRAWING NO. C-203-PL)

MATCH LINE STA 28+00
(SEE DRAWING NO. C-205-PL)


SEE SHEET 8 FOR FLOODPLAIN NOTES
CAUTION: EXIST OVERHEAD POWER LINES IN AREA!
CAUTION: EXIST OVERHEAD POWER LINES IN AREA!
EPSOM DOWNS PLACE SUBDIVISION VOL. 21, PG. 57, H.C.M.R.
HITCHCOCK ST
DODSON ST
DODSON STREET (FORMERLY FERRY ROAD) (60' R.O.W.) VOL. 538, PG. 10 EXECUTED 07/23/2003, H.C.M.R.
HITCHCOCK STREET (60' R.O.W.) VOL. 538, PG. 10 EXECUTED 07/23/2003, H.C.M.R.
BASELINE A
CRITICAL LOCATE PER COH SPEC 02317
CRITICAL LOCATE PER COH SPEC 02317
PROP 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION
LOT 500
LOT 501
LOT 514
LOT 515
LOT 516
LOT 517
LOT 203
LOT 204
LOT 205
LOT 256
LOT 202
LOT 255
ZONE "AE"
ZONE "X" (SHADED)
24+00
25+00
26+00
27+00
28+00
8" PVC (R)
12" PVC WL (R)
8" PVC WL (R)
18" RCP
24" RCP
30" RCP
36" RCP
CONC. WALK
WOOD FENCE
METAL / C.L.F.
METAL/CHAINLINK GATE
GRAVEL DRIVE
ASPH. PVMT.
10' B.L.
25' B.L.
10' UTILITY EASEMENT VOL. 21, PG. 57, H.C.M.R.
AT&T
COMCAST
WOOD RAILROAD TIES
SERVICE POLE (UNDERGROUND ELECTRIC
RAILROAD TIES ACROSS DITCH
POWER POLE W/LIGHT
FIRE HYDRANT
WATER VALVE
MAILBOX
SIGN
CenterPoint Energy 3" IP PLA/STL GAS MAIN (R)
CenterPoint Energy 2" IP STL GAS MAIN (R)
CenterPoint Energy 8" IP STL GAS MAIN (R)
EXIST "A" INLET TOOP GRATE = 57.63' 18" RCP N. FL = 55.08' 18" RCP S. FL = 55.04' 18" RCP E. FL = 55.15'
EXIST "B" INLET GRATE = 57.48' 16" CMP E. FL = 54.64' 18" RCP W. FL = 55.10'
EXIST "C" INLET GRATE = 57.48' 18" RCP N. FL = 55.08' 18" RCP S. FL = 55.04' 18" RCP E. FL = 55.15'
PROP. "D" INLET GRATE = 57.48' 18" RCP N. FL = 55.08' 18" RCP S. FL = 55.04' 18" RCP E. FL = 55.15'
PROP. "E" INLET GRATE = 57.48' 18" RCP N. FL = 55.08' 18" RCP S. FL = 55.04' 18" RCP E. FL = 55.15'
PROP. "F" INLET GRATE = 57.48' 18" RCP N. FL = 55.08' 18" RCP S. FL = 55.04' 18" RCP E. FL = 55.15'
FL = 55.02'
FL = 54.71'
FL = 53.94'
FL = 53.91'
FL = 54.29'
FL = 54.78'
FL = 55.00'
FL = 55.03'
FL = 55.05'
FL = 55.74'
FL = 55.54
FL = 55.88'
FL = 55.10'
FL = 55.26'
FL = 54.13'
8" PVC FL W. = 48.00'
8" PVC WL (R)
ABANDONED
PROP. 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION
PROP. 18" RCP
PROP. 24" RCP
PROP. 30" CMP
PROP. 36" RCP
PROP. 24" RCP
PROP. 30" RC

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\025-029-DODSON-SEWER PROFILES.dwg



C-204-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON ST SEWER STA 23+00 TO STA 28+00 PROFILE

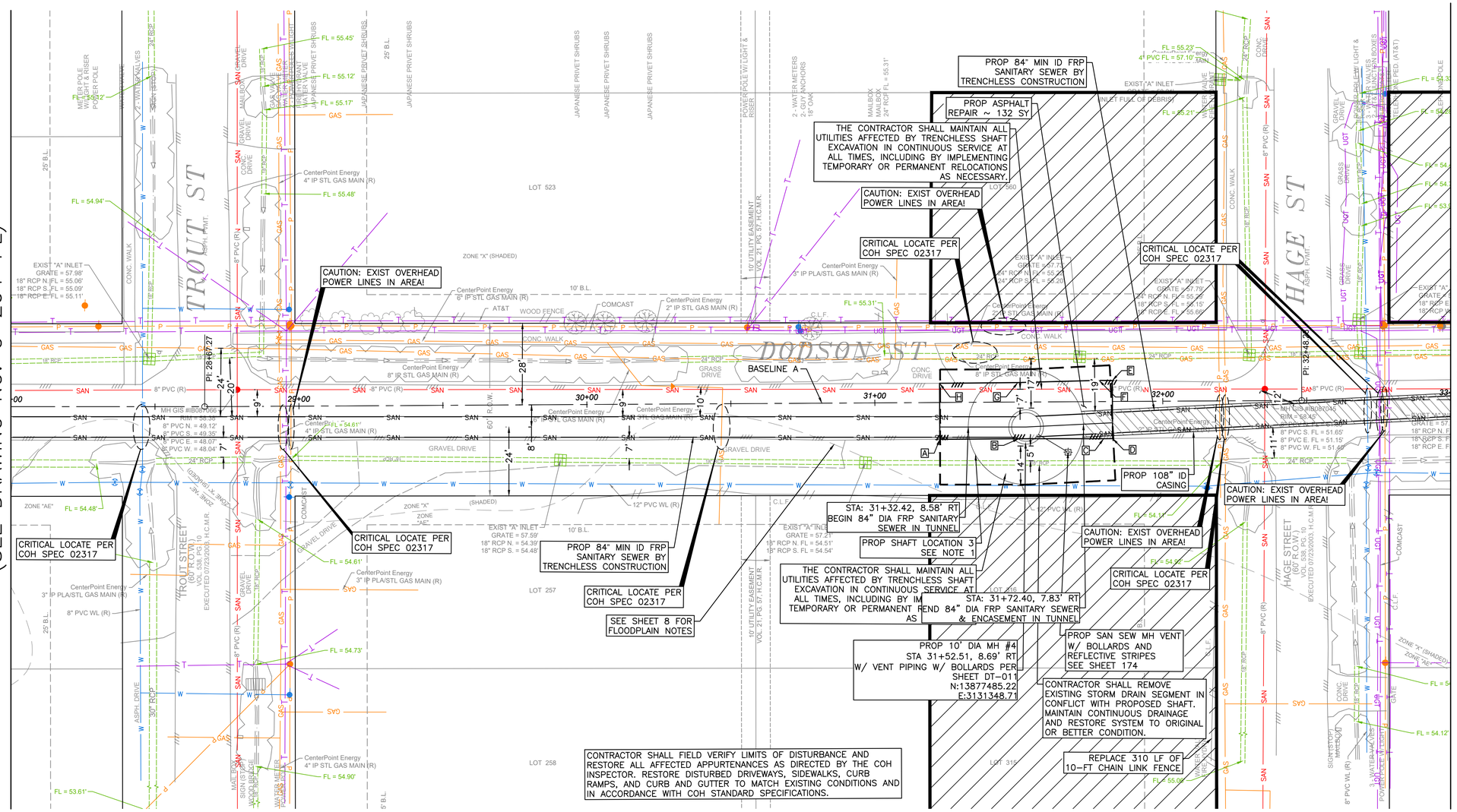
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 25 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\024-028-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 28+00
(SEE DRAWING NO. C-204-PL)

MATCH LINE STA 33+00
(SEE DRAWING NO. C-206-PL)



RESTORATION LEGEND:

- PAVEMENT
- CONCRETE DRIVEWAY
- V-DITCH

ASPHALT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION
A	31+22.51, 12.79' RT	57.78
B	31+49.98, 12.72' RT	57.86
C	31+79.44, 12.89' RT	57.88
D	31+82.51, 12.88' RT	57.90
E	31+82.52, -7.28' LT	58.03
F	31+77.93, -7.37' LT	58.00
G	31+49.73, -6.78' LT	57.96
H	31+22.52, -6.68' LT	57.82

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO DEMOLITION PLAN SHEETS 61 TO 77
10. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
11. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
12. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

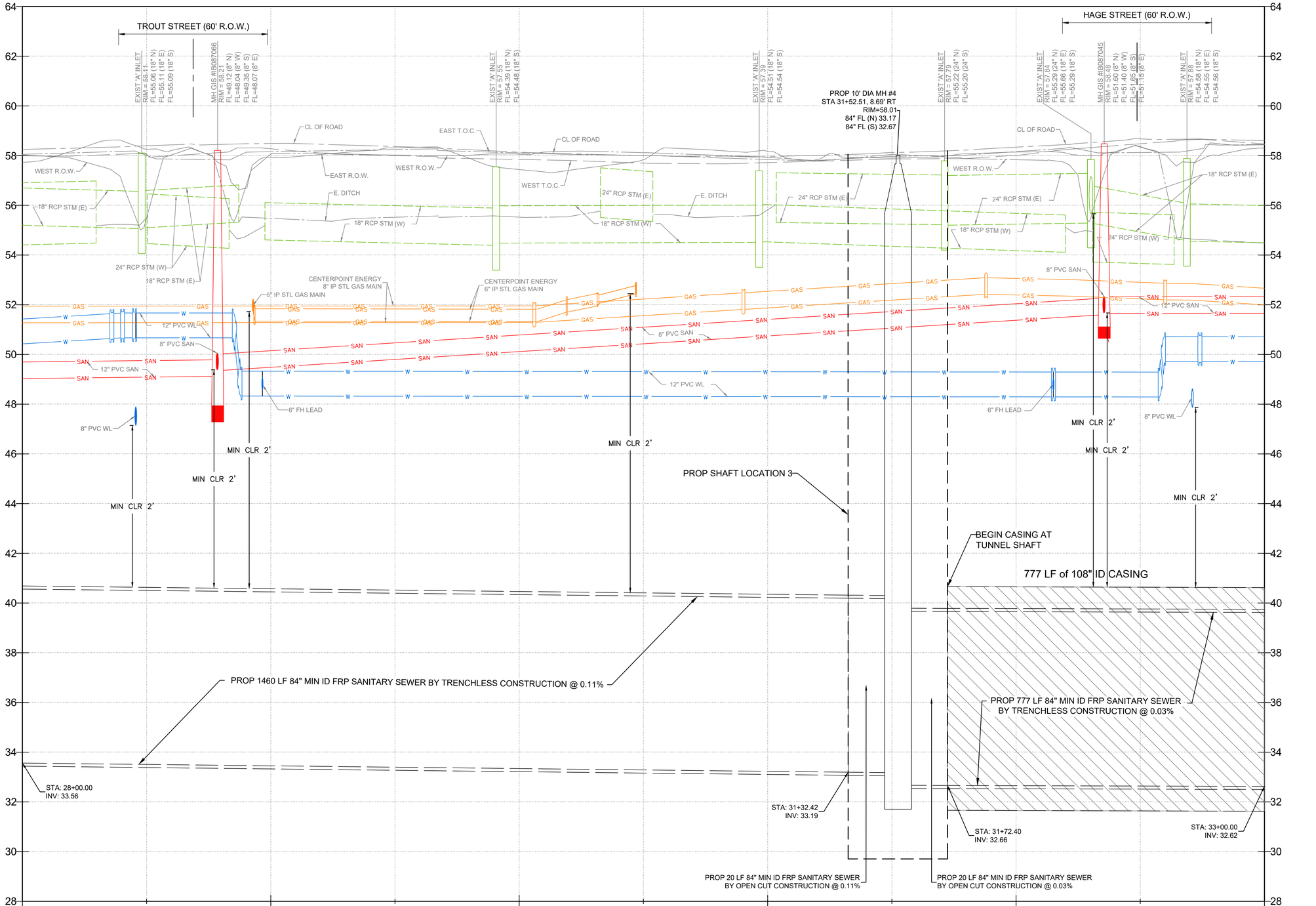
BASELINE A – DODSON ST SEWER STA 28+00 TO STA 33+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E. .	
SHEET NO. 26 OF 192	

60% SUBMITTAL

C-205-PL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\025-029-DODSON-SEWER PROFILES.dwg



C-205-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only. Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

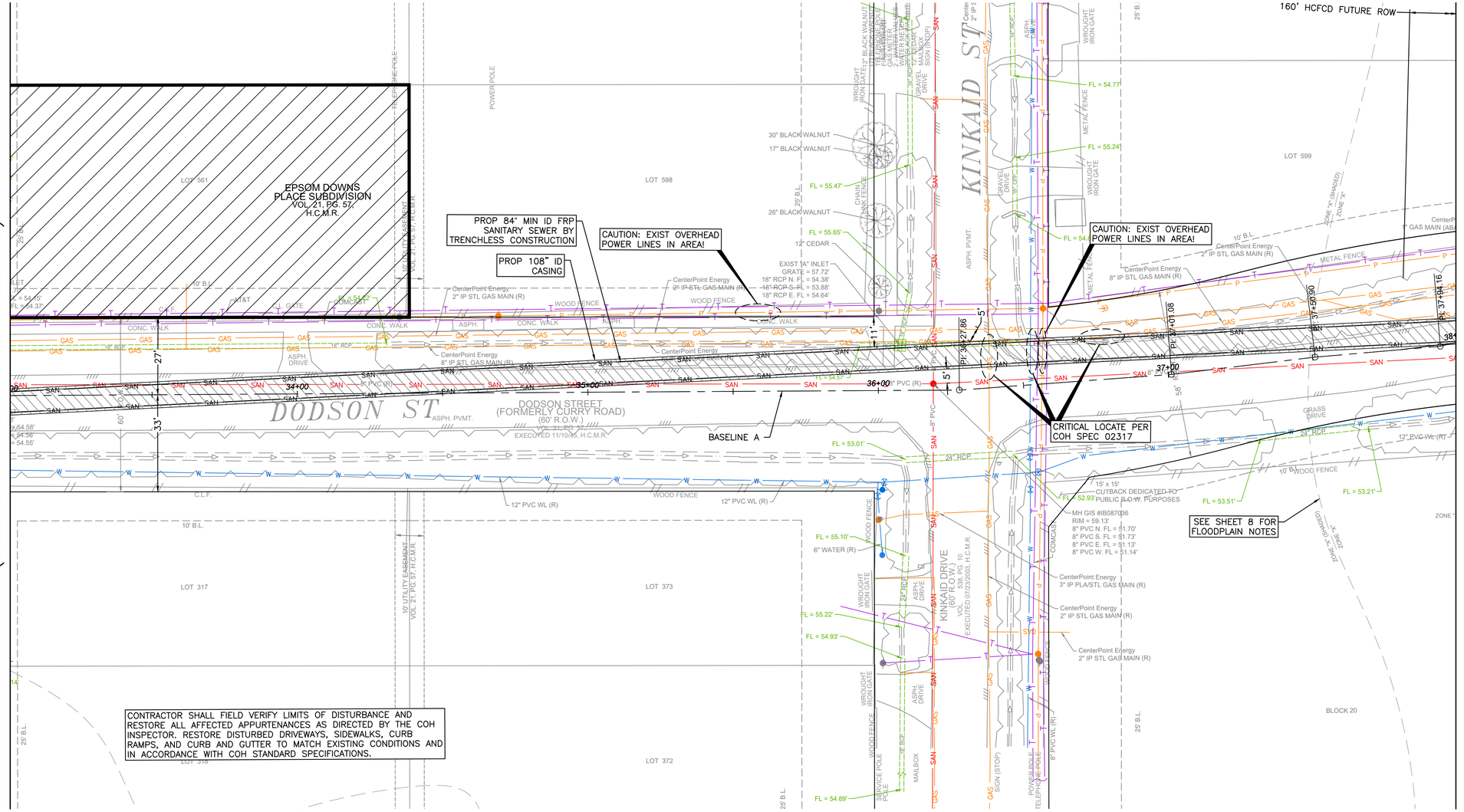
BASELINE A – DODSON ST SEWER STA 28+00 TO STA 33+00 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 27 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\024-028-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 33+00
(SEE DRAWING NO. C-205-PL)



0' 10' 20' 40'
SCALE: 1"=20'

NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

HCFCD NOTES:
*CONSTRUCTION IN HARRIS COUNTY FLOOD CONTROL DISTRICT

RIGHT-OF-WAY REQUIRES:

SITE PLAN MUST BE APPROVED PRIOR TO OBTAINING THE REQUIRED HCFCD RIGHT-OF-WAY NOTIFICATION. BE ADVISED THAT THE HCFCD RIGHT-OF-WAY NOTIFICATION IS SEPARATE FROM THE SITE DEVELOPMENT PERMIT PACKAGE.

1. HCFCD RIGHT-OF-WAY NOTIFICATION (PERMIT)
2. HCFCD 48-HR PRE-CONSTRUCTION NOTICE BOTH ARE REQUIRED PRIOR TO ENTERING OR WORKING WITHIN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY. THE HCFCD RIGHT-OF-WAY NOTIFICATION AND 48-HOUR NOTICE MUST BE PROVIDED TO HCFCD AT dcid@hcfcd.org. TO APPLY FOR THE HCFCD RIGHT-OF-WAY NOTIFICATION PLEASE GO TO http://apps.harriscountytx.gov/Permits AND APPLY FOR THE HCFCD ROW UNDER ROW NOTIFICATION. FAILURE TO PROVIDE BOTH ITEMS COULD RESULT IN PROJECT DELAYS.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON ST SEWER STA 33+00 TO STA 38+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 28 OF 192	

60% SUBMITTAL

MATCH LINE STA 38+00
(SEE DRAWING NO. C-207-PL)

C-206-PL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

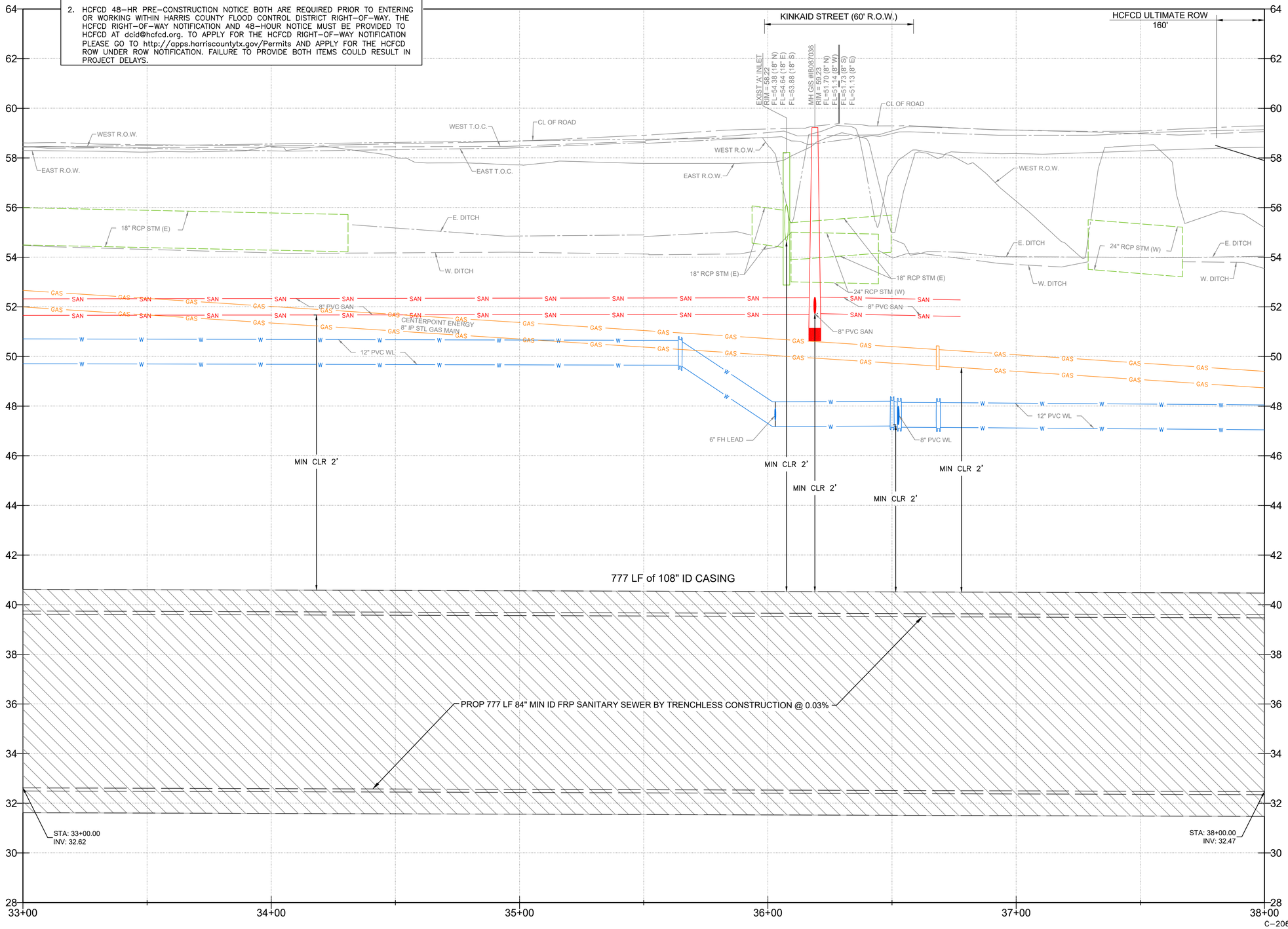
FILE PATH: C:\Users\PAUL.7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\025-029-DODSON-SEWER PROFILES.dwg

HCFCD NOTES:
*CONSTRUCTION IN HARRIS COUNTY FLOOD CONTROL DISTRICT

RIGHT-OF-WAY REQUIRES:

SITE PLAN MUST BE APPROVED PRIOR TO OBTAINING THE REQUIRED HCFCD RIGHT-OF-WAY NOTIFICATION. BE ADVISED THAT THE HCFCD RIGHT-OF-WAY NOTIFICATION IS SEPARATE FROM THE SITE DEVELOPMENT PERMIT PACKAGE.

1. HCFCD RIGHT-OF-WAY NOTIFICATION (PERMIT)
2. HCFCD 48-HR PRE-CONSTRUCTION NOTICE BOTH ARE REQUIRED PRIOR TO ENTERING OR WORKING WITHIN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY. THE HCFCD RIGHT-OF-WAY NOTIFICATION AND 48-HOUR NOTICE MUST BE PROVIDED TO HCFCD AT dcid@hcfcd.org. TO APPLY FOR THE HCFCD RIGHT-OF-WAY NOTIFICATION PLEASE GO TO http://apps.harriscountytx.gov/Permits AND APPLY FOR THE HCFCD ROW UNDER ROW NOTIFICATION. FAILURE TO PROVIDE BOTH ITEMS COULD RESULT IN PROJECT DELAYS.



20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

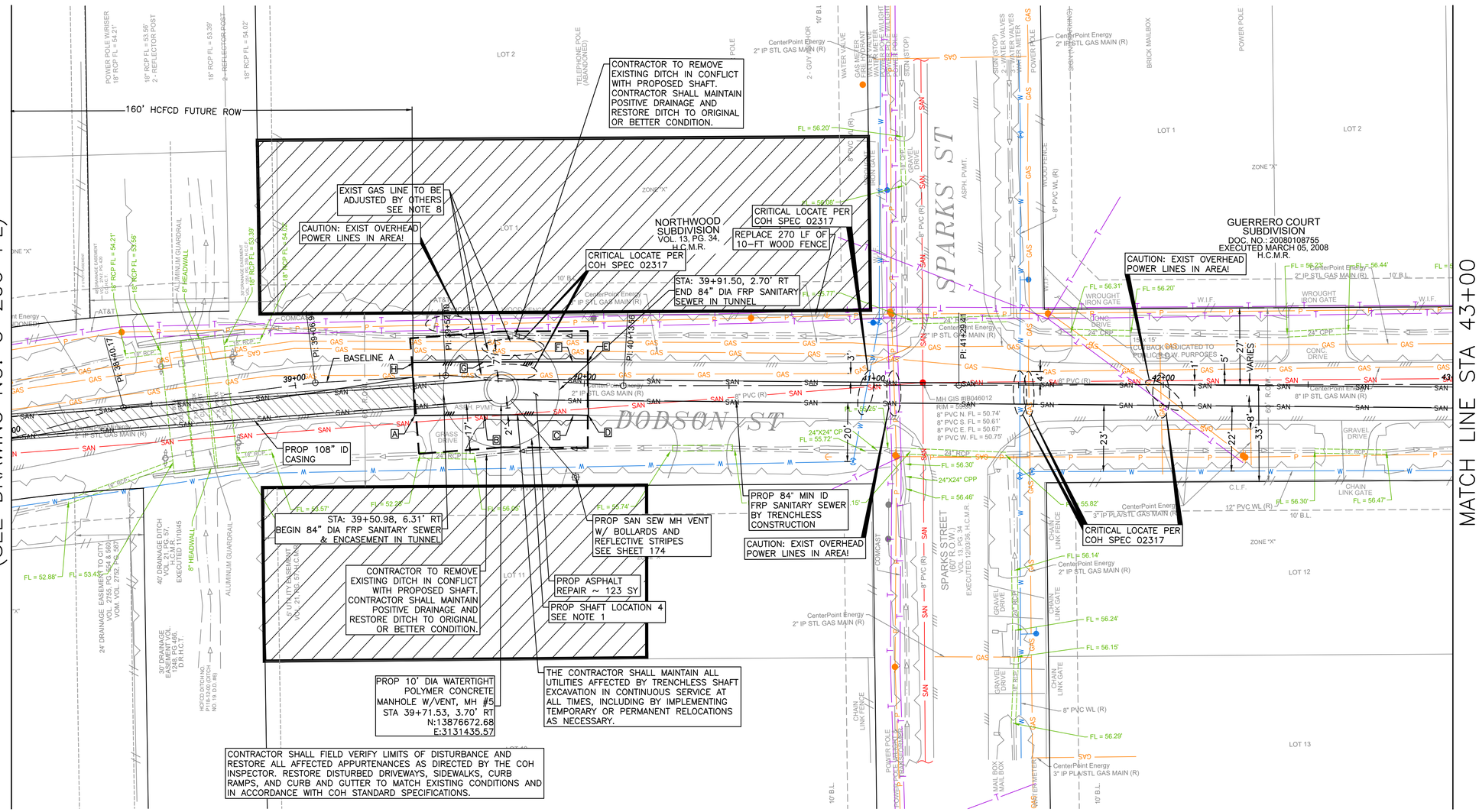
CRMP PACKAGE 6 – AREA 1-BASIN IB043

BASELINE A – DODSON ST SEWER STA 33+00 TO STA 38+00 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 29 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\030-034-DODSON-SEWER PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO DEMOLITION PLAN SHEETS 61 TO 77
10. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
11. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
12. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.

RESTORATION LEGEND:

- PAVEMENT
- CONCRETE DRIVEWAY
- V-DITCH

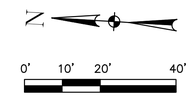
ASPHALT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION
A	39+40.59, 13.24' RT	59.28
B	39+66.16, 12.83' RT	59.15
C	39+96.87, 11.09' RT	58.99
D	40+02.07, 10.90' RT	58.94
E	40+00.85, -7.52' LT	58.78
F	39+95.50, -7.21' LT	58.79
G	39+64.91, -5.43' LT	59.13
H	39+41.48, -5.10' LT	59.50

HCFCD NOTES:
*CONSTRUCTION IN HARRIS COUNTY FLOOD CONTROL DISTRICT

RIGHT-OF-WAY REQUIRES:

SITE PLAN MUST BE APPROVED PRIOR TO OBTAINING THE REQUIRED HCFCD RIGHT-OF-WAY NOTIFICATION. BE ADVISED THAT THE HCFCD RIGHT-OF-WAY NOTIFICATION IS SEPARATE FROM THE SITE DEVELOPMENT PERMIT PACKAGE.

1. HCFCD RIGHT-OF-WAY NOTIFICATION (PERMIT)
2. HCFCD 48-HR PRE-CONSTRUCTION NOTICE BOTH ARE REQUIRED PRIOR TO ENTERING OR WORKING WITHIN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY. THE HCFCD RIGHT-OF-WAY NOTIFICATION AND 48-HOUR NOTICE MUST BE PROVIDED TO HCFCD AT dcid@hcfcd.org. TO APPLY FOR THE HCFCD RIGHT-OF-WAY NOTIFICATION PLEASE GO TO http://apps.harriscountytx.gov/Permits AND APPLY FOR THE HCFCD ROW UNDER ROW NOTIFICATION. FAILURE TO PROVIDE BOTH ITEMS COULD RESULT IN PROJECT DELAYS.



NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

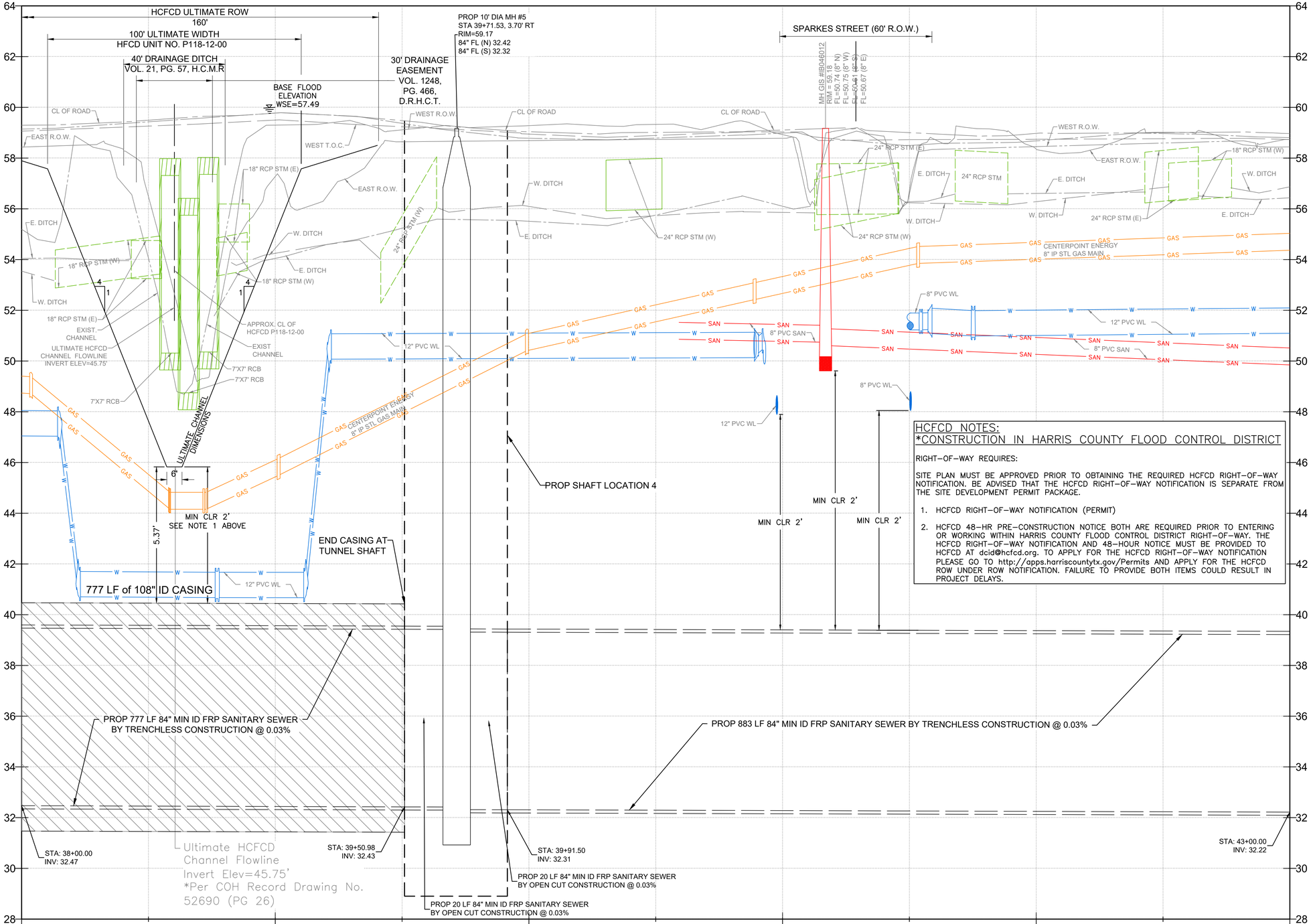
BASELINE A – DODSON ST SEWER STA 38+00 TO STA 43+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 30 OF 192	

60% SUBMITTAL

C-207-PL

NOTE:
1. CONTRACTOR TO ACHIEVE A MINIMUM OF 2' OF CLR FROM THE LOWEST ELEVATION OF THE ULTIMATE CHANNEL AND THE TOP OF THE 84" SANITARY SEWER



HCFCD NOTES:
*CONSTRUCTION IN HARRIS COUNTY FLOOD CONTROL DISTRICT

RIGHT-OF-WAY REQUIRES:

SITE PLAN MUST BE APPROVED PRIOR TO OBTAINING THE REQUIRED HCFCD RIGHT-OF-WAY NOTIFICATION. BE ADVISED THAT THE HCFCD RIGHT-OF-WAY NOTIFICATION IS SEPARATE FROM THE SITE DEVELOPMENT PERMIT PACKAGE.

1. HCFCD RIGHT-OF-WAY NOTIFICATION (PERMIT)
2. HCFCD 48-HR PRE-CONSTRUCTION NOTICE BOTH ARE REQUIRED PRIOR TO ENTERING OR WORKING WITHIN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY. THE HCFCD RIGHT-OF-WAY NOTIFICATION AND 48-HOUR NOTICE MUST BE PROVIDED TO HCFCD AT dcid@hcfcd.org. TO APPLY FOR THE HCFCD RIGHT-OF-WAY NOTIFICATION PLEASE GO TO http://apps.harriscountytx.gov/Permits AND APPLY FOR THE HCFCD ROW UNDER ROW NOTIFICATION. FAILURE TO PROVIDE BOTH ITEMS COULD RESULT IN PROJECT DELAYS.

C-207-PR

SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON ST SEWER STA 38+00 TO STA 43+00 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 31 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\031-035-DODSON-SEWER PROFILES.dwg

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\030-034-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 43+00
(SEE DRAWING NO. C-207-PL)

MATCH LINE STA 48+00
(SEE DRAWING NO. C-209-PL)

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only. Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

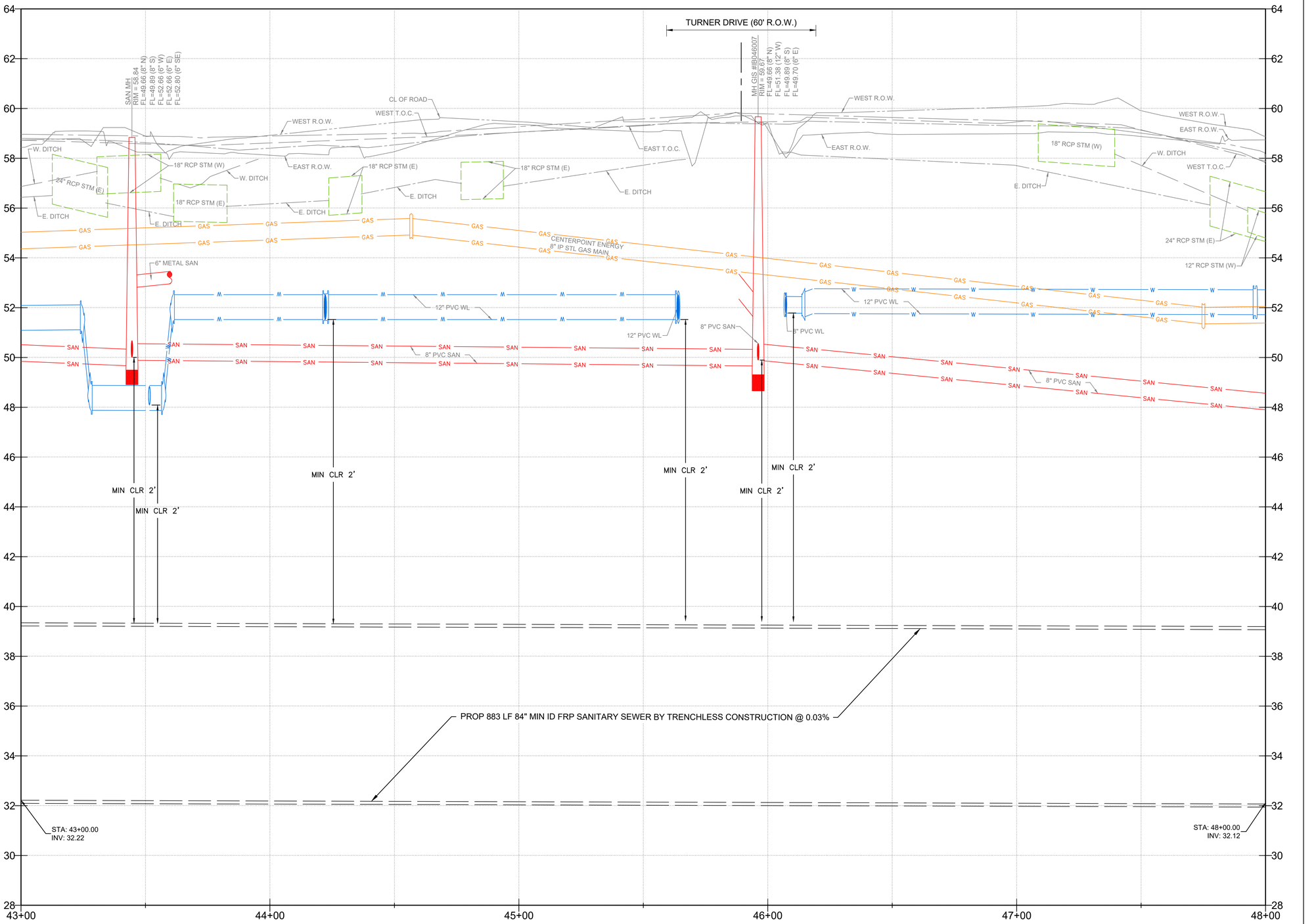
BASELINE A – DODSON ST SEWER STA 43+00 TO STA 48+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 32 OF 192	

60% SUBMITTAL

C-208-PL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\031-035-DODSON-SEWER PROFILES.dwg



C-208-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

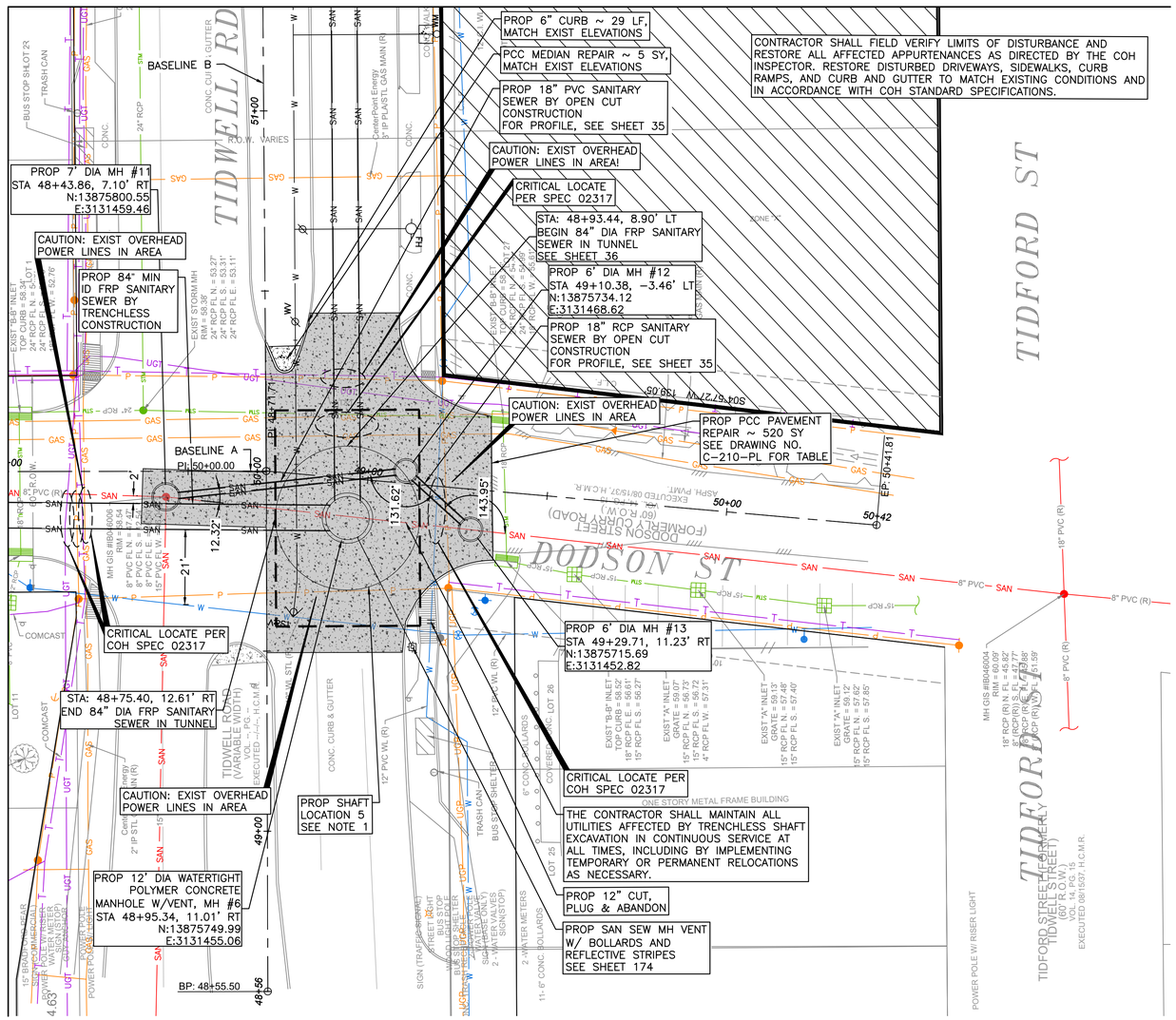
BASELINE A – DODSON ST SEWER STA 43+00 TO STA 48+00 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 33 OF 192	

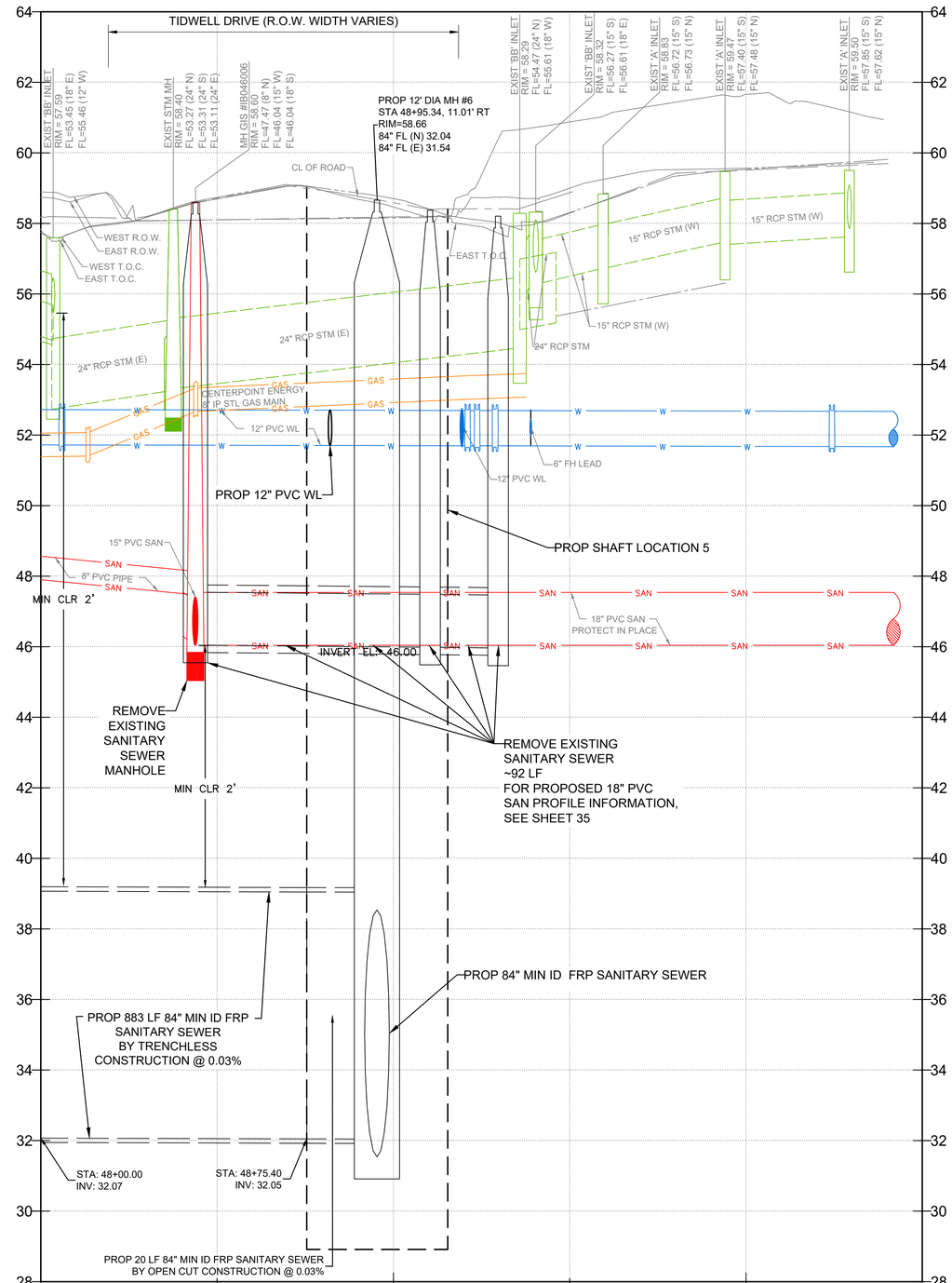
60% SUBMITTAL

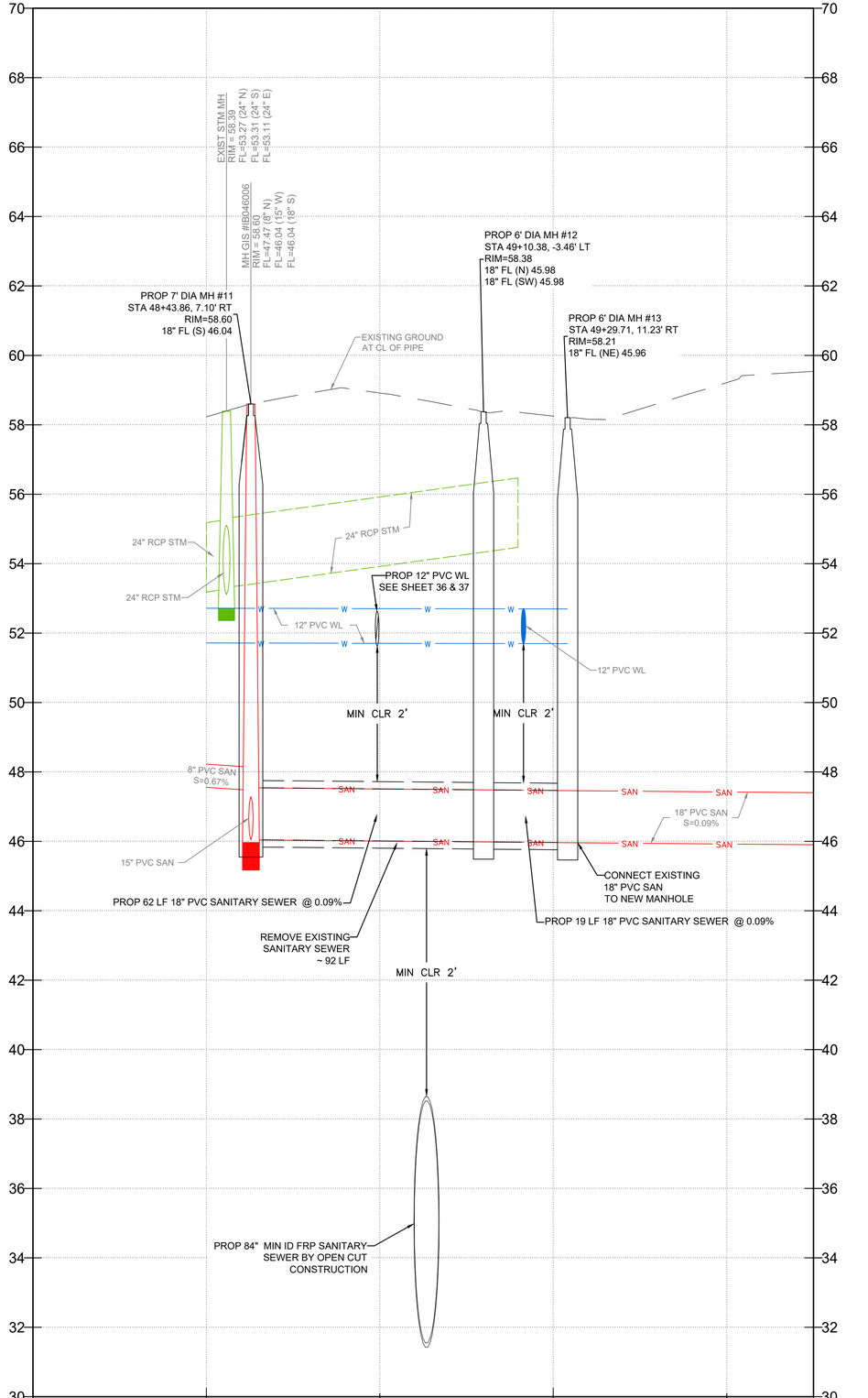
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\030-034-DODSON-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

SEE BASELINE B DRAWING NO. C-210-PL FOR CONTINUATION


MATCH LINE STA 48+00
(SEE DRAWING NO. C-208-PL)
TIDWELL RD
TIDFORD ST
DODSON ST
BASELINE B
BASELINE A
PROP 7' DIA MH #11
STA 48+43.86, 7.10' RT
N:13875800.55
E:3131459.46
CAUTION: EXIST OVERHEAD POWER LINES IN AREA
PROP 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION
CRITICAL LOCATE PER COH SPEC 02317
STA: 48+75.40, 12.61' RT
END 84" DIA FRP SANITARY SEWER IN TUNNEL
CAUTION: EXIST OVERHEAD POWER LINES IN AREA
PROP SHAFT LOCATION 5 SEE NOTE 1
PROP 12' DIA WATERTIGHT POLYMER CONCRETE MANHOLE W/VENT, MH #6
STA 48+95.34, 11.01' RT
N:13875749.99
E:3131455.06
BP: 48+55.50
PROP 6" CURB ~ 29 LF, MATCH EXIST ELEVATIONS
PCC MEDIAN REPAIR ~ 5 SY, MATCH EXIST ELEVATIONS
PROP 18" PVC SANITARY SEWER BY OPEN CUT CONSTRUCTION FOR PROFILE, SEE SHEET 35
CAUTION: EXIST OVERHEAD POWER LINES IN AREA!
CRITICAL LOCATE PER SPEC 02317
STA: 48+93.44, 8.90' LT
BEGIN 84" DIA FRP SANITARY SEWER IN TUNNEL
SEE SHEET 36
PROP 6' DIA MH #12
STA 49+10.38, -3.46' LT
N:13875734.12
E:3131468.62
PROP 18" RCP SANITARY SEWER BY OPEN CUT CONSTRUCTION FOR PROFILE, SEE SHEET 35
CAUTION: EXIST OVERHEAD POWER LINES IN AREA
PROP PCC PAVEMENT REPAIR ~ 520 SY SEE DRAWING NO. C-210-PL FOR TABLE
PROP 6' DIA MH #13
STA 49+29.71, 11.23' RT
N:13875715.69
E:3131452.82
CRITICAL LOCATE PER COH SPEC 02317
THE CONTRACTOR SHALL MAINTAIN ALL UTILITIES AFFECTED BY TRENCHLESS SHAFT EXCAVATION IN CONTINUOUS SERVICE AT ALL TIMES, INCLUDING BY IMPLEMENTING TEMPORARY OR PERMANENT RELOCATIONS AS NECESSARY.
PROP 12" CUT, PLUG & ABANDON
PROP SAN SEW MH VENT W/ BOLLARDS AND REFLECTIVE STRIPES SEE SHEET 174
CONTRACTOR SHALL FIELD VERIFY LIMITS OF DISTURBANCE AND RESTORE ALL AFFECTED APPURTENANCES AS DIRECTED BY THE COH INSPECTOR. RESTORE DISTURBED DRIVEWAYS, SIDEWALKS, CURB RAMPS, AND CURB AND GUTTER TO MATCH EXISTING CONDITIONS AND IN ACCORDANCE WITH COH STANDARD SPECIFICATIONS.
CRITICAL LOCATE PER COH SPEC 02317
CAUTION: EXIST OVERHEAD POWER LINES IN AREA
PROP 12" DIA WATERTIGHT POLYMER CONCRETE MANHOLE W/VENT, MH #6
STA 48+95.34, 11.01' RT
N:13875749.99
E:3131455.06
PROP SHAFT LOCATION 5 SEE NOTE 1
PROP PCC PAVEMENT REPAIR ~ 520 SY SEE DRAWING NO. C-210-PL FOR TABLE
PROP 6' DIA MH #13
STA 49+29.71, 11.23' RT
N:13875715.69
E:3131452.82
CRITICAL LOCATE PER COH SPEC 02317
THE CONTRACTOR SHALL MAINTAIN ALL UTILITIES AFFECTED BY TRENCHLESS SHAFT EXCAVATION IN CONTINUOUS SERVICE AT ALL TIMES, INCLUDING BY IMPLEMENTING TEMPORARY OR PERMANENT RELOCATIONS AS NECESSARY.
PROP 12" CUT, PLUG & ABANDON
PROP SAN SEW MH VENT W/ BOLLARDS AND REFLECTIVE STRIPES SEE SHEET 174
PROP 12" DIA WATERTIGHT POLYMER CONCRETE MANHOLE W/VENT, MH #6
STA 48+95.34, 11.01' RT
N:13875749.99
E:3131455.06
PROP SHAFT LOCATION 5 SEE NOTE 1

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\031-035-DODSON-SEWER PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026





C-209-PR

NO.	DATE	REVISION	APP.

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON ST SEWER STA 48+00 TO END PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 35 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\036-040-TIDWELL-SEWER PLANS.dwg

SEE BASELINE A DRAWING NO. C-209-PL FOR CONTINUATION

PROP 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION SEE SHEET 34

STA: 50+01.79, 8.31' RT 1-12"x22.50' VERT. BEND

STA: 49+96.94, 8.32' RT 1-12"x22.50' VERT. BEND

CAUTION: EXIST OVERHEAD POWER LINES IN AREA!

STA: 49+59.47, 7.30' RT PROP 12"x12" TS&V

CRITICAL LOCATE PER COH SPEC 02317

PROP SHAFT LOCATION 5 SEE NOTE 1

PROP SAN SEW MH VENT W/ BOLLARDS AND REFLECTIVE STRIPES SEE SHEET 174

PROP 12" CUT, PLUG & ABANDON

PROP 12' DIA WATERTIGHT POLYMER CONCRETE MANHOLE W/VENT, MH #6 STA 48+95.34, 11.01' RT N:13875749.99 E:3131455.06

FOR PLAN AND PROFILE, SEE SHEET 34 & 35

PROP 12" ø WATERLINE VIA OPEN CUT ~ 88 LF

PCC MEDIAN REPAIR ~ 5 SY, MATCH EXIST ELEVATIONS

STA: 50+29.91, 8.32' RT 1-12"x22.50' VERT. BEND

STA: 50+36.28, 8.33' RT 1-12"x22.50' VERT. BEND

STA: 50+41.39, 8.33' RT 1-12" G.V.&B.

PROP 6" CURB ~ 29 LF, MATCH EXIST ELEVATIONS

CRITICAL LOCATE PER COH SPEC 02317

PROP WATER METER (LONG)

STA: 50+67.08, 8.35' RT 1-12"x6" TEE, RJ 1-6" GV w/BOX 1-6 FH (3' BC)

CAUTION: EXIST OVERHEAD POWER LINES IN AREA

CRITICAL LOCATE PER COH SPEC 02317

THE CONTRACTOR SHALL MAINTAIN ALL UTILITIES AFFECTED BY TRENCHLESS SHAFT EXCAVATION IN CONTINUOUS SERVICE AT ALL TIMES, INCLUDING BY IMPLEMENTING TEMPORARY OR PERMANENT RELOCATIONS AS NECESSARY.

STA: 50+06.78, 22.48' RT END 84" DIA FRP SANITARY SEWER IN TUNNEL

CAUTION: EXIST OVERHEAD POWER LINES IN AREA!

PROP PCC PAVEMENT REPAIR ~ 520 SY

REPLACE 270 LF OF 10-FT CHAIN LINK FENCE

PROP WATER METER (LONG)

PROP ~ 5 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS

PROP PCC PAVEMENT REPAIR ~ 3 SY

PROP 12" ø WATERLINE

PROP PCC PAVEMENT REPAIR ~ 1 SY

PROP 6" CURB ~ 6 LF, MATCH EXIST ELEVATIONS

PROP 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION

ABANDON EXISTING 12" WL IN PLACE AND TRANSFER SERVICE "CONNECTIONS" TO PROP 12" WL

PROP WATER METER (SHORT)

PROP ~ 5 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS

MATCH LINE STA 53+50 (SEE DRAWING NO. C-211-PL)

N 87°47'04" E 757.16'

N 87°53'57" E 758.83'

N 01°56'25" W (CALLED)

BASELINE B

TIDWELL RD

TIDWELL ROAD (VARIABLE WIDTH) VOL. --, PG. -- EXECUTED --/--/--, H.C.M.R.

DORSON STREET (FORMERLY CORRY ROAD) (60' R.O.W.) EXCAVATED 08/15/37, H.C.M.R. ASPH. PVMT.

BP: 48+55.50

PI: 50+00.00

EP: 51+17.7

SCALE: 1"=20'

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO DEMOLITION PLAN SHEETS 61 TO 77
10. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
11. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
12. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.
13. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER AND SANITARY SEWER SERVICE TO ALL PROPERTIES DURING CONSTRUCTION. TEMPORARY WATER SERVICE, SEWER BYPASSING, AND OTHER MEASURES REQUIRED TO PREVENT SERVICE INTERRUPTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST. ANY PLANNED OUTAGES SHALL BE APPROVED BY THE OWNER AND COORDINATED WITH AFFECTED CUSTOMERS AT LEAST 48 HOURS IN ADVANCE.

RESTORATION LEGEND:

CONCRETE DRIVEWAY/SIDEWAK

CONCRETE PAVEMENT

PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION
A	49+49.57, 0.00' T	59.11	K	50+20.20, 48.20' RT	58.01	U	52+96.21, 9.76' RT	59.00
B	49+49.57, 37.64' RT	58.37	L	50+28.08, 40.58' RT	58.16	V	52+96.21, 10.98' RT	58.97
C	49+58.15, 38.57' RT	58.28	M	50+40.35, 37.30' RT	58.21	W	53+01.21, 10.99' RT	58.97
D	49+63.17, 41.24' RT	58.20	N	50+43.65, 37.32' RT	58.22	X	53+01.21, 8.19' RT	59.03
E	49+69.26, 46.62' RT	58.13	O	50+43.78, 12.69' RT	58.83	Y	53+07.33, 5.99' RT	59.10
F	49+73.99, 55.55' RT	58.03	P	50+41.45, 12.21' RT	58.84	Z	53+07.33, 10.99' RT	58.96
G	49+75.06, 62.80' RT	57.84	Q	50+29.20, 8.07' RT	59.00	ZA	53+12.33, 10.99' RT	58.96
H	49+95.80, 62.53' RT	58.34	R	50+27.24, 5.55' RT	59.06	ZB	53+12.33, 5.99' RT	59.07
I	50+14.73, 62.57' RT	57.64	S	50+29.23, 2.54' RT	59.10			
J	50+16.71, 55.63' RT	57.90	T	50+35.43, 0.00' T	59.14			

C-210-PL

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

SURVEYED BY:
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

BASELINE B – TIDWELL RD SEWER BEGIN TO STA 53+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 36 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\037-041-TIDWELL-SEWER PROFILES.dwg

Station

PROP 12" PVC WL W/RJ SEE SHEET DT-027
FOR OFFSET DTL 0251-01

DODSON STREET (60' ROW)

PROP 12' DIA MH #6
STA 48+95.34, 11.01' RT
RIM=58.66
84" FL (N) 32.04
84" FL (E) 31.54

MH GIS #B046006
RIM = 58.60
FL=47.47 (8" N)
FL=46.04 (15" W)
FL=46.04 (18" S)

EXIST STM MH
RIM = 58.39
FL=52.27 (24" N)
FL=53.31 (24" S)
FL=53.11 (24" E)

EXIST STM MH
RIM = 58.33
FL=52.72 (24" W)
FL=52.57 (24" E)
FL=52.72 (24" N)

SOUTH R.O.W.
NORTH R.O.W.
SOUTH T.O.C.
NORTH T.O.C.
CL OF ROAD

CENTERPOINT ENERGY
3" IP PLASTL GAS MAIN

CENTERPOINT ENERGY
8" IP STL GAS MAIN

24" RCP STM

6' MIN
COVER

12" PVC WL
12" C.I. WL
STM
W
SAN

MIN CLR 2'

PROP 6" FH
LEAD

PROP 12" GATE
VALVE

PROP 6 LF 12" ⌀ PVC WATER
@ 41.42%
BY OPEN CUT CONSTRUCTION

PROP 28 LF 12" ⌀ PVC WATER @ 0.20%
BY OPEN CUT CONSTRUCTION

PROP 479 LF 12" ⌀ PVC WATER @ 0.20%
BY TRENCHLESS CONSTRUCTION

PROP 37 LF 12" ⌀ PVC WATER @ 0.20%
BY OPEN CUT CONSTRUCTION

PROP 5 LF 12" ⌀ PVC WATER @ 41.42%
BY OPEN CUT CONSTRUCTION

STA: 49+91.94

8" PVC SAN
15" PVC SAN
18" PVC SAN

PROP 18" PVC SAN

PROP 7' DIA MH #11
STA 48+43.86, 7.10' RT
RIM=58.60
18" FL (S) 46.04

PROP SHAFT LOCATION 5

REMOVE EXISTING
SANITARY SEWER
MANHOLE

84" FRP SAN SEWER

PROP 1357 LF 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION @ 0.03%

STA: 50+06.78
INV: 31.53

STA: 53+50.00
INV: 31.41

PROP 20 LF 84" MIN ID FRP SANITARY SEWER
BY OPEN CUT CONSTRUCTION @ 0.03%

64 62 60 58 56 54 52 50 48 46 44 42 40 38 36 34 32 30 28 26 24

49+00 50+00 51+00 52+00 53+00 53+50

C-210-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043
BASELINE B – TIDWELL RD SEWER BEGIN TO STA 53+50 PROFILE

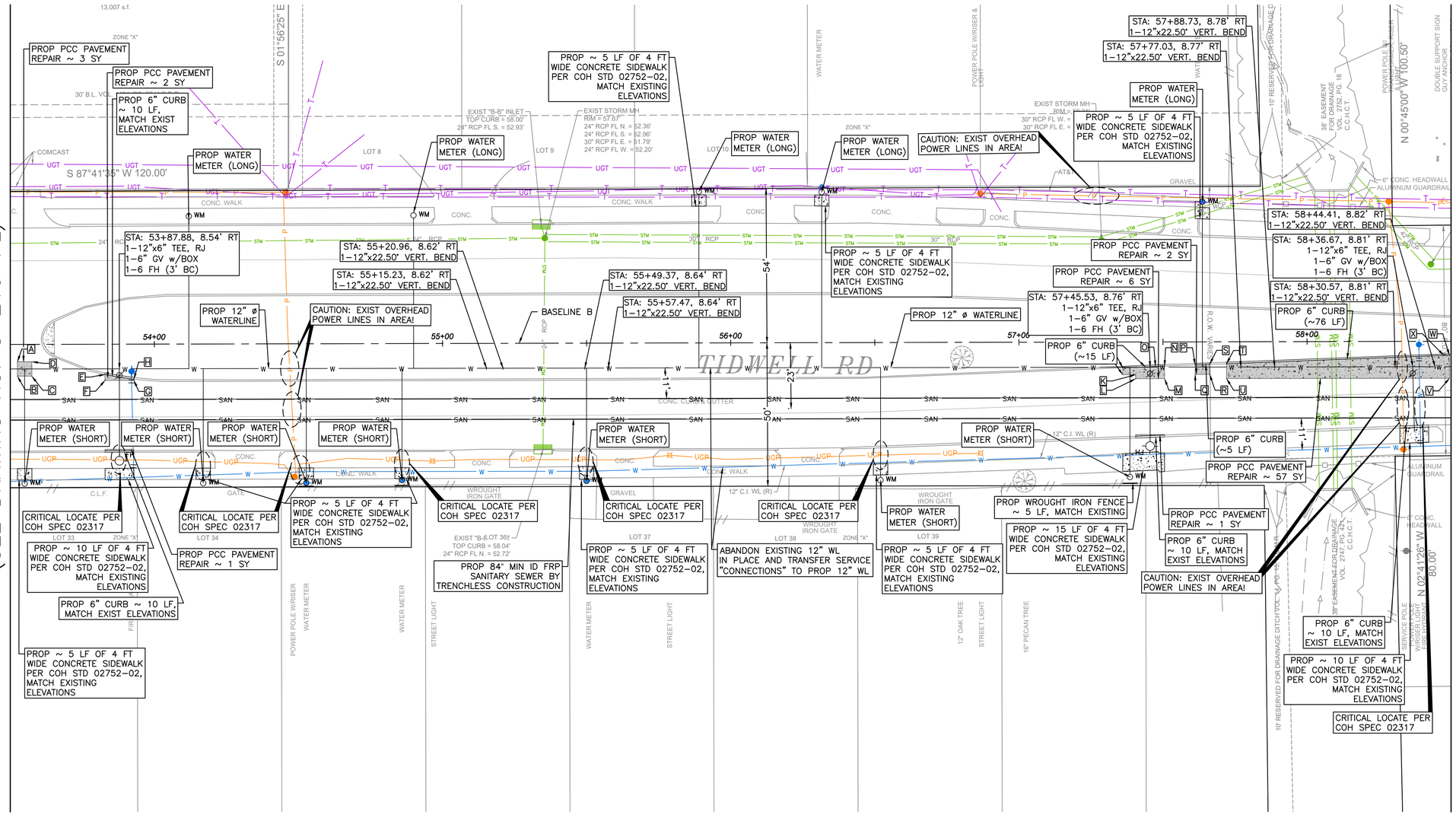
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 37 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\036-040-TIDWELL-SEWER PLANS.dwg

MATCH LINE STA 53+50 (SEE DRAWING NO. C-210-PL)

MATCH LINE STA 58+50 (SEE DRAWING NO. C-212-PL)



RESTORATION LEGEND:

- CONCRETE DRIVEWAY/SIDEWAK
- CONCRETE PAVEMENT

PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION
A	53+52.48, 6.02' RT	59.83	I	57+36.03, 8.95' RT	58.71	Q	57+61.17, 11.27' RT	58.67
B	53+52.48, 11.02' RT	59.78	J	57+36.03, 11.35' RT	58.65	R	57+66.17, 11.27' RT	58.66
C	53+57.48, 11.02' RT	59.79	K	57+40.52, 11.35' RT	58.66	S	57+66.17, 7.83' RT	58.73
D	53+57.48, 6.02' RT	59.75	L	57+40.52, 12.75' RT	57.61	T	57+72.03, 7.61' RT	58.73
E	53+82.88, 10.51' RT	58.64	M	57+50.52, 12.76' RT	57.50	U	57+72.02, 12.77' RT	58.62
F	53+82.87, 12.54' RT	58.74	N	57+50.53, 8.40' RT	57.41	V	58+49.41, 12.82' RT	58.53
G	53+92.87, 12.54' RT	57.61	O	57+47.41, 8.51' RT	58.71	W	58+49.41, 4.85' RT	58.71
H	53+92.88, 12.13' RT	58.53	P	57+61.17, 8.01' RT	58.73	X	58+47.46, 4.87' RT	58.71

C-211-PL

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only. Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 53+50 TO STA 58+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 38 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\037-041-TIDWELL-SEWER PROFILES.dwg

Station

PROP 12" PVC WL W/RJ SEE SHEET DT-027 FOR OFFSET DTL 0251-01

PROP 12" PVC WL W/RJ SEE SHEET DT-027 FOR OFFSET DTL 0251-01

EXIST STM MH RIM = 57.54 FL=52.20 (24" W) FL=52.36 (24" N) FL=51.79 (30" E) FL=52.96 (24" S)

EXIST STM MH RIM = 58.54 FL=51.56 (30" W) FL=51.49 (30" E)

EXIST STM MH RIM= 58.45 FL=51.01 (42" NW) FL=51.01 (42" E)

SOUTH R.O.W. NORTH R.O.W. CL OF ROAD SOUTH T.O.C. NORTH T.O.C.

6' MIN COVER

FH LEAD

STM

W

24" RCP STM

12" C.I. WL

30" RCP STM

42" RCP STM

PROP 6" FH LEAD

PROP 479 LF 12" ∅ PVC WATER @ 0.20% BY TRENCHLESS CONSTRUCTION

PROP 6 LF 12" ∅ PVC WATER @ 41.42%

MIN CLR 2'

PROP 28 LF 12" ∅ PVC WATER @ 0.20%

PROP 8 LF 12" ∅ PVC WATER @ 41.42%

PROP 220 LF 12" ∅ PVC WATER @ 0.20% BY TRENCHLESS CONSTRUCTION

PROP 12 LF 12" ∅ PVC WATER @ 41.42%

5'X5' RCB

PROP 42 LF 12" ∅ PVC WATER @ 0.20%

PROP 14 LF 12" ∅ PVC WATER @ 41.42%

PROP 1357 LF 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION @ 0.03%

STA: 53+50.00
INV: 31.41

STA: 58+50.00
INV: 31.24

64 62 60 58 56 54 52 50 48 46 44 42 40 38 36 34 32 30 28 26 24

53+50 54+00 55+00 56+00 57+00 58+00 58+50

C-211-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043
BASELINE B – TIDWELL RD SEWER STA 53+50 TO STA 58+50 PROFILE

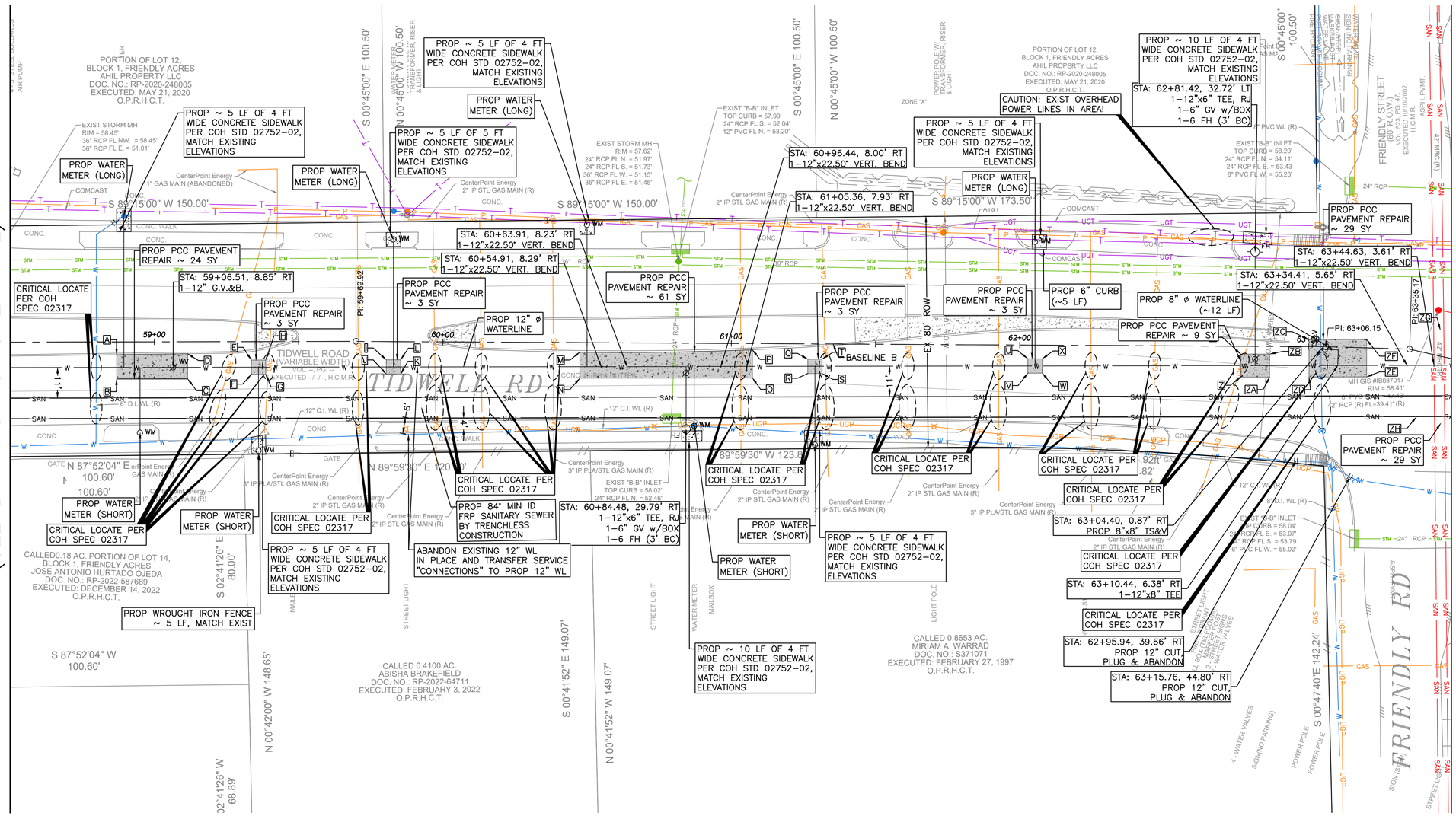
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 39 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\036-040-TIDWELL-SEWER PLANS.dwg

MATCH LINE STA 58+50 (SEE DRAWING NO. C-211-PL)

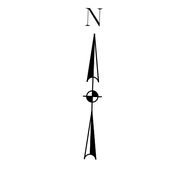
MATCH LINE STA 63+50 (SEE DRAWING NO. C-213-PL)



RESTORATION LEGEND:

- CONCRETE DRIVEWAY/SIDEWAK
- CONCRETE PAVEMENT

PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION
A	58+86.91, 4.42' RT	58.57	J	59+80.45, 11.32' RT	58.16	S	61+31.56, 10.25' RT	58.04	ZB	62+86.62, 2.65' RT	58.73
B	58+86.91, 12.84' RT	58.40	K	59+85.45, 11.28' RT	58.15	T	61+31.53, 5.25' RT	58.14	ZC	63+00.22, -2.45' LT	58.71
C	59+11.51, 12.86' RT	58.32	L	59+85.41, 6.28' RT	58.23	U	62+02.81, 4.74' RT	58.28	ZD	63+00.32, 10.55' RT	58.64
D	59+11.52, 4.13' RT	58.48	M	60+47.51, 3.32' RT	58.19	V	62+02.85, 9.74' RT	58.20	ZE	63+20.56, 10.07' RT	58.62
E	59+33.58, 6.37' RT	58.36	N	60+47.58, 12.34' RT	58.03	W	62+07.85, 9.71' RT	58.21	ZF	63+20.16, -2.92' LT	58.64
F	59+33.58, 11.37' RT	58.27	O	61+07.39, 11.92' RT	58.01	X	62+07.81, 4.71' RT	58.29	ZG	63+44.08, -8.86' LT	58.32
G	59+38.58, 11.37' RT	58.26	P	61+07.32, 2.15' RT	58.20	Y	62+76.62, 2.72' RT	58.67	ZH	63+42.67, 22.45' RT	58.48
H	59+38.58, 6.37' RT	58.35	Q	61+26.53, 5.28' RT	58.14	Z	62+76.68, 10.72' RT	58.50			
I	59+80.41, 6.32' RT	58.24	R	61+26.56, 10.28' RT	58.04	ZA	62+86.67, 10.65' RT	58.56			



NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

SURVEYED BY:
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

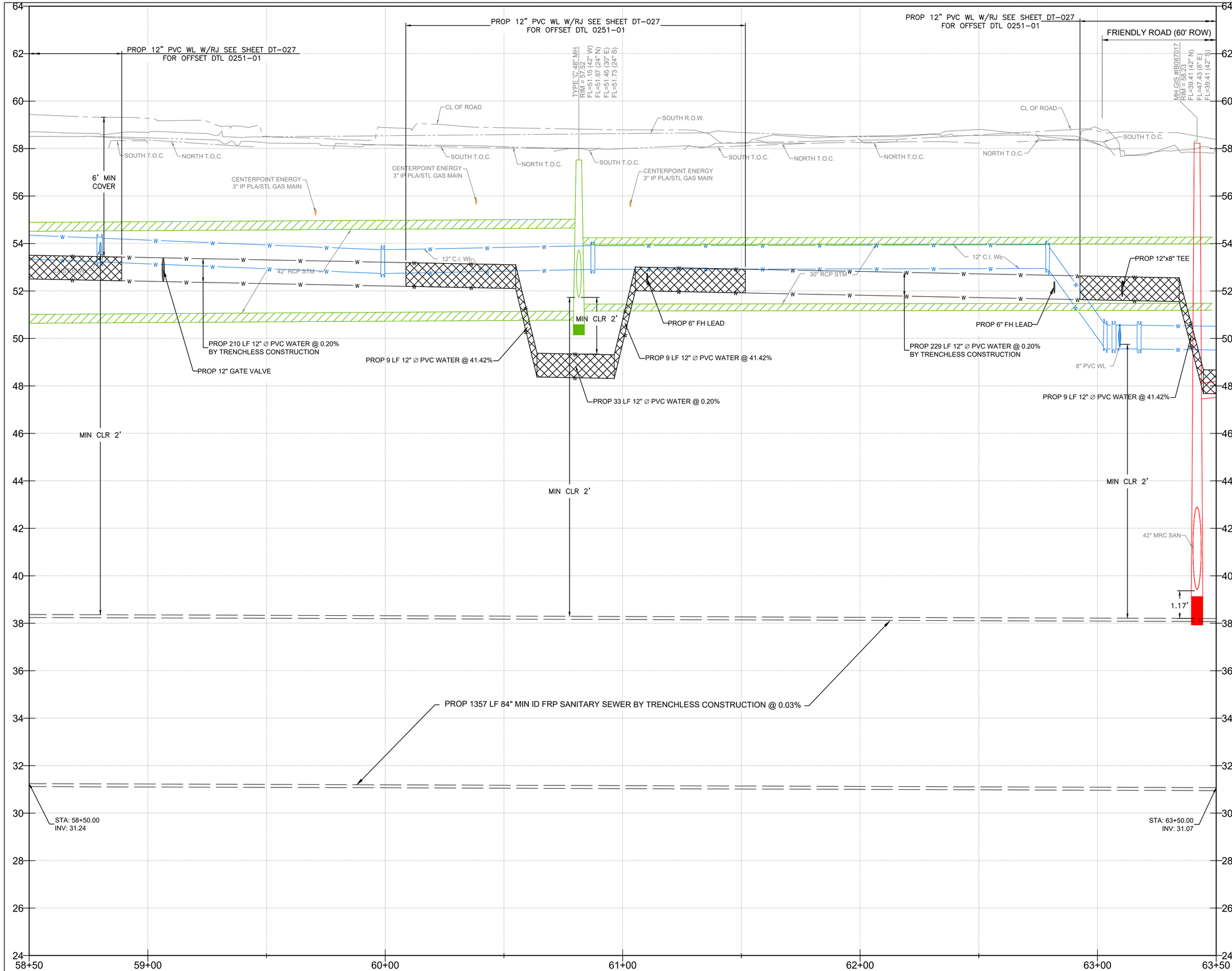
CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 58+50 TO STA 63+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 40 OF 192	

60% SUBMITTAL

C-212-PL



C-212-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B– TIDWELL RD SEWER STA 58+50 TO STA 63+50 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 41 OF 192	

60% SUBMITTAL

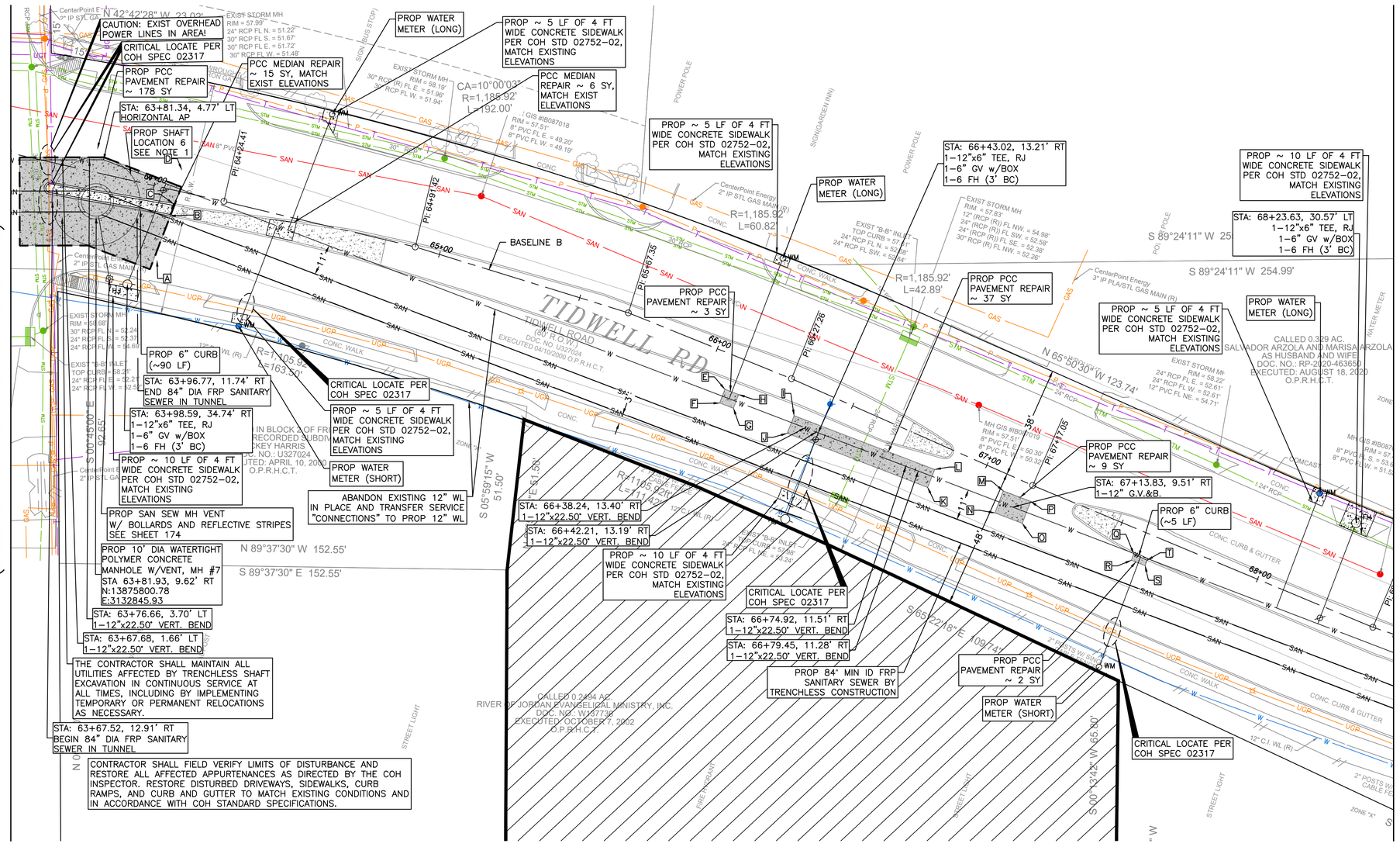
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\037-041-TIDWELL-SEWER PROFILES.dwg

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\042-046-TIDWELL-SEWER PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 63+50
(SEE DRAWING NO. C-212-PL)

MATCH LINE STA 68+50
(SEE DRAWING NO. C-214-PL)



NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO DEMOLITION PLAN SHEETS 61 TO 77
10. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
11. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
12. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.
13. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER AND SANITARY SEWER SERVICE TO ALL PROPERTIES DURING CONSTRUCTION. TEMPORARY WATER SERVICE, SEWER BYPASSING, AND OTHER MEASURES REQUIRED TO PREVENT SERVICE INTERRUPTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST. ANY PLANNED OUTAGES SHALL BE APPROVED BY THE OWNER AND COORDINATED WITH AFFECTED CUSTOMERS AT LEAST 48 HOURS IN ADVANCE.

RESTORATION LEGEND:

- CONCRETE DRIVEWAY/SIDEWAK
- CONCRETE PAVEMENT

PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION
A	64+06.63, 24.61' RT	58.28	H	66+12.59, 11.73' RT	68.27	O	67+18.75, 13.28' RT	68.27
B	64+07.48, 8.90' RT	58.63	I	66+33.15, 11.16' RT	68.27	P	67+18.51, 5.29' RT	68.27
C	64+07.68, 4.49' RT	58.61	J	66+33.40, 17.59' RT	68.27	Q	67+57.80, 8.28' RT	68.27
D	64+08.06, -7.30' LT	58.25	K	66+84.60, 15.08' RT	68.27	R	67+57.87, 10.60' RT	68.27
E	66+07.59, 11.82' RT	68.27	L	66+84.35, 8.52' RT	68.27	S	67+62.86, 10.45' RT	68.27
F	66+07.68, 16.82' RT	68.27	M	67+08.63, 5.77' RT	68.27	T	67+62.81, 8.52' RT	68.27
G	66+12.68, 16.73' RT	68.27	N	67+09.05, 13.76' RT	68.27			

PPCA NOTE

1. CONTRACTOR SHALL COMPLY WITH THE CONTRACT DOCUMENTS AND SECTION 02136 FOR HANDLING, SAMPLING, AND DISPOSAL REQUIREMENTS WHEN WORKING WITHIN AREAS IDENTIFIED AS PPCA.

C-213-PL

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

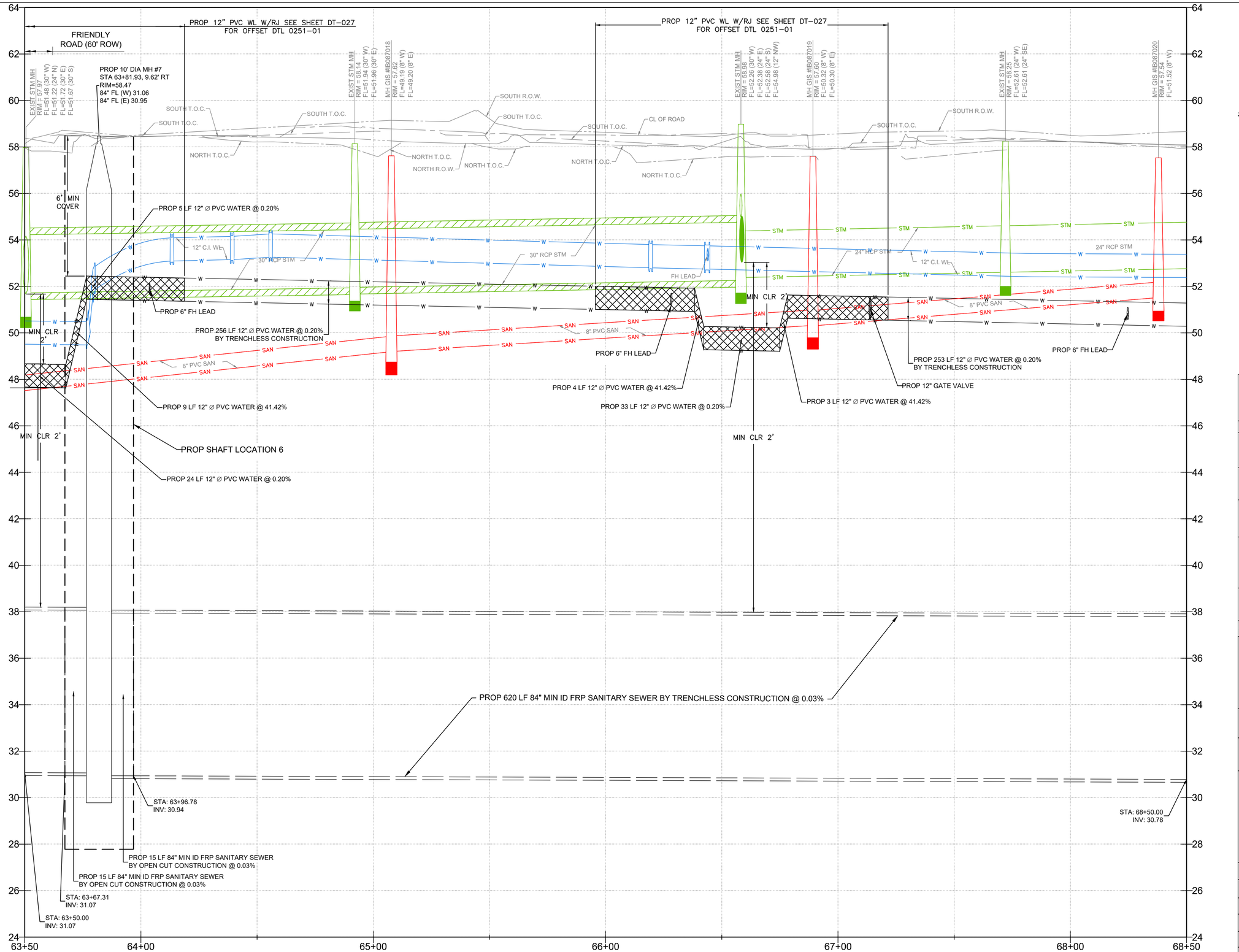
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043
BASELINE B – TIDWELL RD SEWER STA 63+50 TO STA 68+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 42 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\043-047-TIDWELL-SEWER PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

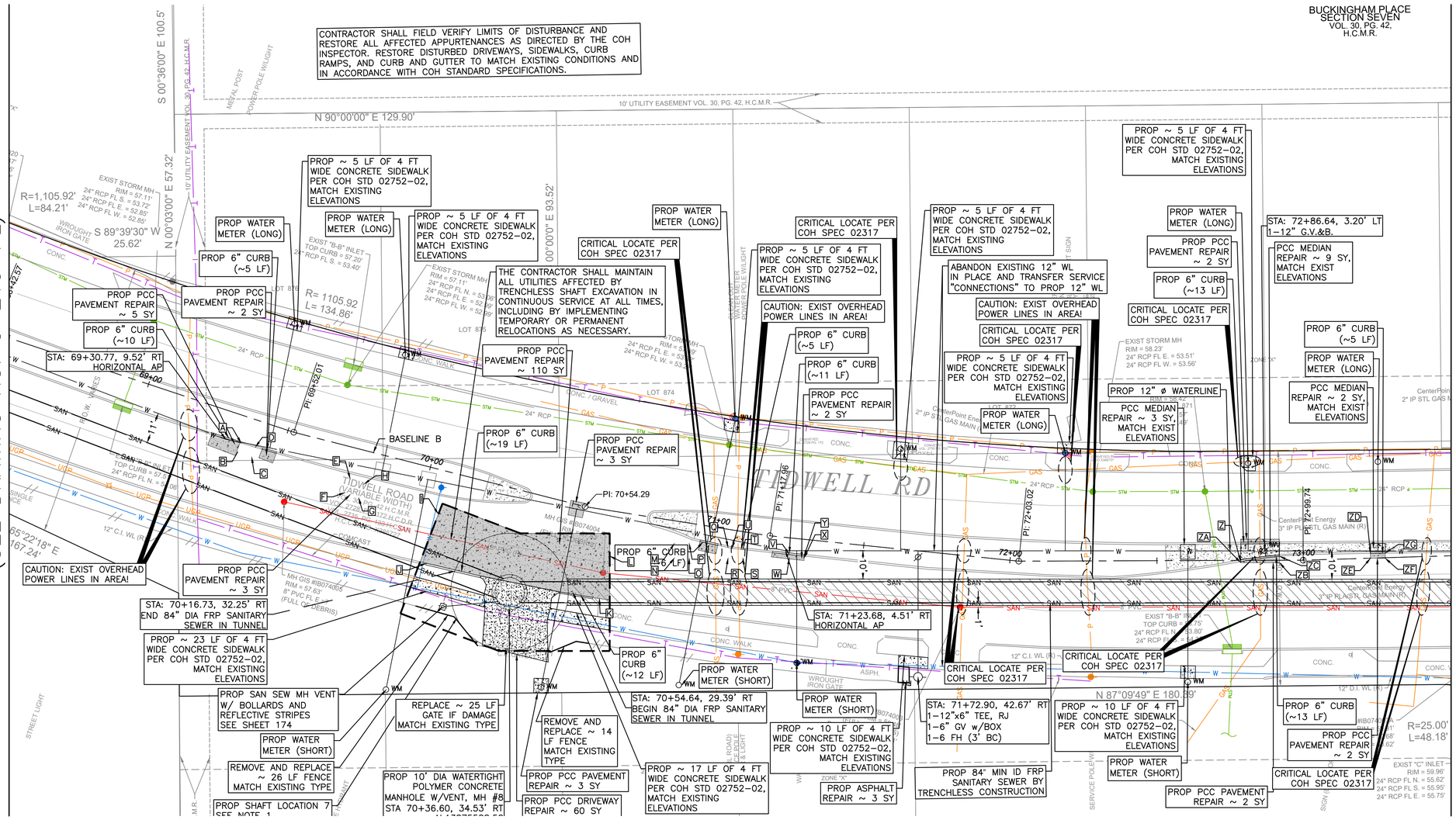
BASELINE B – TIDWELL RD SEWER STA 63+50 TO STA 68+50 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 43 OF 192	

60% SUBMITTAL

C-213-PR

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\042-046-TIDWELL-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO DEMOLITION PLAN SHEETS 61 TO 77
10. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
11. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
12. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.
13. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER AND SANITARY SEWER SERVICE TO ALL PROPERTIES DURING CONSTRUCTION. TEMPORARY WATER SERVICE, SEWER BYPASSING, AND OTHER MEASURES REQUIRED TO PREVENT SERVICE INTERRUPTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST. ANY PLANNED OUTAGES SHALL BE APPROVED BY THE OWNER AND COORDINATED WITH AFFECTED CUSTOMERS AT LEAST 48 HOURS IN ADVANCE.

RESTORATION LEGEND:

CONCRETE DRIVEWAY/SIDEWAK

CONCRETE PAVEMENT

PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE			PCC PAVEMENT REPLACEMENT TABLE		
POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION	POINT	STATION AND OFFSET	ELEVATION
A	69+36.20, 9.13' RT	57.19	J	70+06.74, 32.00' RT	57.99	S	71+10.00, 8.91' RT	58.13	ZB	72+91.68, 0.82' RT	58.96
B	69+36.06, 12.27' RT	57.29	K	70+63.94, 30.09' RT	58.30	T	71+09.55, 6.04' RT	58.06	ZC	72+91.69, -1.37' LT	58.96
C	69+41.05, 12.49' RT	57.32	L	70+65.18, 15.32' RT	58.05	U	71+05.88, 6.22' RT	58.04	ZD	73+22.70, -1.64' LT	59.43
D	69+41.21, 8.95' RT	57.22	M	70+86.26, 7.58' RT	58.02	V	71+25.17, 5.64' RT	58.13	ZE	73+22.65, 0.04' RT	59.27
E	69+74.53, 10.61' RT	57.42	N	70+87.03, 12.52' RT	58.14	W	71+25.29, 6.86' RT	58.16	ZF	73+27.64, 0.19' RT	59.33
F	69+73.96, 15.58' RT	57.57	O	70+91.97, 11.74' RT	58.11	X	71+30.27, 6.35' RT	58.17	ZG	73+27.70, -1.57' LT	59.53
G	69+78.92, 16.15' RT	57.60	P	70+91.20, 6.81' RT	57.98	Y	71+30.20, 5.67' RT	58.16			
H	69+79.50, 11.19' RT	57.45	Q	71+04.51, 6.15' RT	58.05	Z	72+78.51, 0.40' RT	58.90			
I	70+06.56, 14.83' RT	57.67	R	71+05.06, 9.68' RT	58.12	ZA	72+78.50, 0.77' RT	58.90			

PPCA NOTE

1. CONTRACTOR SHALL COMPLY WITH THE CONTRACT DOCUMENTS AND SECTION 02136 FOR HANDLING, SAMPLING, AND DISPOSAL REQUIREMENTS WHEN WORKING WITHIN AREAS IDENTIFIED AS PPCA.

C-214-PL

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

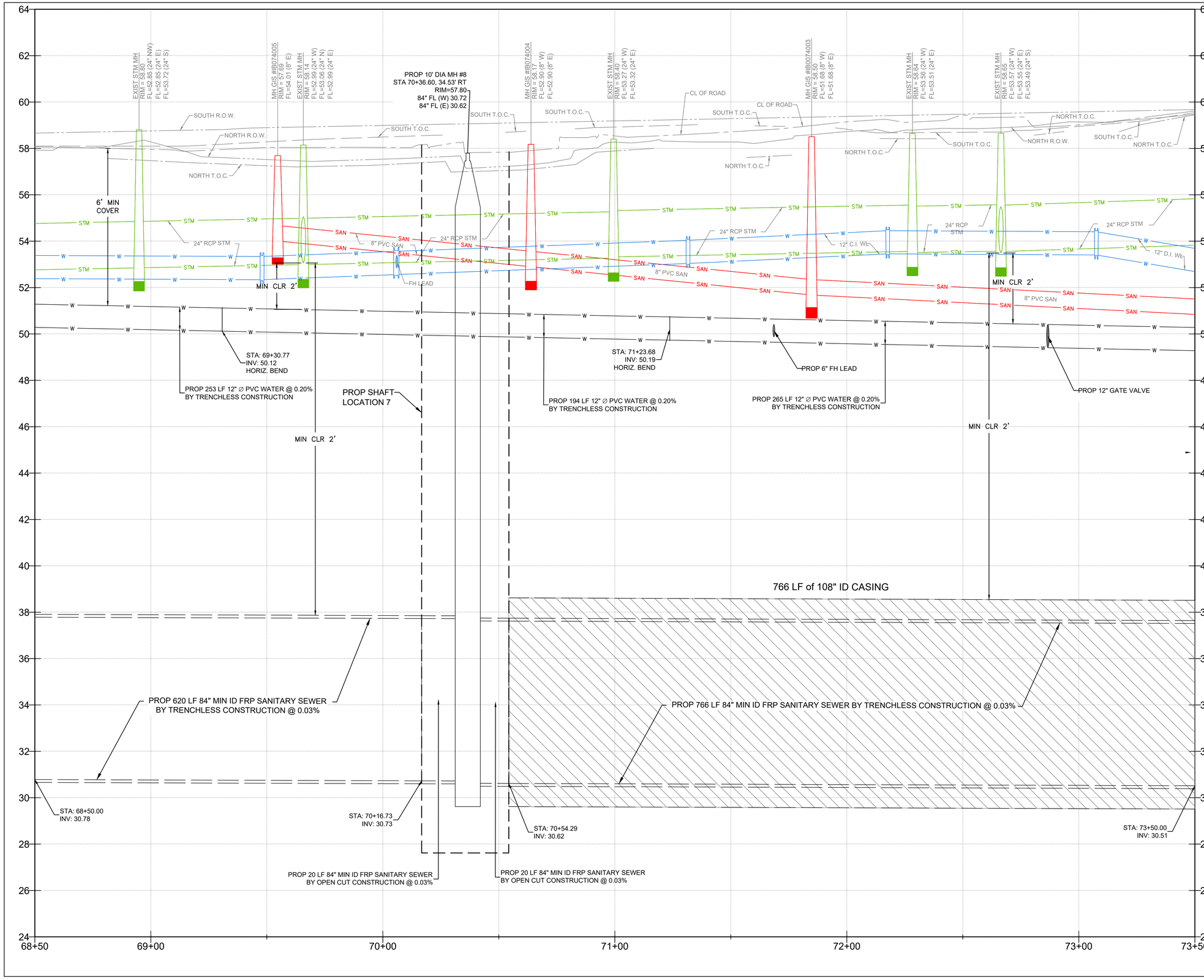
CRMP PACKAGE 6 – AREA 1-BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 68+50 TO STA 73+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 44 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\043-047-TIDWELL-SEWER PROFILES.dwg



C-214-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only. Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

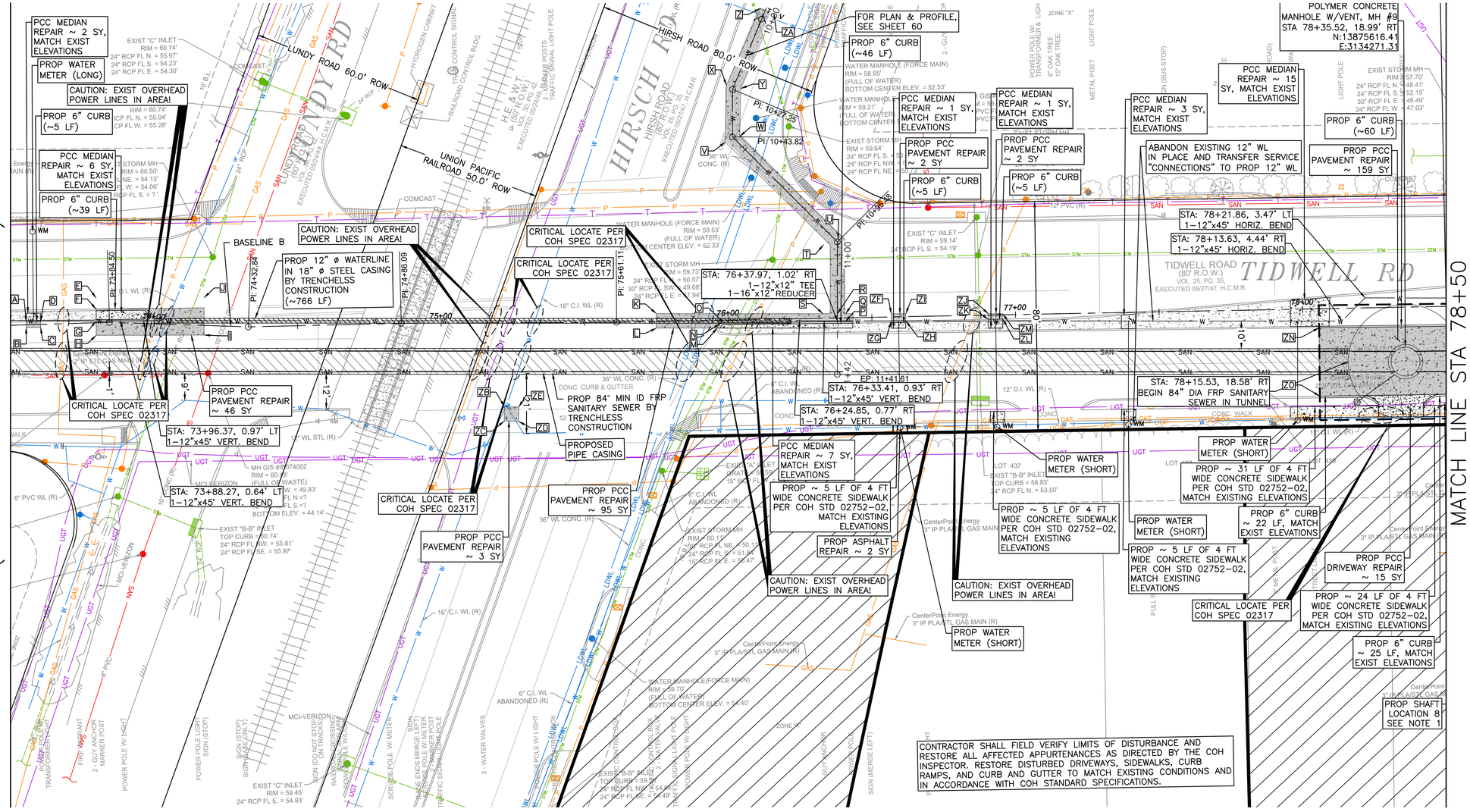
BASELINE B – TIDWELL RD SEWER STA 68+50 TO STA 73+50 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 45 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\042-046-TIDWELL-SEWER PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 73+50 (SEE DRAWING NO. C-214-PL)


LUNDY RD
LUNDYROAD (60' R.O.W.) VOL. 25, PG. 35, EXECUTED 05/27/47, H.C.M.R.
LUNDYROAD 60.0' ROW
HIRSCH RD
HIRSCH ROAD (80' R.O.W.) VOL. 25, PG. 35, EXECUTED 05/27/47, H.C.M.R.
HIRSCH ROAD 80.0' ROW
UNION PACIFIC RAILROAD 50.0' ROW
TIDWELL RD
TIDWELL ROAD (80' R.O.W.) VOL. 25, PG. 35, EXECUTED 05/27/47, H.C.M.R.
H.E. & W.T. R.R. R.O.W. VOL. 25, PG. 35, EXECUTED 05/27/47, H.C.M.R.
PCC MEDIAN REPAIR ~ 2 SY, MATCH EXIST ELEVATIONS
PROP WATER METER (LONG)
CAUTION: EXIST OVERHEAD POWER LINES IN AREA!
PROP 6" CURB (~5 LF)
PCC MEDIAN REPAIR ~ 6 SY, MATCH EXIST ELEVATIONS
PROP 6" CURB (~39 LF)
BASELINE B
PROP 12" ø WATERLINE IN 18" ø STEEL CASING BY TRENCHELESS CONSTRUCTION (~766 LF)
CRITICAL LOCATE PER COH SPEC 02317
PROP PCC PAVEMENT REPAIR ~ 46 SY
STA: 73+96.37, 0.97' LT 1-12"x45° VERT. BEND
STA: 73+88.27, 0.64' LT 1-12"x45° VERT. BEND
PROP PCC PAVEMENT REPAIR ~ 3 SY
PROP PCC PAVEMENT REPAIR ~ 95 SY
PROP 84" MIN ID FRP SANITARY SEWER BY 12 TRENCHLESS CONSTRUCTION
PROPOSED PIPE CASING
STA: 76+37.97, 1.02' RT 1-12"x12" TEE 1-16"x12" REDUCER
STA: 76+33.41, 0.93' RT 1-12"x45° VERT. BEND
STA: 76+24.85, 0.77' RT 1-12"x45° VERT. BEND
PROP ASPHALT REPAIR ~ 2 SY
PROP ~ 5 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS
PCC MEDIAN REPAIR ~ 7 SY, MATCH EXIST ELEVATIONS
CAUTION: EXIST OVERHEAD POWER LINES IN AREA!
FOR PLAN & PROFILE, SEE SHEET 60
PROP 6" CURB (~46 LF)
PCC MEDIAN REPAIR ~ 1 SY, MATCH EXIST ELEVATIONS
PROP PCC PAVEMENT REPAIR ~ 2 SY
PROP 6" CURB (~5 LF)
PCC MEDIAN REPAIR ~ 3 SY, MATCH EXIST ELEVATIONS
ABANDON EXISTING 12" WL IN PLACE AND TRANSFER SERVICE "CONNECTIONS" TO PROP 12" WL
PROP 6" CURB (~60 LF)
PROP PCC PAVEMENT REPAIR ~ 159 SY
POLYMER CONCRETE MANHOLE W/VENT, MH #9 STA 78+35.52, 18.99' RT N:13875616.41 E:3134271.31
PCC MEDIAN REPAIR ~ 15 SY, MATCH EXIST ELEVATIONS
STA: 78+21.86, 3.47' LT 1-12"x45° HORIZ. BEND
STA: 78+13.63, 4.44' RT 1-12"x45° HORIZ. BEND
STA: 78+15.53, 18.58' RT BEGIN 84" DIA FRP SANITARY SEWER IN TUNNEL
PROP WATER METER (SHORT)
PROP ~ 31 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS
PROP 6" CURB ~ 22 LF, MATCH EXIST ELEVATIONS
PROP ~ 5 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS
CRITICAL LOCATE PER COH SPEC 02317
PROP ~ 24 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS
PROP PCC DRIVEWAY REPAIR ~ 15 SY
PROP 6" CURB ~ 25 LF, MATCH EXIST ELEVATIONS
PROP SHAFT LOCATION 8 SEE NOTE 1
CONTRACTOR SHALL FIELD VERIFY LIMITS OF DISTURBANCE AND RESTORE ALL AFFECTED APPURTENANCES AS DIRECTED BY THE COH INSPECTOR. RESTORE DISTURBED DRIVEWAYS, SIDEWALKS, CURB RAMPS, AND CURB AND GUTTER TO MATCH EXISTING CONDITIONS AND IN ACCORDANCE WITH COH STANDARD SPECIFICATIONS.
CRITICAL LOCATE PER COH SPEC 02317
PROP PCC PAVEMENT REPAIR ~ 3 SY
PROP PCC PAVEMENT REPAIR ~ 95 SY
PROP ASPHALT REPAIR ~ 2 SY
CAUTION: EXIST OVERHEAD POWER LINES IN AREA!
PROP WATER METER (SHORT)
PROP ~ 5 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS
PROP WATER METER (SHORT)
CAUTION: EXIST OVERHEAD POWER LINES IN AREA!
PROP WATER METER (SHORT)
PROP ~ 5 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS
PROP PCC DRIVEWAY REPAIR ~ 15 SY
PROP ~ 24 LF OF 4 FT WIDE CONCRETE SIDEWALK PER COH STD 02752-02, MATCH EXISTING ELEVATIONS
PROP 6" CURB ~ 25 LF, MATCH EXIST ELEVATIONS
PROP SHAFT LOCATION 8 SEE NOTE 1
EXIST "C" INLET RIM = 60.74' 24" RCP FL N. = 55.97' 24" RCP FL S. = 54.23' 24" RCP FL E. = 54.30'
EXIST STORM MH RIM = 59.64' 24" RCP FL S. = 50.57' 24" RCP FL NW = 50.69' 24" RCP FL NE = 50.69'
EXIST STORM MH RIM = 59.73' 24" RCP FL S. = 50.57' 24" RCP FL SW = 49.68' 24" RCP FL E. = 49.94'
EXIST STORM MH RIM = 60.11' 24" RCP FL NE = 50.13' 24" RCP FL S. = 51.94' 15" RCP FL E. = 51.47'
EXIST "B-B" INLET TOP CURB = 59.90' 24" RCP FL NW = 54.84' 24" RCP FL SE. = 54.49'
EXIST "C" INLET RIM = 59.45' 24" RCP FL E. = 54.93'
EXIST "B-B" INLET TOP CURB = 60.74' 24" RCP FL SW. = 55.81' 24" RCP FL SE. = 55.97'
WATER MANHOLE (FORCE MAIN) RIM = 58.95' (FULL OF WATER) BOTTOM CENTER ELEV. = 52.53'
WATER MANHOLE (FORCE MAIN) RIM = 59.21' (FULL OF WATER) BOTTOM CENTER ELEV. = 52.21'
WATER MANHOLE (FORCE MAIN) RIM = 59.53' (FULL OF WATER) BOTTOM CENTER ELEV. = 52.33'
WATER MANHOLE (FORCE MAIN) RIM = 59.70' (FULL OF WATER) BOTTOM CENTER ELEV. = 52.40'
MH GIS #6074002 RIM = 60.79' (FULL OF WASTE) 24" RCP FL W. = 49.83' 24" RCP FL N.=? 24" RCP FL S.=? BOTTOM ELEV. = 44.14'
MCI-VERIZON
CenterPoint Energy 3" IP PLA/STL GAS MAIN (R)
CenterPoint Energy 3" IP PLA/STL GAS MAIN
PI: 10+34.25
PI: 10+43.82
PI: 10+98.48
PI: 11+41.61
PI: 74+83.50
PI: 74+32.84
PI: 74+86.09
PI: 75+61.11
EP: 11+41.61
SP: 11+00
SP: 77+00
SP: 78+00
EP: 76+00
EP: 75+00
EP: 74+00
EP: 73+00
SP: 76+00
SP: 75+00
SP: 74+00
SP: 73+00
SP: 72+00
SP: 71+00
SP: 70+00
SP: 69+00
SP: 68+00
SP: 67+00
SP: 66+00
SP: 65+00
SP: 64+00
SP: 63+00
SP: 62+00
SP: 61+00
SP: 60+00
SP: 59+00
SP: 58+00
SP: 57+00
SP: 56+00
SP: 55+00
SP: 54+00
SP: 53+00
SP: 52+00
SP: 51+00
SP: 50+00
SP: 49+00
SP: 48+00
SP: 47+00
SP: 46+00
SP: 45+00
SP: 44+00
SP: 43+00
SP: 42+00
SP: 41+00
SP: 40+00
SP: 39+00
SP: 38+00
SP: 37+00
SP: 36+00
SP: 35+00
SP: 34+00
SP: 33+00
SP: 32+00
SP: 31+00
SP: 30+00
SP: 29+00
SP: 28+00
SP: 27+00
SP: 26+00
SP: 25+00
SP: 24+00
SP: 23+00
SP: 22+00
SP: 21+00
SP: 20+00
SP: 19+00
SP: 18+00
SP: 17+00
SP: 16+00
SP: 15+00
SP: 14+00
SP: 13+00
SP: 12+00
SP: 11+00
SP: 10+00
SP: 9+00
SP: 8+00
SP: 7+00
SP: 6+00
SP: 5+00
SP: 4+00
SP: 3+00
SP: 2+00
SP: 1+00
SP: 0+00
12" PVC (R)
12" D.I. WL (R)
16" C.I. WL (R)
36" WL CONC. (R)
6" C.I. WL ABANDONED (R)
8" PVC WL (R)
12" WL STL (R)
8" C.I. WL ABANDONED (R)
12" WL (R)
12" D.I. WL
16" D.I. WL (R)
36" WL CONC. (R)
6" C.I. WL ABANDONED (R)
3 - WATER VALVES
2 - GUY ANCHOR MARKER POST
FIRE HYDRANT
POWER POLE W/ TRANSFORMER & LIGHT
POWER POLE W/ LIGHT
POWER POLE LIGHT SIGN (STOP)
SIGN (STOP) SIGN (RAISE ONLY)
SIGN (DO NOT STOP) SIGN (DO NOT BLOCK)
RAILROAD CROSSING
CONTROL CABINET
SERVICE POLE W/ METER
SIGN ENDS MERGE LEFT
TRAFFIC SIGNAL POLE W/ MARKER POST
TRAFFIC SIGNAL POLE
SIGN (MERGE LEFT)
TRAFFIC CONTROL BOX
TRAFFIC CONTROL SIGNAL
HYDROGEN CABINET
RAILROAD CONTROL BLOG
POWER POLE W/ TRANSFORMER & LIGH
8" OAK TREE
15" OAK TREE
METAL POST
LIGHT POLE
SIGN (BUS STOP)
ZONE "X"
ZONE "A"
ZONE AE
ZONE AH
ZONE AO
ZONE "X"
LOT 437
LOT 438
LOT 439
LOT 440
LOT 441
LOT 442
LOT 443
LOT 444
LOT 445
LOT 446
LOT 447
LOT 448
LOT 449
LOT 450
LOT 451
LOT 452
LOT 453
LOT 454
LOT 455
LOT 456
LOT

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\043-047-TIDWELL-SEWER PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

Elevation

LUNDY ROAD (60' ROW) | UNION PACIFIC RAILROAD (50' ROW) | HIRSCH ROAD (80' ROW)

EXIST STM MH RIM = 60.50 FL=54.06 (24" W) FL=54.13 (24" N) FL=54.06 (24" S)

EXIST SAN MH RIM = 60.53 FL=49.83 (8" W) FL=47.25 (10" N) FL=47.20 (8" S)

EXIST SAN MH RIM = 59.86 FL=50.68 (8" W) FL=50.62 (8" E)

EXIST RAILROAD TRACKS

SOUTH T.O.C. | NORTH T.O.C. | NORTH R.O.W. | CL OF ROAD | SOUTH R.O.W.

APPROX. RAILROAD CENTERLINE UNION PACIFIC RAILROAD MAINTAINED

EXIST STM MH RIM = 59.81 FL=50.57 (24" N) FL=49.68 (30" SW) FL=47.94 (24" E)

MH DIS #IB023051 RIM = 59.37 FL=54.85 (12" E)

EXIST STM MH RIM = 58.81 FL=47.64 (24" W) FL=53.31 (24" N) FL=47.70 (24" E) FL=53.01 (24" S)

PROP 10' DIA MH #9
STA 78+35.52, 18.99' RT
RIM=57.77
84" FL (W) 30.35
84" FL (E) 30.24

PROP 12" PVC WL W/RJ SEE SHEET DT-027 FOR OFFSET DTL 0251-01

24" RCP STM

12" STL WL IN 16" CASE

8" D.I. WL

8" PVC SAN

16" C.I. WL

12" D.I. WL

36" WL CONC.

6" WL (ABANDONED)

12" PVC SAN

6' MIN COVER

MIN CLR 2'

5.01'

PROP 12"x16" TEE

PROP 180 LF 12" ∅ PVC WATER @ 0.20% BY TRENCHLESS CONSTRUCTION

PROP 11 LF 12" ∅ PVC WATER @ 0.20% BY OPEN CUT CONSTRUCTION

PROP 28 LF 12" ∅ PVC WATER @ 0.20% BY OPEN CUT CONSTRUCTION

PROP 9 LF 12" ∅ PVC WATER @ 100.00%

PROP SHAFT LOCATION 8

STA: 73+50.00

222 LF of 20" ID CASING

PROP 228 LF 12" ∅ PVC WATER @ 0.20% BY TRENCHLESS CONSTRUCTION

766 LF of 108" ID CASING

PROP 766 LF 84" MIN ID FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION @ 0.03%

STA: 73+50.00
INV: 30.51

STA: 78+15.53
INV: 30.36

STA: 78+50.00
INV: 30.24

PROP 20 LF 84" MIN ID FRP SANITARY SEWER BY OPEN CUT CONSTRUCTION @ 0.03%

64 62 60 58 56 54 52 50 48 46 44 42 40 38 36 34 32 30 28 26 24

73+50 74+00 75+00 76+00 77+00 78+00 78+50

C-215-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 73+50 TO STA 78+50 PROFILE

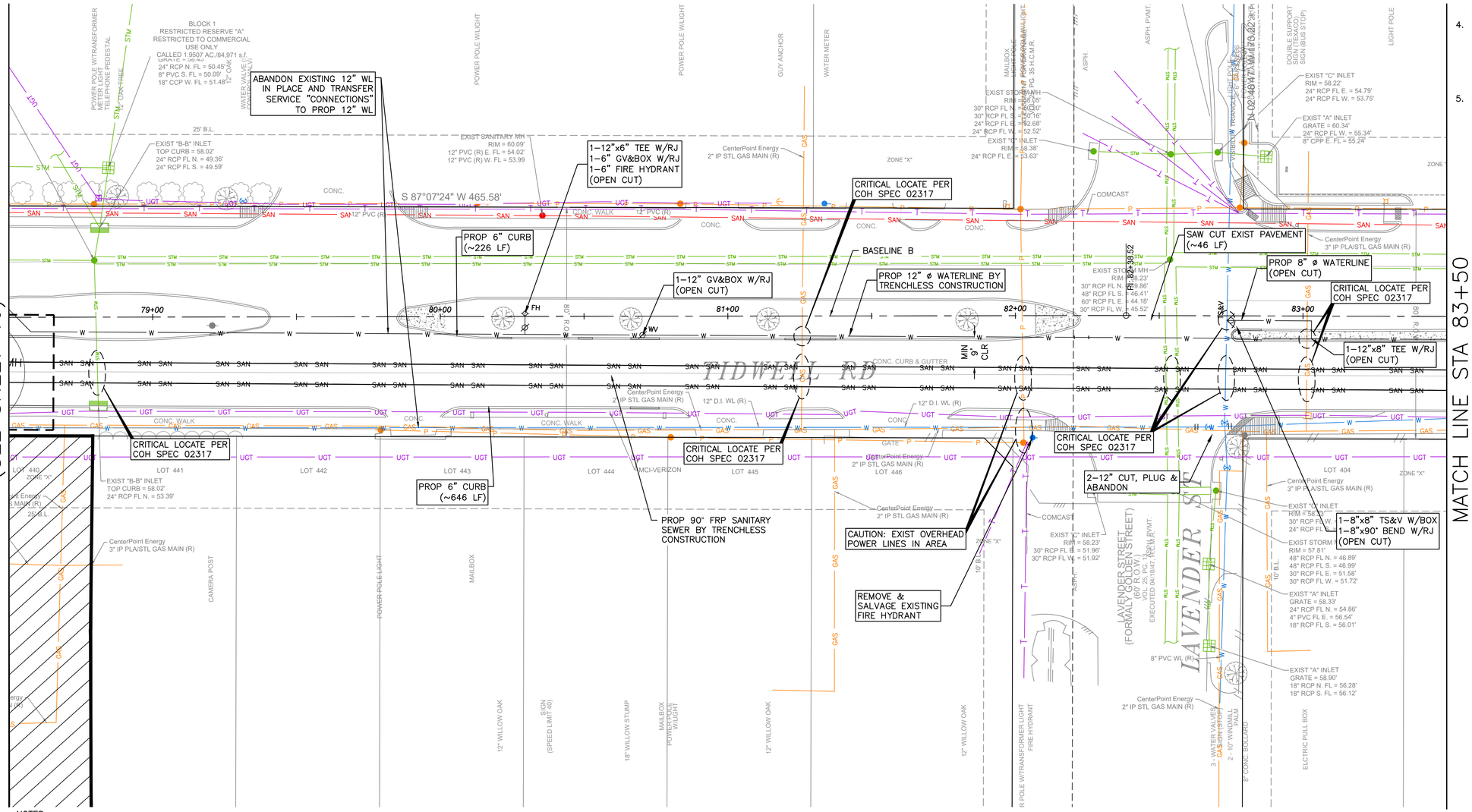
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE 1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM CHELSEA LEGER, P.E.	
SHEET NO. 47 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\totep\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\04-052-TIDWELL-SEWER PLANS_INDUSRI.dwg

MATCH LINE STA 78+50 (SEE SHEET 46)

MATCH LINE STA 83+50 (SEE SHEET 50)



NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER COH STD DTL 02317-08.
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIME.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO TREE PROTECTION PLANS SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
10. REFER TO TRAFFIC CONTROL PLANS SHEETS 78 TO 127.

N

0' 10' 20' 40'

SCALE: 1"=20'

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATION OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NO.	DATE	REVISION	APP.

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

InduSri Consulting
8815 WEST ROAD, SUITE 302
HOUSTON, TEXAS 77064
832-865-4462
TBPE FIRM NO. F-21781

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
MAYUR PARMAR, PE
159566
TEXAS SERIAL NO.
05/24/26
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

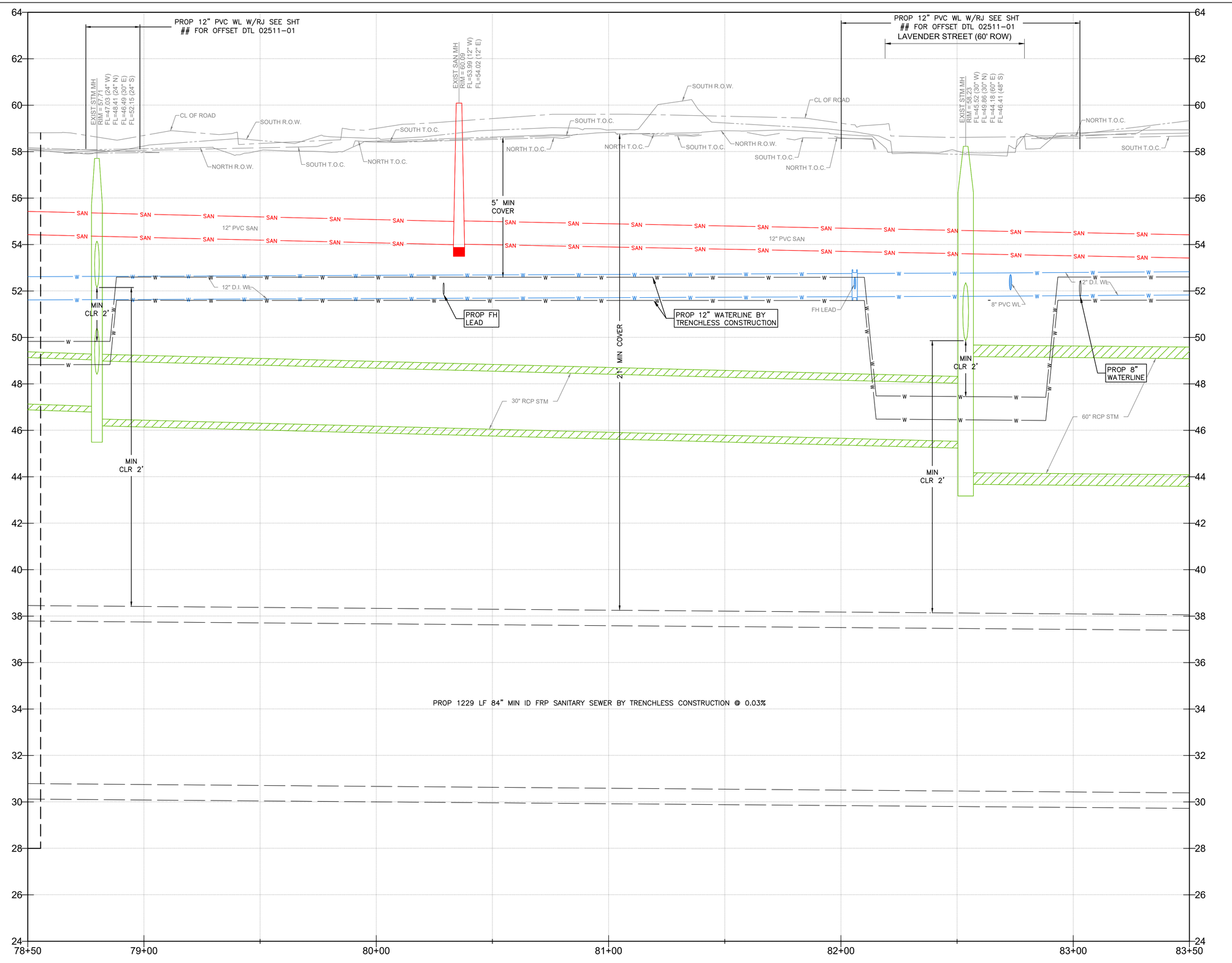
BASELINE B – TIDWELL RD SEWER STA 78+50 TO STA 83+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 48 OF 192	

60% SUBMITTAL

C-216-PL

FILE PATH: C:\Users\totep\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\049-053-TIDWELL-SEWER PROFILES_INDUSRI.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



C-216-PR

NO.	DATE	REVISION	APP.

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

InduSri Consulting
8815 WEST ROAD, SUITE 302
HOUSTON, TEXAS 77064
832-865-4462
TBPE FIRM NO. F-21781

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
MAYUR PARMAR, PE
159566
TEXAS SERIAL NO.
05/24/26
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 78+50 TO STA 83+50 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE: 1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM: CHELSEA LEGER, P.E.	
SHEET NO. 49 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\totep\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\048-052-TIDWELL-SEWER PLANS_INDUSRI.dwg

MATCH LINE STA 83+50 (SEE SHEET 48)

MATCH LINE STA 88+50 (SEE SHEET 52)

N

0' 10' 20' 40'

SCALE: 1"=20'

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATION OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NO.	DATE	REVISION	APP.

BLOCK 1
RESTRICTED RESERVE "A"
RESTRICTED TO COMMERCIAL USE ONLY
CALLED 0.8131 AC./35,417.07 s.f.

EXIST SANITARY MH
RIM = 59.04'
8" CONC. FL E. = 53.24'
12" PVC FL W. = 53.26'

N 87°43'13" W 206'

1.5' X 1.5' BRICK COLUMNS (TYP.) W/ W.I.

5' UTILITY EASEMENT VOL. 25, PG. 13, H.C.M.R.

TIDWELL ROAD
(80' R.O.W.)
VOL. 25, PG. 13,
EXECUTED 04/18/47, H.C.M.R.

PROP 6" CURB (~352 LF)

1-12" GV&BOX W/RJ (OPEN CUT)

BASELINE B

CRITICAL LOCATE PER COH SPEC 02317

ABANDON EXISTING 12" WL IN PLACE AND TRANSFER SERVICE "CONNECTIONS" TO PROP 12" WL

REMOVE & SALVAGE EXISTING FIRE HYDRANT

1-12"x6" TEE W/RJ
1-6" GV&BOX W/RJ
1-6" FIRE HYDRANT
(OPEN CUT)

EXIST STORM MH
RIM = 58.24'
60" STORM FL E. FL= 43.76'
60"STORM FL W. FL= 43.80'
24"STORM FL N. = 52.88'
24"STORM FL S. = 52.85'

EXIST "C" INLET
RIM = 58.58'
24" RCP FL S. = 53.96'

EXIST "A" INLET
GRATE = 59.47'
8" RCP FL N. = 57.17'
18" RCP FL E. = 53.87'
18" RCP FL SW. = 54.27'

EXIST STORM MH
RIM = 58.61'
18" RCP FL NE. = 53.70'
24" RCP FL S. = 54.90'
BOTTOM ELEV. = 43.60'

EXIST SANITARY MH
RIM = 59.57'
6" CONC. FL N. = 52.78'
8" CONC. FL W. = 51.85'
8" CONC. FL S. = 52.37'
6" PVC FL NE. =54.30'
6" PVC FL SE. = 55.05'

N 02°55'01" W 108.00'

ONE FULL SECTION 20 LF PVC WL W/RJ CENTER BELOW EXST SAN SWR (OPEN CUT)

PROP 6" CURB (~232 LF)

CAUTION: EXIST OVERHEAD POWER LINES IN AREA

CRITICAL LOCATE PER COH SPEC 02317

CAUTION: EXIST OVERHEAD POWER LINES IN AREA

CRITICAL LOCATE PER COH SPEC 02317

PROP 12" ø WATERLINE BY TRENCHLESS CONSTRUCTION

PROP 90° FRP SANITARY SEWER BY TRENCHLESS CONSTRUCTION

PROP 6" CURB (~665 LF)

CAUTION: EXIST OVERHEAD POWER LINES IN AREA

1-12"x6" TEE W/RJ
1-6" GV&BOX W/RJ
1-6" FIRE HYDRANT
(OPEN CUT)

TIDWELL RD

84+00 85+00 86+00 87+00 88+00

LOT 403 LOT 402 LOT 409 LOT 410 LOT 411 LOT 412 LOT 413 LOT 414 LOT 401 LOT 400 LOT 399 LOT 398 LOT 397 LOT 395

25' B.L. ZONE "X"

EXIST "B-B" INLET
TOP CURB = 58.50'
24" RCP FL N. = 53.09'

CONC. CURB & GUTTER

12" D.I. WL (R)

12" CONC. WL (R)

MIN 9' CLR

CenterPoint Energy
3" IP PLA/STL GAS MAIN (R)

CenterPoint Energy
2" IP STL GAS MAIN (R)

MCI-VERIZON

GATE

COMCAST

5' UTILITY EASEMENT VOL. 25, PG. 13, H.C.M.R.

10' UTILITY EASEMENT VOL. 25, PG. 13 H.C.M.R.

6" CONC.

60" RCP

GUY ANCHOR

2 - 3" IRON POST

8" HACKBERRY
2 - 3" IRON POST

POWER POLE

WATER METER
36" PECAN
GAS VALVE

12" WILLOW OAK

8" WILLOW OAK

FIRE HYDRANT

WATER METER
GAS VALVE
SERVICE POLE W/LIGHT

SIGN (BUS STOP)

2 - WATER METER

POWER POLE W/LIGHT

PULL BOX (ELECTRIC)
JUNCTION BOX ELECTRIC
POWER POLE W/RISER
LIGHT ANTENNA

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER COH STD DTL 02317-08.
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIME.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO TREE PROTECTION PLANS SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
10. REFER TO TRAFFIC CONTROL PLANS SHEETS 78 TO 127.

C-217-PL

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

InduSri Consulting
8815 WEST ROAD, SUITE 302
HOUSTON, TEXAS 77064
832-865-4462
TBPE FIRM NO. F-21781

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
MAYUR PARMAR, PE
159566
TEXAS SERIAL NO.
05/24/26
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

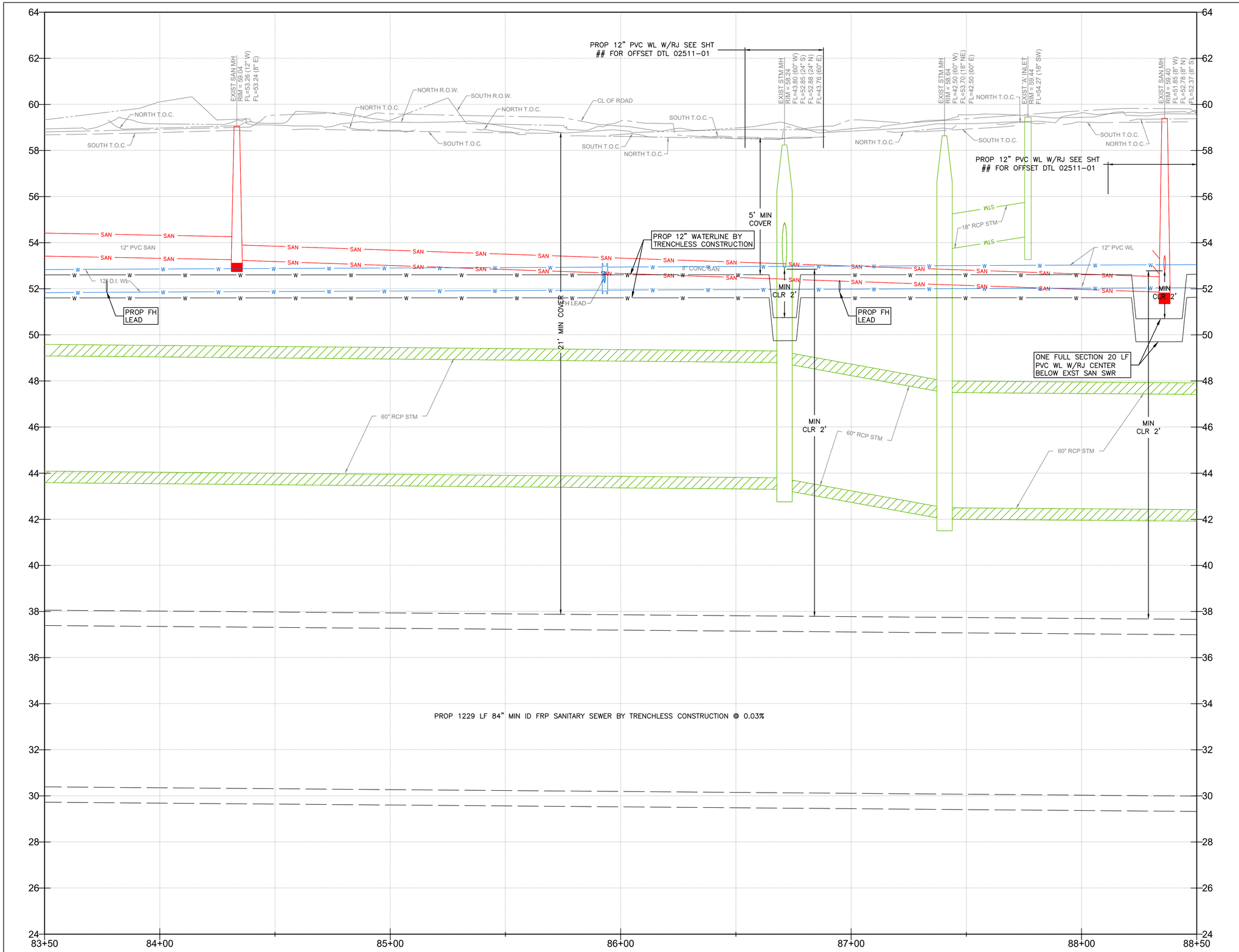
CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 83+50 TO STA 88+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 50 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\totep\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\049-053-TIDWELL-SEWER PROFILES_INDUSRI.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



C-217-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

InduSri Consulting
8815 WEST ROAD, SUITE 302
HOUSTON, TEXAS 77064
832-885-4452
TBPE FIRM NO. F-21781

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
MAYUR PARMAR, PE
159566
TEXAS SERIAL NO.
05/24/26
DATE

SURVEYED BY:
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

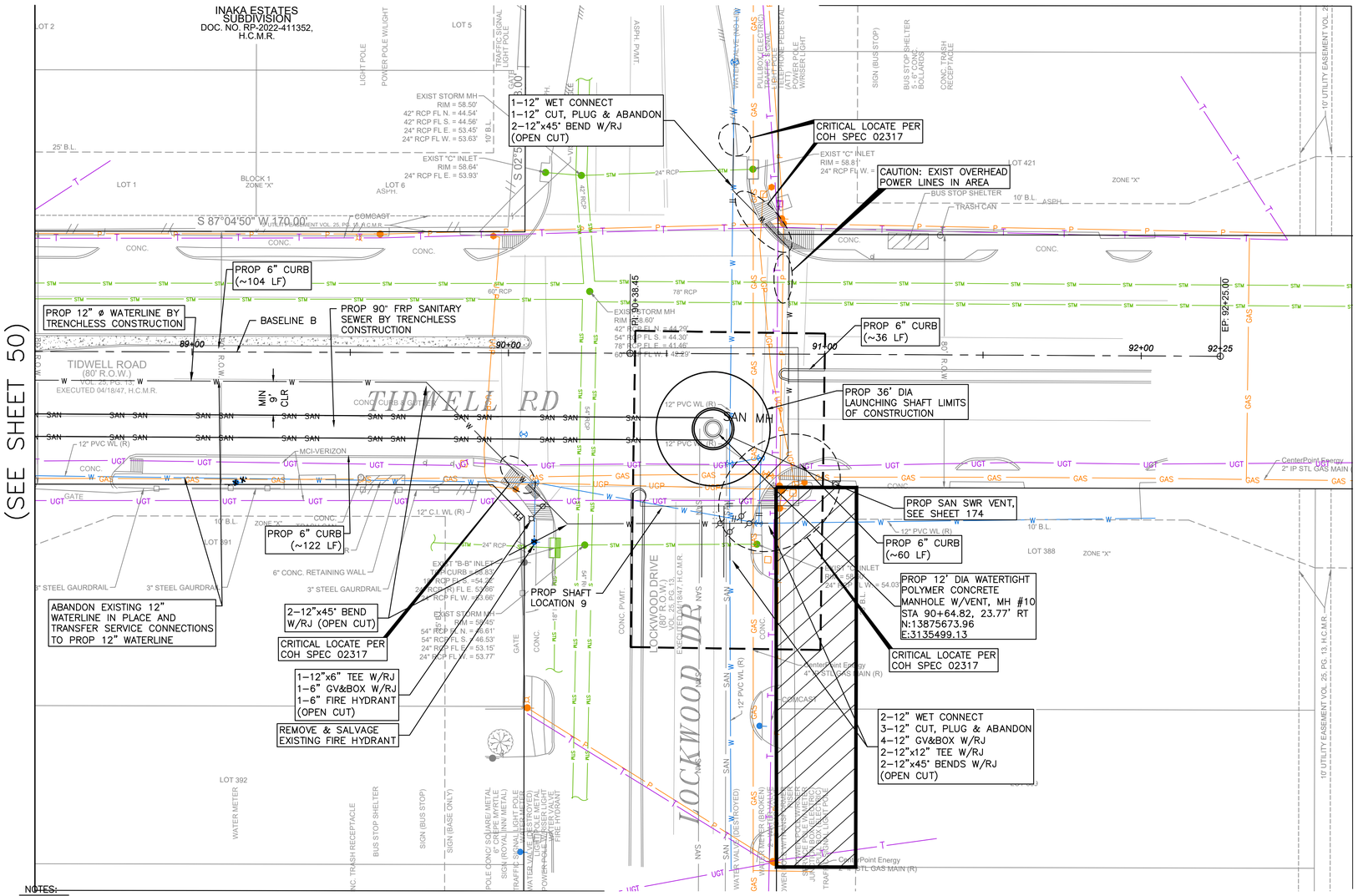
BASELINE B – TIDWELL RD SEWER STA 83+50 TO STA 88+50 PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 51 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\totep\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\048-052-TIDWELL-SEWER PLANS_INDUSRI.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

MATCH LINE STA 88+50
(SEE SHEET 50)



N

0' 10' 20' 40'

SCALE: 1"=20'

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATION OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NO.	DATE	REVISION	APP.

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER COH STD DTL 02317-08.
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIME.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO TREE PROTECTION PLANS SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
10. REFER TO TRAFFIC CONTROL PLANS SHEETS 78 TO 127.

C-218-PL

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

InduSri Consulting
8815 WEST ROAD, SUITE 302
HOUSTON, TEXAS 77064
832-865-4462
TBPE FIRM NO. F-21781

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
MAYUR PARMAR, PE
159566
TEXAS SERIAL NO.
05/24/26
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

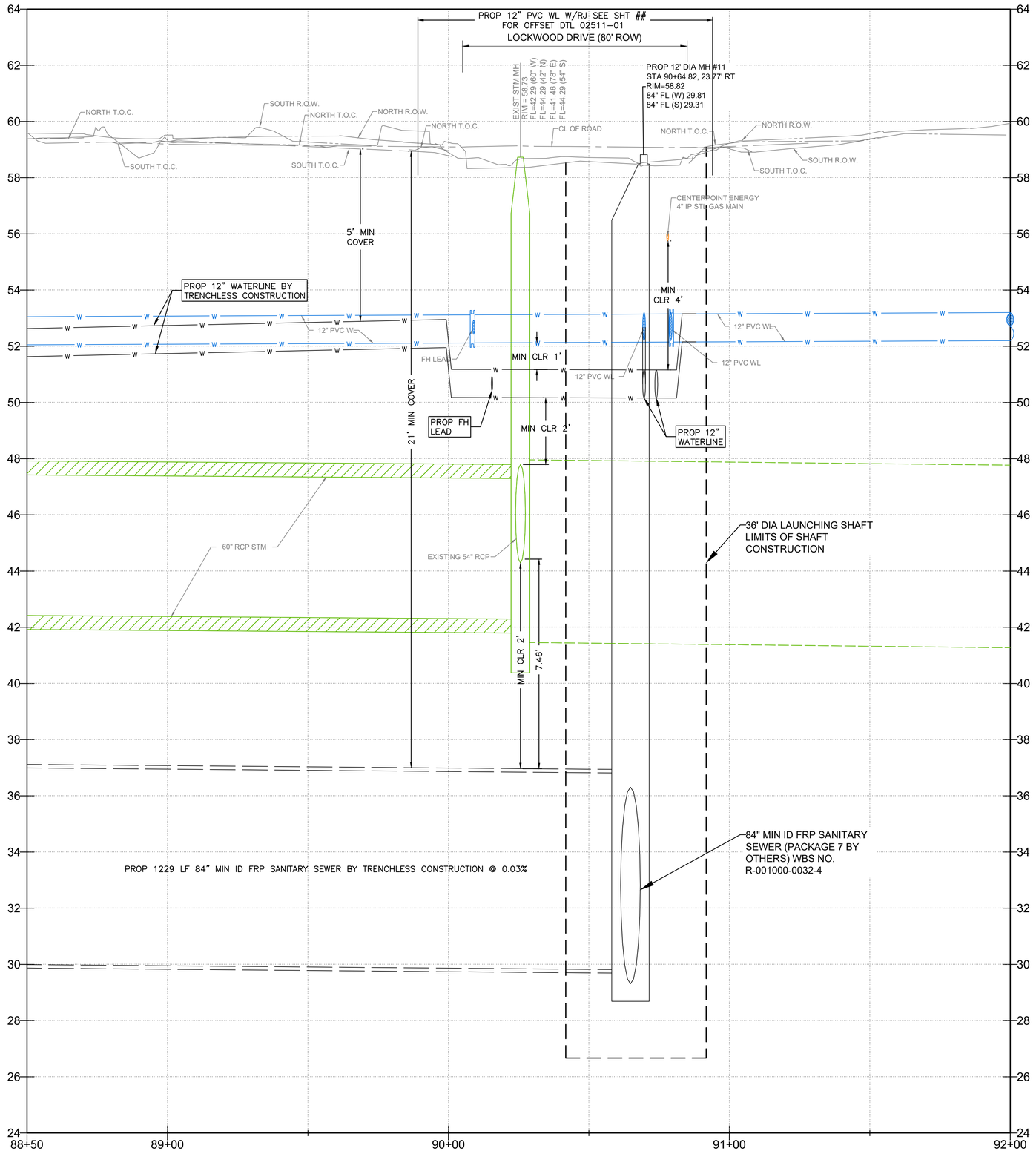
CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 88+50 TO END PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 52 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\totep\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\049-053-TIDWELL-SEWER PROFILES_INDUSRI.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only. Signature valid for one year.

InduSri Consulting
8815 WEST ROAD, SUITE 302
HOUSTON, TEXAS 77064
832-865-4462
TBPE FIRM NO. F-21781

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
MAYUR PARMAR, PE
159566
TEXAS SERIAL NO.
05/24/26
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

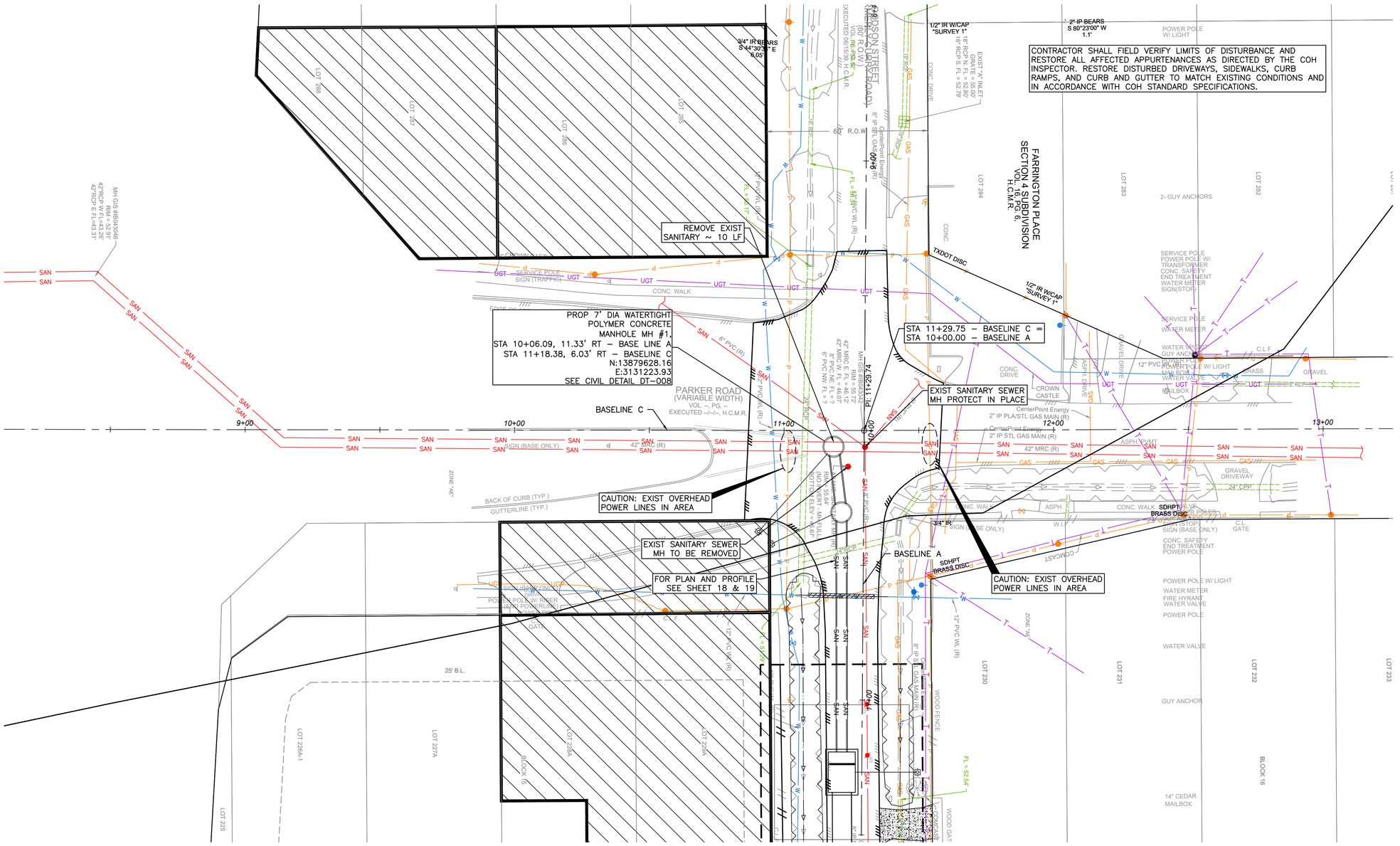
CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL RD SEWER STA 88+50 TO END PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 53 OF 192	

60% SUBMITTAL

C-218-PR



NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
10. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
11. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON/PARKER TEMPORARY BYPASS SEWER PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 54 OF 192	

60% SUBMITTAL

C-219-PL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\054-058-INTERSECTION-PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\055-059-INTERSECTION-PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

C-219-PR

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

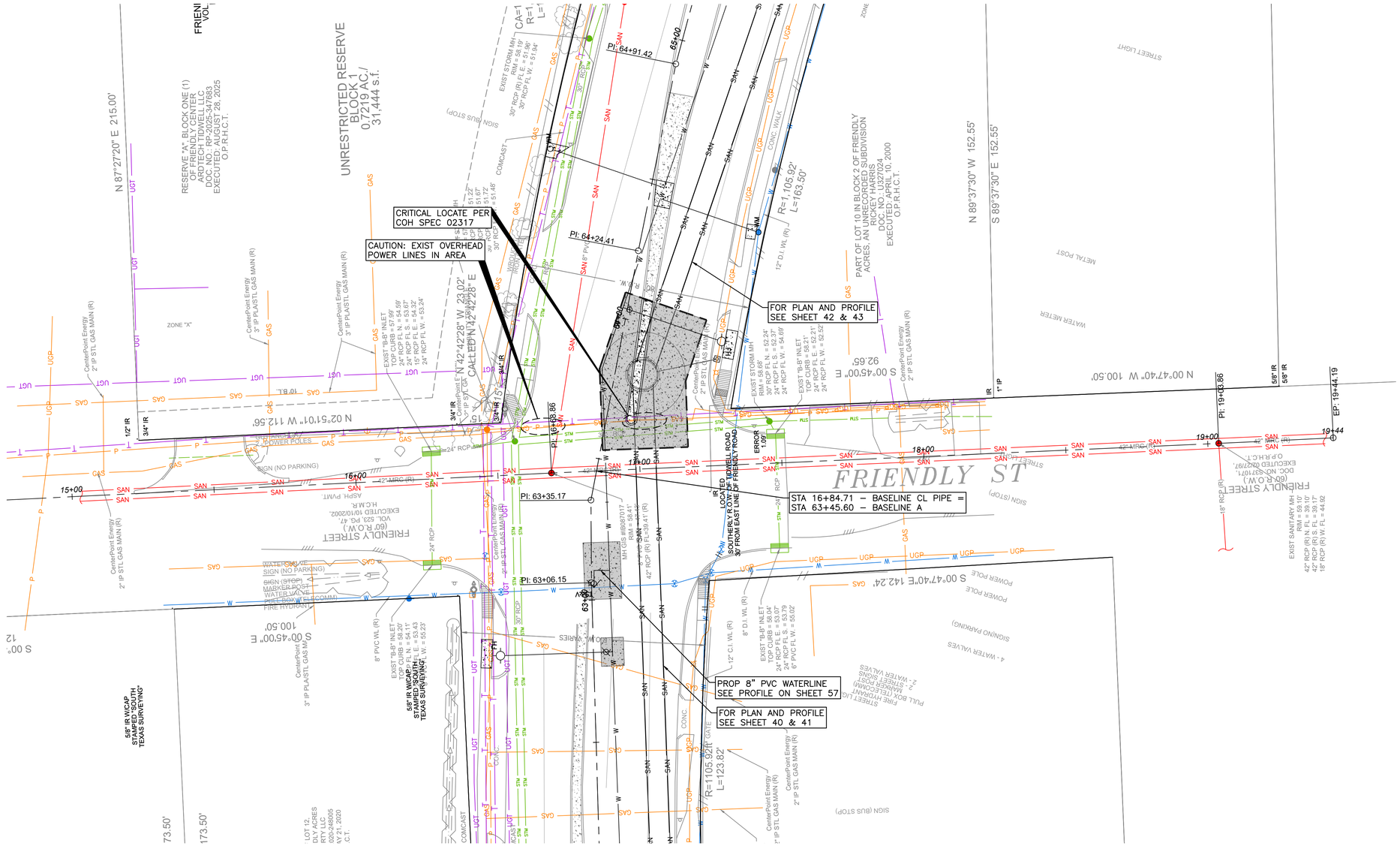
CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE A – DODSON/PARKER TEMPORARY BYPASS SEWER PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 55 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\054-058-INTERSECTION-PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



SCALE: 1"=20'

NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
10. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
11. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.

C-220-PL

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

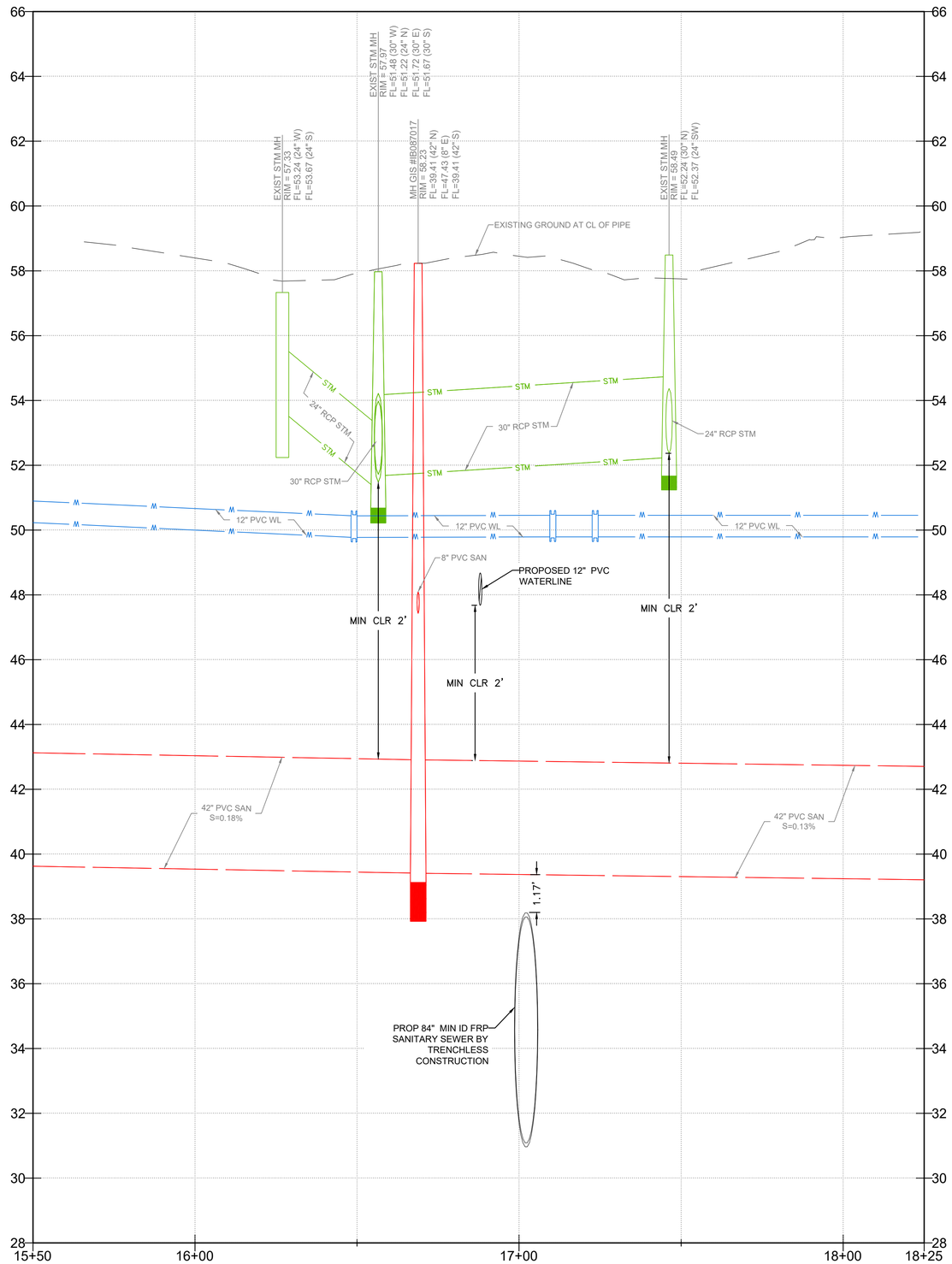
BASELINE A – TIDWELL/FRIENDLY INTERSECTION SEWER PLAN

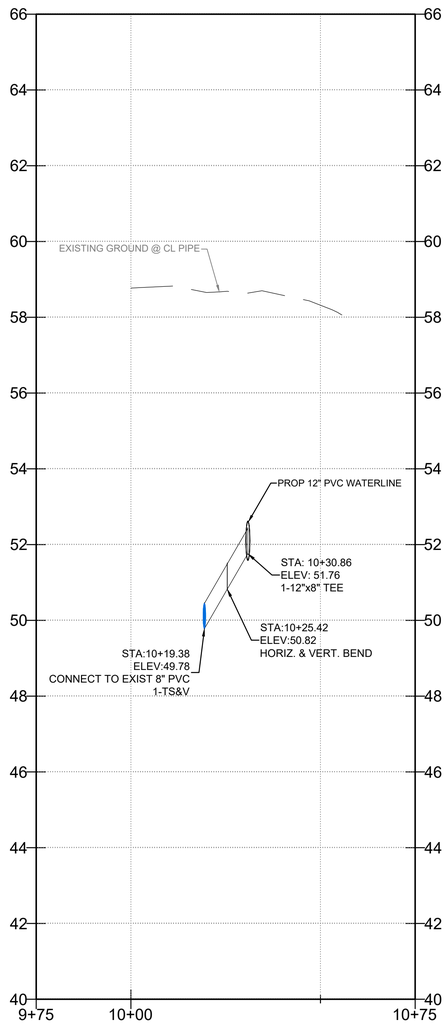
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 56 OF 192	

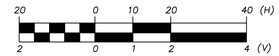
60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\055-059-INTERSECTION-PROFILES.dwg







NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

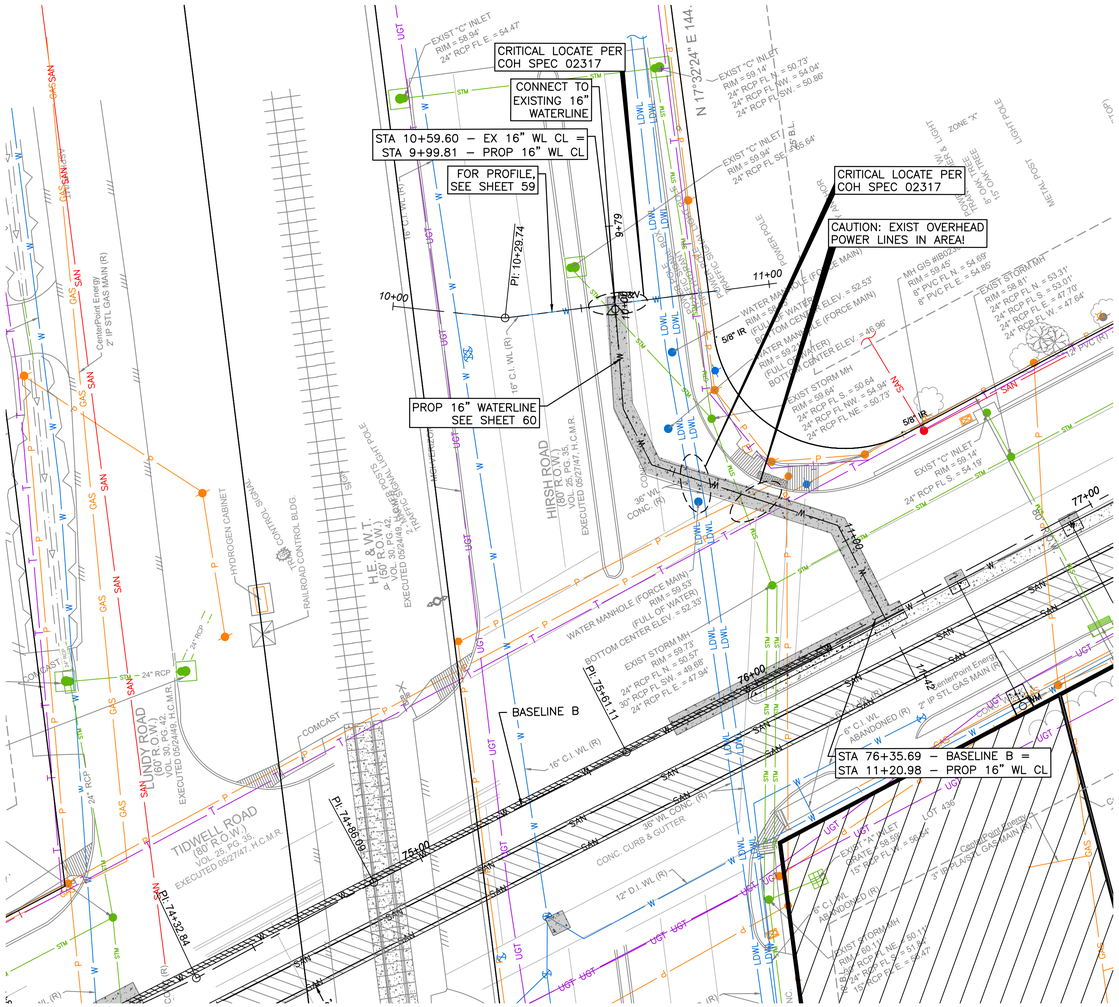
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

BASELINE B – TIDWELL/FRIENDLY INTERSECTION SEWER & WATER PROFILE

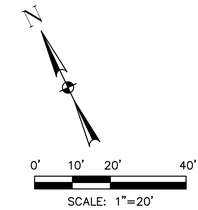
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 57 OF 192	

60% SUBMITTAL



NOTES:

1. SHAFT LOCATION AND GEOMETRY SHOWN ARE REPRESENTATIVE ONLY. ACTUAL LOCATION AND GEOMETRY TO BE AS DETERMINED BY CONTRACTOR MEANS AND METHOD AND SHALL BACKFILL SHAFT PER CON STD DTL 02317-08
2. CONTRACTOR SHALL TAKE CARE TO MAINTAIN EXISTING SERVICE CONNECTION THROUGHOUT CONSTRUCTION.
3. PAVEMENT & CURB REPLACEMENT LIMITS SHOWN AT SHAFT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAVEMENT SURFACE AND MARKING AND TRAFFIC SIGNING REMOVED IN THE COURSE OF SHAFT EXCAVATION, AND ANY PAVEMENT DAMAGED BY CONTRACTOR OPERATIONS. REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE CITY OF HOUSTON STANDARDS, IN THICKNESS AND STRENGTH MATCHING THE EXISTING PAVEMENT, AND INCLUDING CURBS THAT ARE REMOVED OR DAMAGED. NO SEPARATE PAYMENT, COSTS ARE SUBSIDIARY TO SHAFT EXCAVATION.
4. THE GROUND SURFACE IN THE PROJECT AREA SHALL BE RESTORED TO ITS EXISTING CONDITION AND ELEVATION, I.E. BACKFILL OPERATIONS TO MATCH EXISTING GROUND ELEVATIONS.
5. CONTRACTOR SHALL NOT USE PARKING LOTS TO STAGE MATERIALS OR DEWATERING SYSTEM.
6. ALL DEWATERING OPERATIONS SHALL BE WITHIN THE PIPE EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS. DO NOT BLOCK PARKING LOTS OR DRIVEWAYS. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
7. CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES HEIGHT SHALL NOT EXCEED THE OVERHEAD CLEARANCE OF UTILITY LINES CROSSING ROADWAY.
8. CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY TO TEMPORARILY RELOCATE THE AFFECTED SEGMENT.
9. REFER TO TRAFFIC CONTROL PLAN SHEETS 78 TO 127
10. REFER TO TREE PRESERVATION PLAN SHEETS 128 TO 151 FOR APPROPRIATE PROTECTION MEASURES. TREES OUTSIDE OF PROJECT LIMITS ARE TO BE PROTECTED AND REMAIN IN PLACE.
11. CONTRACTOR TO PROVIDE TEMPORARY MAILBOX PER UNITED STATE POSTAL SERVICE (USPS) REQUIREMENTS DURING CONSTRUCTION AND RESTORE PERMANENT MAILBOX TO EXISTING OR BETTER CONDITIONS, NO EXTRA PAY.



NO.	DATE	REVISION	APP.

SURVEY NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TAXES COORDINATES SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NCAD83) (2011 ADJ.; EPOCH 2010.00).
2. ALL ELEVATION SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 18).
3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99989985044.
4. HORIZONTAL COORDINATES ARE BASED ON THE REDUNDANT GPS RTN OBSERVATIONS COLLECTED DURING OCTOBER 2025 AND CONSTRAINED TO THE PUBLISHED COORDINATES OF THE CITY OF HOUSTON SURVEY MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.
5. ELEVATIONS ARE BASED ON REDUNDANT GPS RTN OBSERVATIONS, ADJUSTED WITH DIGITAL LEVELING CONSTRAINED TO THE PUBLISHED ELEVATIONS OF SAID MARKER NO(S). 5461-8315, 5461-8408 AND 5561-7205.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:

FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

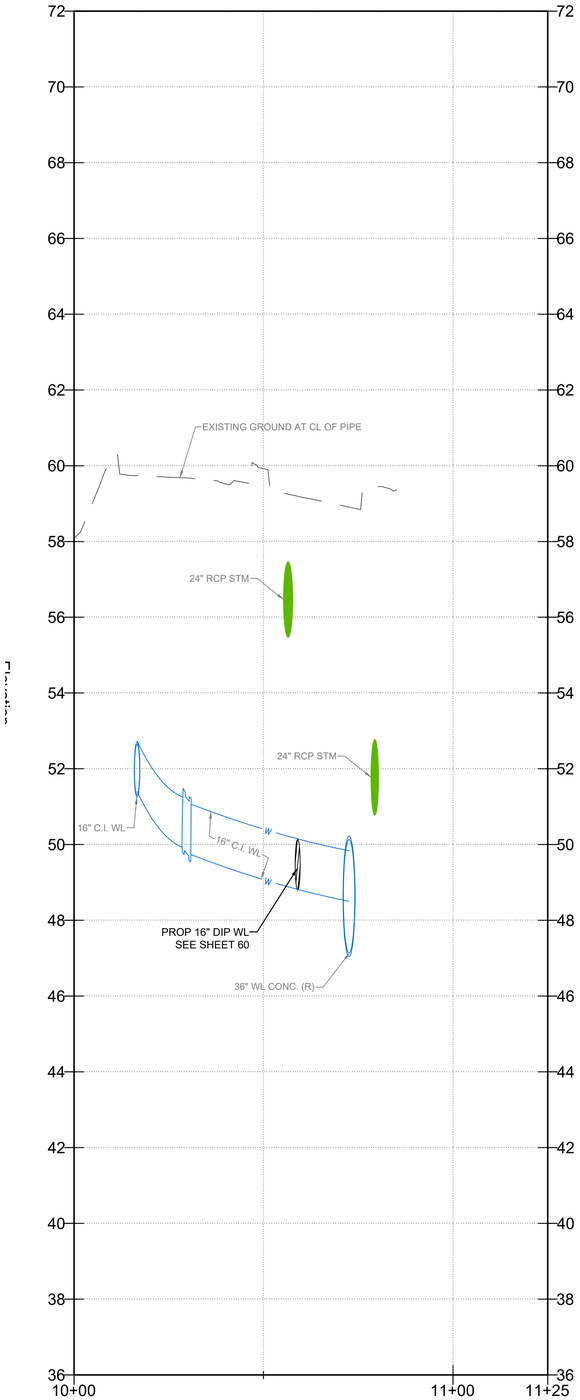
BASELINE B – TIDWELL/HIRSCH PROP 16" WL CONNECTION PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=20' (H)	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 58 OF 192	

60% SUBMITTAL

C-221-PL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\054-058-INTERSECTION-PLANS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



Elevation

20 0 10 20 40 (H)
2 0 1 2 4 (V)
SCALE: HORZ. 1"=20'
VERT. 1"=2'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

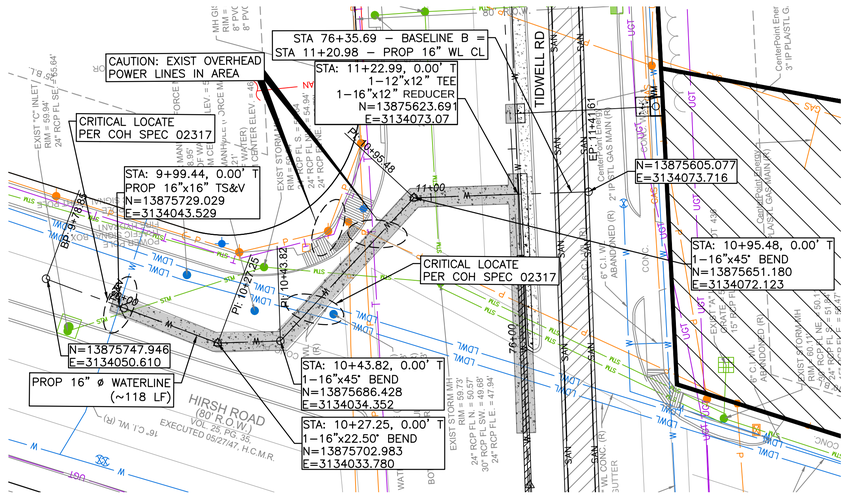
BASELINE B – TIDWELL/HIRSCH PROP 16" WL CONNECTION PROFILE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE: 1"=20' (H) 1"=2' (V)	
CITY OF HOUSTON PM: CHELSEA LEGER, P.E.	
SHEET NO. 59 OF 192	

60% SUBMITTAL

C-221-PR

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\055-059-INTERSECTION-PROFILES.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

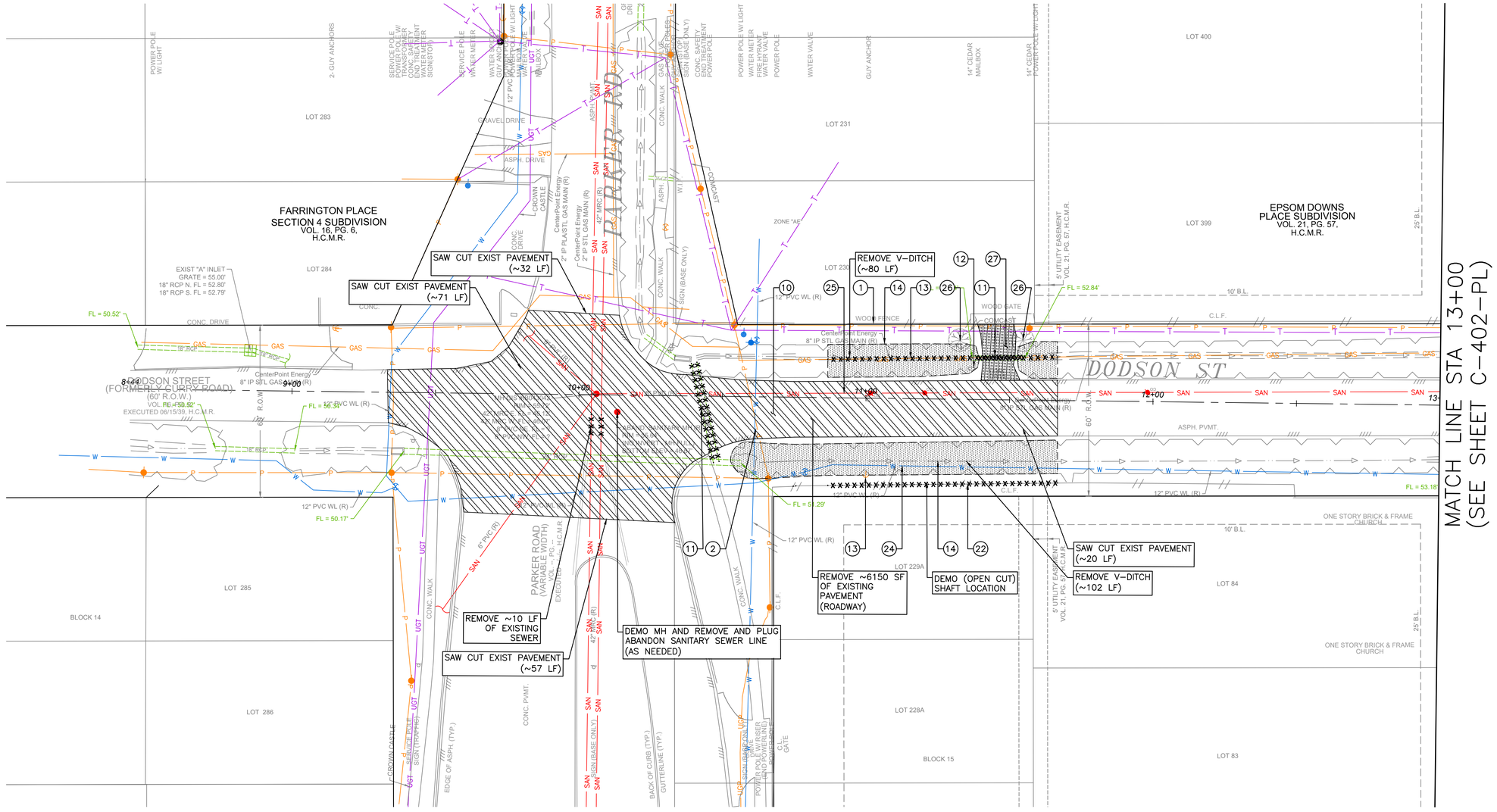

CAUTION: EXIST OVERHEAD POWER LINES IN AREA
CRITICAL LOCATE PER COH SPEC 02317
STA: 9+99.44, 0.00' T
PROP 16"x16" TS&V
N=13875729.029
E=3134043.529
N=13875747.946
E=3134050.610
PROP 16" ø WATERLINE (~118 LF)
HIRSH ROAD (80' R.O.W.)
VOL. 25, PG. 35
EXECUTED 05/27/47, H.C.M.R.
STA 76+35.69 – BASELINE B = STA 11+20.98 – PROP 16" WL CL
STA: 11+22.99, 0.00' T
1–12"x12" TEE
1–16"x12" REDUCER
N=13875623.691
E=3134073.07
TIDWELL RD
N=13875605.077
E=3134073.716
STA: 10+95.48, 0.00' T
1–16"x45° BEND
N=13875651.180
E=3134072.123
CRITICAL LOCATE PER COH SPEC 02317
STA: 10+43.82, 0.00' T
1–16"x45° BEND
N=13875686.428
E=3134034.352
STA: 10+27.25, 0.00' T
1–16"x22.50° BEND
N=13875702.983
E=3134033.780
PI: 10+27.25
PI: 10+43.82
PI: 10+85.48
EP: 11+41.61
EXIST STORM MH
RIM = 59.73'
24" RCP FL N = 49.68'
24" RCP FL S = 49.68'
30" RCP FL E = 47.94'
24" RCP FL E = 47.94'
EXIST STORM MH
RIM = 60.10'
24" RCP FL NE = 50.13'
24" RCP FL S = 49.93'
24" RCP FL E = 49.93'
EXIST "A" INLET
RIM = 59.64'
24" RCP FL SE = 49.64'
EXIST "C" INLET
RIM = 59.94'
24" RCP FL SE = 49.94'
6" C.I. W.L. ABANDONED (R)
6" C.I. W.L. ABANDONED (R)
8" C.I. W.L. ABANDONED (R)
6" C.I. W.L. ABANDONED (R)
8" C.I. W.L. ABANDONED (R)
8" C.I. W.L. ABANDONED (R)
8

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V–DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.


SCALE: 1"=20'
FARRINGTON PLACE SECTION 4 SUBDIVISION VOL. 16, PG. 6, H.C.M.R.
EPSOM DOWNS PLACE SUBDIVISION VOL. 21, PG. 57, H.C.M.R.
DODSON ST
FARRINGTON PL
PARKER ROAD (VARIABLE WIDTH)
8+44 DODSON STREET (FORMERLY CURRY ROAD) (60' R.O.W.) VOL. 16, PG. 52 EXECUTED 06/15/39, H.C.M.R.
SAW CUT EXIST PAVEMENT (~32 LF)
SAW CUT EXIST PAVEMENT (~71 LF)
REMOVE V–DITCH (~80 LF)
SAW CUT EXIST PAVEMENT (~20 LF)
REMOVE V–DITCH (~102 LF)
REMOVE ~6150 SF OF EXISTING PAVEMENT (ROADWAY)
DEMO (OPEN CUT) SHAFT LOCATION
REMOVE ~10 LF OF EXISTING SEWER
SAW CUT EXIST PAVEMENT (~57 LF)
DEMO MH AND REMOVE AND PLUG ABANDON SANITARY SEWER LINE (AS NEEDED)
MATCH LINE STA 13+00 (SEE SHEET C–402–PL)
LOT 283
LOT 284
LOT 285
LOT 286
LOT 231
LOT 230
LOT 229A
LOT 228A
LOT 400
LOT 399
LOT 84
LOT 83
BLOCK 14
BLOCK 15
GRAVEL DRIVE
ASPH. DRIVE
CONC. DRIVE
CONC. WALK
CONC. PVMT.
ASPH. PVMT.
WOOD FENCE
WOOD GATE
C.L.F.
ONE STORY BRICK & FRAME CHURCH
12" PVC WL (R)
8" IP STL GAS MAIN (R)
2" IP PLA/STL GAS MAIN (R)
42" MRC (R)
6" PVC(R)
EXIST "A" INLET GRATE = 55.00' 18" RCP N. FL = 52.80' 18" RCP S. FL = 52.79'
FL = 50.52'
FL = 50.34'
FL = 50.17'
FL = 51.29'
FL = 52.84'
FL = 53.18'
9+00
10+00
11+00
12+00
13+00
R.O.W.
10' B.L.
25' B.L.
5' UTILITY EASEMENT VOL. 21, PG. 57, H.C.M.R.
CROWN CASTLE SERVICE POLE SIGN (TRAFFIC)
EDGE OF ASPH. (TYP.)
BACK OF CURB (TYP.)
GUTTERLINE (TYP.)
SIGN (BASE ONLY)
POWER POLE W/ LIGHT
SERVICE POLE W/ POWER METER TRANSFORMER CONC. SAFETY END TREATMENT WATER METER SIGN(STOP)
2- GUY ANCHORS
WATER METER
GAS VALVE
GAS MARKER
CONC. SAFETY END TREATMENT
POWER POLE
WATER METER FIRE HYRANT WATER VALVE
WATER VALVE
GUY ANCHOR
14" CEDAR MAILBOX
14" CEDAR POWER POLE W/ LIGHT
5' UTILITY EASEMENT VOL. 21, PG. 57, H.C.M.R.
CENTERPOINT ENERGY 8" IP STL GAS MAIN (R)
CENTERPOINT ENERGY 2" IP PLA/STL GAS MAIN (R)
CENTERPOINT ENERGY 8" IP STL GAS MAIN (R)
CENTERPOINT ENERGY 4" IP STL GAS MAIN (R)
CENTERPOINT ENERGY 2" IP STL GAS MAIN (R)
CENTERPOINT ENERGY 42" MRC (R)
CENTERPOINT ENERGY 6" PVC(R)
CENTERPOINT ENERGY 12" PVC WL

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

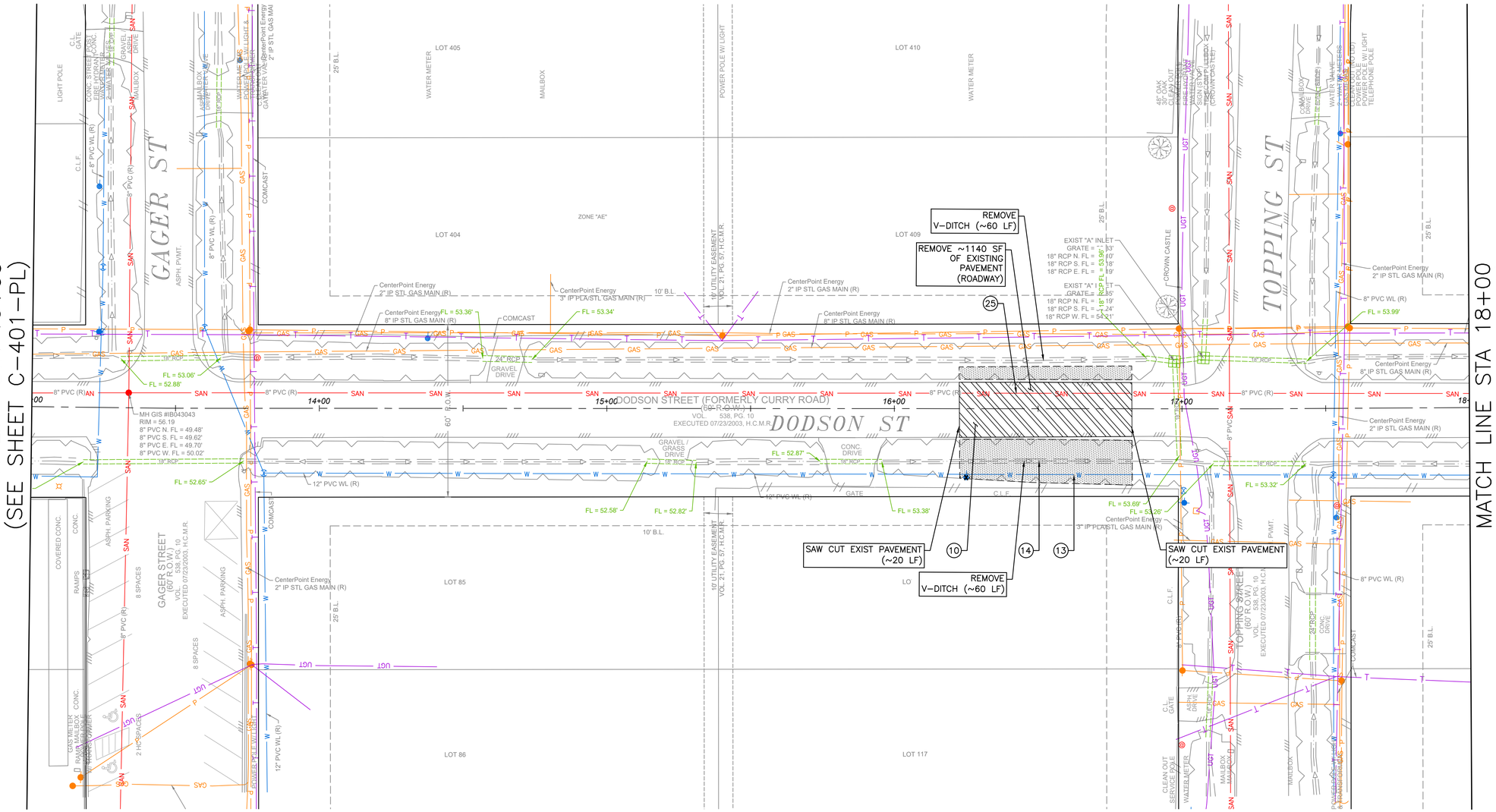
GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.

N

0' 10' 20' 40'

SCALE: 1"=20'



DEMOLITION KEY NOTES:

(1)	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
(2)	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
(3)	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
(4)	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
(5)	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
(6)	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
(7)	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
(8)	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
(9)	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
(10)	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
(11)	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
(12)	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
(13)	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

(14)	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
(15)	PROTECT EXISTING INLET IN PLACE.
(16)	REMOVE EXISTING STORM INLET AS REQUIRED.
(17)	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
(18)	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
(19)	REMOVE EXISTING CURB/CURB & GUTTER.
(20)	REMOVE EXISTING GRASS.
(21)	REMOVE EXISTING CONCRETE MEDIAN.
(22)	REMOVE EXISTING FENCE/GATE.
(23)	REMOVE EXISTING CONCRETE DRIVEWAY.
(24)	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
(25)	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
(26)	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
(27)	REMOVE EXISTING DIRT DRIVEWAY.

C-402-PL

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

DEMOLITION PLAN – DODSON ST STA 13+00 TO STA 18+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 62 OF 192	

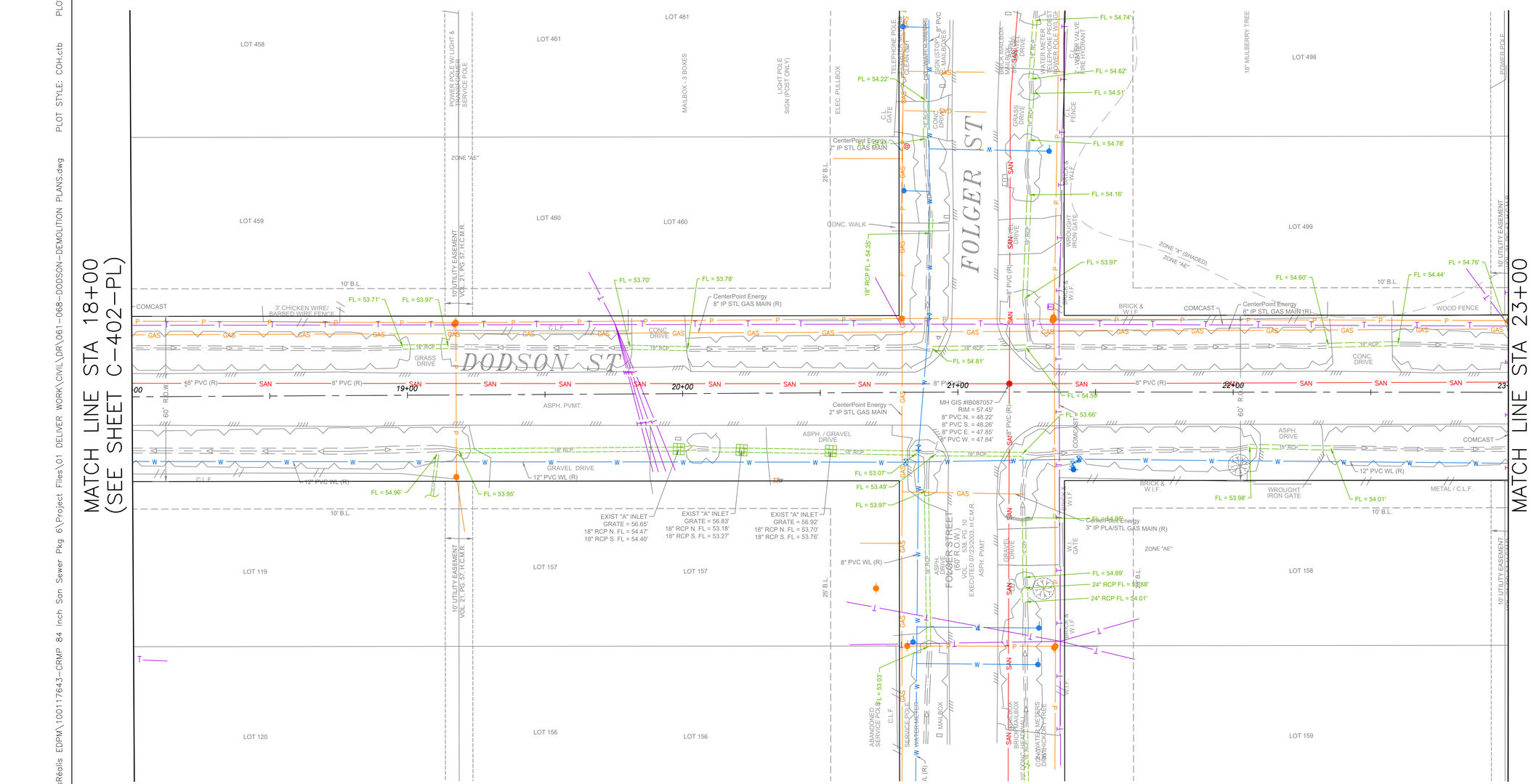
60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DRK\CIVIL\DR\061-068-DODSON-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\CIVIL\061-068-DODSON-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:	
1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:	
14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

C-403-PL

NO.	DATE	REVISION	APP.

0' 10' 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.
Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)
Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

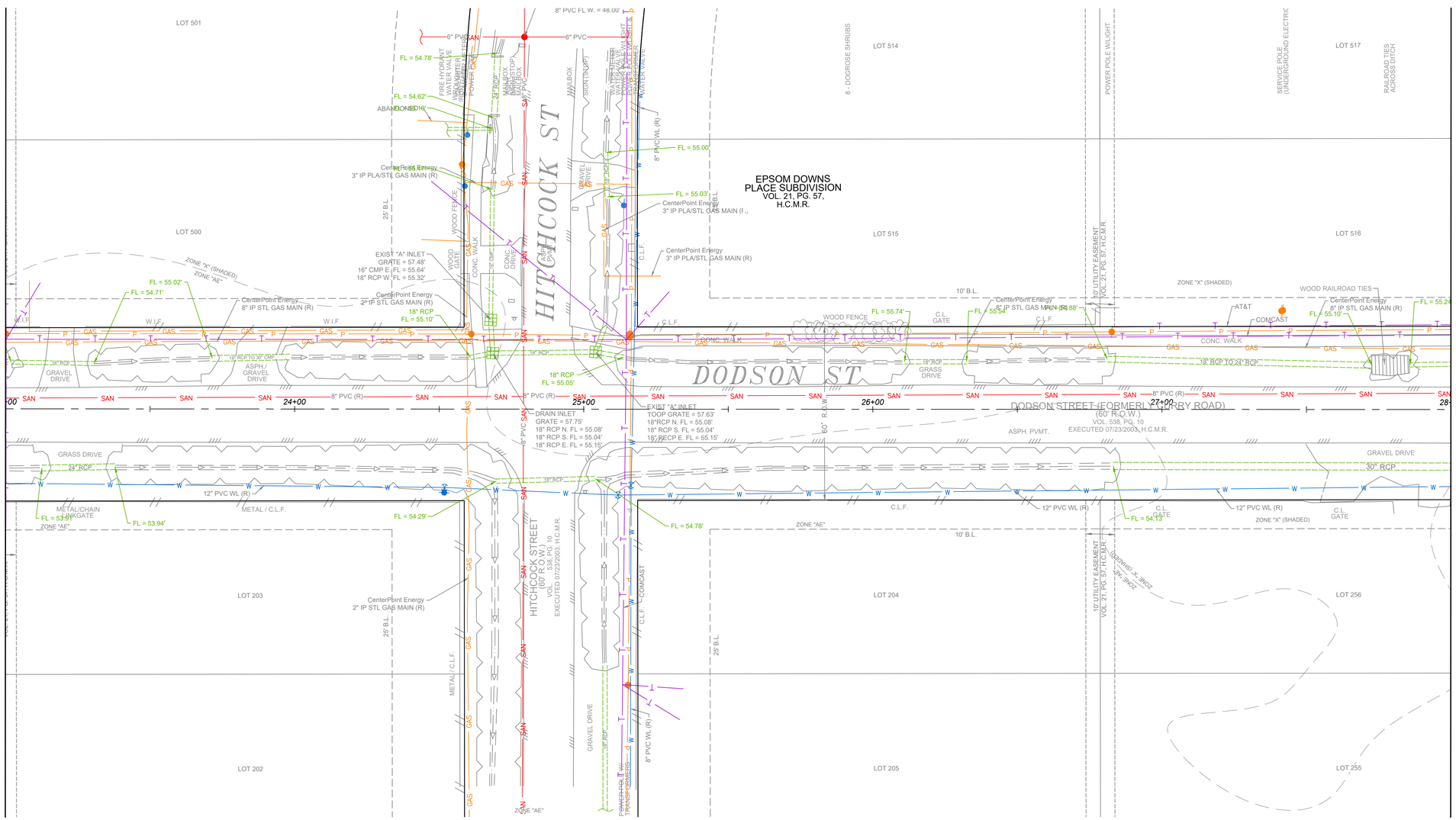
DEMOLITION PLAN – DODSON ST STA 18+00 TO STA 23+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 63 OF 192	

60% SUBMITTAL

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:	
1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:	
14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

C-404-PL

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – DODSON ST STA 23+00 TO STA 28+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 64 OF 192	

60% SUBMITTAL

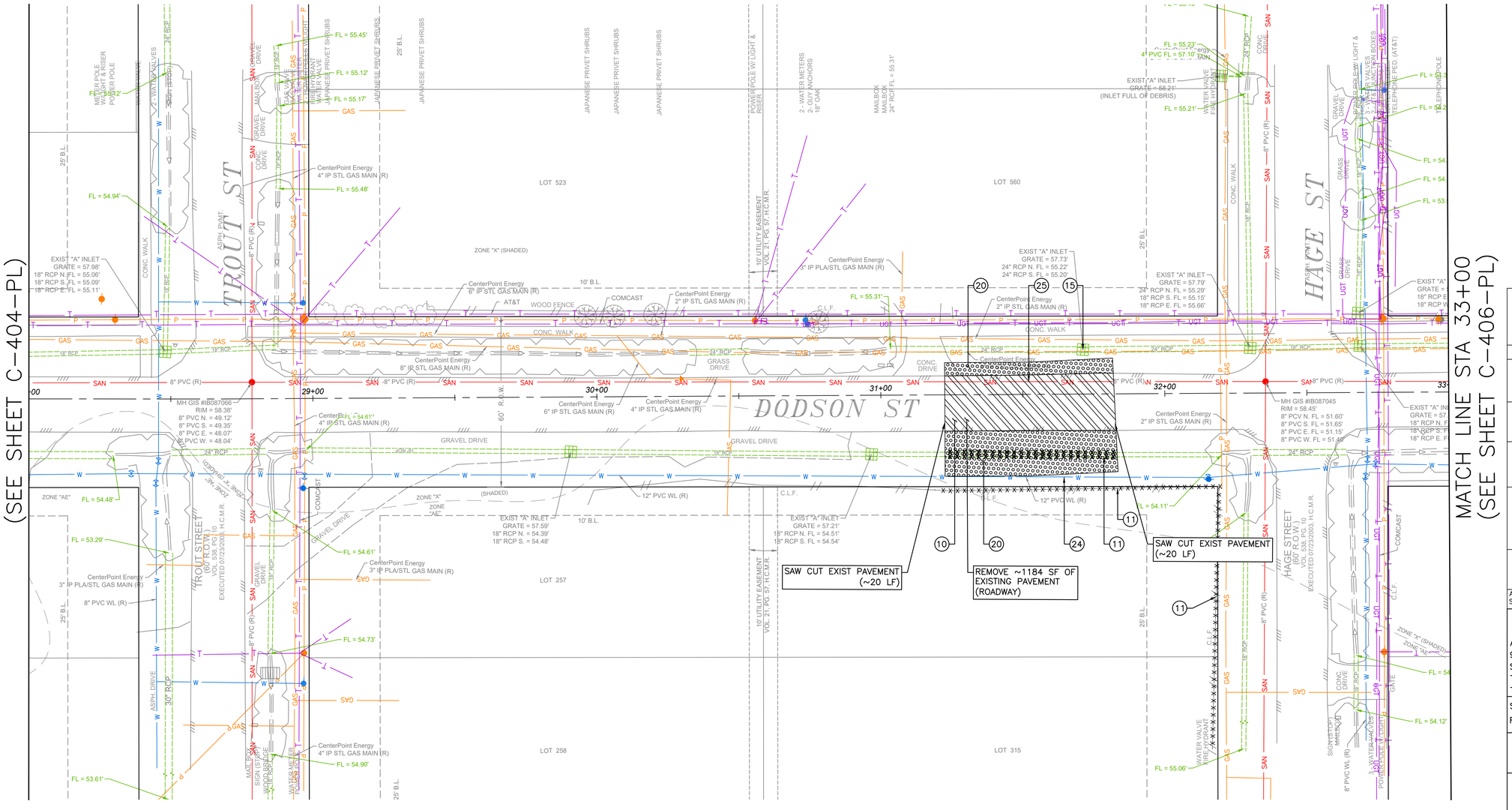
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\061-068-DODSON-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:

1. EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2. REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3. REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4. PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5. ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6. REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7. REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8. ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9. BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10. SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11. REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12. REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13. COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

14. REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15. PROTECT EXISTING INLET IN PLACE.
16. REMOVE EXISTING STORM INLET AS REQUIRED.
17. PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18. REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19. REMOVE EXISTING CURB/CURB & GUTTER.
20. REMOVE EXISTING GRASS.
21. REMOVE EXISTING CONCRETE MEDIAN.
22. REMOVE EXISTING FENCE/GATE.
23. REMOVE EXISTING CONCRETE DRIVEWAY.
24. MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25. MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26. PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27. REMOVE EXISTING DIRT DRIVEWAY.

C-405-PL

NO.	DATE	REVISION	APP.

N

0' 10' 20' 40'

SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – DODSON ST STA 28+00 TO STA 33+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 65 OF 192	

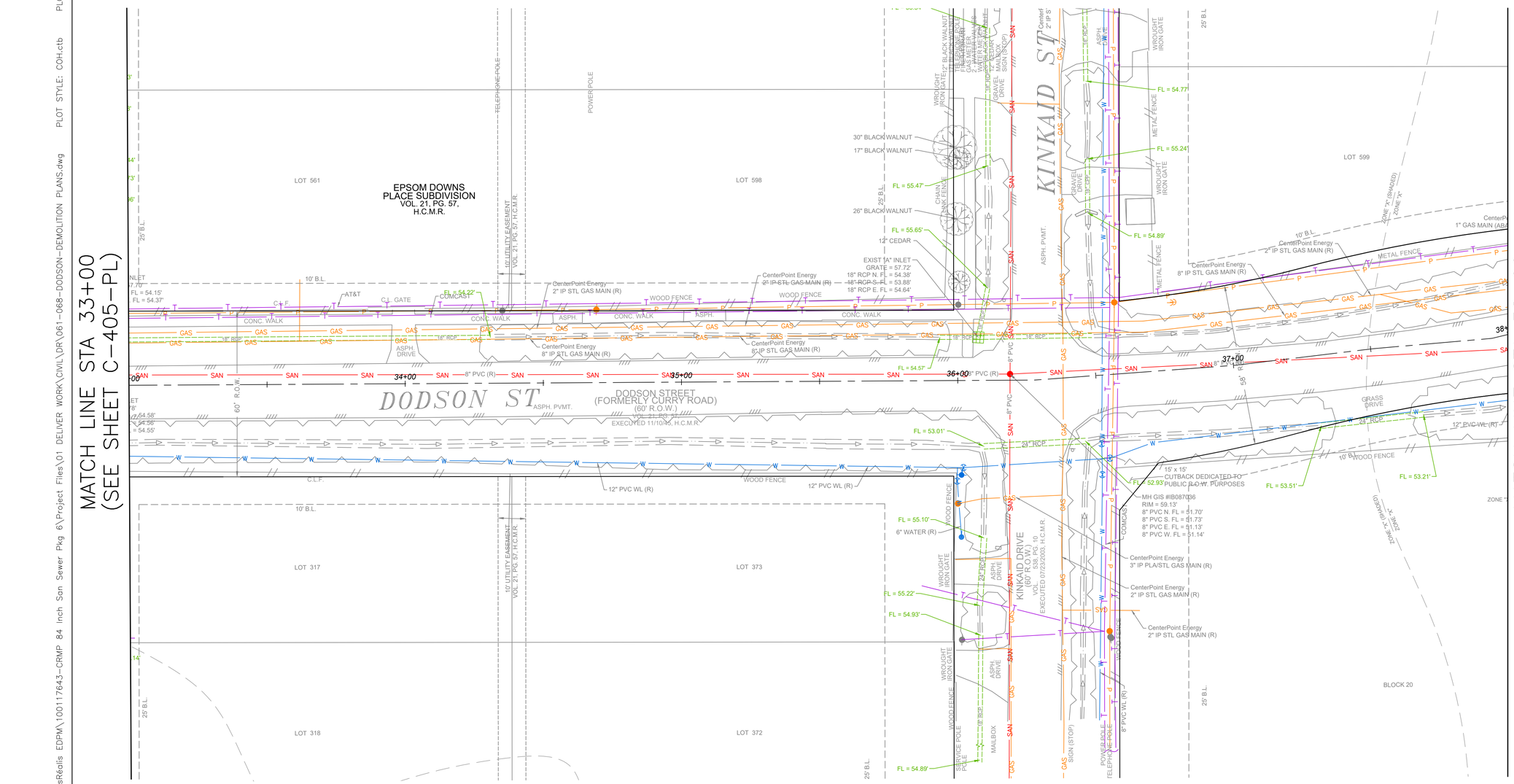
60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\061-068-DODSON-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\061-068-DODSON-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – DODSON ST STA 33+00 TO STA 38+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 66 OF 192	

60% SUBMITTAL

DEMOLITION KEY NOTES:

1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

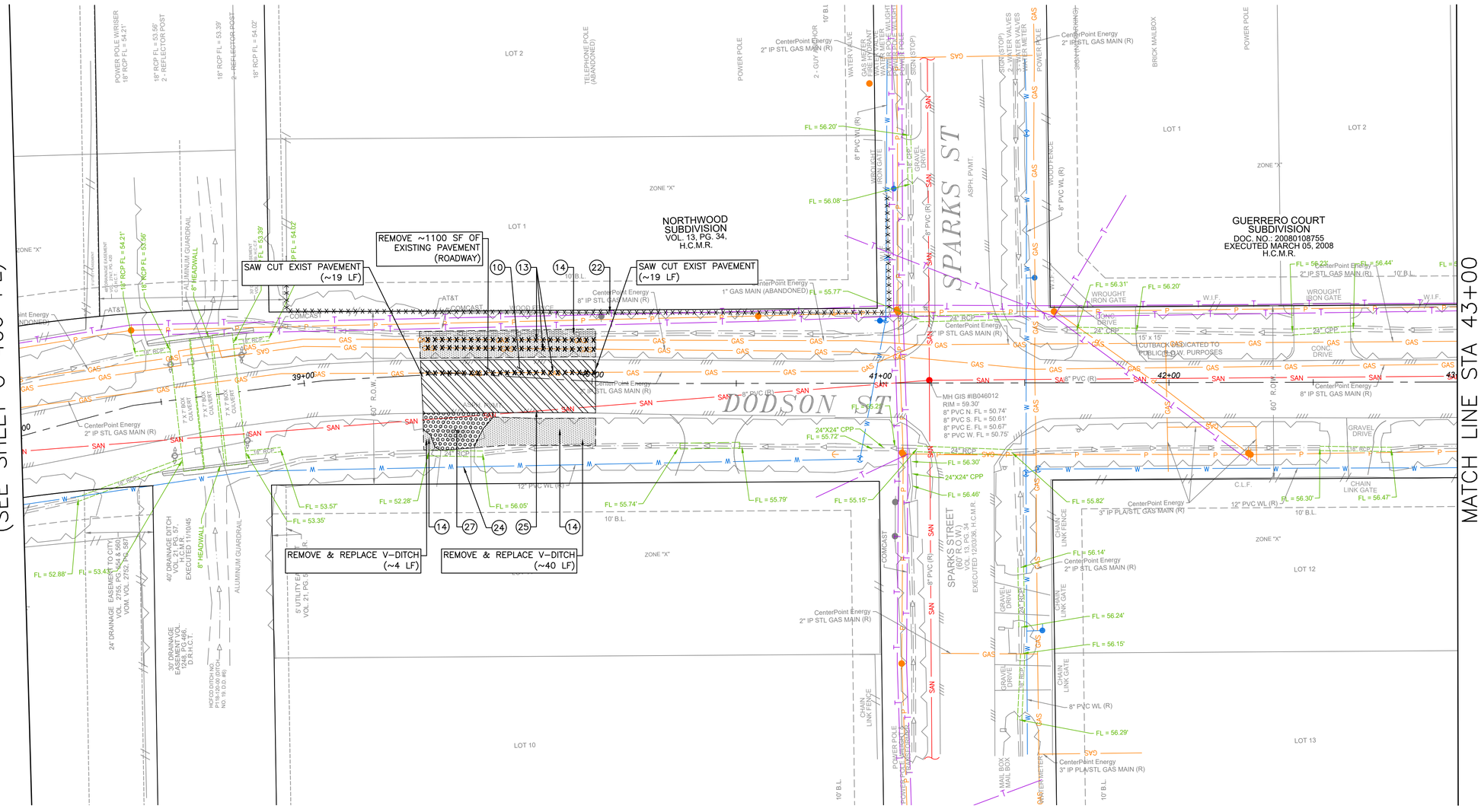
14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:	
1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:	
14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

C-407-PL

NO.	DATE	REVISION	APP.

N

0' 10' 20' 40'

SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – DODSON ST STA 38+00 TO STA 43+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 67 OF 192	

60% SUBMITTAL

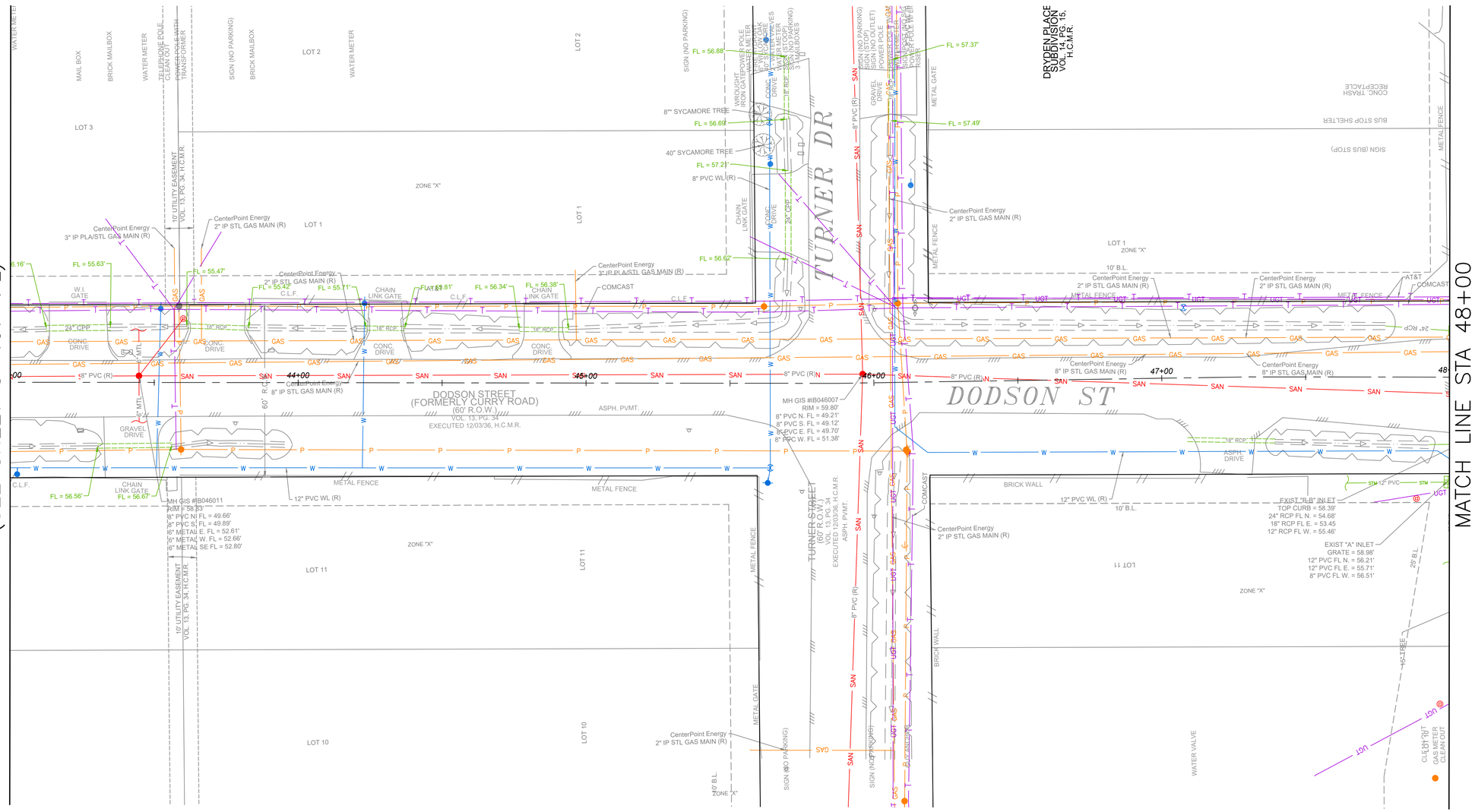
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\061-068-DODSON-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:

1. EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2. REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3. REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4. PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5. ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6. REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7. REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8. ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9. BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10. SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11. REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12. REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13. COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

14. REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15. PROTECT EXISTING INLET IN PLACE.
16. REMOVE EXISTING STORM INLET AS REQUIRED.
17. PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18. REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19. REMOVE EXISTING CURB/CURB & GUTTER.
20. REMOVE EXISTING GRASS.
21. REMOVE EXISTING CONCRETE MEDIAN.
22. REMOVE EXISTING FENCE/GATE.
23. REMOVE EXISTING CONCRETE DRIVEWAY.
24. MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25. MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26. PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27. REMOVE EXISTING DIRT DRIVEWAY.

C-408-PL

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – DODSON ST STA 43+00 TO STA 48+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 68 OF 192	

60% SUBMITTAL

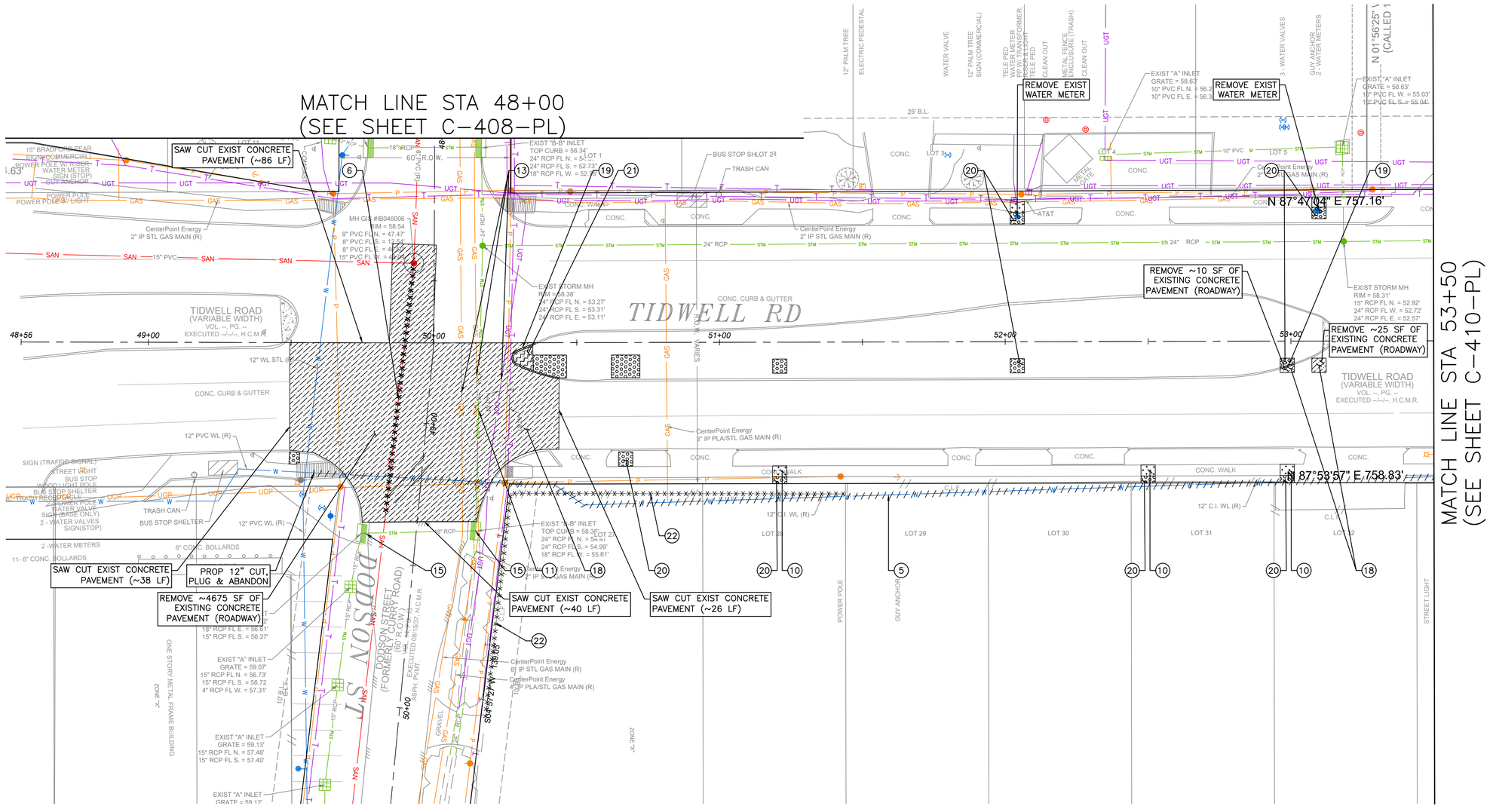
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\061-068-DODSON-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:

1. EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2. REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3. REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4. PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5. ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6. REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7. REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8. ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9. BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10. SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11. REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12. REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13. COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

14. REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15. PROTECT EXISTING INLET IN PLACE.
16. REMOVE EXISTING STORM INLET AS REQUIRED.
17. PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18. REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19. REMOVE EXISTING CURB/CURB & GUTTER.
20. REMOVE EXISTING GRASS.
21. REMOVE EXISTING CONCRETE MEDIAN.
22. REMOVE EXISTING FENCE/GATE.
23. REMOVE EXISTING CONCRETE DRIVEWAY.
24. MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25. MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26. PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27. REMOVE EXISTING DIRT DRIVEWAY.

C-409-PL

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – DOTSON ST STA 48+00 TO END & TIDWELL RD BEGIN TO STA 53+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 69 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

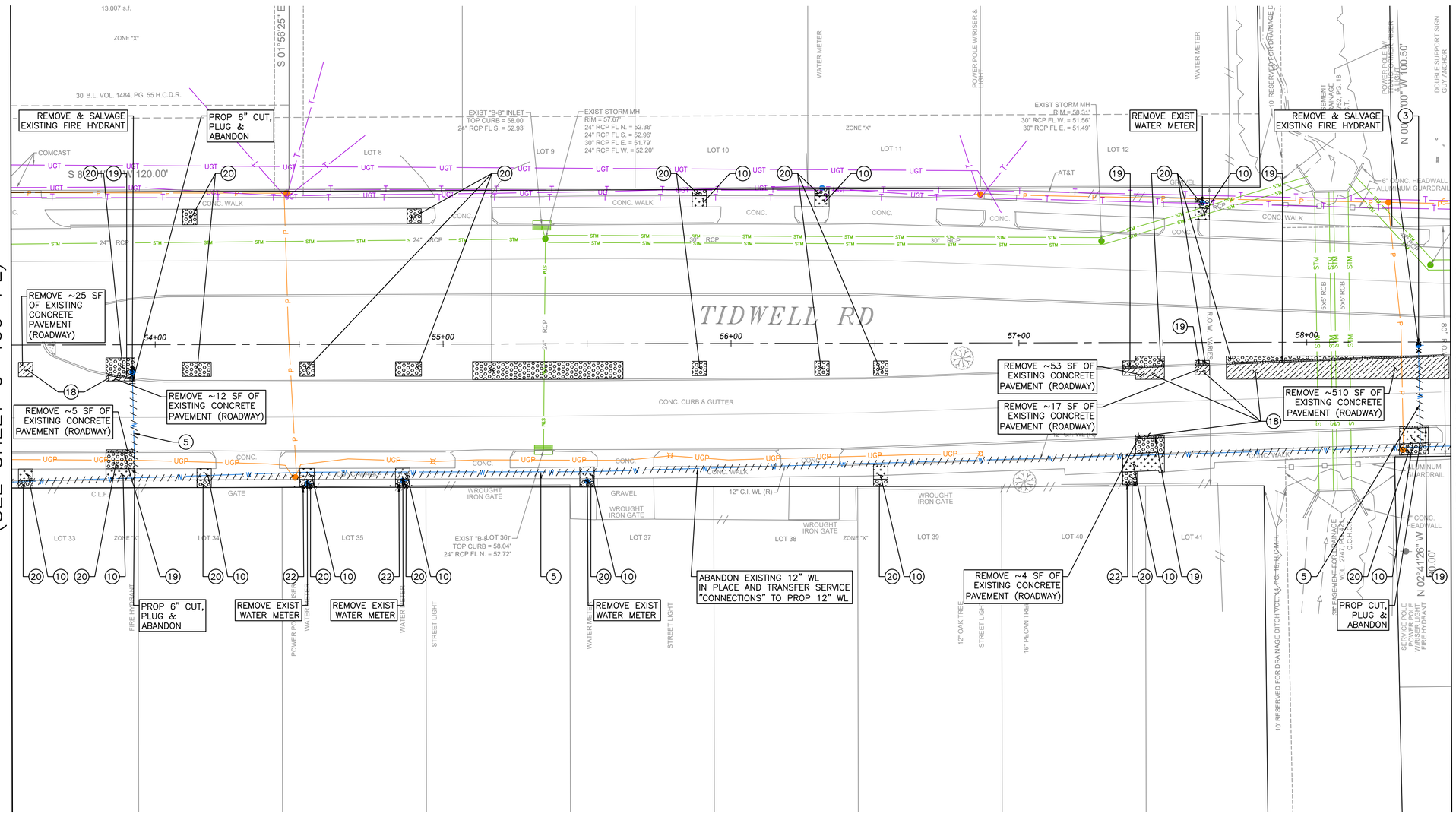
1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.



DEMOLITION KEY NOTES:	
1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:	
14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

C-410-PL

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only. Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – TIDWELL RD STA 53+50 TO STA 58+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 70 OF 192	

60% SUBMITTAL

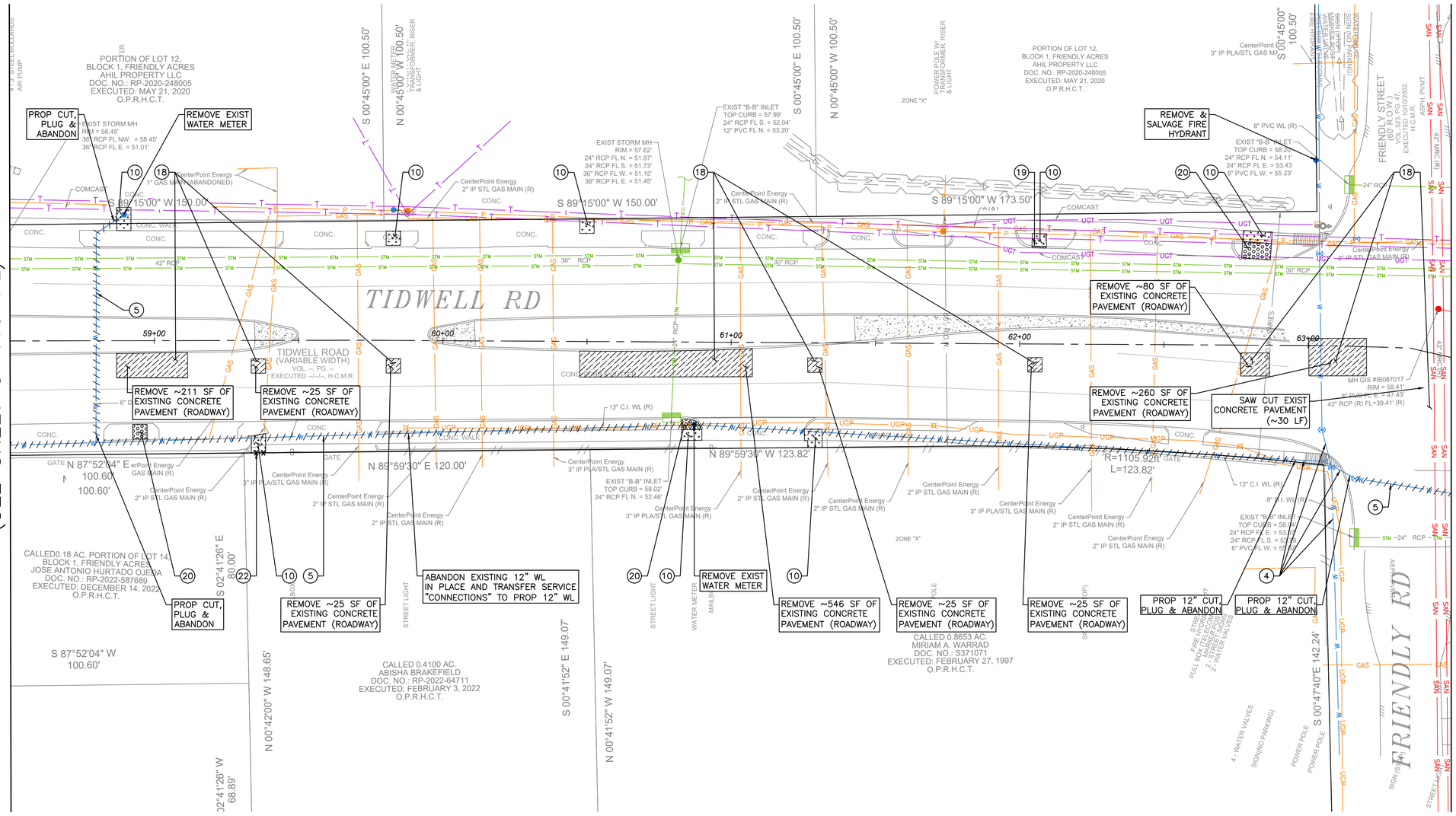
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:	
1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:	
14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

C-411-PL

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only. Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – TIDWELL RD STA 58+50 TO STA 63+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 71 OF 192	

60% SUBMITTAL

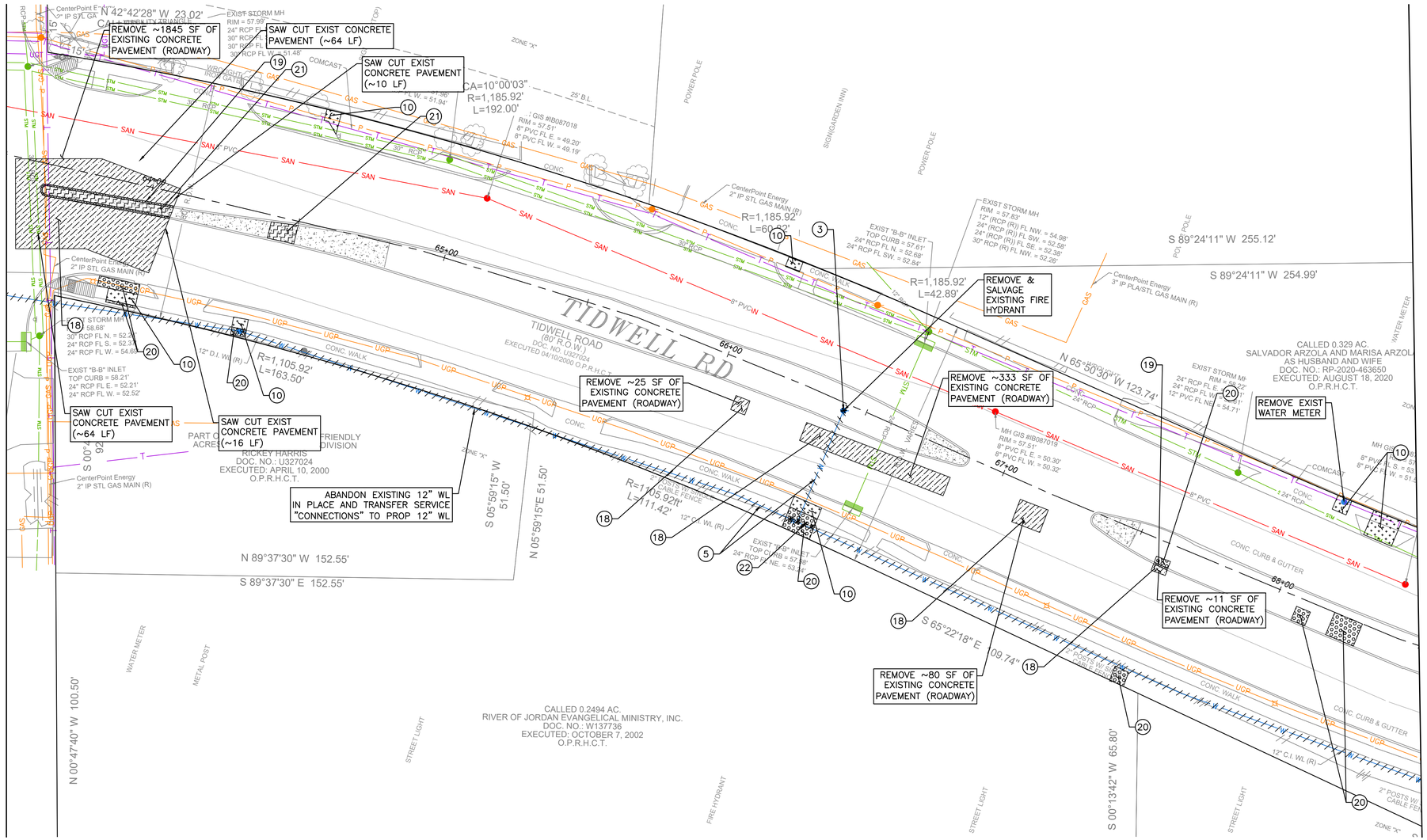
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:

1. EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2. REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3. REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4. PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5. ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6. REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7. REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8. ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9. BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10. SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11. REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12. REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13. COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

14. REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15. PROTECT EXISTING INLET IN PLACE.
16. REMOVE EXISTING STORM INLET AS REQUIRED.
17. PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18. REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19. REMOVE EXISTING CURB/CURB & GUTTER.
20. REMOVE EXISTING GRASS.
21. REMOVE EXISTING CONCRETE MEDIAN.
22. REMOVE EXISTING FENCE/GATE.
23. REMOVE EXISTING CONCRETE DRIVEWAY.
24. MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25. MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26. PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27. REMOVE EXISTING DIRT DRIVEWAY.

C-412-PL

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITIION PLAN – TIDWELL RD STA 63+50 TO STA 68+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 72 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

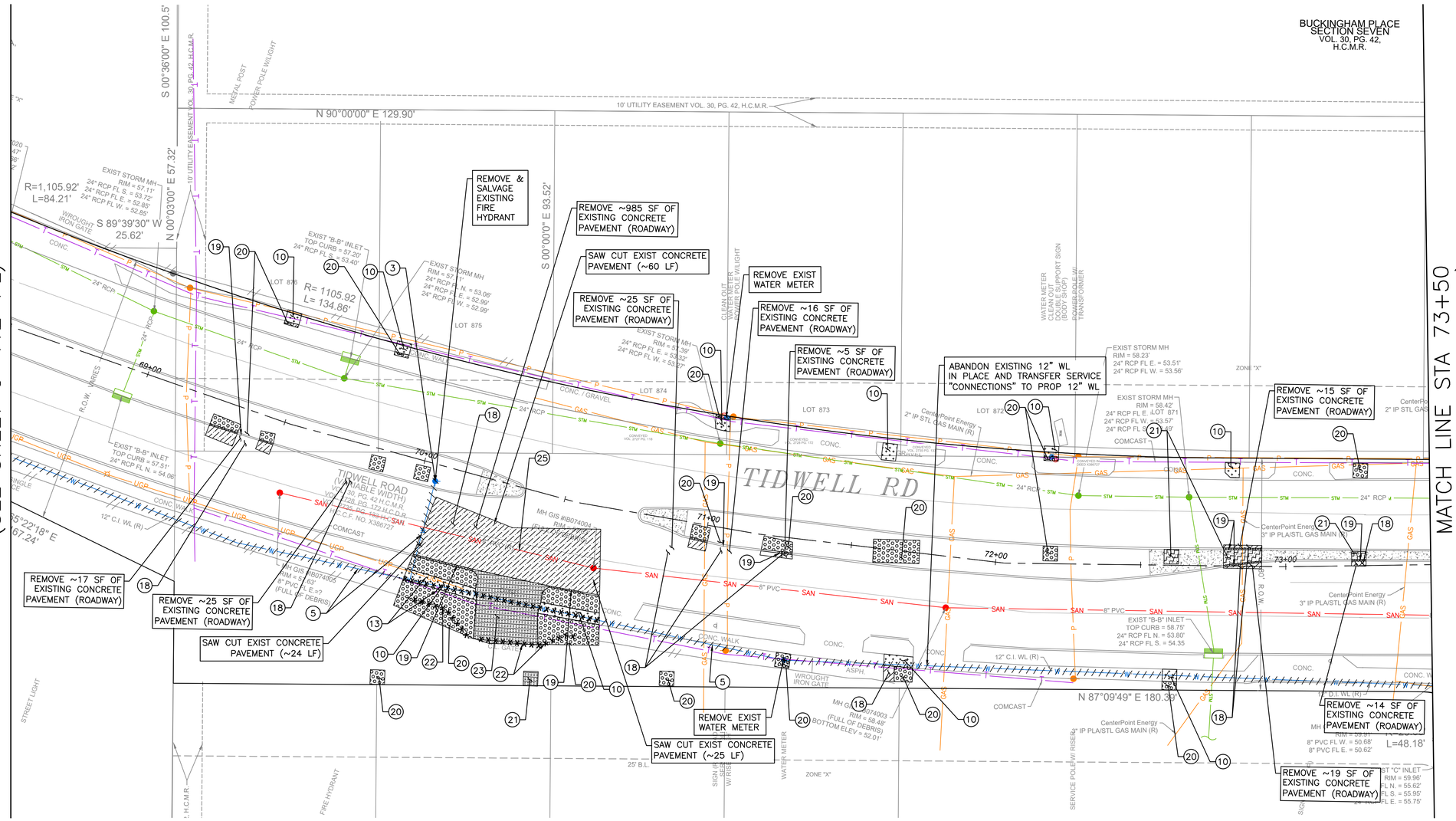
1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

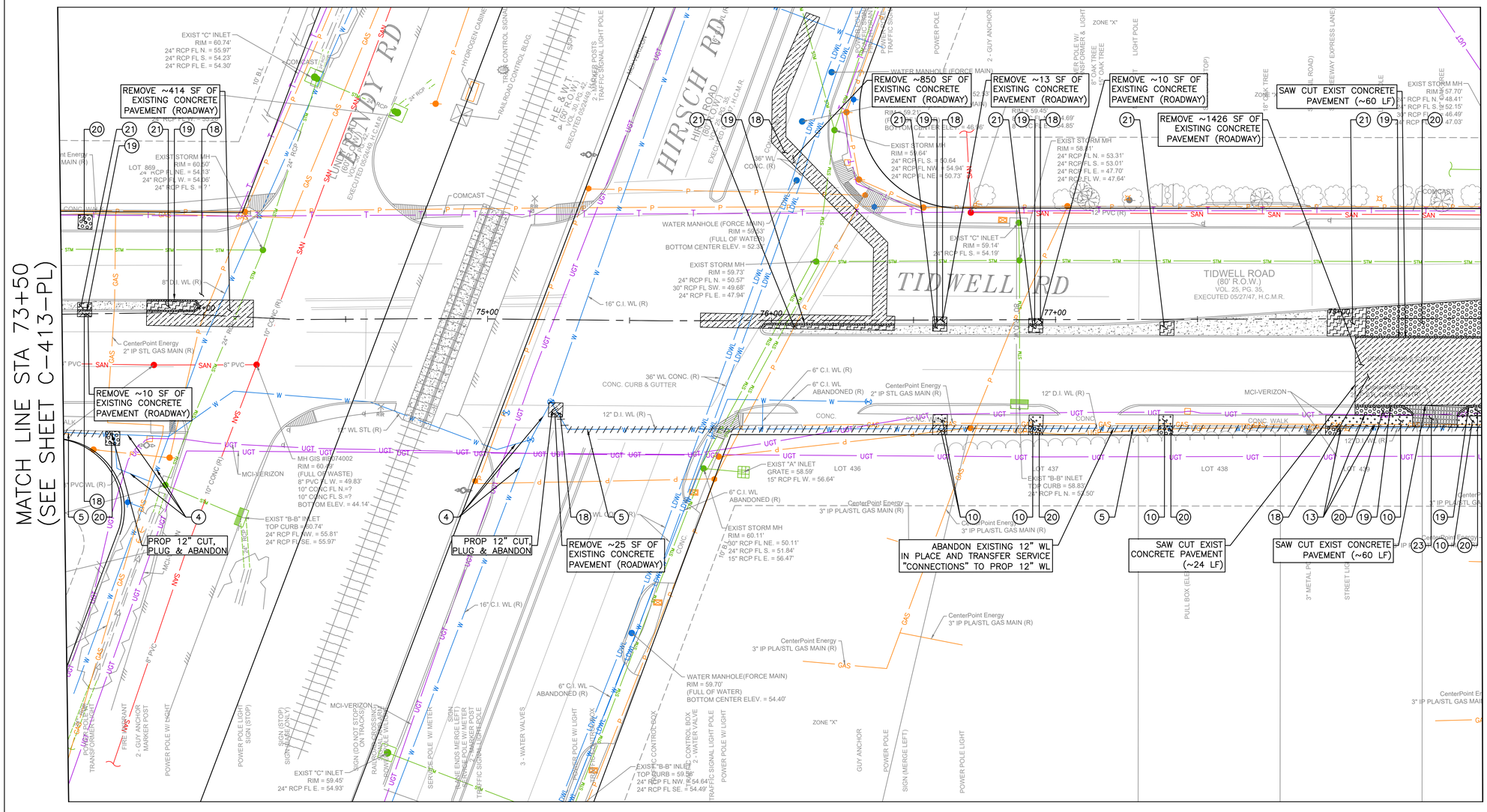

MATCH LINE STA 68+50 (SEE SHEET C-412-PL)
MATCH LINE STA 73+50 (SEE SHEET C-414-PL)
BUCKINGHAM PLACE SECTION SEVEN VOL. 30, PG. 42, H.C.M.R.
10' UTILITY EASEMENT VOL. 30, PG. 42, H.C.M.R.
S 00°36'00" E 100.5'
N 90°00'00" E 129.90'
S 00°00'0" E 93.52'
N 00°03'00" E 57.32'
S 89°39'30" W 25.62'
R=1,105.92' L=84.21'
R= 1105.92 L= 134.86'
N 87°09'49" E 180.39'
L=48.18'
S 65°22'18" E 67.24'
TIDWELL ROAD (VARIABLE WIDTH) VOL. 30, PG. 42 H.C.M.R. VOL. 2728, PG. 172 H.C.D.R. H.C.C.F. NO. X386727
TIDWELL RD
REMOVE & SALVAGE EXISTING FIRE HYDRANT
REMOVE ~985 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
SAW CUT EXIST CONCRETE PAVEMENT (~60 LF)
REMOVE EXIST WATER METER
REMOVE ~25 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
REMOVE ~16 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
REMOVE ~5 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
ABANDON EXISTING 12" WL IN PLACE AND TRANSFER SERVICE "CONNECTIONS" TO PROP 12" WL
REMOVE ~15 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
REMOVE ~17 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
REMOVE ~25 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
SAW CUT EXIST CONCRETE PAVEMENT (~24 LF)
REMOVE EXIST WATER METER
SAW CUT EXIST CONCRETE PAVEMENT (~25 LF)
REMOVE ~14 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
REMOVE ~19 SF OF EXISTING CONCRETE PAVEMENT (ROADWAY)
EXIST STORM MH RIM = 57.11' 24" RCP FL S. = 53.72' 24" RCP FL E. = 52.85' 24" RCP FL W. = 52.85'
EXIST "B-B" INLET TOP CURB = 57.20' 24" RCP FL S. = 53.40'
EXIST STORM MH RIM = 57.11' 24" RCP FL E. = 53.06' 24" RCP FL N. = 52.99' 24" RCP FL W. = 52.99'
EXIST STORM MH RIM = 58.39' 24" RCP FL E. = 53.32' 24" RCP FL W. = 53.27'
EXIST STORM MH RIM = 58.23' 24" RCP FL E. = 53.51' 24" RCP FL W. = 53.56'
EXIST STORM MH RIM = 58.42' 24" RCP FL E. = LOT 871 24" RCP FL W. = 53.57' 24" RCP FL S. = 49'
EXIST "B-B" INLET TOP CURB = 57.51' 24" RCP FL N. = 54.06
EXIST "B-B" INLET TOP CURB = 58.75' 24" RCP FL N. = 53.80' 24" RCP FL S. = 54.35
EXIST "C" INLET RIM = 59.96' FL N. = 55.62' FL S. = 55.95' FL E. = 55.75'
MH GIS #IB074004 RIM = 57.76' 8" PVC FL E.-S = 47.76' (FULL OF DEBRIS)
MH GIS #IB074003 RIM = 58.48' (FULL OF DEBRIS) BOTTOM ELEV = 52.01'
MH RIM = 59.96' 8" PVC FL W. = 50.68' 8" PVC FL E. = 50.62'
LOT 876
LOT 875
LOT 874
LOT 873
LOT 872
LOT 871
ZONE "X"
CONC.
CONC. / GRAVEL
CONC. WALK
ASPH.
24" RCP
8" PVC
12" C.I. WL (R)
CONVERTED VOL. 2727 PG. 172
CONVERTED VOL. 2727 PG. 119
CONVERTED VOL. 2728 PG. 172
CONVERTED VOL. 2727 PG. 172
CONVERTED VOL. 2727 PG. 119

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:

(1)	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
(2)	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
(3)	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
(4)	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
(5)	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
(6)	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
(7)	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
(8)	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
(9)	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
(10)	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
(11)	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
(12)	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
(13)	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

(14)	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
(15)	PROTECT EXISTING INLET IN PLACE.
(16)	REMOVE EXISTING STORM INLET AS REQUIRED.
(17)	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
(18)	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
(19)	REMOVE EXISTING CURB/CURB & GUTTER.
(20)	REMOVE EXISTING GRASS.
(21)	REMOVE EXISTING CONCRETE MEDIAN.
(22)	REMOVE EXISTING FENCE/GATE.
(23)	REMOVE EXISTING CONCRETE DRIVEWAY.
(24)	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
(25)	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
(26)	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
(27)	REMOVE EXISTING DIRT DRIVEWAY.

C-414-PL

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – TIDWELL RD STA 73+50 TO STA 78+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 74 OF 192	

60% SUBMITTAL

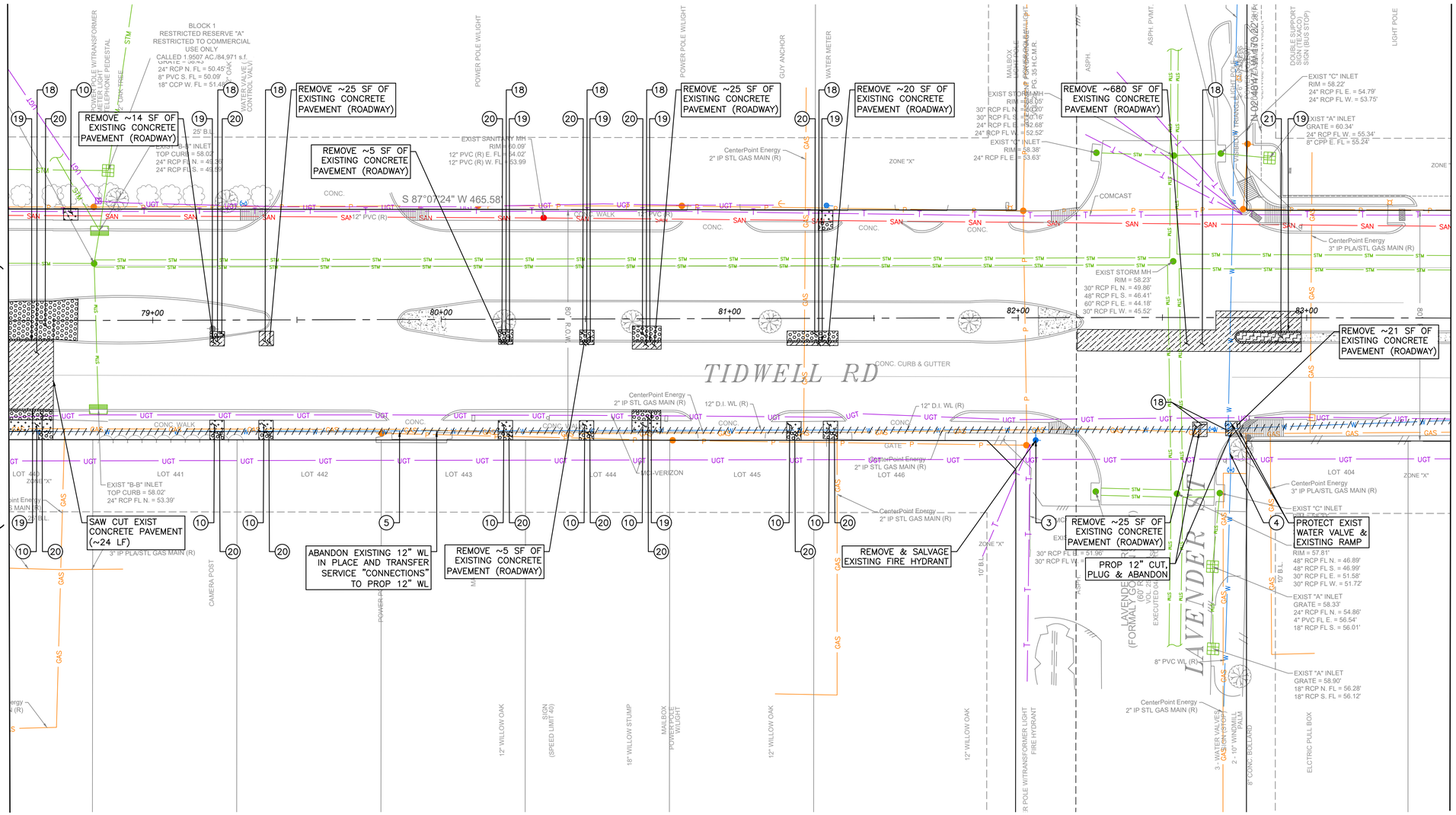
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

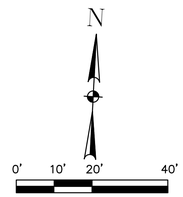
DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.





NO.	DATE	REVISION	APP.

DEMOLITION KEY NOTES:

1. EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2. REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3. REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4. PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5. ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6. REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7. REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8. ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9. BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10. SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11. REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12. REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13. COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

14. REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15. PROTECT EXISTING INLET IN PLACE.
16. REMOVE EXISTING STORM INLET AS REQUIRED.
17. PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18. REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19. REMOVE EXISTING CURB/CURB & GUTTER.
20. REMOVE EXISTING GRASS.
21. REMOVE EXISTING CONCRETE MEDIAN.
22. REMOVE EXISTING FENCE/GATE.
23. REMOVE EXISTING CONCRETE DRIVEWAY.
24. MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25. MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26. PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27. REMOVE EXISTING DIRT DRIVEWAY.

C-415-PL

NOTICE:

FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

DEMOLITION PLAN – TIDWELL RD STA 78+50 TO STA 83+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 75 OF 192	

60% SUBMITTAL

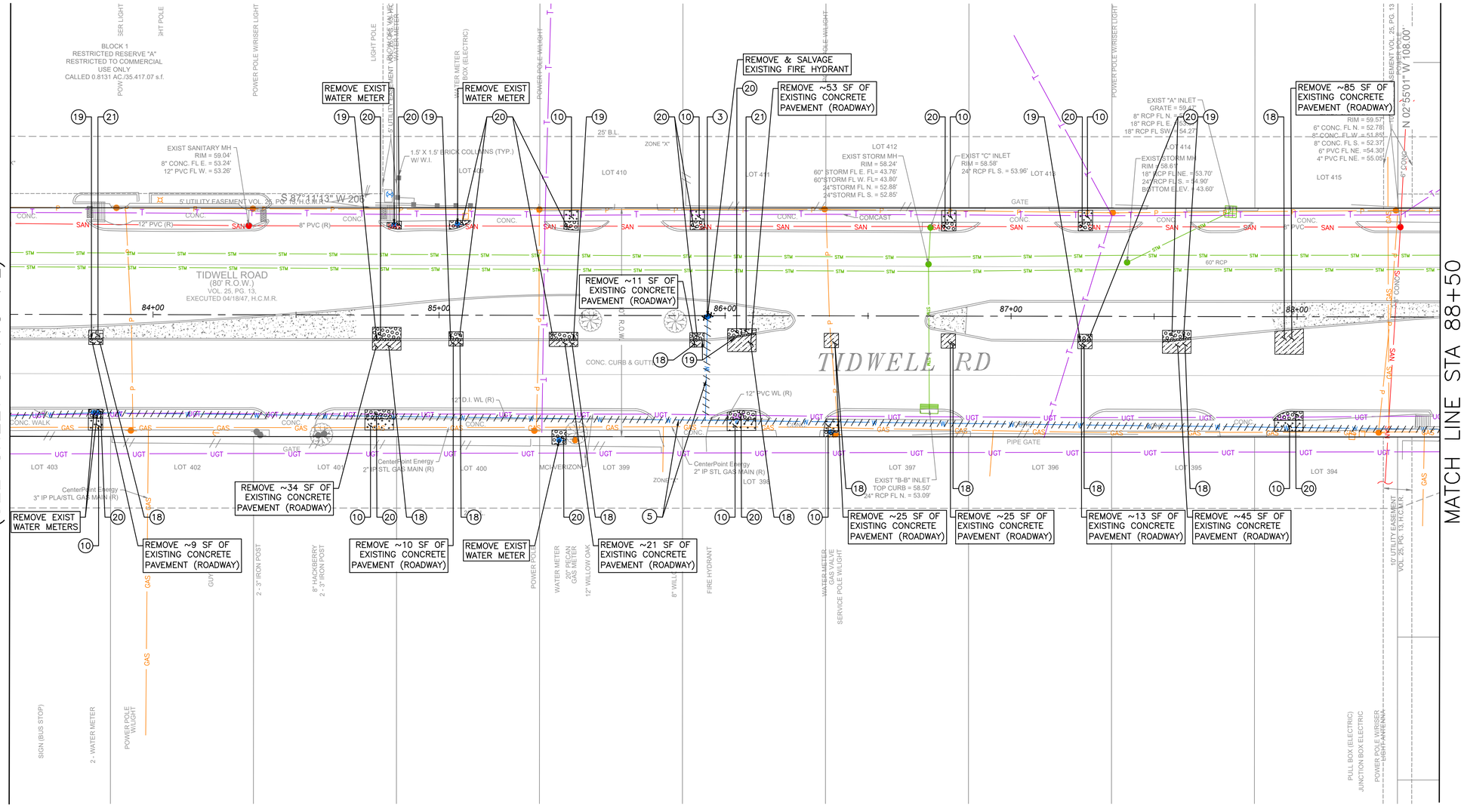
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.



DEMOLITION KEY NOTES:

1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

C-416-PL

N

0' 10' 20' 40'

SCALE: 1"=20'

NO.	DATE	REVISION	APP.

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – TIDWELL RD STA 83+50 TO STA 88+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 76 OF 192	

60% SUBMITTAL

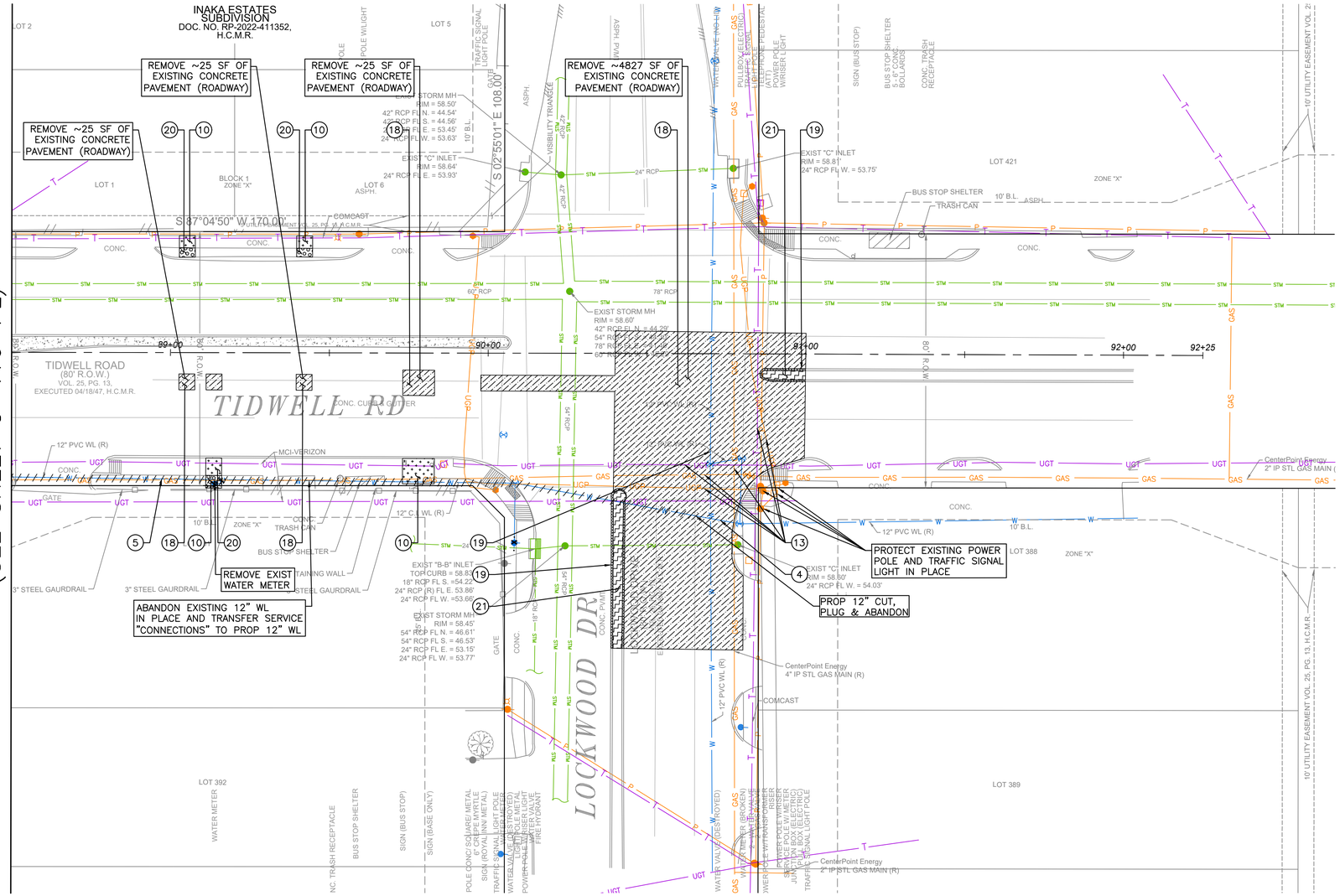
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

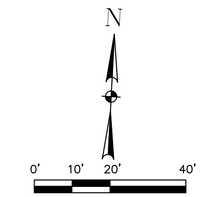
DEMOLITION LEGEND:

- PAVEMENT (ASPHALT) REMOVAL
- PAVEMENT (CONCRETE) REMOVAL
- CURB/CURB & GUTTER REMOVAL
- SIDEWALK (CONCRETE) REMOVAL
- DRIVEWAY/PARKING LOT (ASPHALT) REMOVAL
- DRIVEWAY/PARKING LOT (CONCRETE) REMOVAL
- MEDIAN REMOVAL
- V-DITCH REMOVAL
- GRASS REMOVAL
- UTILITY REMOVAL
- UTILITY ABANDON

GENERAL NOTES:

1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HOUSTON (COH) WASTEWATER OPERATIONS TO PROVIDE AN OPPORTUNITY TO IDENTIFY WIMAX POLES AND OTHER EQUIPMENT FOR SALVAGE.
2. FOR CONCRETE REMOVAL, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE NEAREST EXISTING CONCRETE JOINTS AND USE THESE JOINTS AS LIMITS OF REMOVAL TO MINIMIZE IMPACT TO ADJACENT CONCRETE.
3. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES WITH CARE AND VERIFY DEPTH AND HORIZONTAL LOCATION PRIOR TO CUTTING OR REMOVING PIPE. ALL WORK SHALL COMPLY WITH COH UTILITY LOCATION REQUIREMENTS.





NO.	DATE	REVISION	APP.

DEMOLITION KEY NOTES:

1	EXISTING FENCE SHALL REMAIN UNLESS OTHERWISE NOTED.
2	REMOVE EXISTING WATERLINE AS SHOWN. CUT AND PLUG AT LIMITS PER COH STANDARD SPECIFICATIONS. COORDINATE SHUTDOWNS AND TIE-INS WITH HOUSTON DRINKING WATER OPERATIONS.
3	REMOVE FIRE HYDRANTS, VALVES AND ASSOCIATED APPURTENANCES WITHIN INDICATED LIMITS. PLUG REMAINING CONNECTIONS AND RESTORE TRENCH PER COH REQUIREMENTS.
4	PROTECT ALL ACTIVE WATERLINES DURING DEMOLITION. HAND EXCAVATION REQUIRED WHERE CONFLICTS EXIST PER COH UTILITY LOCATION REQUIREMENTS.
5	ABANDON EXISTING WATERLINE IN PLACE AS SHOWN IN THE DRAWINGS. FILL OR CAP PER COH-APPROVED METHOD.
6	REMOVE EXISTING SANITARY SEWER PIPE WHERE INDICATED. MAINTAIN ACTIVE SEWER SERVICE UNTIL BYPASS PUMPING IS APPROVED PER COH IDM CHAPTER 8.
7	REMOVE SANITARY MANHOLES; REMOVE TO A MINIMUM OF 2 FT BELOW FINISH GRADE, GROUT/CAP ALL PENETRATIONS, AND BACKFILL/COMPACT PER COH GEOTECHNICAL AND WASTEWATER REQUIREMENTS.
8	ABANDON SANITARY SEWER PIPE SEGMENTS IN PLACE BY BULKHEADING AND FLOWABLE FILLING TO PREVENT FUTURE VOIDS PER COH WASTEWATER STANDARDS.
9	BYPASS PUMPING (IF REQUIRED) SHALL FOLLOW APPROVED SEQUENCING, TEMPORARY DISCHARGE ROUTING, AND COH WASTEWATER POLICIES; NO DEMOLITION AFFECTING FLOW MAY BEGIN PRIOR TO APPROVAL.
10	SAWCUT PAVEMENT, SIDEWALK, AND DRIVEWAYS AT DEMOLITION LIMITS. REMOVE SURFACING MATERIALS PER COH SPECIFICATIONS.
11	REMOVE EXISTING STORM DRAIN AS NEEDED PER PROPOSED SANITARY SEWER INSTALLATION CONFLICTS.
12	REMOVE EXISTING MAIL BOX AS REQUIRED AND PROVIDE TEMPORARY MAILBOX PER UNITED STATES POSTAL OFFICE (USPS) REQUIREMENTS.
13	COORDINATE WITH FRANCHISE UTILITIES (GAS, ELECTRIC, TELECOM) FOR DEMOLITION WITHIN SHARED CORRIDORS. FOLLOW COH UTILITY LOCATION GUIDELINES.

DEMOLITION KEY NOTES:

14	REMOVE EXISTING ROADSIDE DITCHES PER APPROVED SEQUENCING.
15	PROTECT EXISTING INLET IN PLACE.
16	REMOVE EXISTING STORM INLET AS REQUIRED.
17	PROTECT IN PLACE ALL ACTIVE WASTEWATER LINES DURING DEMOLITION; HAND-EXCAVATE WHERE CONFLICT EXISTING PER COH UTILITY LOCATION REQUIREMENTS.
18	REMOVE EXISTING CONCRETE PAVEMENT, SEE GENERAL NOTE 2.
19	REMOVE EXISTING CURB/CURB & GUTTER.
20	REMOVE EXISTING GRASS.
21	REMOVE EXISTING CONCRETE MEDIAN.
22	REMOVE EXISTING FENCE/GATE.
23	REMOVE EXISTING CONCRETE DRIVEWAY.
24	MAINTAIN WATER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
25	MAINTAIN SANITARY SEWER SERVICES DURING DEMOLITION, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR COH APPROVAL.
26	PROTECT EXISTING TREE, REFER TO TREE PRESERVATION SHEETS.
27	REMOVE EXISTING DIRT DRIVEWAY.

C-417-PL

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: RODS, INC
FB NO. _____

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

DEMOLITION PLAN – TIDWELL RD STA 88+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
CHELSEA LEGER, P.E.	
SHEET NO. 77 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\069-077 TIDWELL-DEMOLITION PLANS.dwg PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

1. GENERAL

PHASE 1 STEP 1: INSTALLATION OF TEMPORARY SIGNALS AT THE INTERSECTIONS OF TIDWELL AND HIRSH RD AS WELL AS TIDWELL AND LOCKWOOD RD. CONTRACTOR TO UTILIZE TRAFFIC CONTROL STANDARDS DURING THE CONSTRUCTION OF THE TEMPORARY SIGNALS.
PHASE 1 STEP 2: INSTALLATION OF TEMPORARY PAVEMENT, PLACING OF ADVANCE WARNING SIGNS AND TRAFFIC CONTROL BARRICADES ALONG TIDWELL RD CLOSING THE EASTBOUND DIRECTION LANES FOR A TWO-DAY TRAFFIC OPERATION AND IN ACCORDANCE WITH THE TRAFFIC CONTROL LAYOUTS FOR PHASE 1. PLACEMENT OF SIGNS AND AWS TO BE IN ACCORDANCE WITH THE TCP STANDARDS. TEMPORARY TRAFFIC SIGNALS TO BEGIN OPERATION DURING THIS STEP.
PHASE 1 STEP 3: INSTALLATION OF A 84-INCH SANITARY SEWER WITH MULTIPLE TUNNEL SHAFT WORK AREAS ALONG TIDWELL DR. USING TRENCHLESS CONSTRUCTION METHODS. CONTRACTOR TO DETERMINE SEQUENCE OF SHAFT CONSTRUCTION DURING THIS PHASE.
PHASE 1 STEP 4: INSTALLATION OF THE WATER LINE AND PAVEMENT RESTORATION ON HIRSCH RD AND TIDWELL RD INTERSECTION AND LOCKWOOD RD AND TIDWELL RD INTERSECTION, PLACING OF ADVANCE WARNING SIGNS AND TRAFFIC CONTROL BARRICADES IN ACCORDANCE TO ONE LANE CLOSURE TCP STANDARDS. REOPEN EASTBOUND LANES ON TIDWELL AND SHIFT TRAFFIC BACK TO THE EXISTING CONFIGURATION BEYOND WORKZONE LOCATION 5.

PHASE 2: INSTALLATION OF TRAFFIC CONTROL DEVICES ALONG DODSON RD IN ACCORDANCE WITH PHASE 2 LAYOUTS WITH A FULL CLOSURE OF DODSON RD BETWEEN KINAID DR AND SPARKS ST AS WELL AS BETWEEN TROUT ST AND HAGE ST. INSTALLATION OF 84-INCH SANITARY SEWER USING TRENCHLESS CONSTRUCTION METHODS ALONG DODSON BETWEEN WORKZONE LOCATIONS 3, 4 AND 5. RESTORE PAVEMENT AND REOPEN WORKZONES TO EXISTIG TRAFFIC CONFIGURATION ONCE THIS STEP IS COMPLETED.
PHASE 3: INSTALLATION OF TRAFFIC CONTROL DEVICES ALONG DODSON RD IN ACCORDANCE WITH PHASE 3 LAYOUTS WITH FULL CLOSURE OF DODSON RD BETWEEN TOPPING ST AND GAGER ST. AS WELL AS TROUT ST TO HAGE ST. INSTALLATION OF 84-INCH SANITARY SEWER USING TRENCHLESS CONSTRUCTION METHODS ALONG DODSON BETWEEN SHAFT LOCATION 2 AND 3. RESTORE PAVEMENT AND REOPEN WORKZONES TO EXISTING TRAFFIC CONFIGURATION ONCE THIS STEP IS COMPLETED.
PHASE 4: INSTALLATION OF TRAFFIC CONTROL DEVICES ALONG DODSON RD IN ACCORDANCE WITH PHASE 4 LAYOUTS WITH FULL CLOSURE OF DODSON RD BETWEEN WILEY RD AND GAGER ST AS WELL AS GAGER ST AND TOPPING ST INSTALLATION OF 84-INCH SANITARY SEWER USING TRENCHLESS CONSTRUCTION METHODS ALONG DODSON BETWEEN SHAFT LOCATION 1 AND 2. RESTORE PAVEMENT AND REOPEN WORKZONES TO EXISTING TRAFFIC CONFIGURATION ONCE THIS STEP IS COMPLETED.

2. TRAFFIC OPERATIONS (THROUGH MOVEMENT)

THROUGH TRAFFIC ON TIDWELL RD SHALL BE MAINTAINED DURING PHASE CONTRUCTION USING TEMPORARY LANE SHIFTS, MERGE TAPERS AND CHANNELIZATIONS TO ROUTE VEHICLES SAFELY AROUND ACTIVE WORK AREAS.

3. STAGING / ROLLING WORK ZONES

CONSTRUCTION IS ANTICIPATED TO PROGRESS USING A ROLLING/SEGMENTED TRAFFIC CONTROL APPROACH. ACTIVE WORK LIMITS SHALL BE ESTABLISHED ONLY WHERE WORK IS CONCURRING AND SHALL BE CLEARLY DELINEATED WITH APPROVED DEVICES AND SIGNING.

4. WORKZONE PROTECTION / CONTRACTOR USE AREAS

EACH WATERLINE OPEN PIT FITTING AND SHAFT LOCATION SHALL BE TREATED AS AN ACTIVE WORK ZONE WITH APPROPRIATE BUFFER SPACE AND TRAFFIC EXCLUSION/CLOSED AREAS AS SHOWN ON THE PLANS. CLOSED AREAS SHALL NOT BE ACCESSIBLE TO PUBLIC TRAFFIC AND MAY BE USED FOR CONTRACTOR OPERATIONS/STAGING WHERE INDICATED. POSITIVE PROTECTION (BARRIERS/FENCING) SHALL BE PROVIDED AS REQUIRED FOR PUBLIC SAFETY.

5. ACCESS (DRIVEWAYS /LOCAL TRAFFIC)

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICAL. WHERE "LOCAL TRAFFIC ONLY" OR TEMPORARY RESTRICTIONS ARE SHOWN, THE CONTRACTOR SHALL MAINTAIN SAFE ACCESS AND COORDINATE ANY TEMPORARY DRIVEWAY CLOSURES WITH PROPERTY OWNERS IN ADVANCE. MAINTAIN AT LEAST ONE ACCESS POINT TO COMMERCIAL PROPERTIES WHEN FEASIBLE.

6. PEDESTRIAN / ADA

PEDESTRIAN ROUTES AND ADA ACCESS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. WHERE PEDESTRIAN ACCESS TO PUSH BUTTONS, CROSSWALKS, OR SIDEWALKS CANNOT BE MANTAINED SAFELY, THE CONTRACTOR SHALL IMPLEMENT THE APPROVED PEDESTRIAN DETOUR AND POST REQUIRED CLOSURE/DETOUR SIGNING AS SHOWN ON THE TCP SHEETS.

7. TRAFFIC SIGNALS / INTERSECTIONS

EXISTING TRAFFIC SIGNAL OPERATIONS MAY REQUIRE TEMPORARY ADJUSTMENTS (TIMING/PHASING/DETECTION) TO MATCH TEMPORARY LANE CONFIGURATIONS AND MAINTAIN SAFE OPERATIONS. CONTRACTOR SHALL COORDINATE WITH COH TRAFFIC OPERATIONS PRIOR TO IMPLEMENTATION AND SHALL RESTORE SIGNAL OPERATIONS TO ORIGINAL CONDITIONS UPON COMPLETITION (OR AS DIRECTED BY COH)

8. METRO BUS STOPS

BUS STOPS IDENTIFIED ON TCP SHEETS SHALL EITHER REMAIN IN SERVICE, BE TEMPORARILY RELOCATED, OR BE TEMPORARILY SUSPENDED AS INDICATED. CONTRACTOR SHALL COORDINATE WITH METRO FOR STOP RELOCATION/SUSPENSION(METRO: 713-615-6195), MAINTAIN ADA ACCESS WHERE STOPS REMAIN IN SERVICE, AND POST REQUIRED TEMPORARY SIGNING/NOTICES.

9. DEVICES, SIGNING AND PAVEMENT MARKINGS

ADVANCE WARNING SIGNING, CHANNELIZING DEVICES (DRUMS/DELINIATORS), BARRICADES, WARNING LIGHTS, ARROW BOARDS (AS REQUIRED) SHALL BE INSTALLED AND MANTAINED AS DEPICTED ON THE TCP SHEETS. DEVICES SHALL BE ADJUSTED AS NECESSARY TO ACCOMMODATE DRIVEWAYS, INTERSECTIONS, AND MEDIAN OPENINGS WHILE MAINTAINING SAFETY.

10. MAINTENANCE, HOUSEKEEPING AND RESTORATION

CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL DEVICES IN PROPER POSITION AND CONDITION AT ALL TIMES, REMOVE SILLAGE FROM HAULING OPERATIONS IMMEDIATELY, AND REPAIR/REPLACE ANY DAMAGED SIGNS, MARKINGS, OR TRAFFIC SIGNAL COMPONENTS. UPON COMPLETITION OF EACH STAGE, TEMPORARY DEVICES/MARKINGS SHALL BE REMOVED AS REQUIRED AND FINAL CONDITIONS RESTORED PER PROJECT REQUIREMENTS AND COH STANDARDS.

PROPOSED BUS STATIONS SCHEDULE

LOCATION	STOP ID	EXISTING STATION	PROPOSED STATUS
TIDWELL RD @ DODSON ST	2694		OUT OF SERVICE
TIDWELL RD @ FRIENDLY RD	2695		TEMPORARY RELOCATION
TIDWELL RD @ LUNDY RD	2696		TEMPORARY RELOCATION
TIDWELL RD @ LAVANDER ST	2697		OUT OF SERVICE
TIDWELL RD @ LOCKWOOD DR	2698		TEMPORARY RELOCATION

TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

ROADWAY	POSTED SPEED	TAPER LENGTH	SPACING CHANNELIZING DEVICES		SIGN SPACING	BUFFER SPACE
			TAPER	TANGENT		
PARKER RD	35	245'	35'	70'	160'	120'
GAGER ST	30	180'	30'	60'	120'	90'
TOPPING ST	30	180'	30'	60'	120'	90'
FOLGER ST	30	180'	30'	60'	120'	90'
HITCHCOCK ST	30	180'	30'	60'	120'	90'
TROUT ST	30	180'	30'	60'	120'	90'
HAGE ST	30	180'	30'	60'	120'	90'
KINKAID ST	30	180'	30'	60'	120'	90'
SPARKS ST	30	180'	30'	60'	120'	90'
TURNER DR	30	180'	30'	60'	120'	90'
DODSON ST	30	180'	30'	60'	120'	90'
FRIENDLY RD	30	180'	30'	60'	120'	90'
LUNDY RD	30	180'	30'	60'	120'	90'
LAVENDER ST	30	180'	30'	60'	120'	90'
LOCKWOOD DR	30	180'	30'	60'	120'	90'

PROPOSED TRAFFIC SIGNAL MODIFICATIONS

LOCATION		REQUIRED MODIFICATIONS (SUMMARY)	EB APPROACH (DETAIL)	WB APPROACH (DETAIL)	NB APPROACH (DETAIL)	SB APPROACH (DETAIL)
TIDWELL RD @ HIRSCH RD		SHIFT EB MOVEMENT TO WB INSIDE LANE; RE-ALIGN SIGNAL DISPLAYS	RE-ALIGN/RELOCATE SIGNAL HEADS TO SERVE (1) EB TEMPORARY LANE OPERATING IN THE WB INSIDE LANE (CONTRA-FLOW/SHIFT CONDITION). VERIFY VISIBILITY AND LANE LINE-UP	ADJUST WB SIGNAL HEADS TO MAINTAIN PROPER LANE LINE-UP AND INDICATION VISIBILITY UNDER TEMPORARY LANE CONFIGURATION		
TIDWELL RD @ LOCKWOOD DR		SHIFT EB MOVEMENT TO WB INSIDE LANE; RE-ALIGN SIGNAL DISPLAYS	RE-ALIGN/RELOCATE GISNAL HEADS TO SERVE (1) EB TEMPORARY LANE OPERATING IN THE WB INSIDE LANE (CONTRA-FLOW/SHIFT CONDITION). VERIFY VISIBILITY AND LANE LINE-UP	ADJUST WB SIGNAL HEADS TO MAINTAIN PROPER LANE LINE-UP AND INDICATION VISIBILITY UNDER TEMPORARY LANE CONFIGURATION	RE-ALIGN/RELOCATE SIGNAL HEADS TO SERVE (1) NB TEMPORARY LANE OPERATING IN THE WB INSIDE LANE (CONTRA-FLOW/SHIFT CONDITION). VERIFY VISIBILITY AND LANE LINE-UP	ADJUST SB SIGNAL HEADS TO MAINTAIN PROPER LANE LINE-UP AND INDICATION VISIBILITY UNDER TEMPORARY LANE CONFIGURATION

TCP01

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

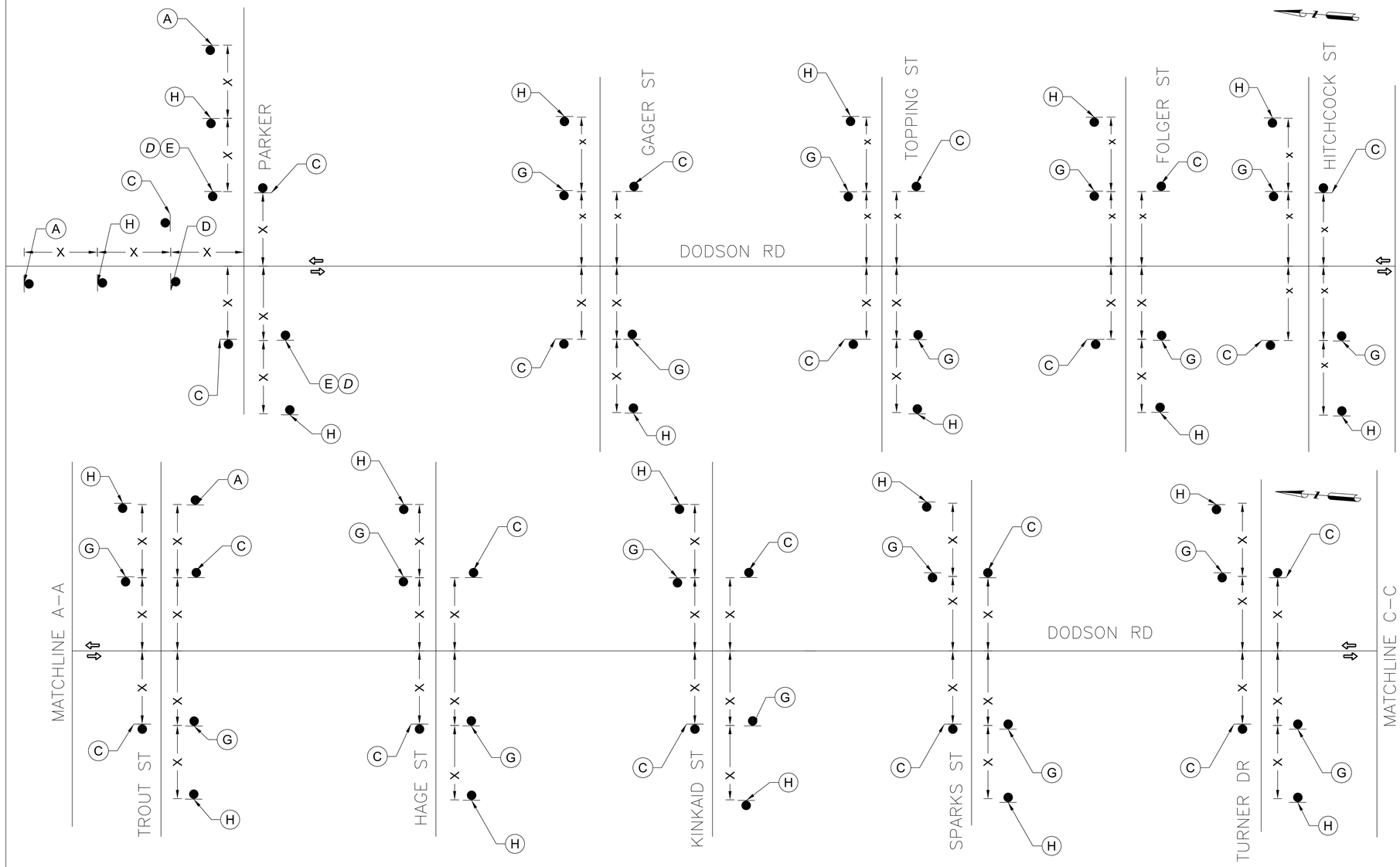
CRMP PACKAGE 6 – AREA 1-BASIN IB043

TCP NARRATIVE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 78 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENGINEERING\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

ROADWAY	POSTED SPEED	TAPER LENGTH	SPACING CHANNELIZING DEVICES		SIGN SPACING	BUFFER SPACE
			TAPER	TANGENT		
PARKER RD	35	245'	35'	70'	160'	120'
GAGER ST	30	180'	30'	60'	120'	90'
TOPPING ST	30	180'	30'	60'	120'	90'
FOLGER ST	30	180'	30'	60'	120'	90'
HITCHCOCK ST	30	180'	30'	60'	120'	90'
TROUT ST	30	180'	30'	60'	120'	90'
HAGE ST	30	180'	30'	60'	120'	90'
KINKAID ST	30	180'	30'	60'	120'	90'
SPARKS ST	30	180'	30'	60'	120'	90'
TURNER DR	30	180'	30'	60'	120'	90'

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

WORK ZONE SIGNS

(A) OBEY WARNING SIGNS / STATE LAW — R20–3T, 48"X42"

(B) ROAD WORK / NEXT X MILES — G20–1, 48"X24"

(C) END / ROAD WORK — G20–2, 36"X18"

(D) NAME / ADDRESS / CITY / STATE / CONTRACTOR — G20–6, 48"X30"

(E) ROAD WORK / NEXT X MILES → — G20–1br, 72"x24"

(F) ROAD WORK / ← NEXT X MILES — G20–1bl, 72"x24"

(G) ROAD WORK / ← NEXT X MILES / NEXT X MILES → — G20–1a, 72"x36"

(H) ROAD / WORK / AHEAD — CW20–1D, 36"x36"

GENERAL NOTES

1. Flags attached to signs where shown are OPTIONAL.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are OPTIONAL.
3. Inactive work vehicles or other equipment should be parked near the right–of–way line and not parked on the paved shoulder.
4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
6. Contractor shall provide and install traffic control devices in conformance with part VI of Texas Manual on Uniform Traffic Control Devices (TMUTCD – Latest edition with revisions) during construction.
7. No lanes shall be blocked from 7am to 9am and 4pm to 6:30pm Monday thru Friday.
8. Off duty uniformed law enforcement officers/flaggers are required to direct traffic when applicable.
9. If project is within 400 feet from a signalized intersection, the Contractor shall contact Harris County Engineering Department, Traffic Signal Maintenance at (713) 881–3210 five (5) days prior to the start of construction.

Posted Speed *	Formula	Minimum Desirable Taper Lengths "L" **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TCP02

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

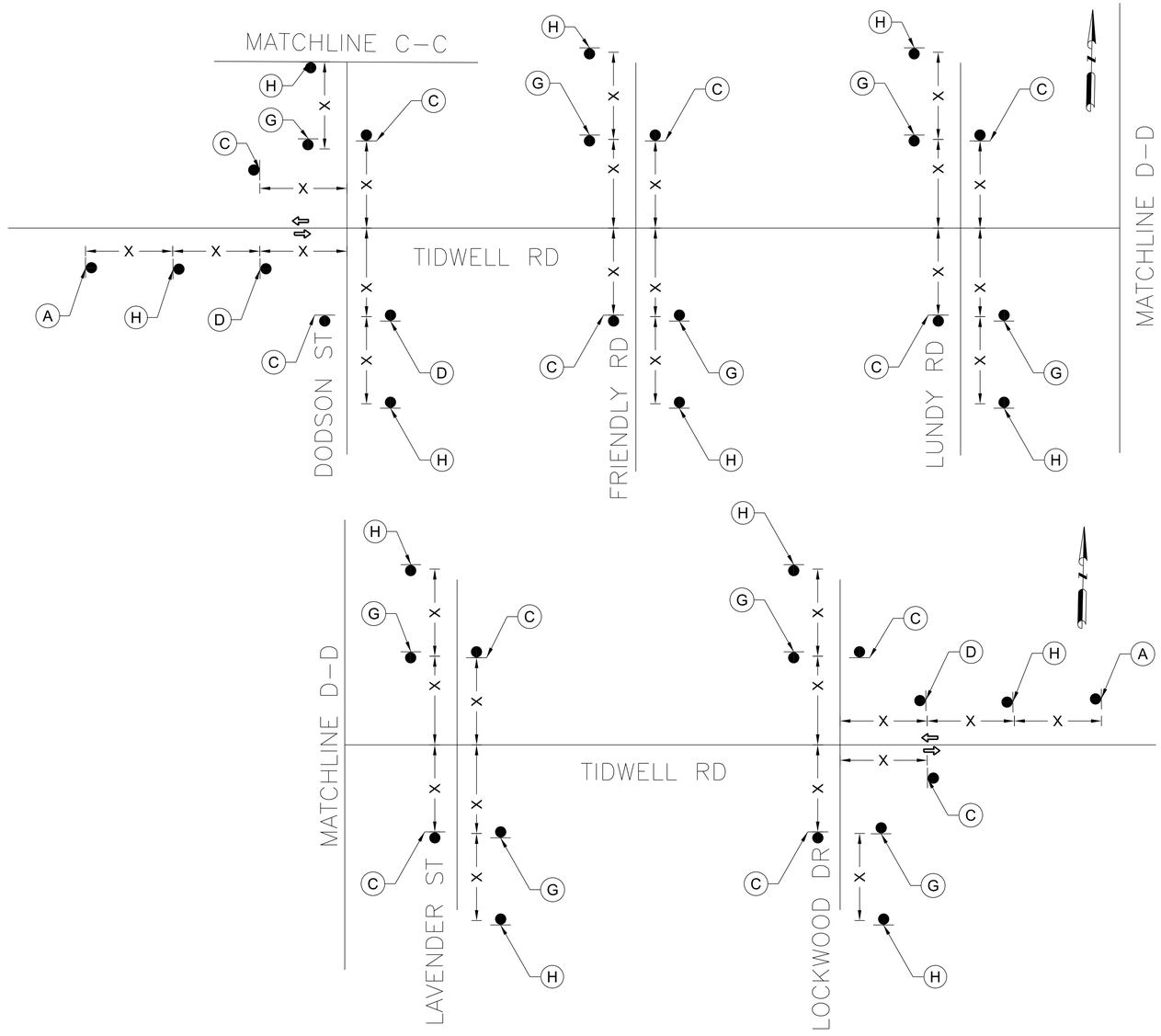
CRMP PACKAGE 6 – AREA 1–BASIN IB043

ADVANCED WARNING SIGNS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 79 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENG\TCP\02 TCP WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

ROADWAY	POSTED SPEED	TAPER LENGTH	SPACING CHANNELIZING DEVICES		SIGN SPACING	BUFFER SPACE
			TAPER	TANGENT		
DODSON ST	30	180'	30'	60'	120'	90'
FRIENDLY RD	30	180'	30'	60'	120'	90'
LUNDY RD	30	180'	30'	60'	120'	90'
LAVENDER ST	30	180'	30'	60'	120'	90'
LOCKWOOD DR	30	180'	30'	60'	120'	90'

NO.	DATE	REVISION	APP.

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

WORK ZONE SIGNS

(A) OBEY WARNING SIGNS STATE LAW — R20–3T 48"X42"

(B) ROAD WORK NEXT X MILES — G20–1 48"X24"

(C) END ROAD WORK — G20–2 36"X18"

(D) NAME ADDRESS CITY STATE CONTRACTOR — G20–6 48"X30"

(E) ROAD WORK NEXT X MILES → — G20–1br 72"x24"

(F) ROAD WORK ← NEXT X MILES — G20–1bl 72"x24"

(G) ROAD WORK ← NEXT X MILES NEXT X MILES → — G20–1a 72"x36"

(H) ROAD WORK AHEAD — CW20–1D 36"x36"

GENERAL NOTES

1. Flags attached to signs where shown are OPTIONAL.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are OPTIONAL.
3. Inactive work vehicles or other equipment should be parked near the right–of–way line and not parked on the paved shoulder.
4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
6. Contractor shall provide and install traffic control devices in conformance with part VI of Texas Manual on Uniform Traffic Control Devices (TMUTCD – Latest edition with revisions) during construction.
7. No lanes shall be blocked from 7am to 9am and 4pm to 6:30pm Monday thru Friday.
8. Off duty uniformed law enforcement officers/flaggers are required to direct traffic when applicable.
9. If project is within 400 feet from a signalized intersection, the Contractor shall contact Harris County Engineering Department, Traffic Signal Maintenance at (713) 881–3210 five (5) days prior to the start of construction.

Posted Speed *	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TCP03

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

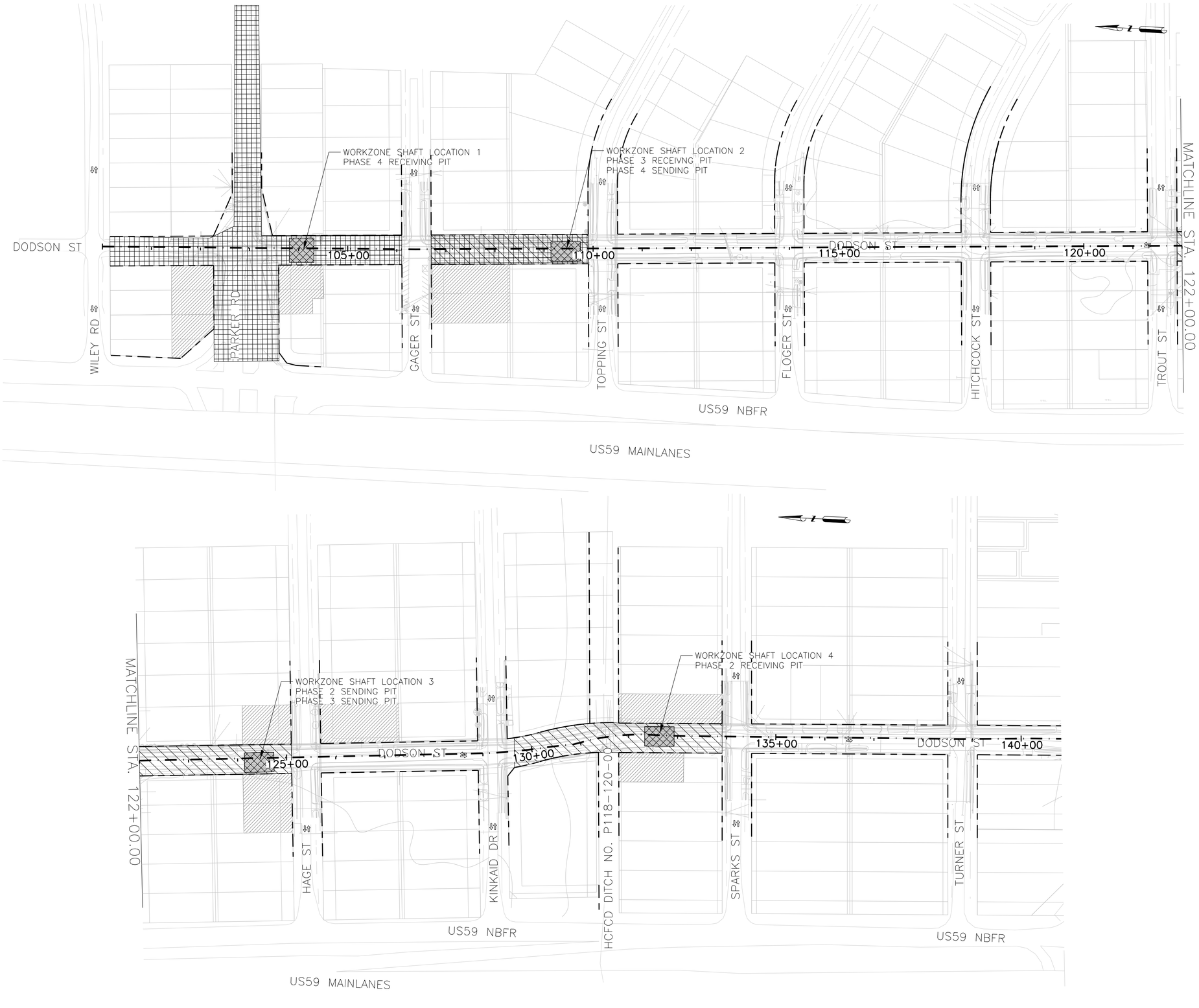
CRMP PACKAGE 6 – AREA 1–BASIN IB043

ADVANCED WARNING SIGNS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 80 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



TCP LEGEND

- PHASE 1 WORKZONE
- PHASE 2 WORKZONE
- PHASE 3 WORKZONE
- PHASE 4 WORKZONE
- SHAFT LOCATION – ACTIVE CONSTRUCTION AREA
- PROP CONSTRUCTION EASEMENT

NO.	DATE	REVISION	APP.

NOTES:

1–CONTRACTOR SHALL MAINTAIN SAFE TWO WAY TRAFFIC AND LOCAL ACCESS AT ALL TIMES UNLESS OTHERWISE NOTED.

2–ALL SIGNING, CHANNELIZATION DEVICES AND PAVEMENT MARKINGS SHALL BE INSTALLED PRIOR TO ANY LANE CLOSURES.

3–MAINTAIN EMERGENCY VEHICLE ACCESS THROUGH PROJECT LIMITS AT ALL TIMES.

0 100 200
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1 – BASIN IB043

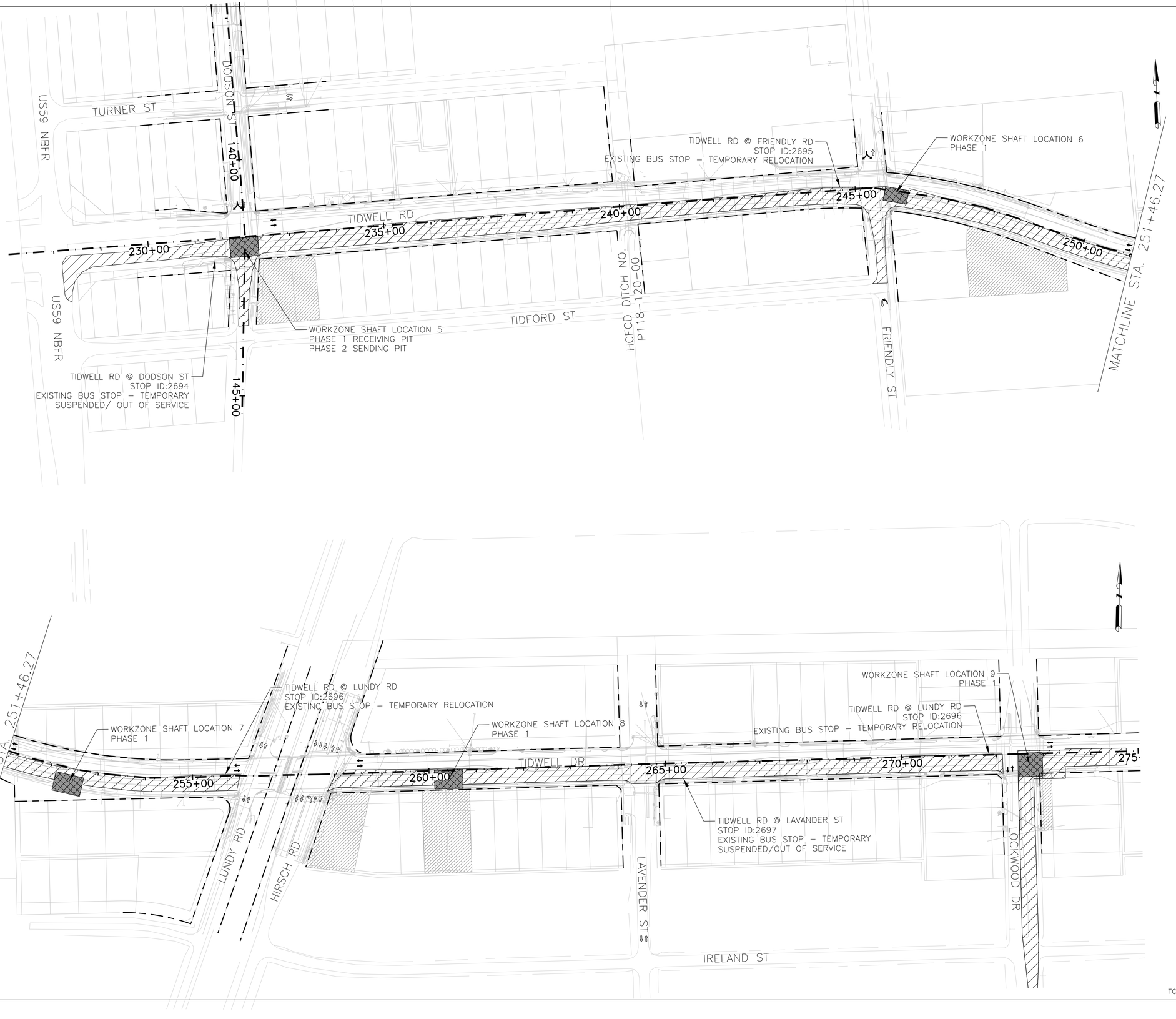
OVERALL TCP PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 81 OF 192	

60% SUBMITTAL

TCP04

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EN01_TRY\02X-60XX-TWATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



TCP LEGEND

- PHASE 1 WORKZONE
- PHASE 2 WORKZONE
- PHASE 3 WORKZONE
- PHASE 4 WORKZONE
- SHAFT LOCATION – ACTIVE CONSTRUCTION AREA
- PROP CONSTRUCTION EASEMENT

NOTES:

1–CONTRACTOR SHALL MAINTAIN SAFE TWO WAY TRAFFIC AND LOCAL ACCESS AT ALL TIMES UNLESS OTHERWISE NOTED.

2–ALL SIGNING, CHANNELIZATION DEVICES AND PAVEMENT MARKINGS SHALL BE INSTALLED PRIOR TO ANY LANE CLOSURES.

3–MAINTAIN EMERGENCY VEHICLE ACCESS THROUGH PROJECT LIMITS AT ALL TIMES.

0 100 200
HORIZONTAL

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 –
AREA 1 – BASIN IB043

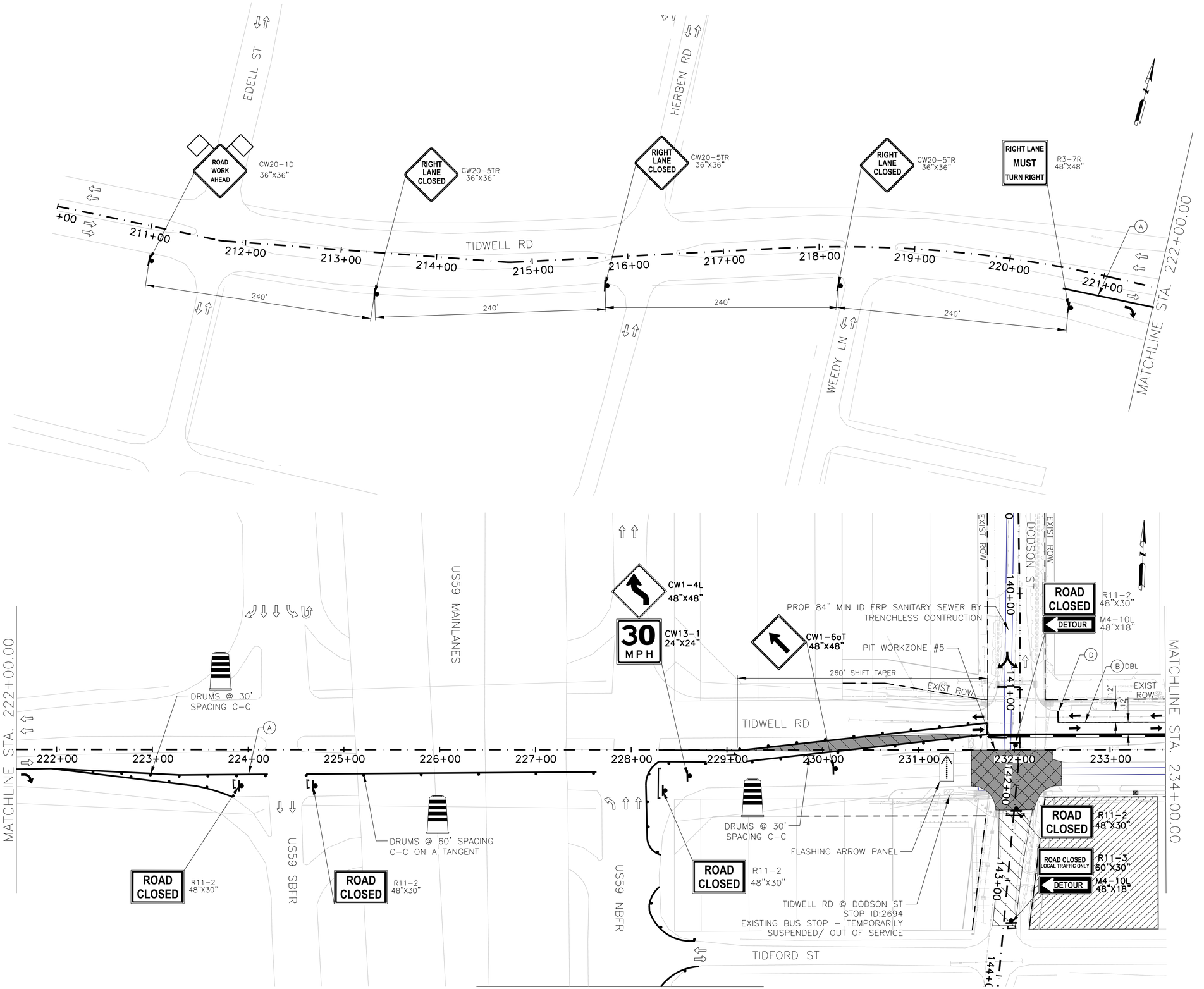
OVERALL TCP PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 82 OF 192	

60% SUBMITTAL

TCP05

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\PLOT DRAWING\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

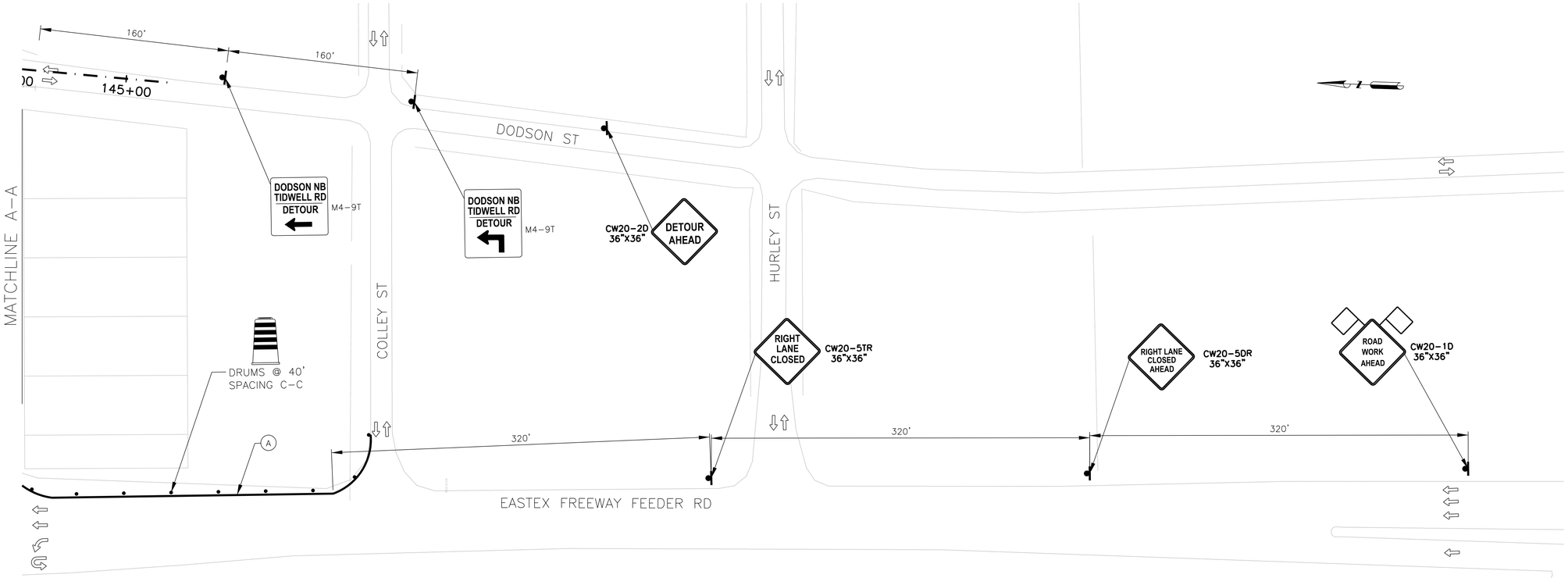
PHASE 1 STEP 3 TRAFFIC CONTROL PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 83 OF 192	

60% SUBMITTAL

TCP06

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible] WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

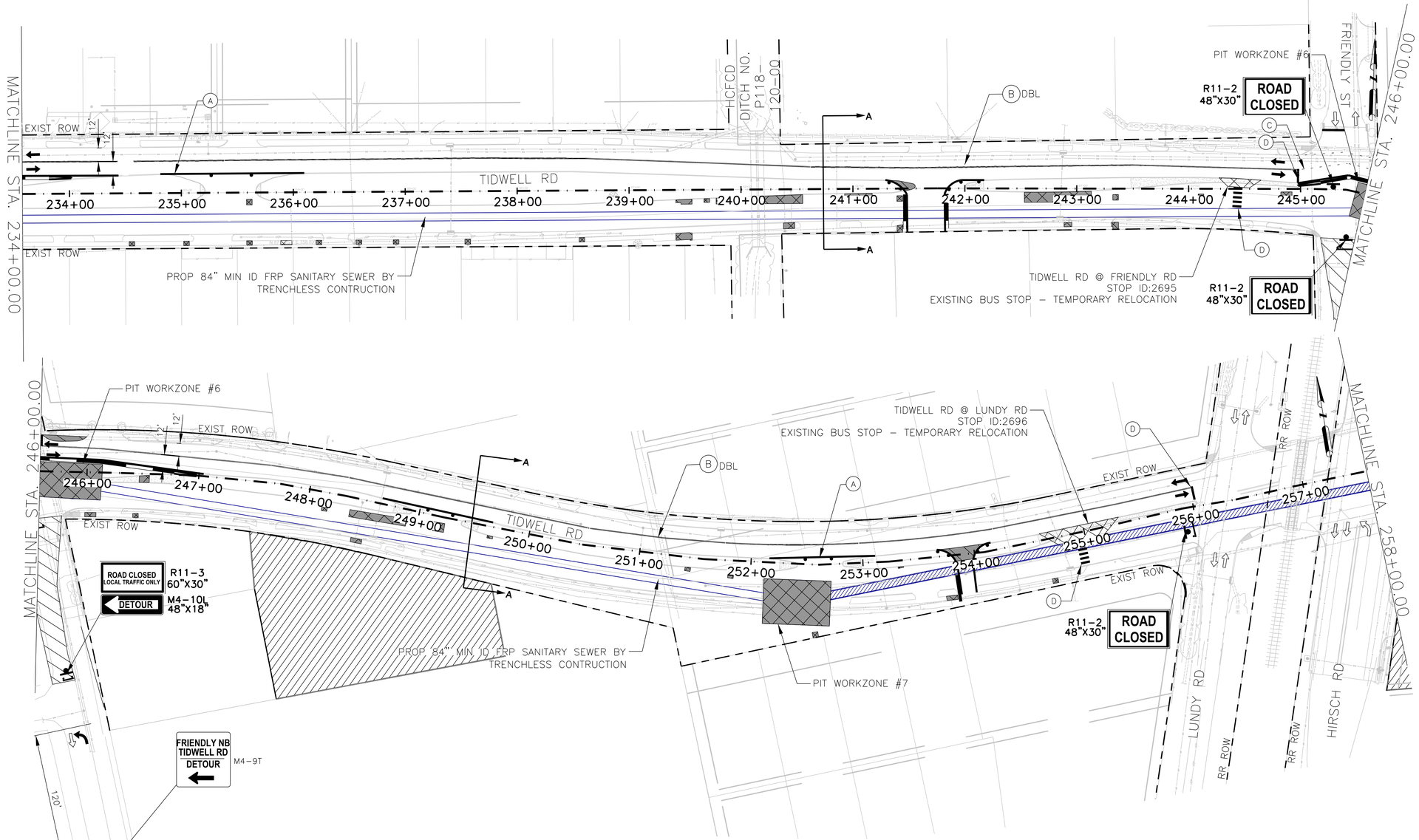
PHASE I STEP II TRAFIC CONTROL PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 84 OF 192	

60% SUBMITTAL

TCP07

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EN01_ENGR\X02_CAD\XXXX



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

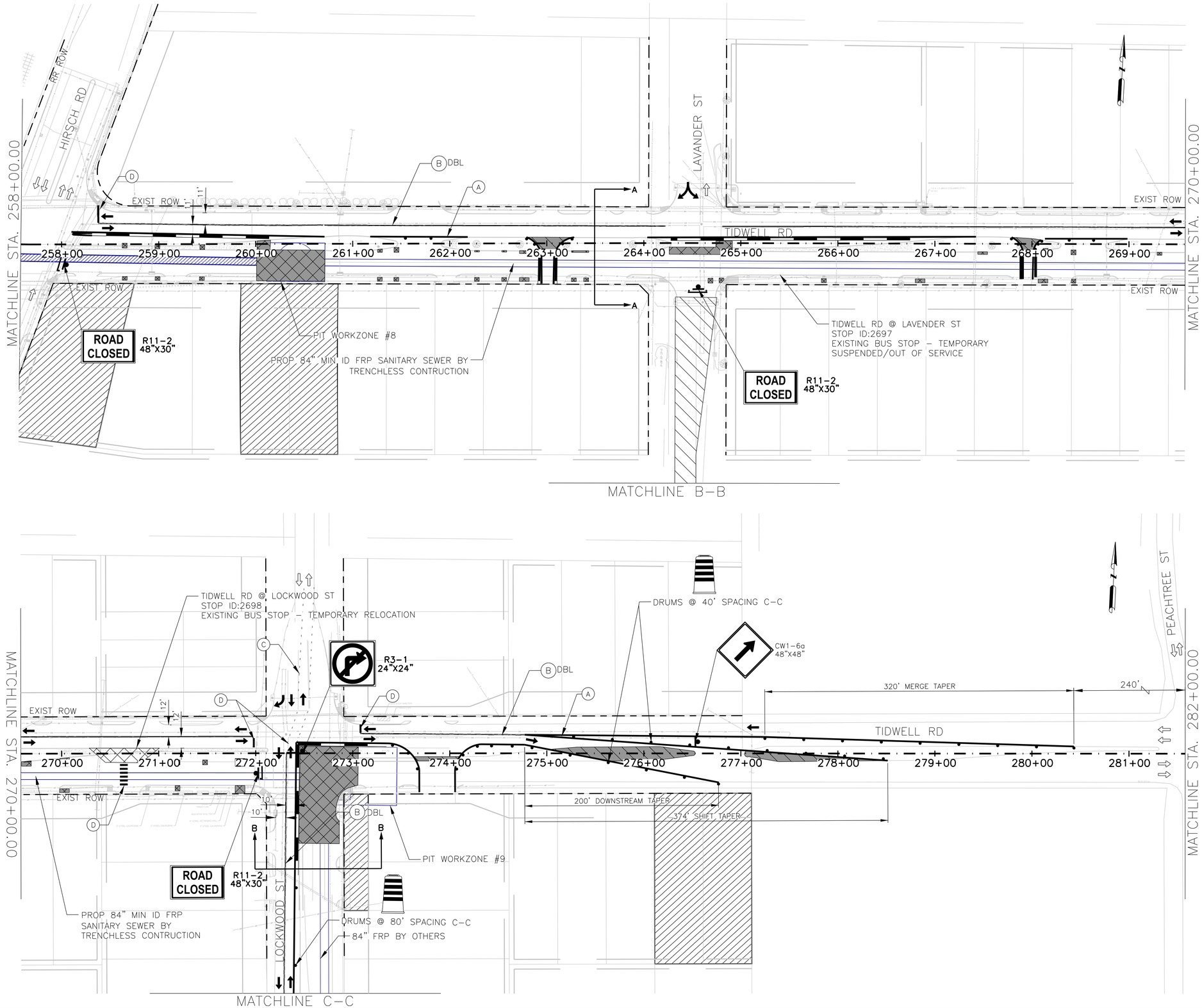
PHASE 1 STEP 3 TRAFFIC CONTROL PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 85 OF 192	

TCP08

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EMAIL\SHEETS\8X11 TCP\8X11 TCP WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

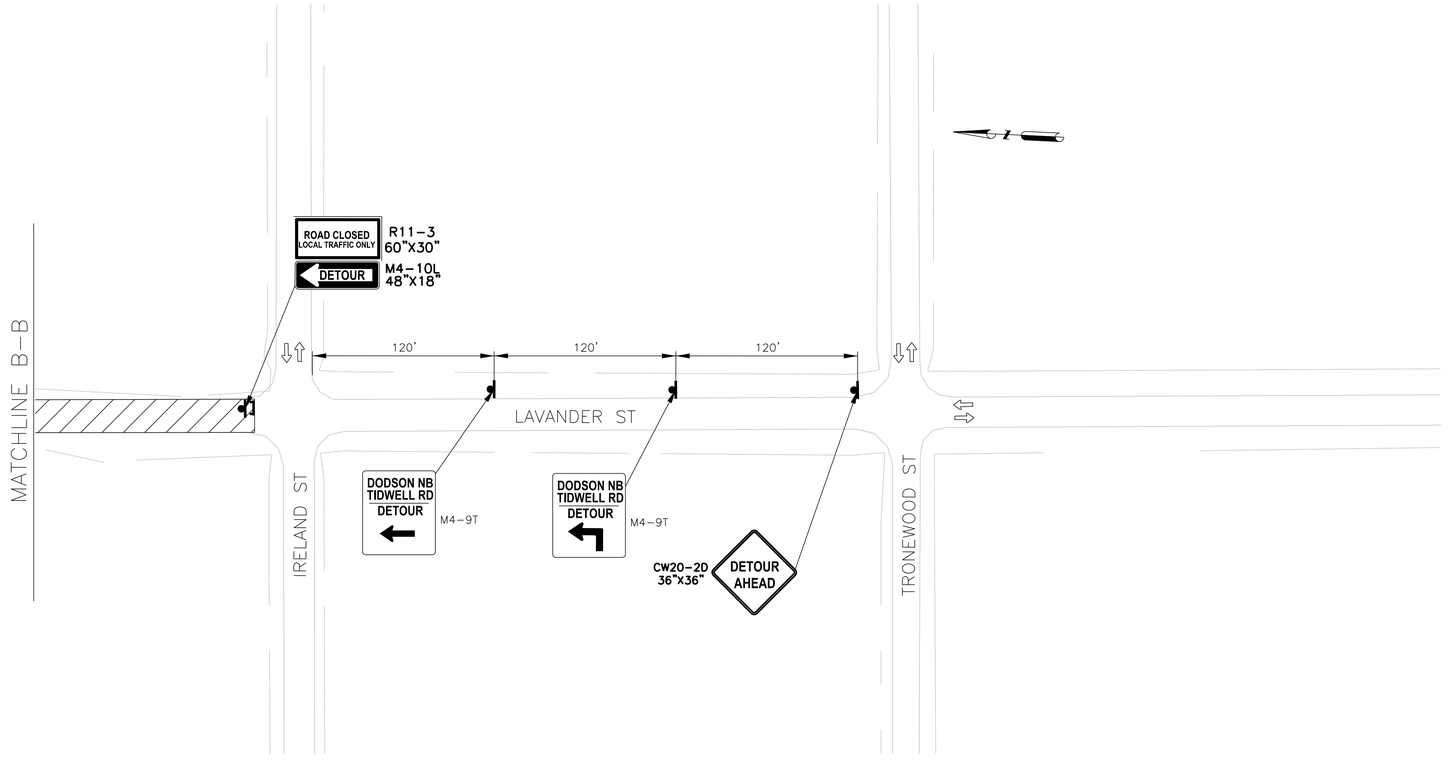
PHASE 1 STEP 3 TRAFFIC CONTROL PLAN

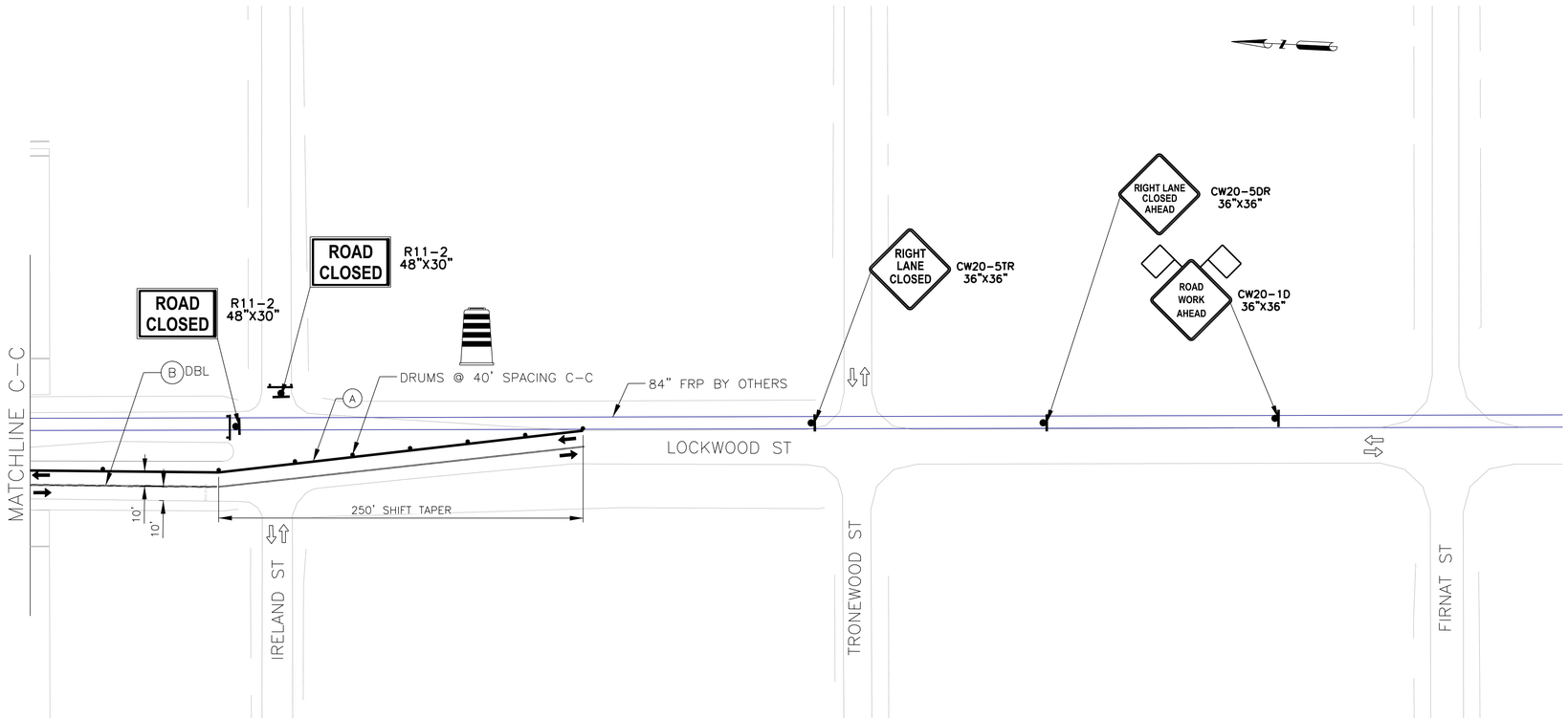
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 86 OF 192	

60% SUBMITTAL

TCP09

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENG\TCP\XREF\XREF-EXHIBIT WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM





LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

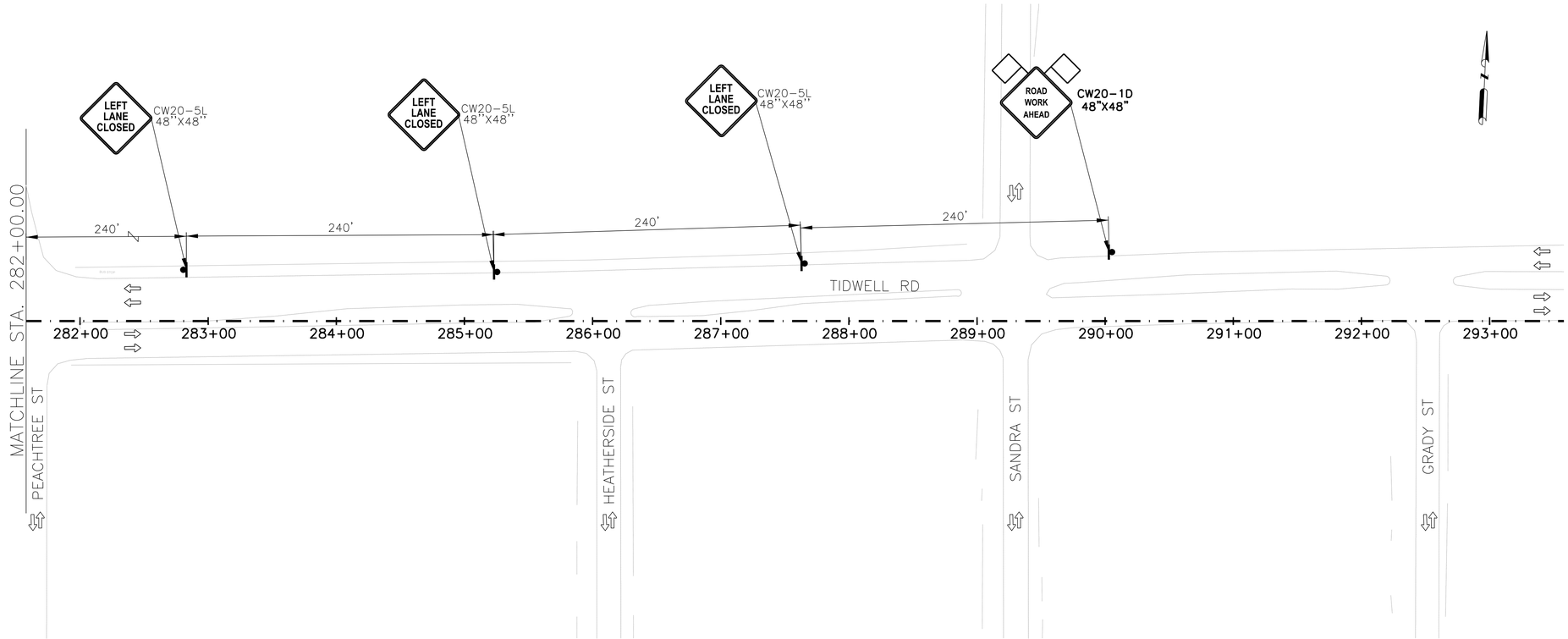
PHASE I STEP II TRAFIC CONTROL PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 87 OF 192	

60% SUBMITTAL

TCP10

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 1 STEP 3 TRAFFIC CONTROL PLAN

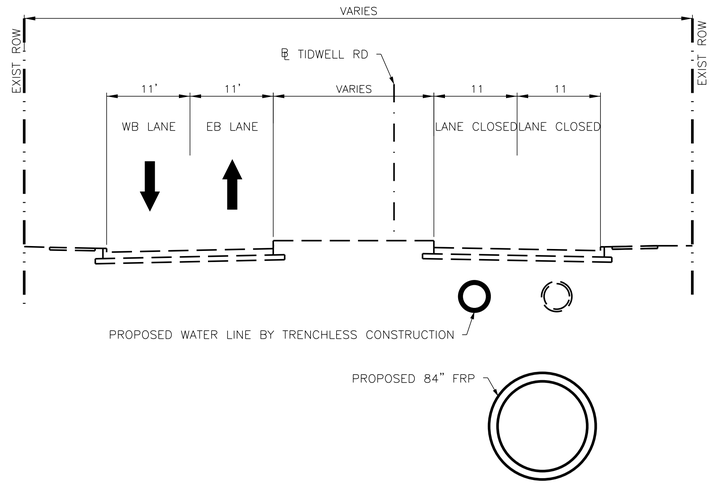
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 88 OF 192	

TCP11

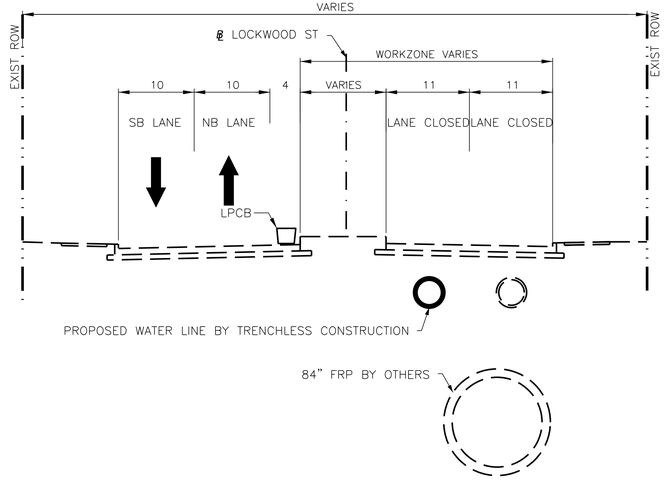
60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

PROPOSED TCP TYPICAL SECTION
SECTION A–A



PROPOSED TCP TYPICAL SECTION
SECTION B–B



NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/26
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 –
AREA 1–BASIN IB043

TCP TYPICAL SECTIONS
PHASE 1 STEP 2

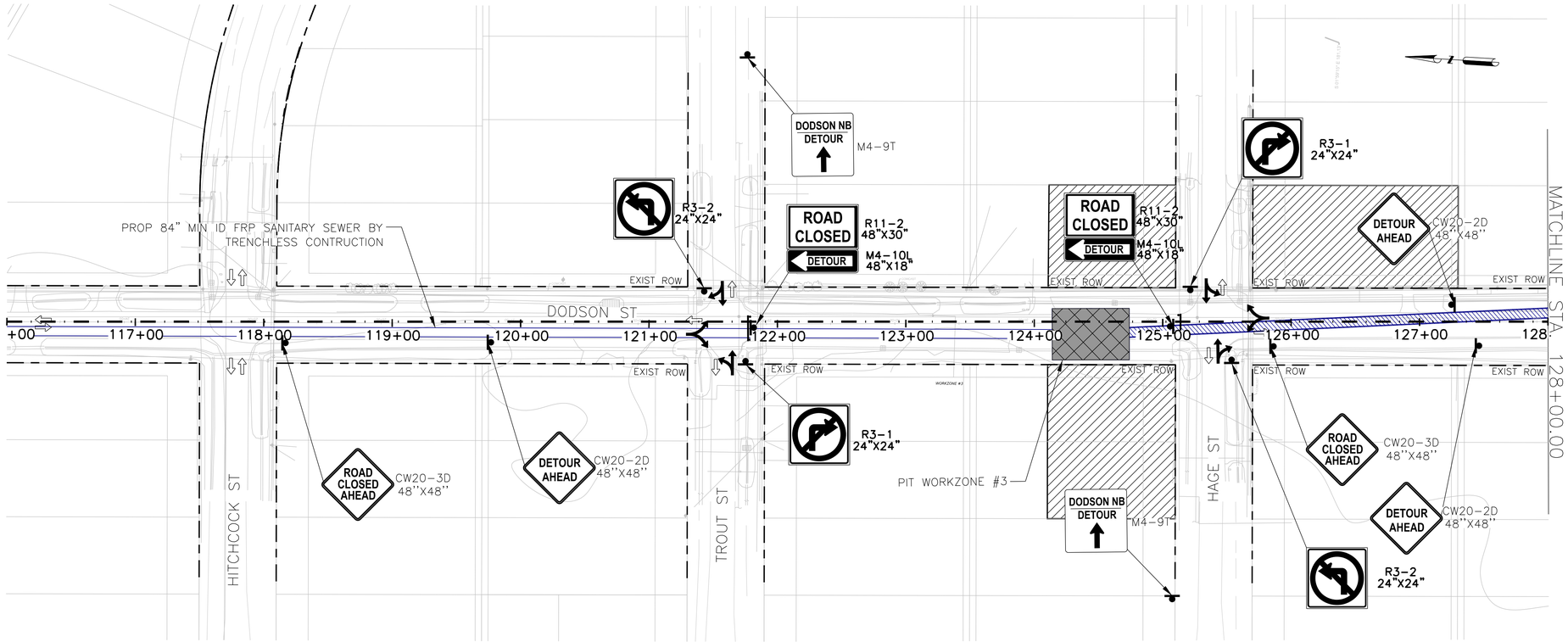
WBS NUMBER
R–001000–0031–3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 89 OF 192

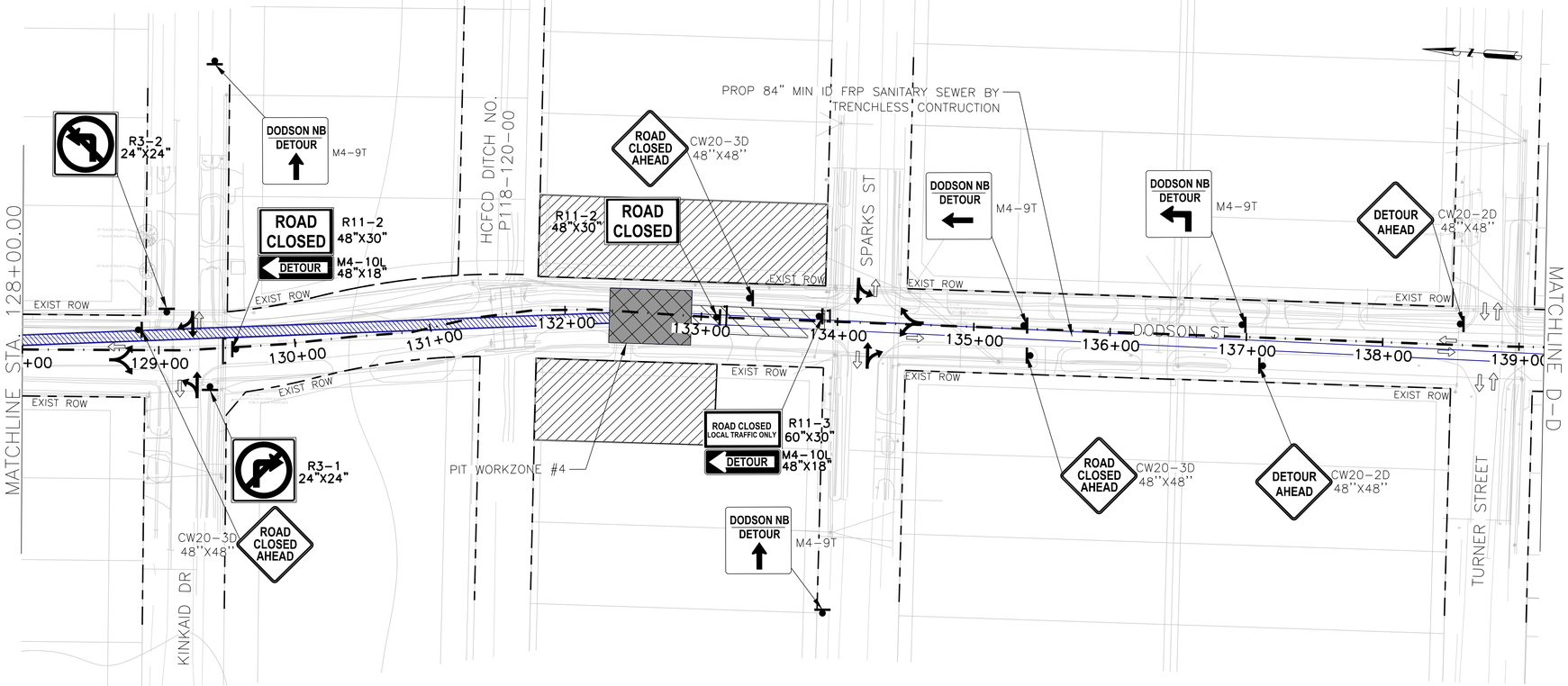
FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

TCP12

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EPM01_SHT\XREF\82X-C82XXX-TW-WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM





LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

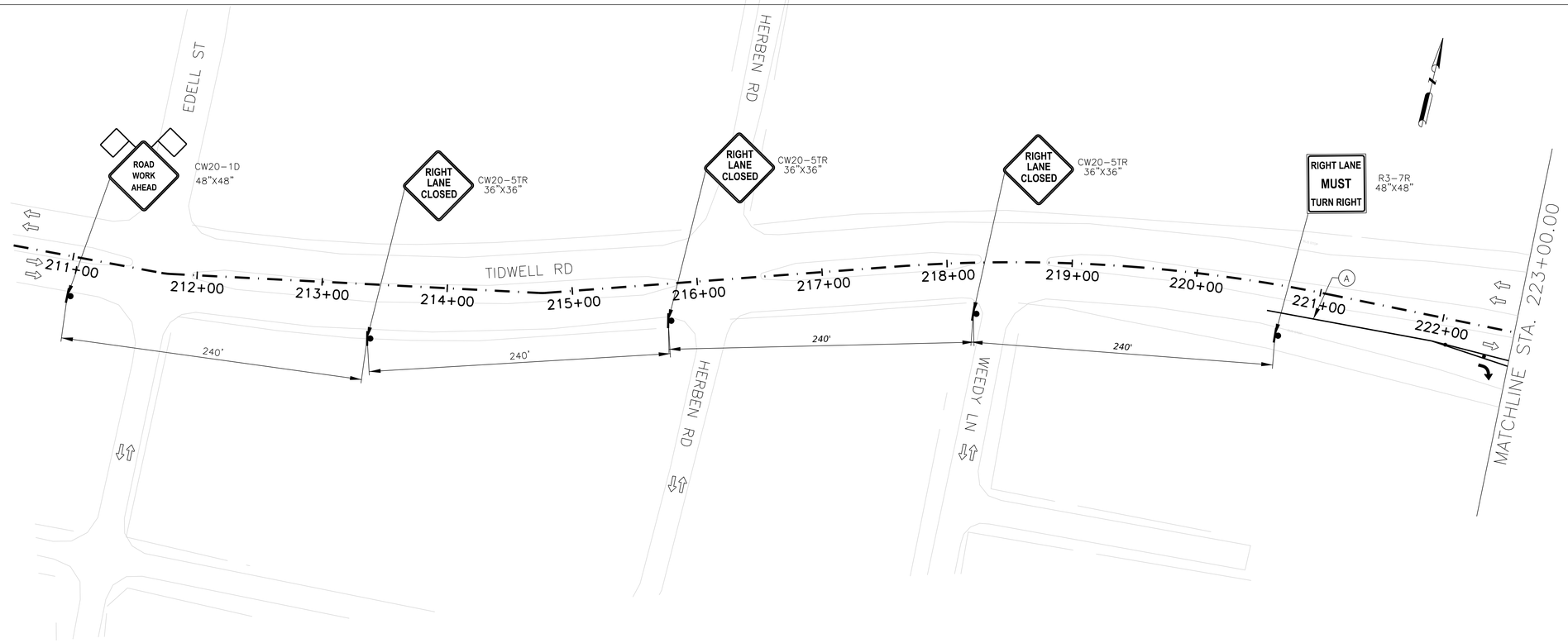
PHASE 2 TRAFFIC CONTROL PLAN

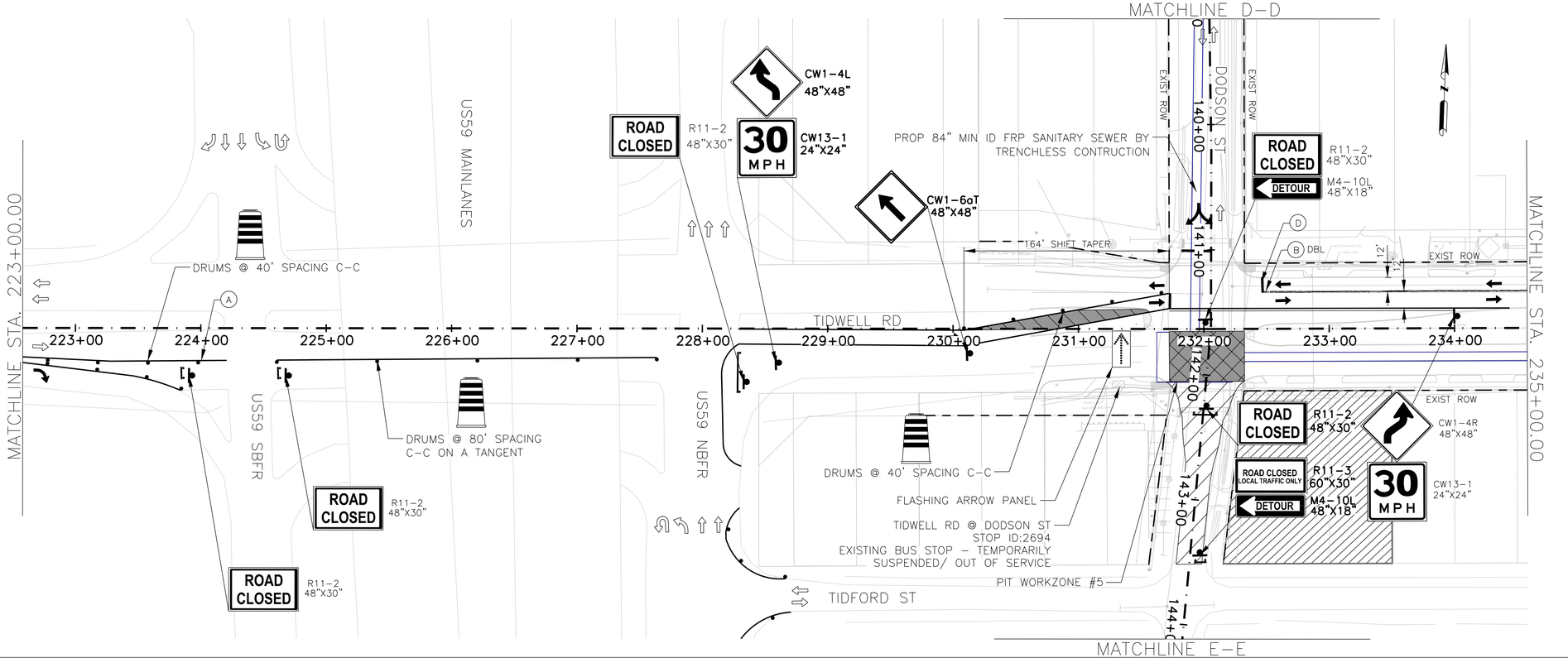
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 90 OF 192	

60% SUBMITTAL

TCP13

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]\CRMP_SHEET_TCP13.dwg PLOTTED: 8/18/2025 10:36 AM





LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 2 TRAFFIC CONTROL PLAN

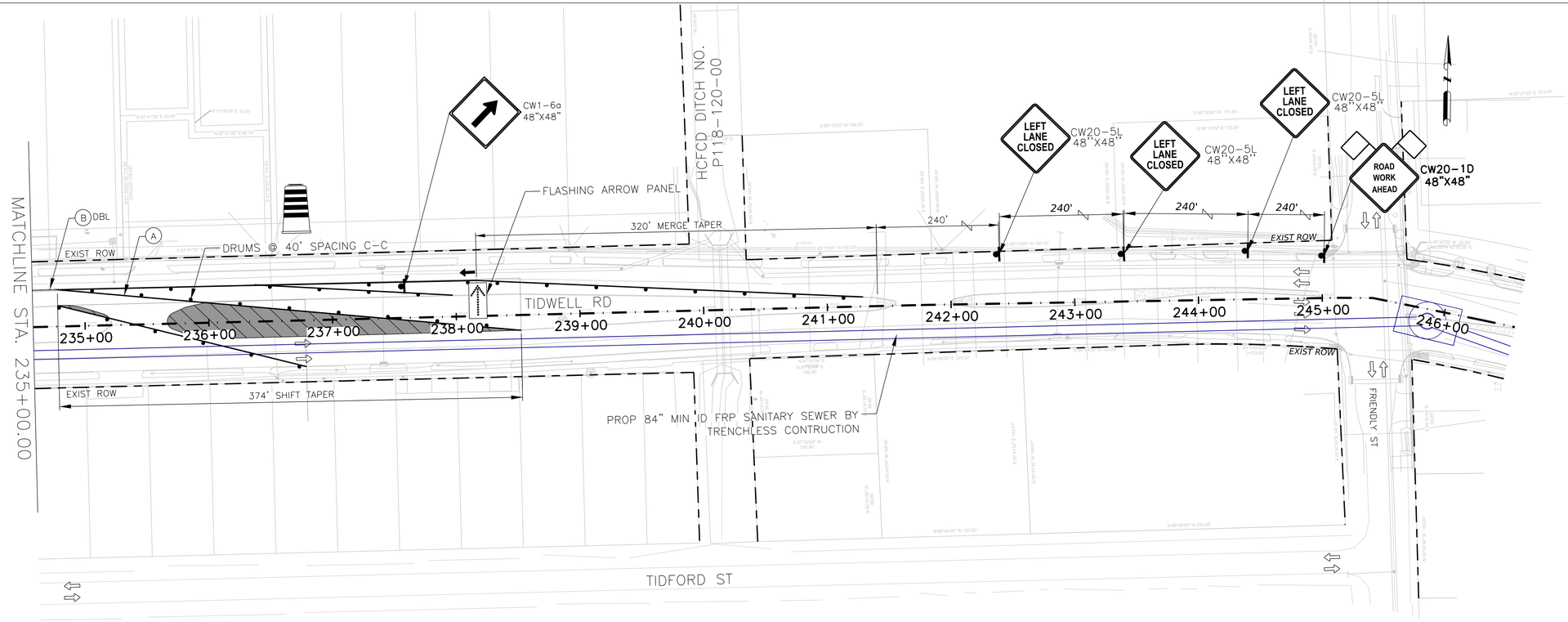
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 91 OF 192	

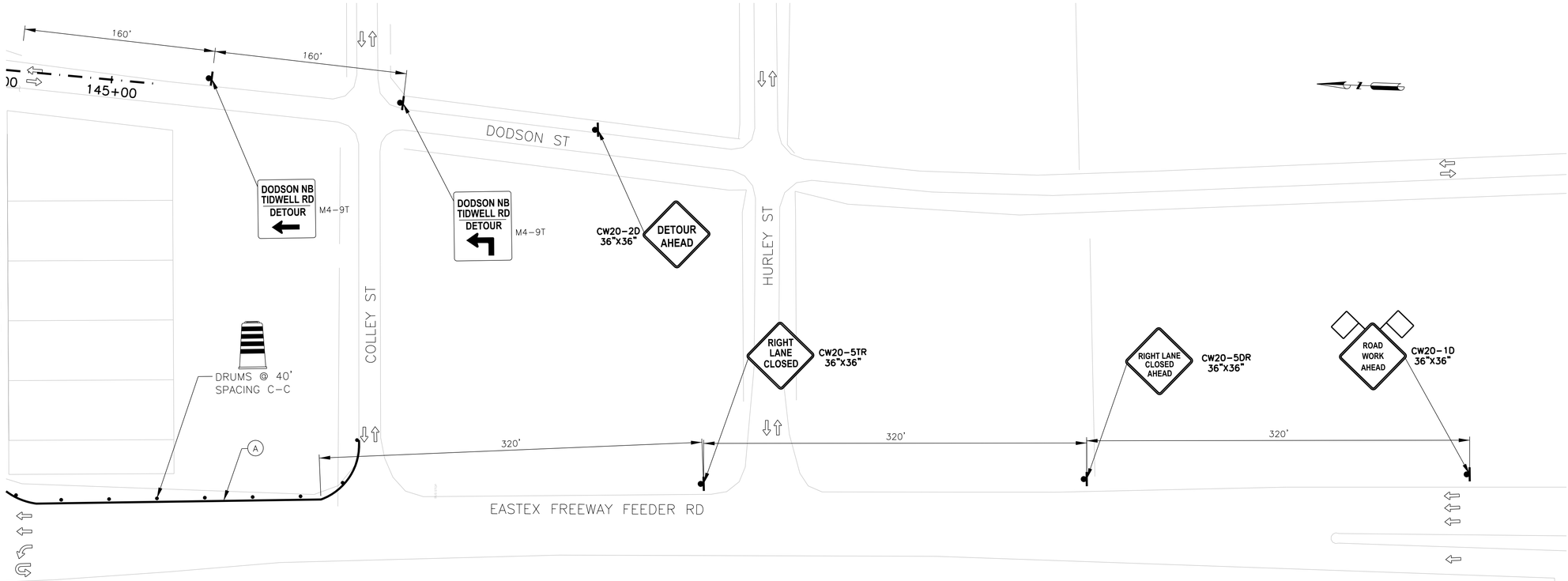
60% SUBMITTAL

TCP14

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENG\TCP\XREF\XREF-EXHIBIT WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENG\TCP\XREF\XBX-EBXX-TWATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM





LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

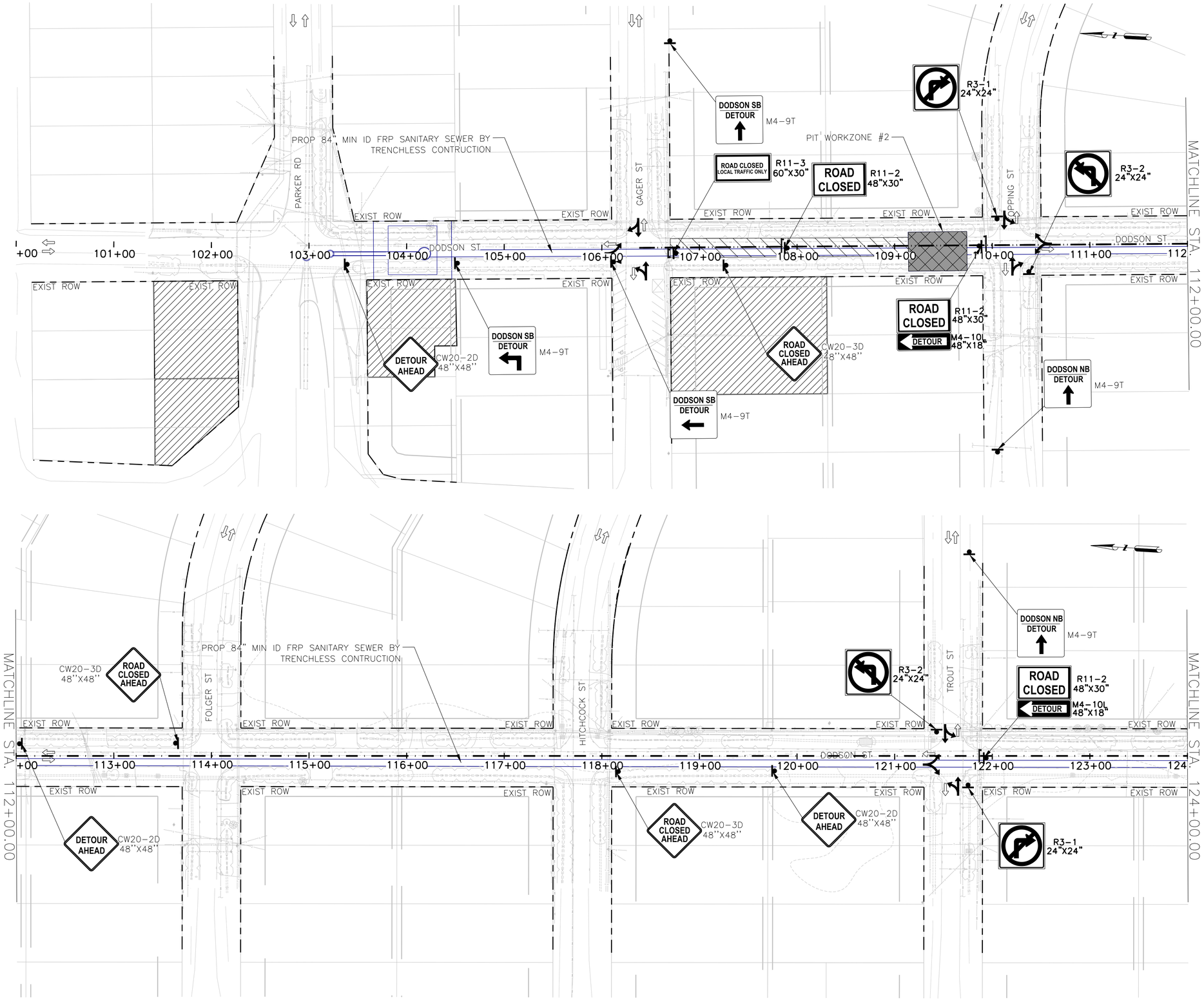
CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 2 TRAFFIC CONTROL PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 92 OF 192	

60% SUBMITTAL

TCP15



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

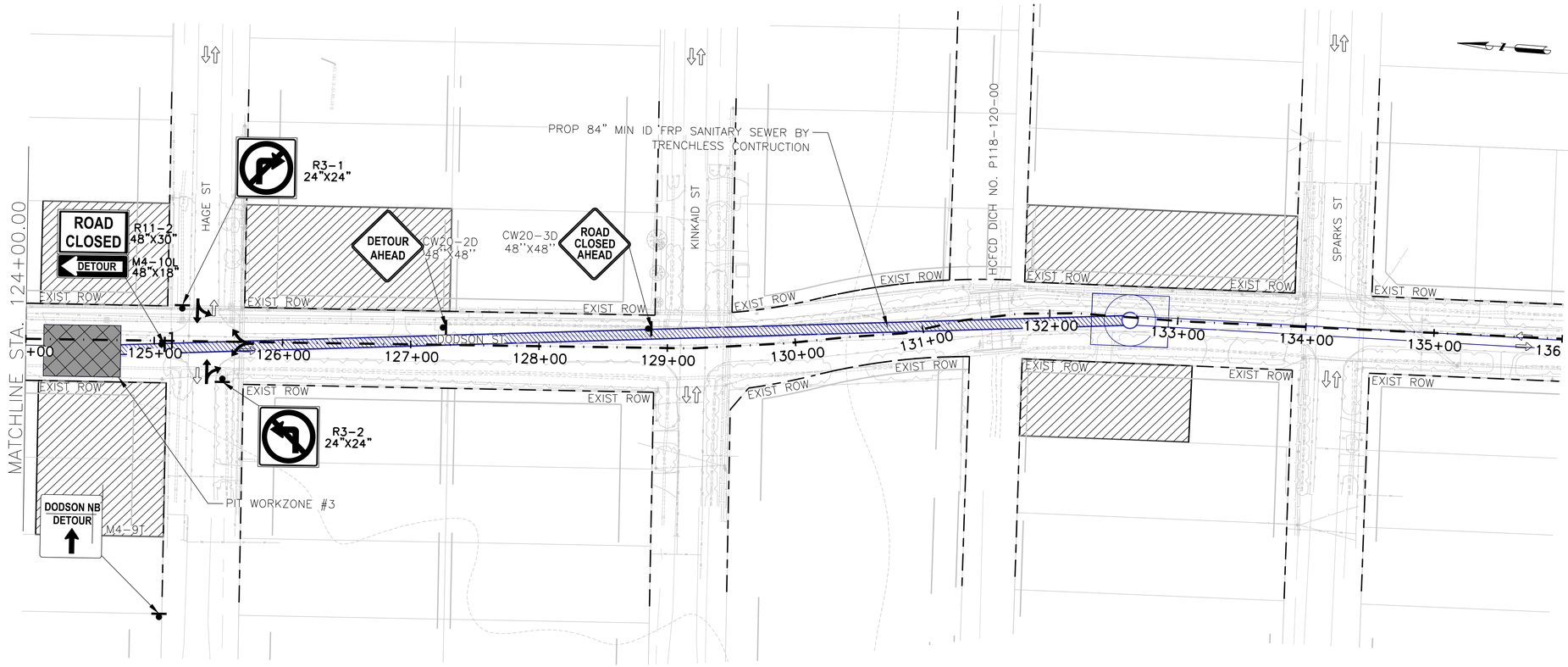
PHASE 3 TRAFFIC CONTROL PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 93 OF 192	

60% SUBMITTAL

TCP16

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENG\TCP\[TCP16 CRMP PKG 6 AREA 1 IB043 WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 3 TRAFFIC CONTROL PLAN

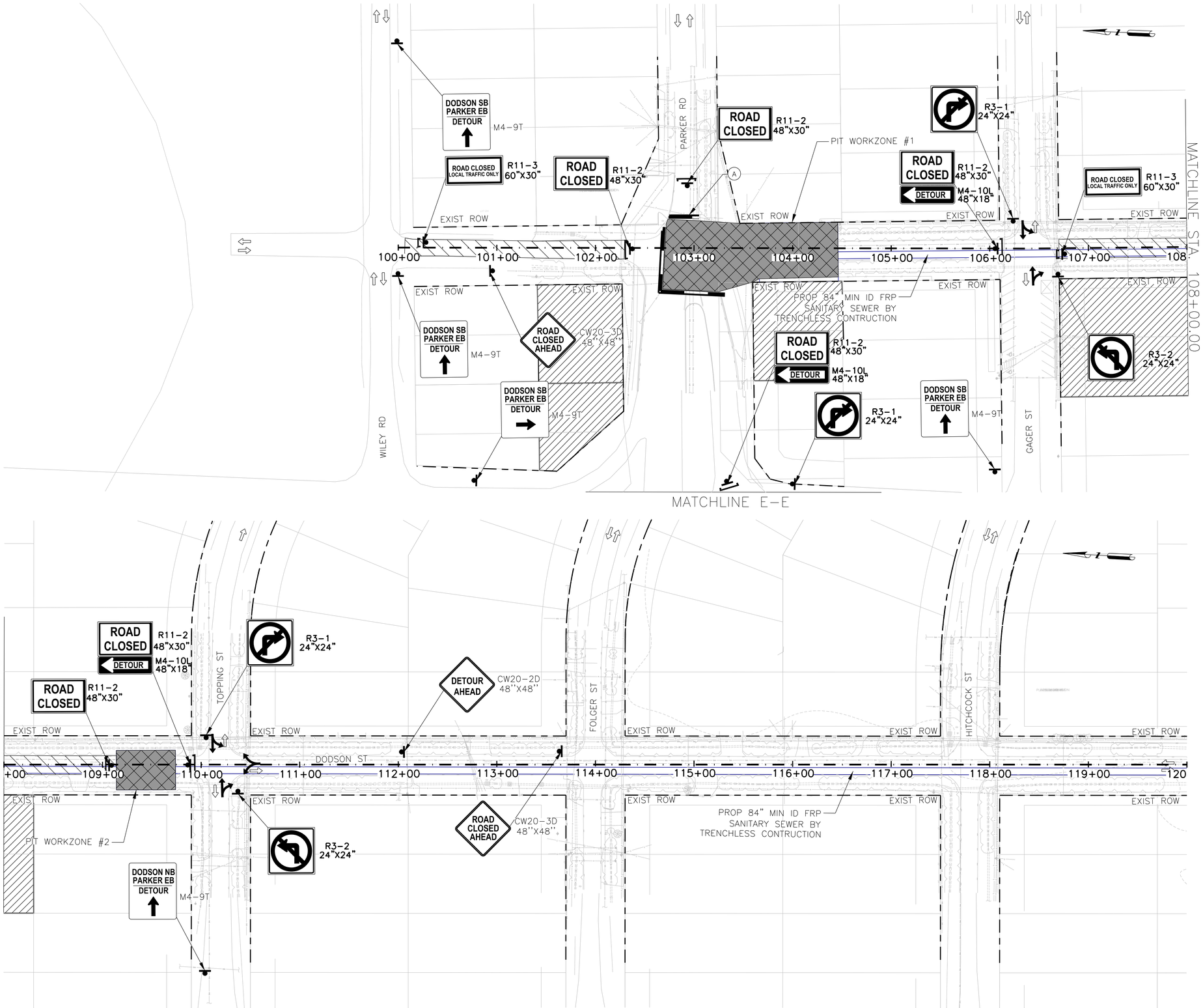
WBS NUMBER
R-001000-0031-3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 94 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

TCP17

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENGR\CIVIL\SHEETS\TCP\TCP17 WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 4 TRAFFIC CONTROL PLAN

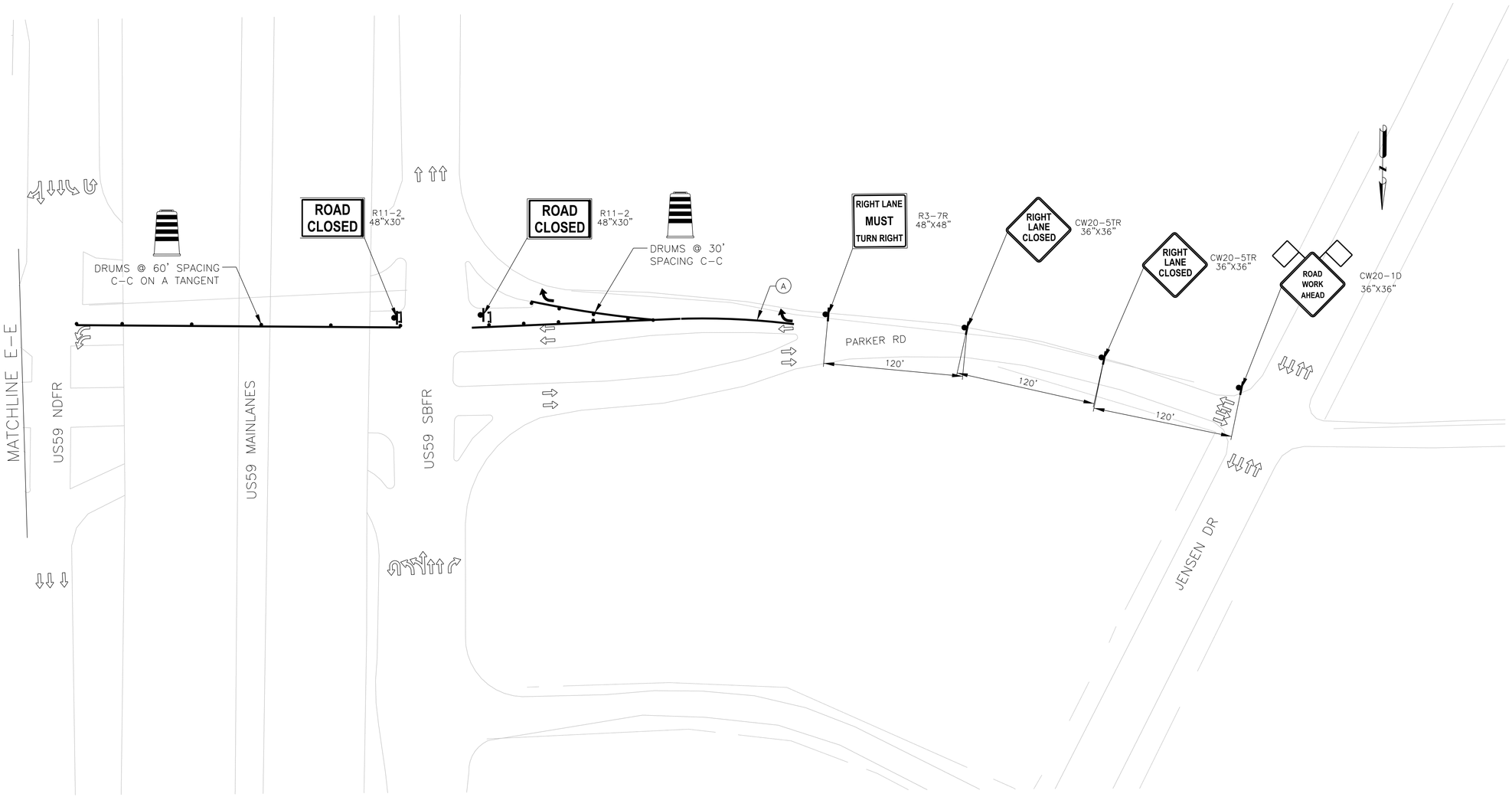
WBS NUMBER
R-001000-0031-3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 95 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

TCP18

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\EN01_CITY\02X-EXHXXtWATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- TEMPORARY GROUND MOUNTED SIGN
- PLASTIC DRUM
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- LOW PROFILE CONC. BARRIER
- VERTICAL PANELS
- TYPE III BARRICADE W/ROAD CLOSED SIGN
- LOW PROFILE CONC. BARRIER TY II
- (A) WRK ZN PAV MARK REMOVABLE 4" (W) (SLD)
- (B) WRK ZN PAV MARK REMOVABLE 4" (Y) (SLD)
- (C) WRK ZN PAV MARK REMOVABLE 4" (W) (BRK)
- (D) WRK ZN PAV MARK REMOVABLE 24" (W) (SLD)

NO.	DATE	REVISION	APP.

NOTE:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THIS PROJECT AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER
2. MAINTAIN MINIMUM 10-FOOT LANE WIDTH AT ALL TIMES
3. REFER TO TCP STANDARD DETAILS FOR MORE INFORMATION.

0 50 100
HORIZONTAL

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE VI TRAFFIC CONTROL PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 96 OF 192	

TCP19

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EM01_TSTY02X-E02Xxx-TWATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EM01_SHY\XBX-EBXXX-HWATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

TIDWELL RD

US59 SBFR

US59 MAINLANES

US59 NBFR

DODSON ST

EXIST ROW

TIDFORD ST

COLLEY ST

MATCHLINE A–A

MATCHLINE D–D

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

A	DETOUR	M4–9S 30"X24"
B	DETOUR	M4–9S 30"X24"
C	DETOUR	M4–9S 30"X24"
G	ROAD CLOSED AHEAD	CW20–3D 48"X48"
H	DETOUR AHEAD	CW20–2D 48"X48"
I	TY III BARRICADE	
J	ROAD CLOSED	R11–2 48"X30"
K	DO NOT ENTER	R5–1 36"X36"
L	ROAD CLOSED TO THRU TRAFFIC	R11–2 60"X30"
M		R3–1 24"X24"
N		R3–2 24"X24"
O	DODSON ST NB	M4–12T XX"X12"
P	DODSON ST SB	M4–12T XX"X12"
Q	TIDWELL RD EB	M4–12T XX"X12"
R	FRIENDLY DR NB	M4–12T XX"X12"
Z	LAVENDER ST NB	M4–12T XX"X12"
T	LAVENDER ST SB	M4–12T XX"X12"
S	FRIENDLY DR SB	M4–12T XX"X12"

TCP20

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

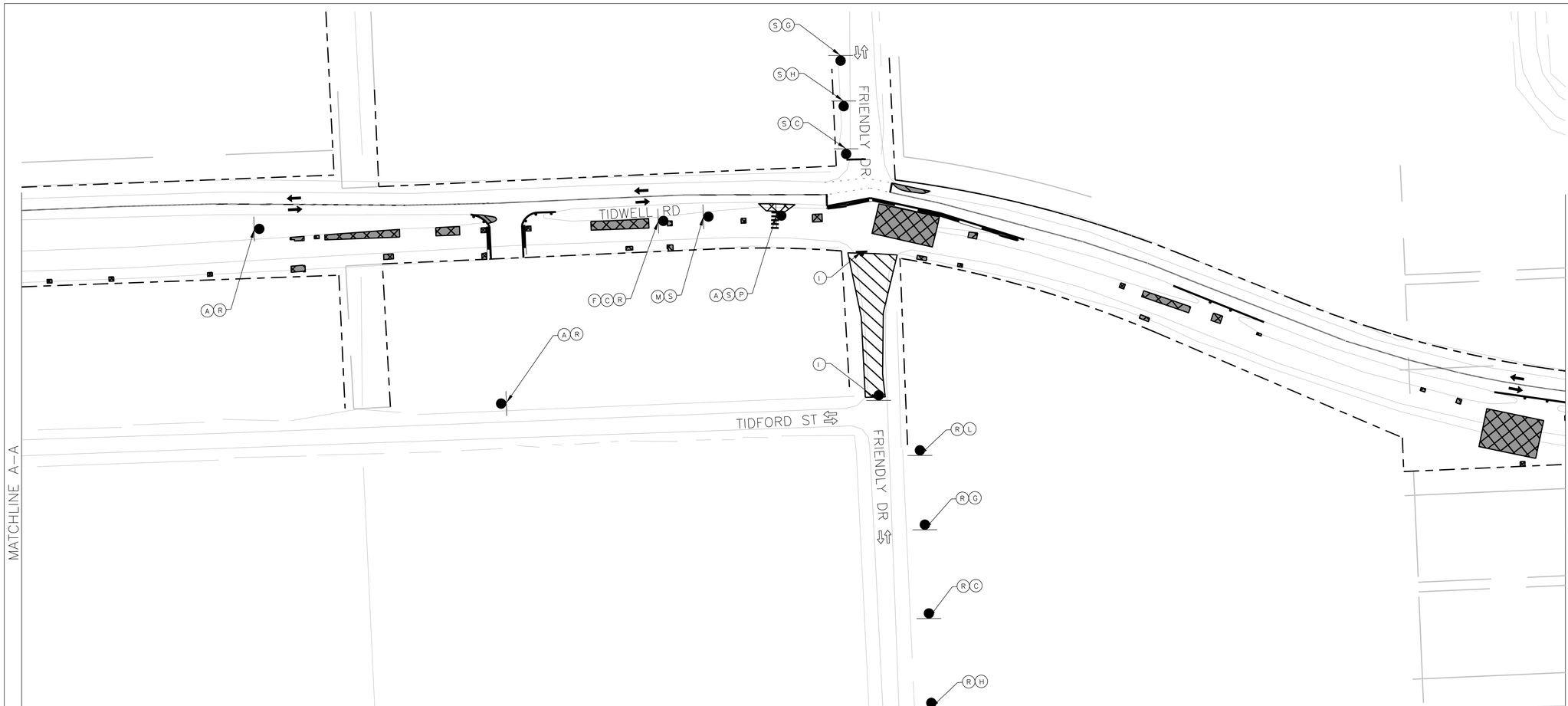
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 1 STEP 3 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 97 OF 192	

60% SUBMITTAL



NO.	DATE	REVISION	APP.

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

A — DETOUR — M4-9S 30"X24"

B — DETOUR — M4-9S 30"X24"

C — DETOUR — M4-9S 30"X24"

G — ROAD CLOSED AHEAD — CW20-3D 48"X48"

H — DETOUR AHEAD — CW20-2D 48"X48"

I — ROAD CLOSED — TY III BARRICADE

J — ROAD CLOSED — R11-2 48"X30"

K — DO NOT ENTER — R5-1 36"X36"

L — ROAD CLOSED TO THRU TRAFFIC — R11-2 60"X30"

M — R3-1 24"X24"

N — R3-2 24"X24"

O — DODSON ST NB — M4-12T XX"X12"

P — DODSON ST SB — M4-12T XX"X12"

Q — TIDWELL RD EB — M4-12T XX"X12"

R — FRIENDLY DR NB — M4-12T XX"X12"

Z — LAVENDER ST NB — M4-12T XX"X12"

T — LAVENDER ST SB — M4-12T XX"X12"

S — FRIENDLY DR SB — M4-12T XX"X12"

TCP21

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

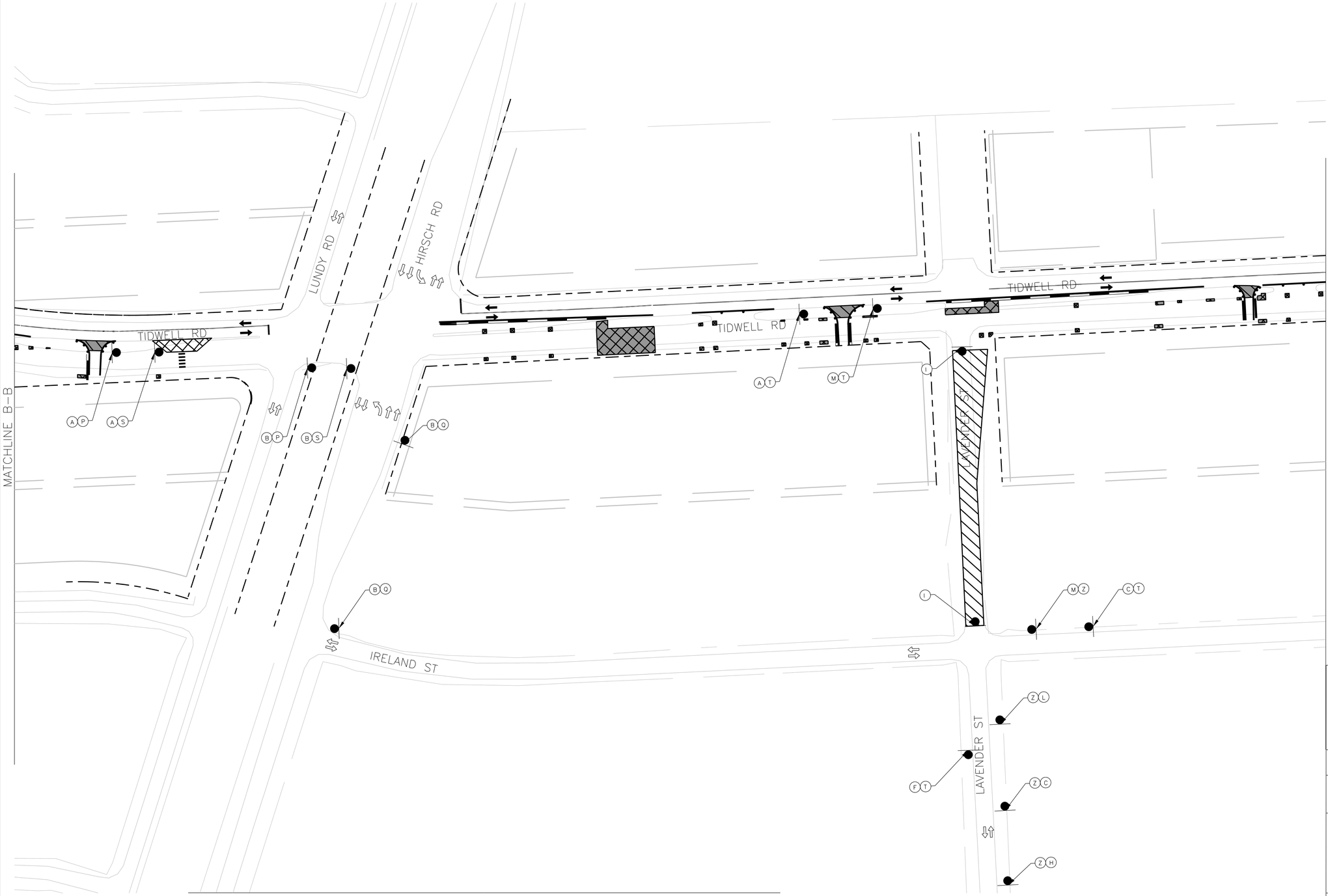
CRMP PACKAGE 6 –
AREA 1–BASIN IB043

PHASE 1 STEP 3 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 98 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\EMOT\SHEETS\IB043_STEP3_DETOUR_WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



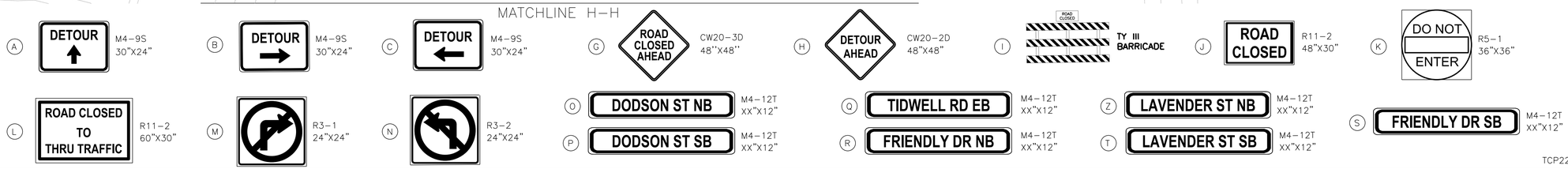
LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS



TCP22

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.

YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 –
AREA 1-BASIN IB043

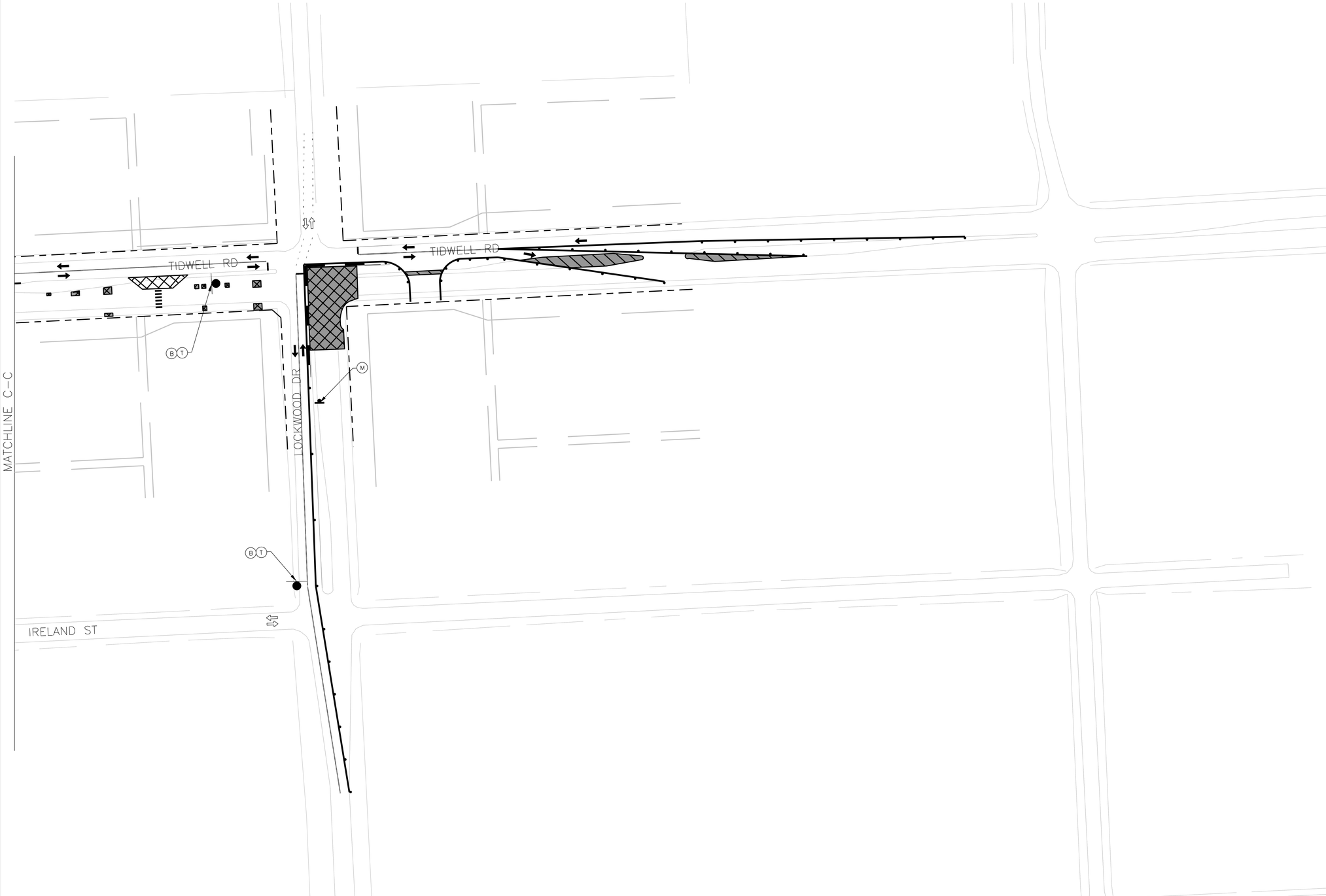
PHASE 1 STEP 3 DETOURS

WBS NUMBER
R-001000-0031-3
DRAWING SCALE
AS NOTED
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 99 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\PLAN SET\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

A — DETOUR — M4-9S 30"X24"

B — DETOUR — M4-9S 30"X24"

C — DETOUR — M4-9S 30"X24"

G — ROAD CLOSED AHEAD — CW20-3D 48"X48"

H — DETOUR AHEAD — CW20-2D 48"X48"

I — ROAD CLOSED — TY III BARRICADE

J — ROAD CLOSED — R11-2 48"X30"

K — DO NOT ENTER — R5-1 36"X36"

L — ROAD CLOSED TO THRU TRAFFIC — R11-2 60"X30"

M — R3-1 24"X24"

N — R3-2 24"X24"

O — DODSON ST NB — M4-12T XX"X12"

P — DODSON ST SB — M4-12T XX"X12"

Q — TIDWELL RD EB — M4-12T XX"X12"

R — FRIENDLY DR NB — M4-12T XX"X12"

Z — LAVENDER ST NB — M4-12T XX"X12"

T — LAVENDER ST SB — M4-12T XX"X12"

S — FRIENDLY DR SB — M4-12T XX"X12"

TCP23

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 1 STEP 3 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 100 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

MATCHLINE D–D

HURLEY ST

HURLEY ST

HURLEY ST

RAMIN DR

DODSON ST

US59 SBFR

US59 MAINLANES

US59 NBFR

DODSON ST

SIMMONS

MATCHLINE E–E

NO.	DATE	REVISION	APP.

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

(A)	DETOUR ↑	M4–9S 30"X24"
(B)	DETOUR →	M4–9S 30"X24"
(C)	DETOUR ←	M4–9S 30"X24"
(G)	ROAD CLOSED AHEAD	CW20–3D 48"X48"
(H)	DETOUR AHEAD	CW20–2D 48"X48"
(I)	ROAD CLOSED TY III BARRICADE	
(J)	ROAD CLOSED	R11–2 48"X30"
(K)	DO NOT ENTER	R5–1 36"X36"
(L)	ROAD CLOSED TO THRU TRAFFIC	R11–2 60"X30"
(M)		R3–1 24"X24"
(N)		R3–2 24"X24"
(O)	DODSON ST NB	M4–12T XX"X12"
(P)	DODSON ST SB	M4–12T XX"X12"
(Q)	TIDWELL RD EB	M4–12T XX"X12"
(R)	FRIENDLY DR NB	M4–12T XX"X12"
(Z)	LAVENDER ST NB	M4–12T XX"X12"
(T)	LAVENDER ST SB	M4–12T XX"X12"
(S)	FRIENDLY DR SB	M4–12T XX"X12"

TCP24

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 1 STEP 3 DETOURS

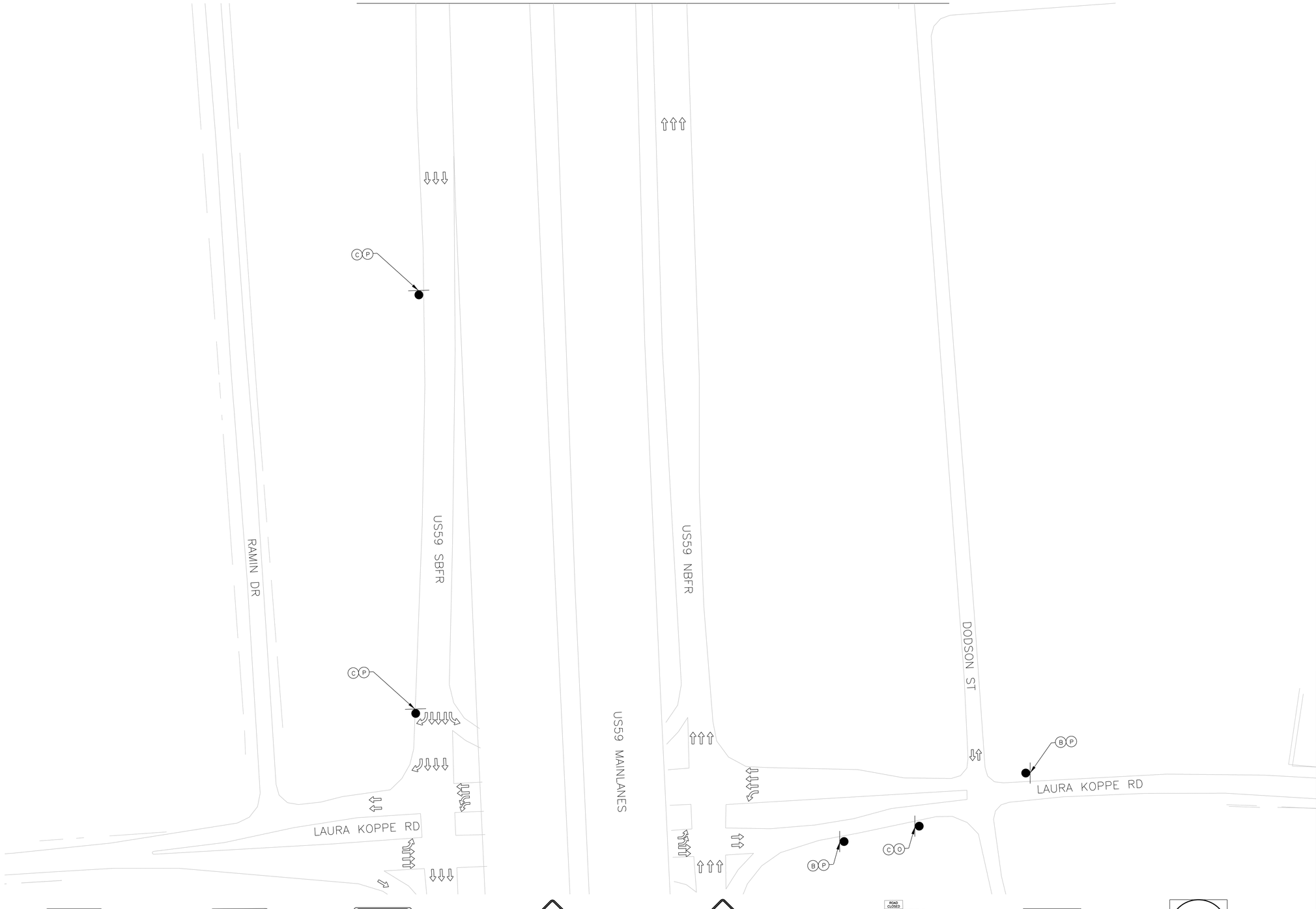
WBS NUMBER
R–001000–0031–3
DRAWING SCALE
AS NOTED
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 101 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

MATCHLINE E-E



MATCHLINE F-F

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

A — DETOUR — M4-9S 30"X24"

B — DETOUR — M4-9S 30"X24"

C — DETOUR — M4-9S 30"X24"

G — ROAD CLOSED AHEAD — CW20-3D 48"X48"

H — DETOUR AHEAD — CW20-2D 48"X48"

I — ROAD CLOSED — TY III BARRICADE

J — ROAD CLOSED — R11-2 48"X30"

K — DO NOT ENTER — R5-1 36"X36"

L — ROAD CLOSED TO THRU TRAFFIC — R11-2 60"X30"

M — R3-1 24"X24"

N — R3-2 24"X24"

O — DODSON ST NB — M4-12T XX"X12"

P — DODSON ST SB — M4-12T XX"X12"

Q — TIDWELL RD EB — M4-12T XX"X12"

R — FRIENDLY DR NB — M4-12T XX"X12"

Z — LAVENDER ST NB — M4-12T XX"X12"

T — LAVENDER ST SB — M4-12T XX"X12"

S — FRIENDLY DR SB — M4-12T XX"X12"

TCP25

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 –
AREA 1-BASIN IB043

PHASE 1 STEP 3 DETOURS

WBS NUMBER
R-001000-0031-3
DRAWING SCALE
AS NOTED
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 102 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EM01_SHT\XXXX

MATCHLINE G–G

MATCHLINE F–F

NO.	DATE	REVISION	APP.

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

A — DETOUR — M4–9S 30"X24"

B — DETOUR — M4–9S 30"X24"

C — DETOUR — M4–9S 30"X24"

G — ROAD CLOSED AHEAD — CW20–3D 48"X48"

H — DETOUR AHEAD — CW20–2D 48"X48"

I — ROAD CLOSED — TY III BARRICADE

J — ROAD CLOSED — R11–2 48"X30"

K — DO NOT ENTER — R5–1 36"X36"

L — ROAD CLOSED TO THRU TRAFFIC — R11–2 60"X30"

M — R3–1 24"X24"

N — R3–2 24"X24"

O — DODSON ST NB — M4–12T XX"X12"

P — DODSON ST SB — M4–12T XX"X12"

Q — TIDWELL RD EB — M4–12T XX"X12"

R — FRIENDLY DR NB — M4–12T XX"X12"

Z — LAVENDER ST NB — M4–12T XX"X12"

T — LAVENDER ST SB — M4–12T XX"X12"

S — FRIENDLY DR SB — M4–12T XX"X12"

TCP26

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 1 STEP 3 DETOURS

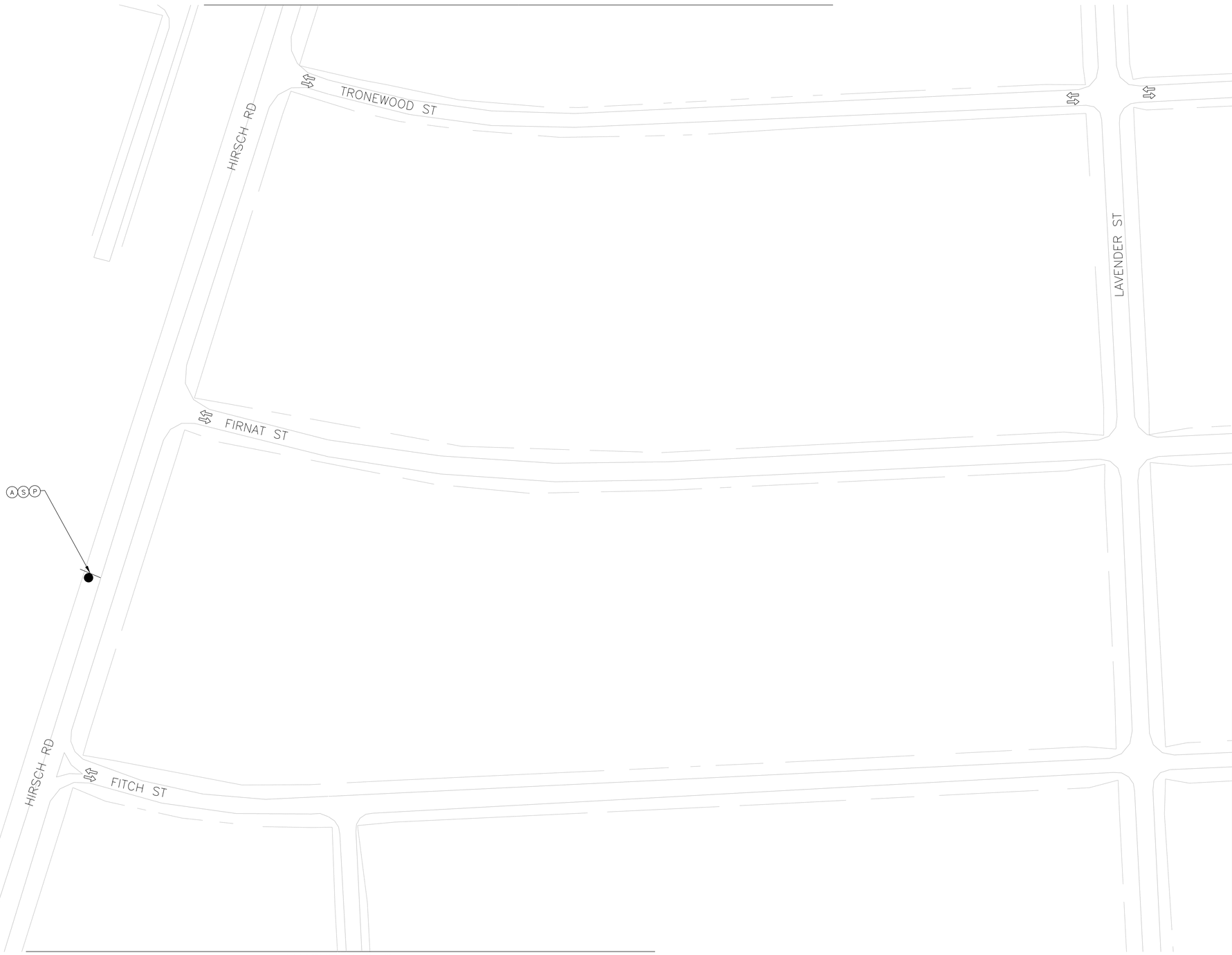
WBS NUMBER
R–001000–0031–3
DRAWING SCALE
AS NOTED
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 103 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

MATCHLINE H–H



MATCHLINE G–G

NO.	DATE	REVISION	APP.

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

(A) DETOUR — M4–9S 30"X24"

(B) DETOUR — M4–9S 30"X24"

(C) DETOUR — M4–9S 30"X24"

(G) ROAD CLOSED AHEAD — CW20–3D 48"X48"

(H) DETOUR AHEAD — CW20–2D 48"X48"

(I) ROAD CLOSED — TY III BARRICADE

(J) ROAD CLOSED — R11–2 48"X30"

(K) DO NOT ENTER — R5–1 36"X36"

(L) ROAD CLOSED TO THRU TRAFFIC — R11–2 60"X30"

(M) R3–1 24"X24"

(N) R3–2 24"X24"

(O) DODSON ST NB — M4–12T XX"X12"

(P) DODSON ST SB — M4–12T XX"X12"

(Q) TIDWELL RD EB — M4–12T XX"X12"

(R) FRIENDLY DR NB — M4–12T XX"X12"

(Z) LAVENDER ST NB — M4–12T XX"X12"

(T) LAVENDER ST SB — M4–12T XX"X12"

(S) FRIENDLY DR SB — M4–12T XX"X12"

TCP27

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

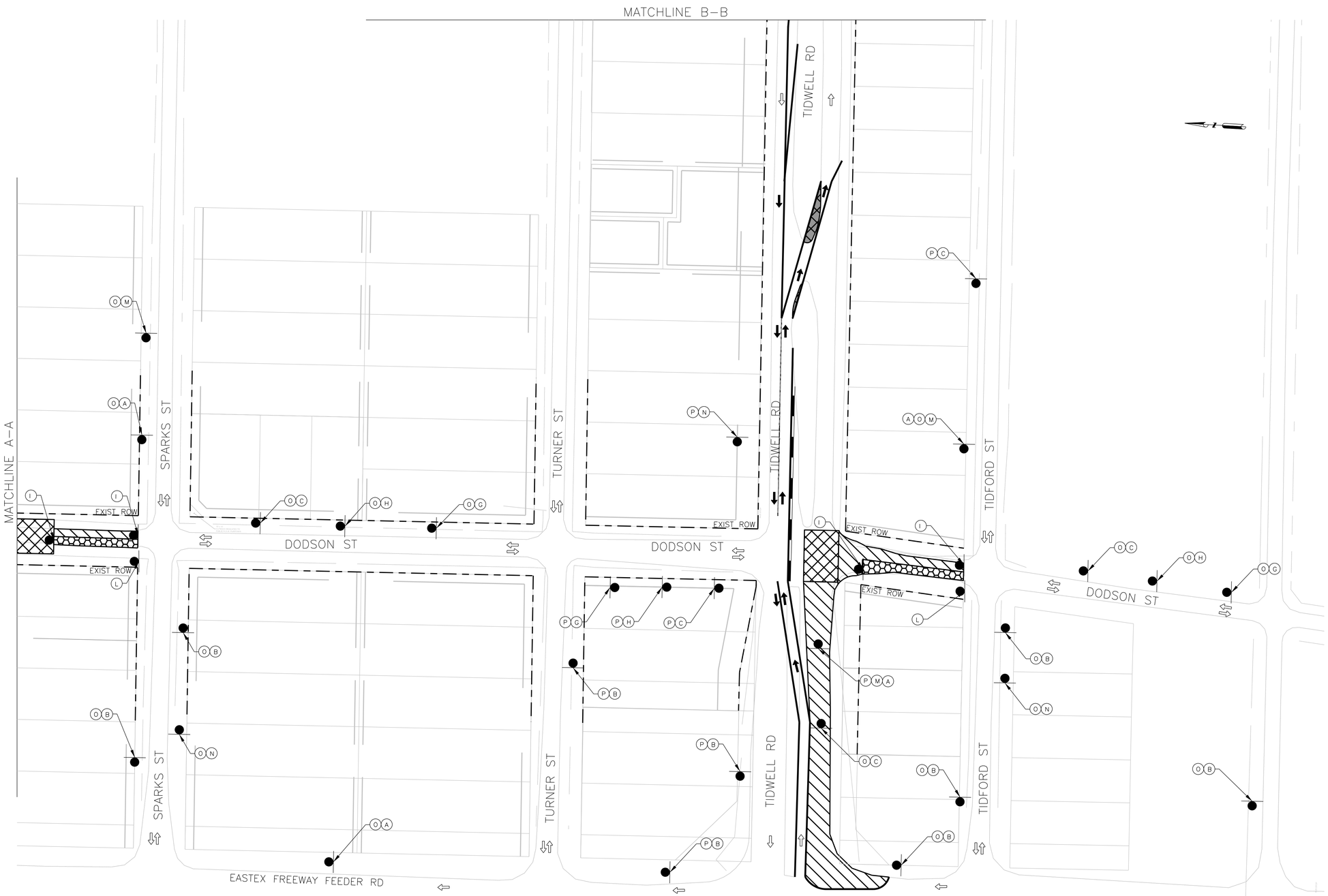
CRMP PACKAGE 6 –
AREA 1–BASIN IB043

PHASE 1 STEP 3 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 104 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EMOT\SHEETS\EMOT_SHEETS_WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 2 DETOURS

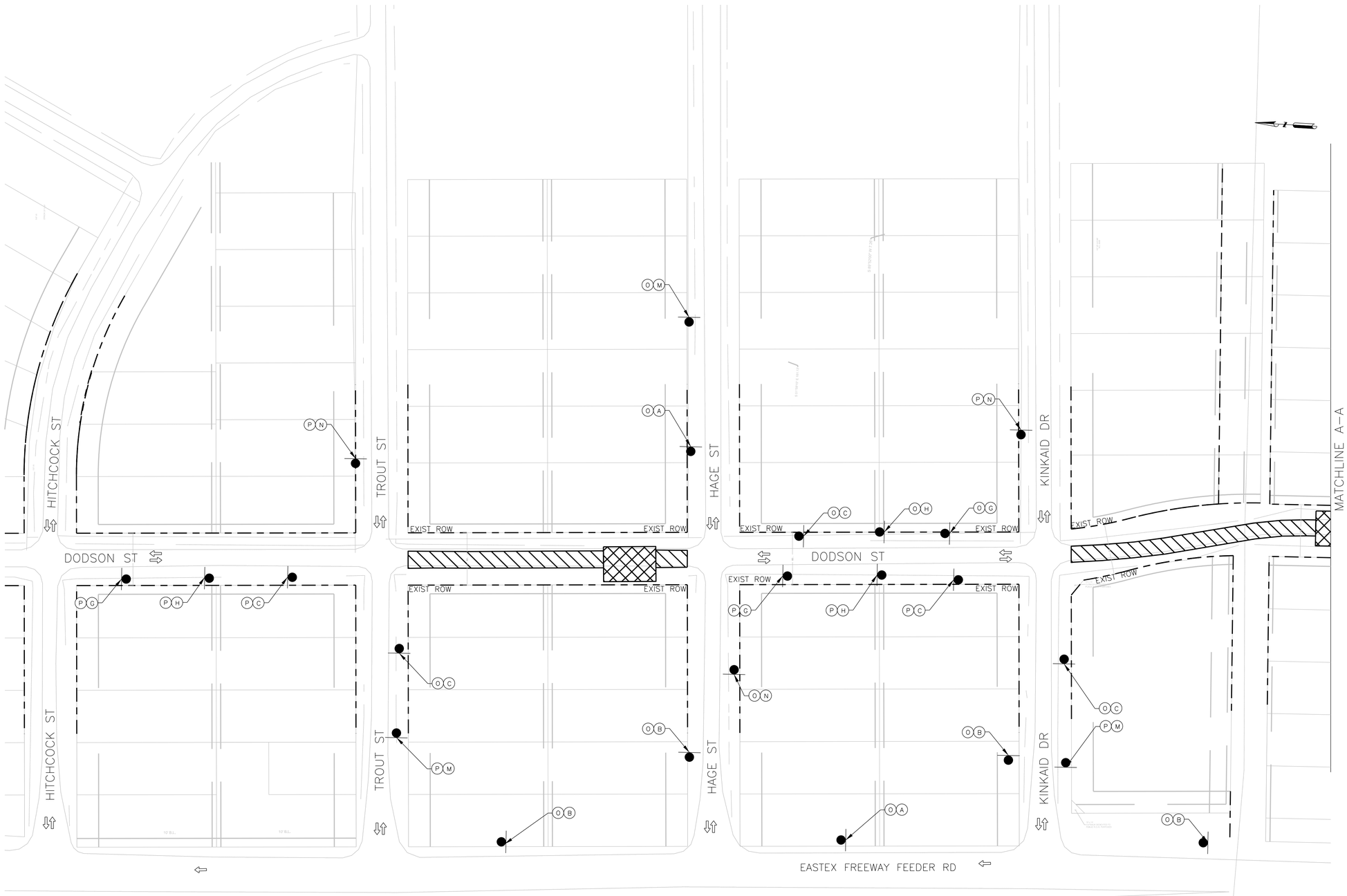
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 105 OF 192	

60% SUBMITTAL

TCP28

A — DETOUR (M4–9S 30"X24")
B — DETOUR (M4–9S 30"X24")
C — DETOUR (M4–9S 30"X24")
G — ROAD CLOSED AHEAD (CW20–3D 48"X48")
H — DETOUR AHEAD (CW20–2D 48"X48")
I — TY III BARRICADE
J — ROAD CLOSED (R11–2 48"X30")
K — DO NOT ENTER (R5–1 36"X36")
L — ROAD CLOSED TO THRU TRAFFIC (R11–2 60"X30")
M — (R3–1 24"X24")
N — (R3–2 24"X24")
O — DODSON ST NB (M4–12T XX"X12")
P — DODSON ST SB (M4–12T XX"X12")
Q — TIDWELL RD EB (M4–12T XX"X12")
R — FRIENDLY DR NB (M4–12T XX"X12")
Z — LAVENDER ST NB (M4–12T XX"X12")
T — LAVENDER ST SB (M4–12T XX"X12")
S — FRIENDLY DR SB (M4–12T XX"X12")

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



NO.	DATE	REVISION	APP.

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

(A) DETOUR — M4–9S 30"X24"

(B) DETOUR — M4–9S 30"X24"

(C) DETOUR — M4–9S 30"X24"

(G) ROAD CLOSED AHEAD — CW20–3D 48"X48"

(H) DETOUR AHEAD — CW20–2D 48"X48"

(I) ROAD CLOSED — TY III BARRICADE

(J) ROAD CLOSED — R11–2 48"X30"

(K) DO NOT ENTER — R5–1 36"X36"

(L) ROAD CLOSED TO THRU TRAFFIC — R11–2 60"X30"

(M) — R3–1 24"X24"

(N) — R3–2 24"X24"

(O) DODSON ST NB — M4–12T XX"X12"

(P) DODSON ST SB — M4–12T XX"X12"

(Q) TIDWELL RD EB — M4–12T XX"X12"

(R) FRIENDLY DR NB — M4–12T XX"X12"

(Z) LAVENDER ST NB — M4–12T XX"X12"

(T) LAVENDER ST SB — M4–12T XX"X12"

(S) FRIENDLY DR SB — M4–12T XX"X12"

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING
& UTILITIES FB NO. 000000

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

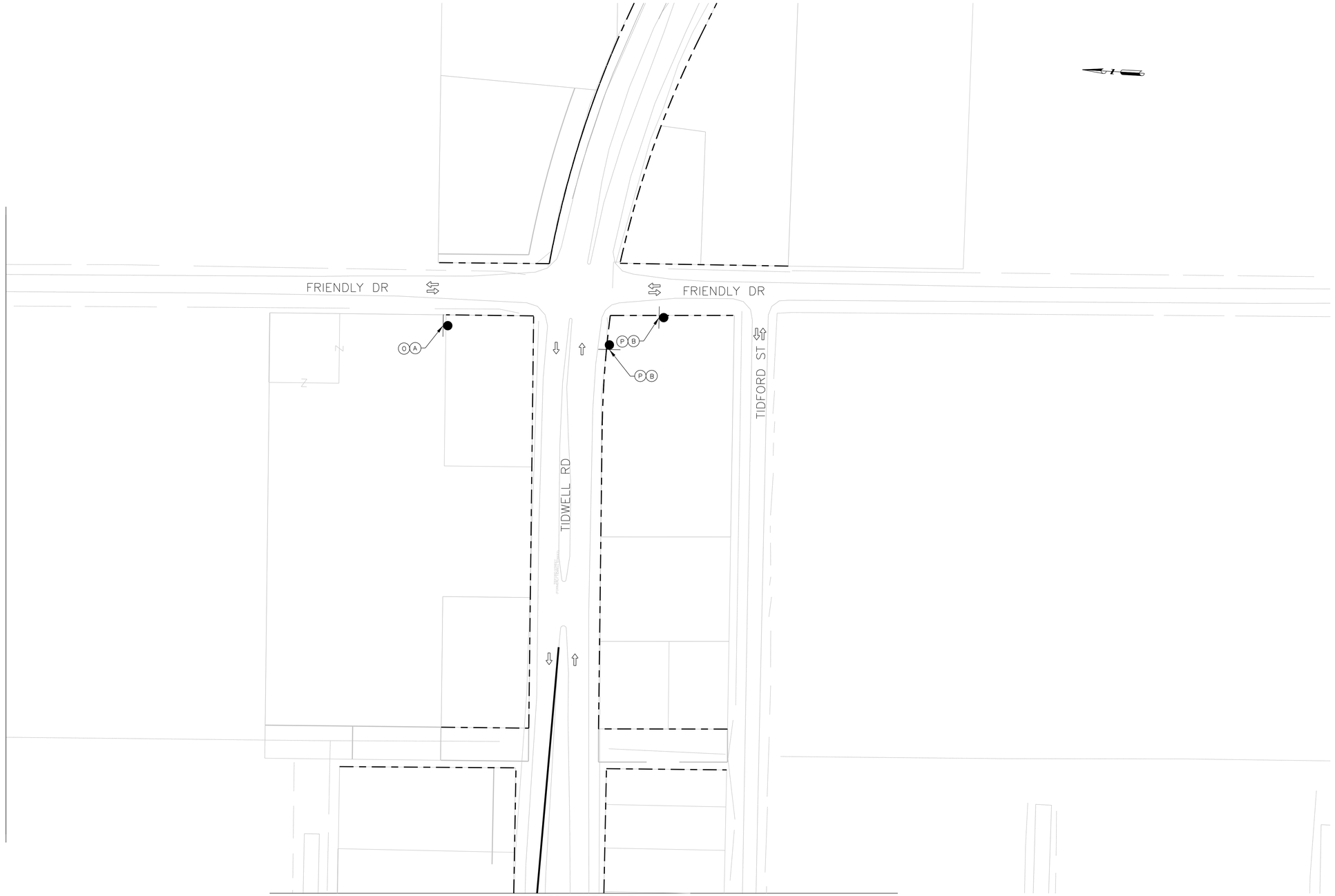
PHASE 2 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 106 OF 192	

TCP29

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

A — DETOUR — M4-9S 30"X24"

B — DETOUR — M4-9S 30"X24"

C — DETOUR — M4-9S 30"X24"

G — ROAD CLOSED AHEAD — CW20-3D 48"X48"

H — DETOUR AHEAD — CW20-2D 48"X48"

I — TY III BARRICADE

J — ROAD CLOSED — R11-2 48"X30"

K — DO NOT ENTER — R5-1 36"X36"

L — ROAD CLOSED TO THRU TRAFFIC — R11-2 60"X30"

M — R3-1 24"X24"

N — R3-2 24"X24"

O — DODSON ST NB — M4-12T XX"X12"

P — DODSON ST SB — M4-12T XX"X12"

Q — TIDWELL RD EB — M4-12T XX"X12"

R — FRIENDLY DR NB — M4-12T XX"X12"

Z — LAVENDER ST NB — M4-12T XX"X12"

T — LAVENDER ST SB — M4-12T XX"X12"

S — FRIENDLY DR SB — M4-12T XX"X12"

TCP30

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

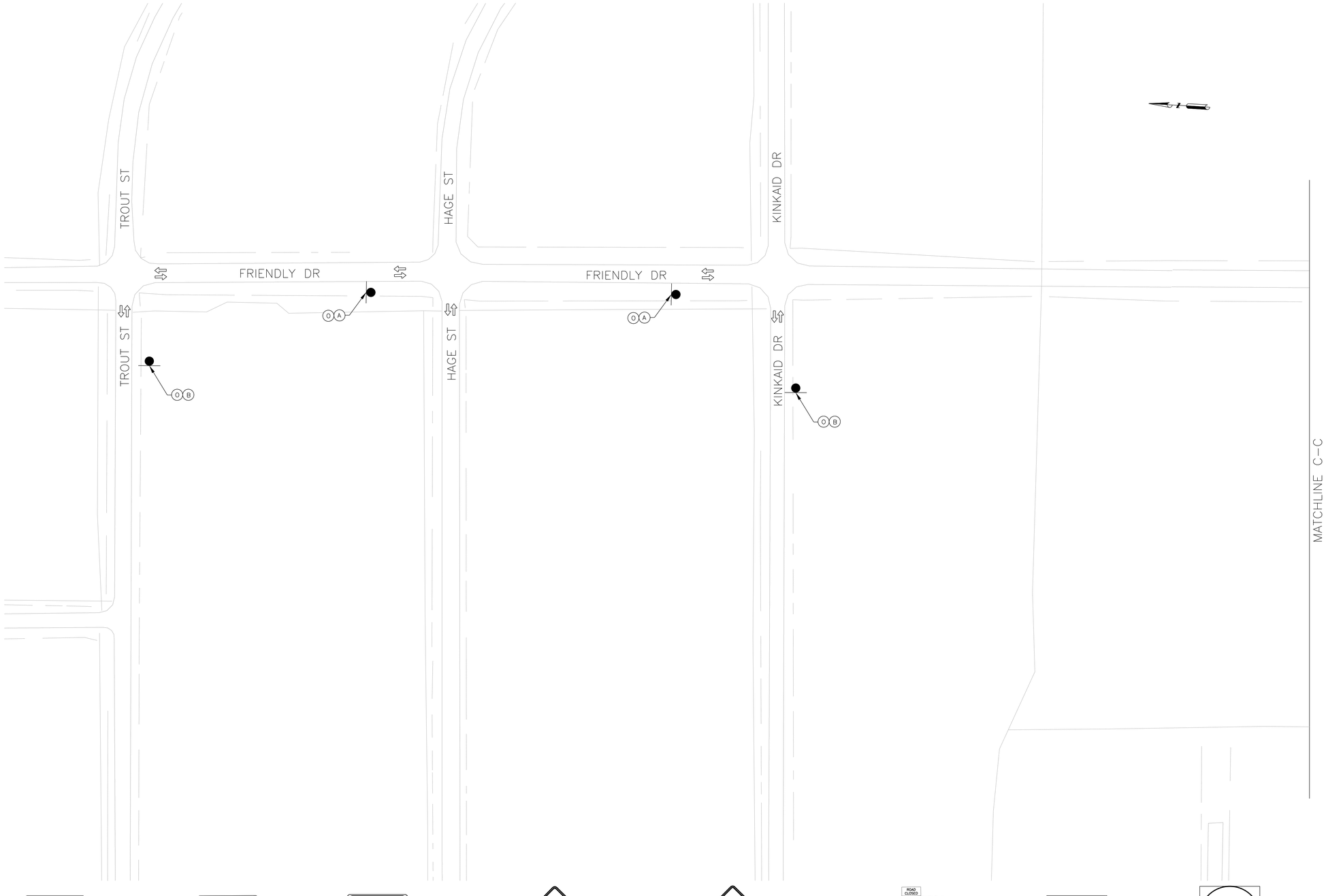
CRMP PACKAGE 6 –
AREA 1–BASIN IB043

PHASE 2 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 107 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EMAIL\SHEET\[redacted]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



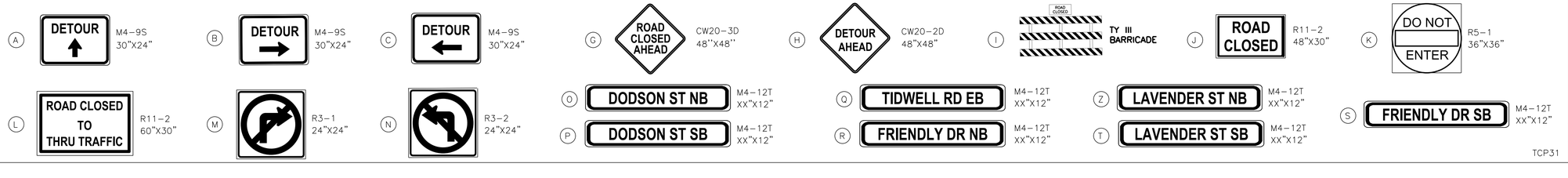
LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS



TCP31

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

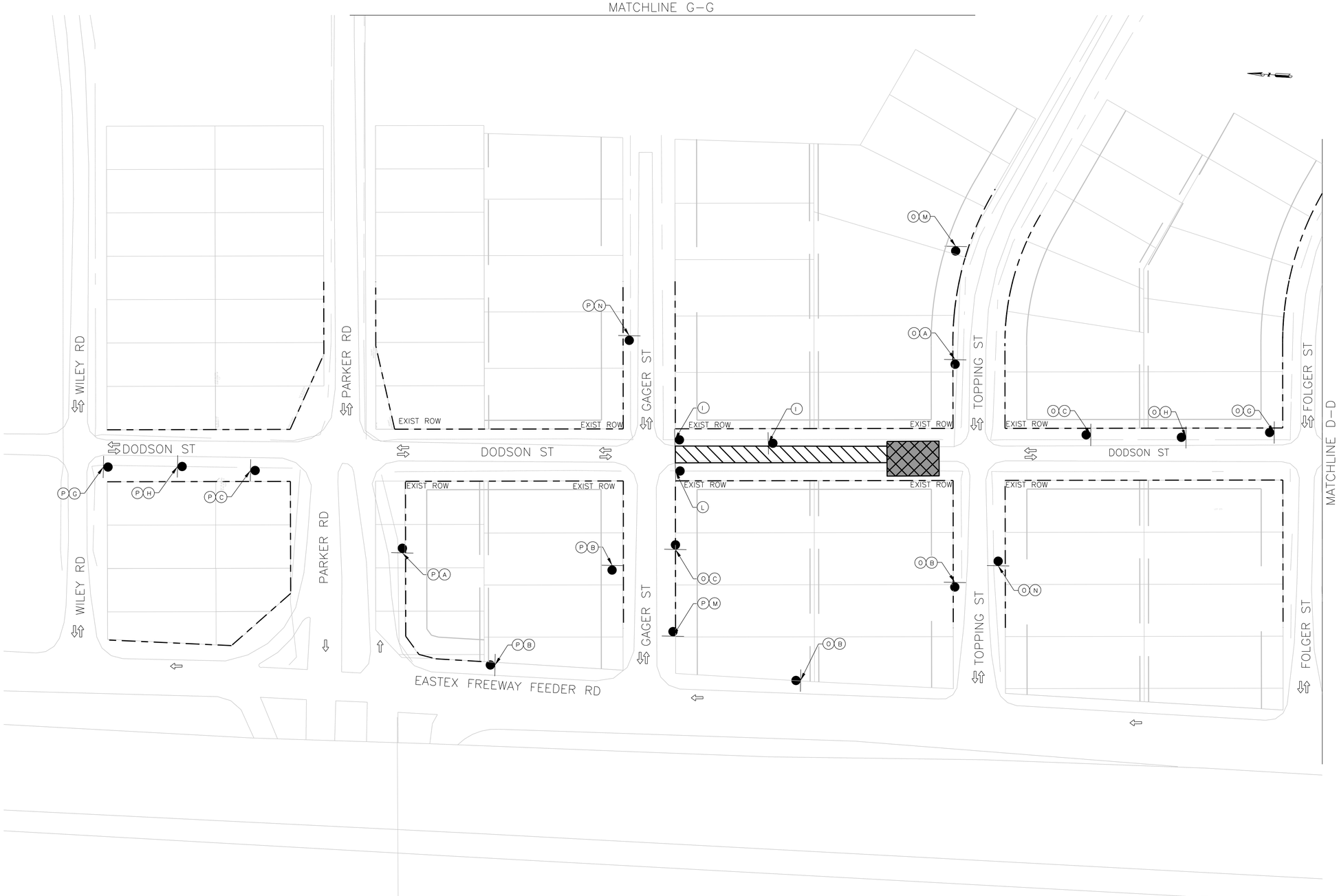
CRMP PACKAGE 6 –
AREA 1–BASIN IB043

PHASE 2 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 108 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EMD\DRY\XX-XX-WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



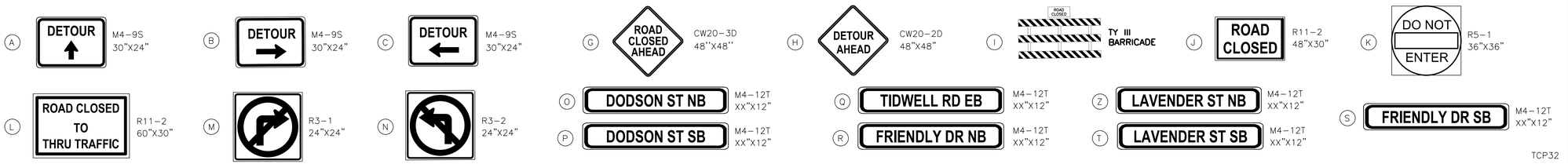
LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS



TCP32

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

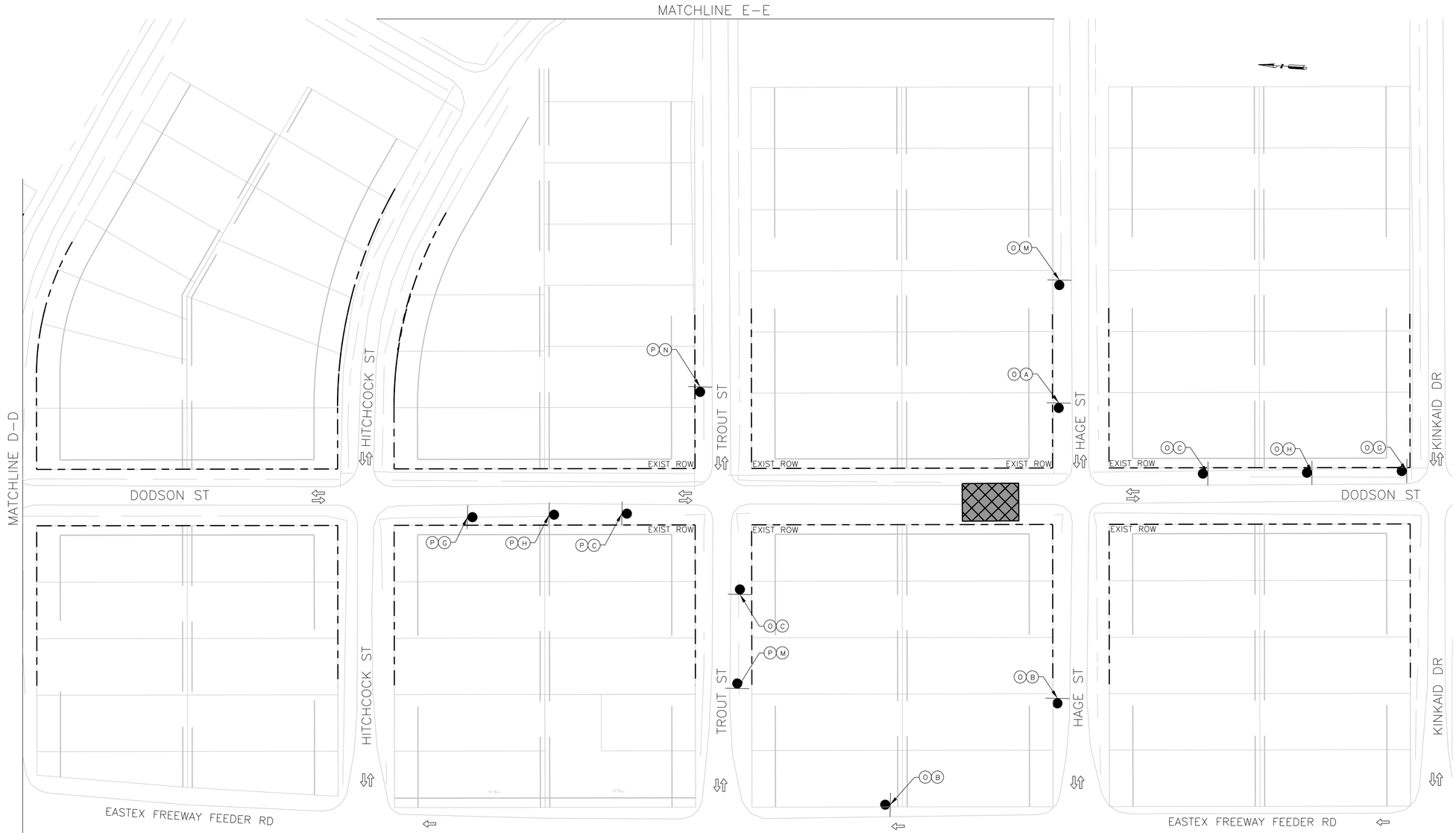
CRMP PACKAGE 6 –
AREA 1–BASIN IB043

PHASE 3 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 109 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EIM\01 DRY\XX-CXX-WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1-SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

A — DETOUR (M4-9S 30"X24")

B — DETOUR (M4-9S 30"X24")

C — DETOUR (M4-9S 30"X24")

G — ROAD CLOSED AHEAD (CW20-3D 48"X48")

H — DETOUR AHEAD (CW20-2D 48"X48")

I — ROAD CLOSED, TY III BARRICADE

J — ROAD CLOSED (R11-2 48"X30")

K — DO NOT ENTER (R5-1 36"X36")

L — ROAD CLOSED TO THRU TRAFFIC (R11-2 60"X30")

M — (R3-1 24"X24")

N — (R3-2 24"X24")

O — DODSON ST NB (M4-12T XX"X12")

P — DODSON ST SB (M4-12T XX"X12")

Q — TIDWELL RD EB (M4-12T XX"X12")

R — FRIENDLY DR NB (M4-12T XX"X12")

Z — LAVENDER ST NB (M4-12T XX"X12")

T — LAVENDER ST SB (M4-12T XX"X12")

S — FRIENDLY DR SB (M4-12T XX"X12")

TCP33

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

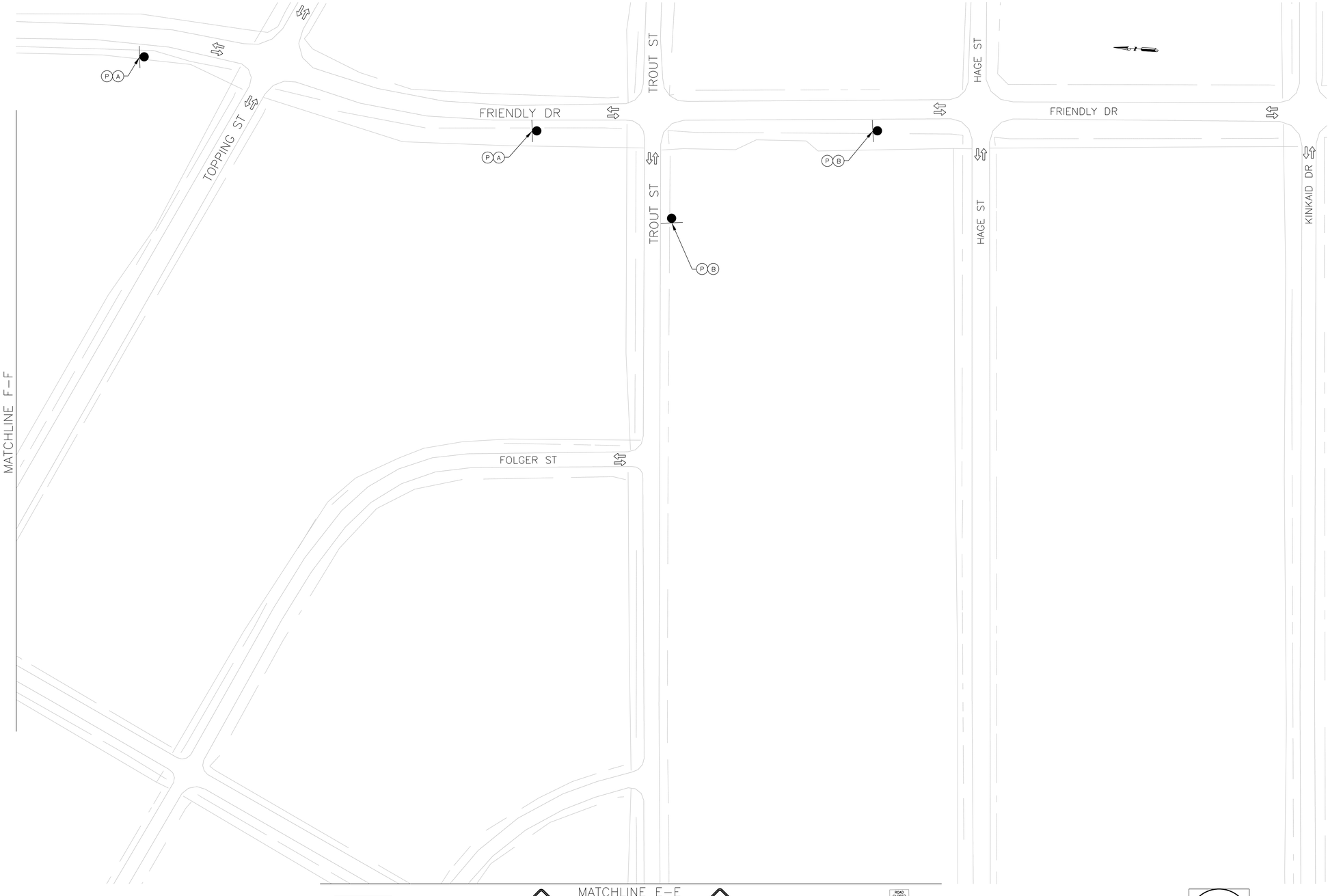
CRMP PACKAGE 6 –
AREA 1–BASIN IB043

PHASE 3 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 110 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

(A) DETOUR M4–9S 30"X24"

(B) DETOUR M4–9S 30"X24"

(C) DETOUR M4–9S 30"X24"

(G) ROAD CLOSED AHEAD CW20–3D 48"X48"

(H) DETOUR AHEAD CW20–2D 48"X48"

(I) ROAD CLOSED TY III BARRICADE

(J) ROAD CLOSED R11–2 48"X30"

(K) DO NOT ENTER R5–1 36"X36"

(L) ROAD CLOSED TO THRU TRAFFIC R11–2 60"X30"

(M) R3–1 24"X24"

(N) R3–2 24"X24"

(O) DODSON ST NB M4–12T XX"X12"

(P) DODSON ST SB M4–12T XX"X12"

(Q) TIDWELL RD EB M4–12T XX"X12"

(R) FRIENDLY DR NB M4–12T XX"X12"

(Z) LAVENDER ST NB M4–12T XX"X12"

(T) LAVENDER ST SB M4–12T XX"X12"

(S) FRIENDLY DR SB M4–12T XX"X12"

TCP34

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

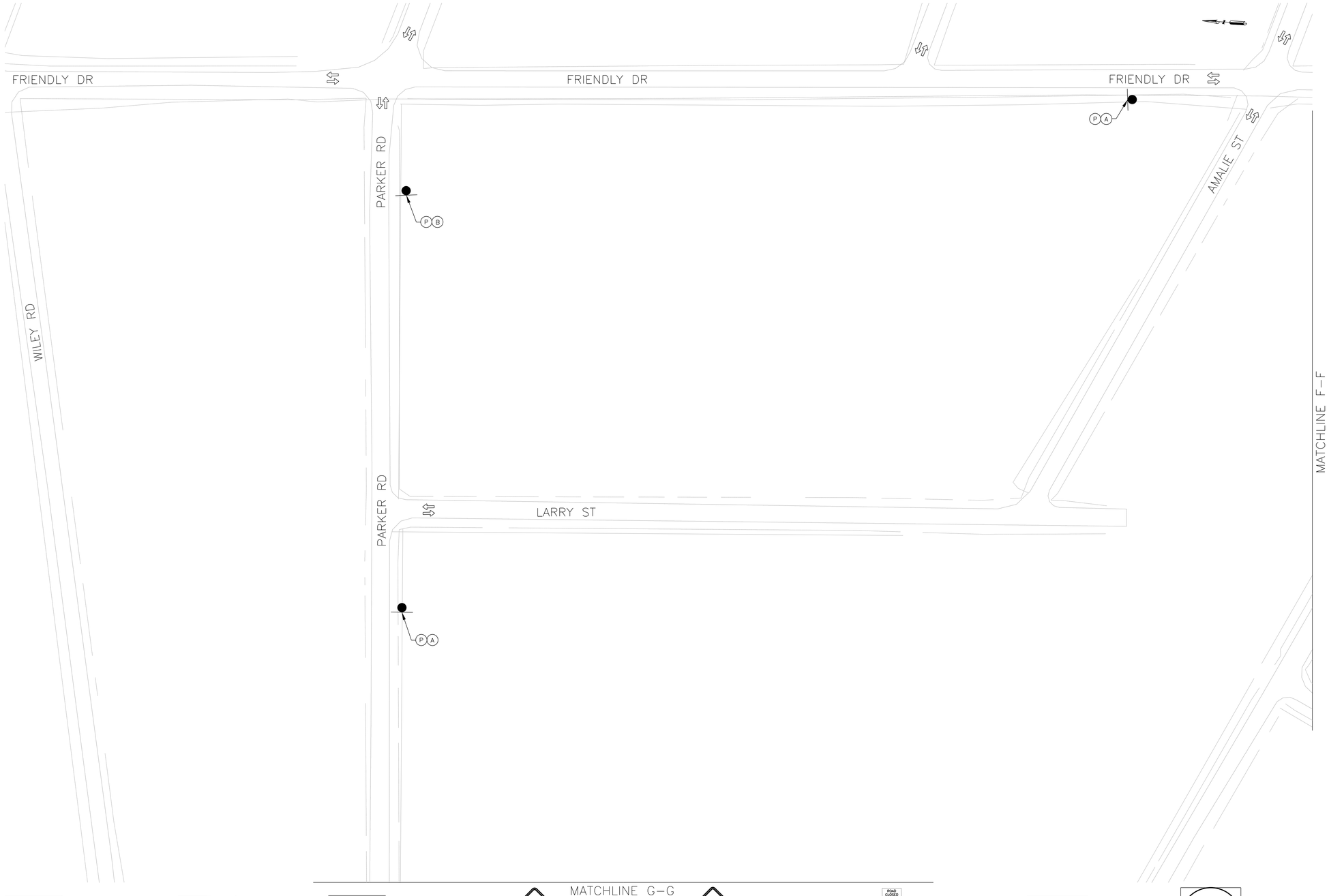
CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 3 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 111 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

(A) DETOUR M4–9S 30"X24"

(B) DETOUR M4–9S 30"X24"

(C) DETOUR M4–9S 30"X24"

(G) ROAD CLOSED AHEAD CW20–3D 48"X48"

(H) DETOUR AHEAD CW20–2D 48"X48"

(I) ROAD CLOSED TY III BARRICADE

(J) ROAD CLOSED R11–2 48"X30"

(K) DO NOT ENTER R5–1 36"X36"

(L) ROAD CLOSED TO THRU TRAFFIC R11–2 60"X30"

(M) R3–1 24"X24"

(N) R3–2 24"X24"

(O) DODSON ST NB M4–12T XX"X12"

(P) DODSON ST SB M4–12T XX"X12"

(Q) TIDWELL RD EB M4–12T XX"X12"

(R) FRIENDLY DR NB M4–12T XX"X12"

(Z) LAVENDER ST NB M4–12T XX"X12"

(T) LAVENDER ST SB M4–12T XX"X12"

(S) FRIENDLY DR SB M4–12T XX"X12"

TCP35

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 3 DETOURS

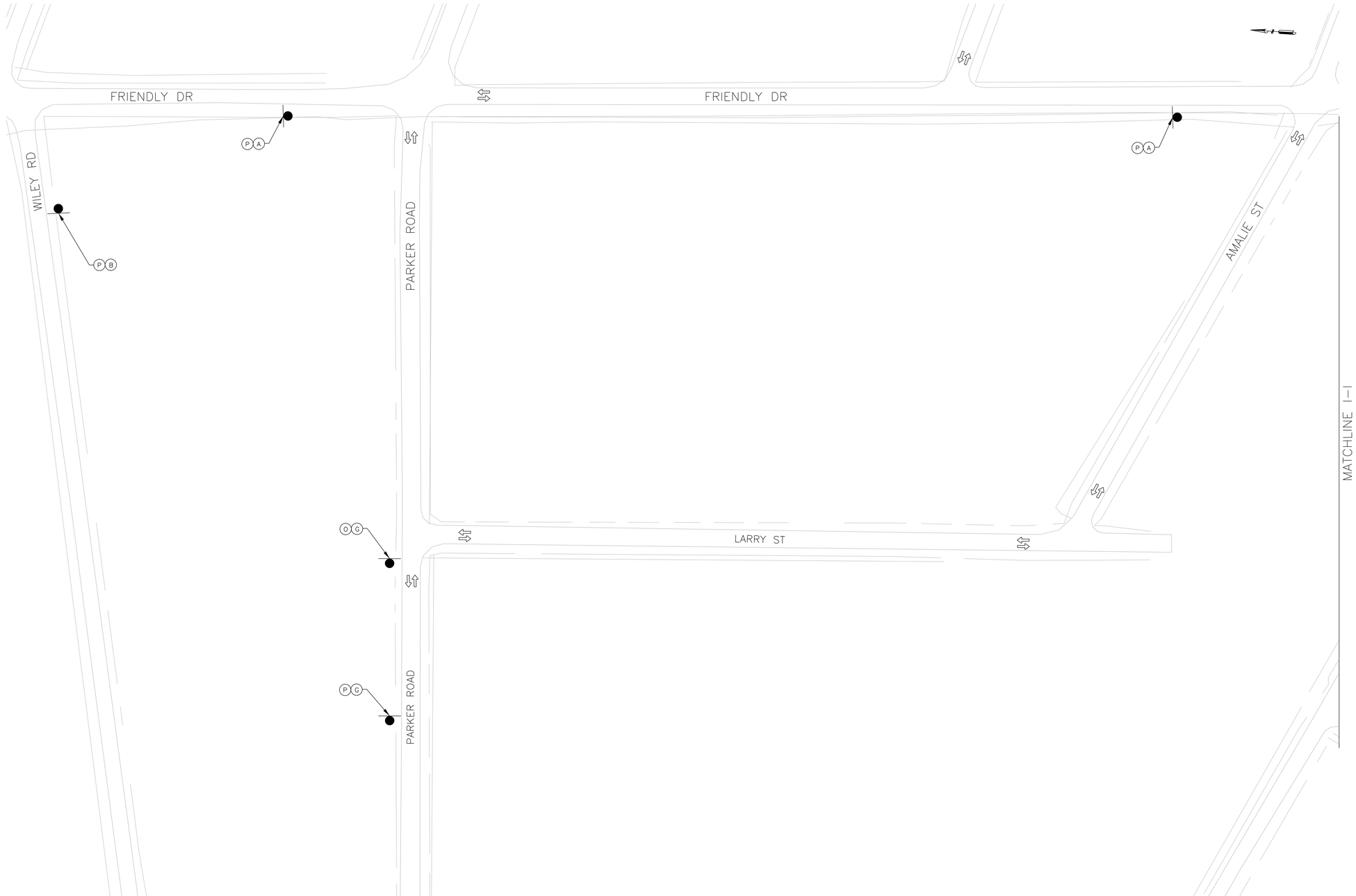
WBS NUMBER
R–001000–0031–3
DRAWING SCALE
AS NOTED
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 112 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EMAIL\SHEET SET\[redacted]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EMOT\SHEETS\XXXX



NO.	DATE	REVISION	APP.

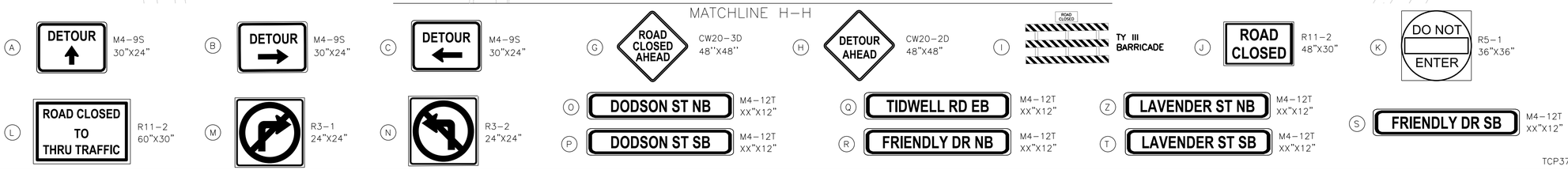
LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS



TCP37

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 –
AREA 1–BASIN IB043

PHASE 4 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 114 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\PLOTTED: 8/18/2025 10:36 AM

LEGEND

- TEMPORARY GROUND MOUNTED SIGN
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW

NOTE:

1–SIGNS SHALL BE SPACED TYPICALLY @ 120' ON ALL SHEETS.

NTS

NO.	DATE	REVISION	APP.

(A) DETOUR M4–9S 30"X24"

(B) DETOUR M4–9S 30"X24"

(C) DETOUR M4–9S 30"X24"

(G) ROAD CLOSED AHEAD CW20–3D 48"X48"

(H) DETOUR AHEAD CW20–2D 48"X48"

(I) ROAD CLOSED TY III BARRICADE

(J) ROAD CLOSED R11–2 48"X30"

(K) DO NOT ENTER R5–1 36"X36"

(L) ROAD CLOSED TO THRU TRAFFIC R11–2 60"X30"

(M) R3–1 24"X24"

(N) R3–2 24"X24"

(O) DODSON ST NB M4–12T XX"X12"

(P) DODSON ST SB M4–12T XX"X12"

(Q) TIDWELL RD EB M4–12T XX"X12"

(R) FRIENDLY DR NB M4–12T XX"X12"

(Z) LAVENDER ST NB M4–12T XX"X12"

(T) LAVENDER ST SB M4–12T XX"X12"

(S) FRIENDLY DR SB M4–12T XX"X12"

TCP 38

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

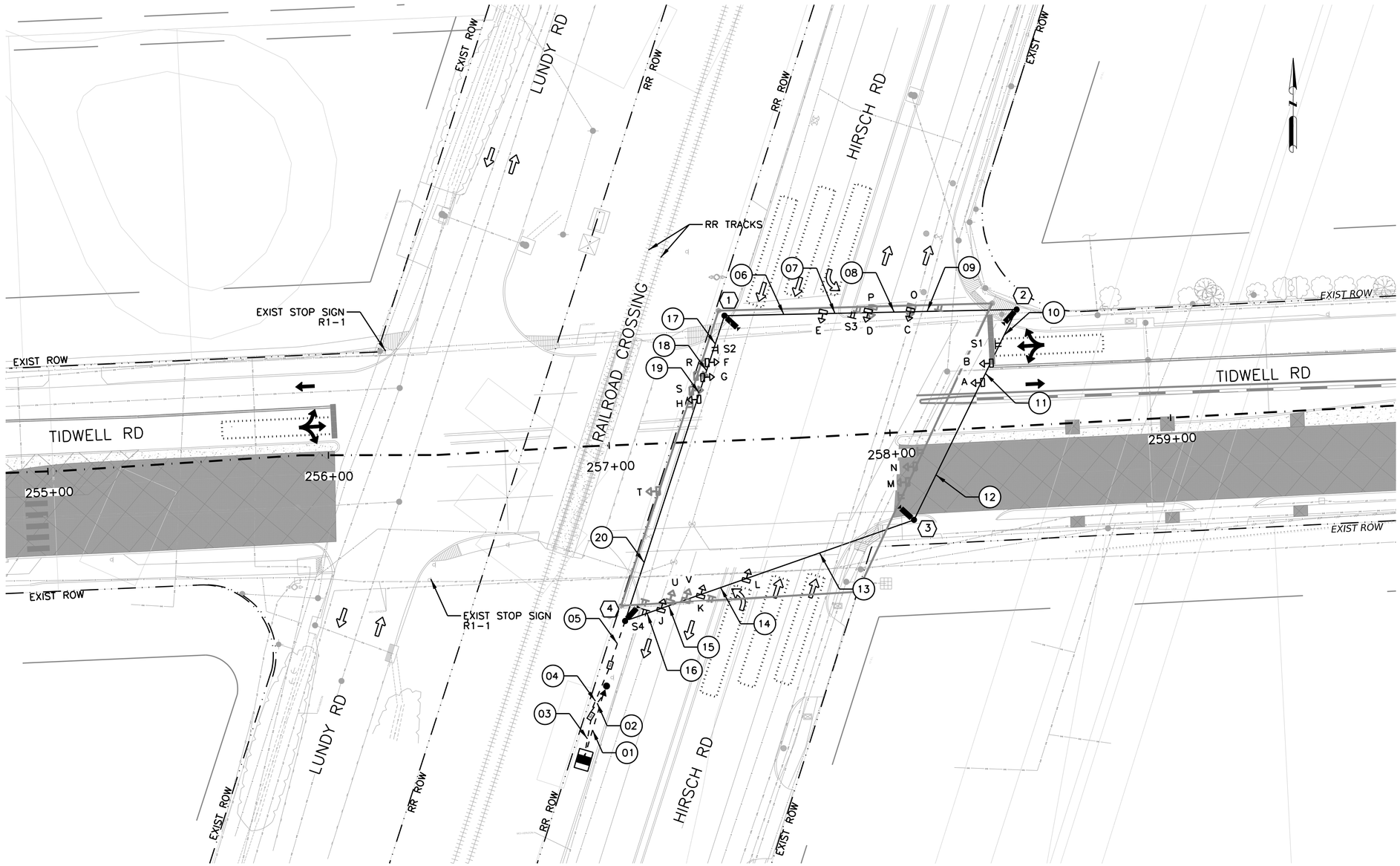
CRMP PACKAGE 6 – AREA 1–BASIN IB043

PHASE 4 DETOURS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 115 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EMJOT\SHEETS\[WATERLINE PLANS.dwg]PLOTTED: 8/18/2025 10:36 AM



LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- EXISTING SIGNAL HEAD
- TEMPORARY SIGNAL HEAD
- CCTV
- OVERHEAD SIGN
- TEMPORARY TIMBER POLE W/ GUY WIRE
- TEMPORARY SPAN WIRE
- TEMPORARY CONTROLLER CABINET
- TEMPORARY PULL BOX
- TEMPORARY CONDUIT
- TEMPORARY SERVICE POLE
- PROP VIVDS DETECTION ZONE (6'X40')

NOTES:
1. INSTALL AND ADJUST TEMPORARY SIGNAL PRIOR TO CONSTRUCTION.
2. LOCATIONS SHOWN FOR ALL TEMPORARY APPURTENANCES ARE SUBJECT TO ADJUSTMENT DUE TO FIELD CONDITIONS WITH THE APPROVAL OF THE FIELD ENGINEER.
3. LOCATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE . IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT EXISTING UTILITIES ARE REMOVED, RELOCATED OR ADJUSTED PRIOR TO COMMENCING WORK.
4. ALIGN SIGNAL HEADS TO THE CENTER OF LANE.
5. TEMPORARY CONDUIT WILL BE ABANDONED WITH THE TEMPORARY SIGNAL REMOVAL.
6. COVER EXISTING SIGNAL AFTER INSTALLATION OF TEMPORARY SIGNAL.
7. REFER TO TRAFFIC SIGNAL ELEVATIONS FOR MORE DETAILS.
8. CONTRACTOR MUST CONNECT SIGNAL WIRING AT CONTROLLER DURING OFF-PEAK HOURS. PROVIDE POLICE OFFICER AS NEEDED FOR TRAFFIC CONTROL.
9. STREET NAME SIGNS FROM EXISTING SIGNAL TO BE REUSED IN TEMPORARY SIGNAL.

0 20 40
SCALE IN FEET

NO.	DATE	REVISION	APP.

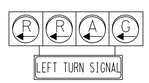
BAG, EXISTING

ONE-WAY
3-SECTION HORIZONTAL
12" LED SIGNAL HEADS

M,N,O,P,R,S,T,U,V

PROPOSED, NEW LOCATION

ONE-WAY
4-SECTION HORIZONTAL
12" LED SIGNAL HEADS



B,E,G,L

ONE-WAY
3-SECTION HORIZONTAL
12" LED SIGNAL HEADS

A,C,D,F,H,J,K

Hirsch Rd
9500 9400
S1,S2

Tidwell Rd
4500 4600
S3,S4

TCP39

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/26
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043 TEMPORARY TRAFFIC SIGNAL PHASE 1 STEP 3

WBS NUMBER
R-001000-0031-3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 116 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

LEGEND

- PROP TEMPORARY PAVEMENT
- WORKZONE
- PROP TEMPORARY BUS STOP
- LOCAL ACCESS ONLY
- PROP CONSTRUCTION EASEMENT
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- EXISTING SIGNAL HEAD
- TEMPORARY SIGNAL HEAD
- CCTV
- OVERHEAD SIGN
- TEMPORARY TIMBER POLE W/ GUY WIRE
- TEMPORARY SPAN WIRE
- TEMPORARY CONTROLLER CABINET
- TEMPORARY PULL BOX
- TEMPORARY CONDUIT
- TEMPORARY SERVICE POLE
- PROP VIVDS DETECTION ZONE (6'X40')

NOTES:
1. INSTALL AND ADJUST TEMPORARY SIGNAL PRIOR TO CONSTRUCTION.
2. LOCATIONS SHOWN FOR ALL TEMPORARY APPURTENANCES ARE SUBJECT TO ADJUSTMENT DUE TO FIELD CONDITIONS WITH THE APPROVAL OF THE FIELD ENGINEER.
3. LOCATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE . IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT EXISTING UTILITIES ARE REMOVED, RELOCATED OR ADJUSTED PRIOR TO COMMENCING WORK.
4. ALIGN SIGNAL HEADS TO THE CENTER OF LANE.
5. TEMPORARY CONDUIT WILL BE ABANDONED WITH THE TEMPORARY SIGNAL REMOVAL.
6. COVER EXISTING SIGNAL AFTER INSTALLATION OF TEMPORARY SIGNAL.
7. REFER TO TRAFFIC SIGNAL ELEVATIONS FOR MORE DETAILS.
8. CONTRACTOR MUST CONNECT SIGNAL WIRING AT CONTROLLER DURING OFF-PEAK HOURS. PROVIDE POLICE OFFICER AS NEEDED FOR TRAFFIC CONTROL.
9. STREET NAME SIGNS FROM EXISTING SIGNAL TO BE REUSED IN TEMPORARY SIGNAL.

0 20 40
SCALE IN FEET

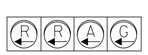
NO.	DATE	REVISION	APP.

BAG, EXISTING

ONE-WAY 3-SECTION HORIZONTAL 12" LED SIGNAL HEADS

A,B,D,E,G,H,J,K

ONE-WAY 4-SECTION HORIZONTAL 12" LED SIGNAL HEADS



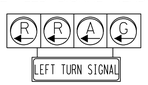
C,F,I,L

PROPOSED, NEW LOCATION

ONE-WAY 3-SECTION HORIZONTAL 12" LED SIGNAL HEADS

M,O,Q,R

ONE-WAY 4-SECTION HORIZONTAL 12" LED SIGNAL HEADS



N,P,S

S1,S3

S2,S4

R3-2
30"X30"
S5

R3-1
30"X30"
S6,S7

R3-6R
30"X36"
S8

AGHA ENGINEERING LLC F-20817 1080 ELDRIDGE PKWY SUITE #1100 HOUSTON, TX 77077	DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES. YAZAN BADRI. PE 144635 TEXAS SERIAL NO. 07/09/26 DATE
SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 –
AREA 1–BASIN IB043
TEMPORARY TRAFFIC SIGNAL
PHASE 1 STEP 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 117 OF 192	

60% SUBMITTAL

TCP40

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\ENGINEERING\TRAFFIC\SIGNAL\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

	TEMPORARY SIGNAL POLE CHART
POLE ID	TEMPORARY TIMBER POLE (40' TALL) W/2 DOWN GUYS WITH ACCUSCAN 300
POLE 1	TEMPORARY TIMBER POLE (40' TALL) W/2 DOWN GUYS WITH ACCUSCAN 300
POLE 2	TEMPORARY TIMBER POLE (40' TALL) W/2 DOWN GUYS WITH ACCUSCAN 300
POLE 3	TEMPORARY TIMBER POLE (40' TALL) W/2 DOWN GUYS WITH ACCUSCAN 300
POLE 4	TEMPORARY TIMBER POLE (40' TALL) W/2 DOWN GUYS WITH ACCUSCAN 300
METER	METER POLE, SERVICE LOOP AND DISCONNECT TYPE D (120/240) 70 (NS) SS (E) SP (O)
CONTROLLER CABINET	ATC 2071 HC (ITS) CONTROLLER IN A GROUND MOUNTED CABINET (HOUSING) AND A CONCRETE FOUNDATION WITH PROPOSED BATTERY BACKUP SYSTEM

PROPOSED ELECTRICAL SCHEDULE FOR TIDWELL RD & LOCKWOOD RD INTERSECTION

DESCRIPTION	ITEM	RUN NUMBER															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
POWER	#4 AWG XHHW (STRANDED)	2															
GROUND BARE	#8 BARE COPPER	1	1	1	1	1											
VEHICLE SIGNAL	7/C #14 (IMSA 20-1) (STRANDED)			7	7	7		2	1	3	3	2	1	2	2	3	4
CCTV CABLE	6/C #14 AWG			4	4	4	1	1	1	2	3			1	1	1	1
CONDUIT (PVC)	1"																
	2"	1	1														
	3"																
	4"			1	1	1											

PROPOSED ELECTRICAL SCHEDULE FOR TIDWELL RD & HIRSCH RD INTERSECTION

DESCRIPTION	ITEM	RUN NUMBER																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
POWER	#4 AWG XHHW (STRANDED)	2																				
GROUND BARE	#8 BARE COPPER	1	1	1	1	1																
VEHICLE SIGNAL	7/C #14 (IMSA 20-1) (STRANDED)			8	8	8		1	3	2	2	3	4	4	5	6	6	1	3	2	2	
CCTV CABLE	6/C #14 AWG			4	4	4	1				1	2	2	3	3	3	3				1	
CONDUIT (PVC)	1"																					
	2"	1	1																			
	3"																					
	4"			1	1	1																

ELECTRICAL SERVICE DATA

ADDRESS	ELECTRICAL SERVICE DESCRIPTIONI (SEE ELECTRICAL DETAILS – SERVICE SUPPORT SF & SP)	SERVICE CONDUIT SIZE	SERVICE CONDUCTORS NO./SIZE	SAFETY SWITCH AMPS	MAIN DISCONNECT		TWO-POLE CONTACTOR AMPS	PANEL BD/LOADCENTER AMP RATING (MIN.)	CIRCUIT NO.	BRANCH CKT. BKR. POLE/AMPS	KVA LOAD
					SWITCH AMP/FUSES	CKT. BKR. POLE/AMP					
ESIID:	ELEC SERV TY D(120/240) 070 (NS)SS(E)SP(O)	1-1/4"	3/#4	N/A	N/A	2P/70	20	70	TRAFFIC SIGNAL	1P/50	<7.1
									ILUMINATION	2P/50	

NOTES:
1. PROVIDE AND INSTALL TEMPORARY SIGNAL AS SHOWN PRIOR TO CONSTRUCTION.
2. LOCATIONS OF UTILITY ARE APPROXIMATE. VERIFY ALL OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REPAIR DAMAGES, IN COORDINATION WITH UTILITY COMPANIES, CAUSED DURING CONSTRUCTION OF TEMPORARY SIGNALS AT NO ADDITIONAL COST.
3. NO PEDESTRIAN ACCESS IS PROVIDED DURING CONSTRUCTION.
4. REFER TO TRAFFIC CONTROL PLANS FOR CONSTRUCTION SEQUENCES, CONSTRUCTION AREA, ROAD CLOSURE AND DETOUR, PAVEMENT MARKINGS, SIGNING, AND OTHER INFORMATION.

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/26
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043 TEMPORARY TRAFFIC DETAILS

WBS NUMBER
R-001000-0031-3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 118 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

TCP41

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\[illegible]WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

GENERAL NOTES

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) LATEST EDITION WITIH REVISIONS DURING THE ENTIRE CONSTRUCTION PERIOD.
2. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM THE LATEST VERSION OF THE TMUTCD.
3. NO LANES SHALL BE CLOSED DURING THE HOURS OF 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM MONDAY THRU FRIDAY WITHOUT APPROVAL OF THE CITY TRAFFIC ENGINEER.
4. NO WORK SHALL BE PERFORMED IN RESIDENTIAL AREAS FROM 7:00 PM TO 7:00 AM.
5. CONTRACTOR SHALL MAINTAIN APPROVED NUMBER OF THROUGH LANES OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION WORKING HOURS. TRAFFIC CONTROL PLANS SHALL INCLUDE ONE-WAY AND/OR DETOUR PLANS. CONTRACTOR SHALL MAINTAIN ADA COMPLIANT PEDESTRIAN ACCESS TO BUS STOPS AND ADEQUATE BUS ACCESS TO ALL THE BUS STOPS.
6. CONTRACTOR SHALL MAINTAIN TRAFFIC LANES AND DETOURS ACCORDING TO TRAFFIC CONTROL PLANS DURING WORKING HOURS.
7. CONTRACTOR SHALL COVER OPEN PAVEMENT EXCAVATIONS FOR MINOR UTILITY WORK WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW WHEN FEASIBLE.
8. IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT METHOD OF "TRAFFIC CONTROL PLANS" DURING THE CONSTRUCTION THAN WHAT IS OUTLINED IN THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT AN ALTERNATE SET OF TRAFFIC CONTROL PLANS TO THE CITY OF HOUSTON PROJECT MANAGER FOR APPROVAL TEN WORKING DAYS PRIOR TO IMPLEMENTATION. THESE PLANS SHALL BE DRAWN TO SCALE ON REPRODUCIBLE MYLARS AND SHALL BE SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS. OFFICE OF CITY ENGINEER, MOBILITY PERMITS SECTION REPRESENTATIVE APPROVAL IS REQUIRED TO ACCEPT THE PROPOSED CHANGES.
9. CONTRACTOR SHALL SECURE LANE/SIDEWALK/BICYCLE FACILITY CLOSURE PERMITS FROM OFFICE OF CITY ENGINEER (MOBILITY PERMIT SECTION AT https://geohub.houstontx.gov) BEFORE IMPLEMENTING THE TRAFFIC CONTROL PLAN. THE APPLICATION MUST BE SUBMITTED AT LEAST TEN DAYS PRIOR TO THE IMPLEMENTATION OF THE TRAFFIC CONTROL PLAN AND/OR BEGINNING CONSTRUCTION WORK. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, CONSTRUCTION SEQUENCING, AND CONSTRUCTION SCHEDULE WITH THE APPLICATION.
10. CONTRACTOR SHALL HAVE APPROVED TRAFFIC CONTROL PLAN AND PERMIT AT THE JOB SITE FOR INSPECTION AT ALL TIMES.
11. DURING PAVEMENT SURFACE RESTORATION PROJECTS; THE CONTRACTOR SHALL NOT OPEN CLOSED LANES UNTIL THE PAVEMENT SURFACE HAS CURED ENOUGH TO ALLOW VEHICULAR TRAFFIC ACCORDING TO CITY OF HOUSTON STANDARD SPECIFICATIONS.
12. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATING ALL CONSTRUCTION ACTIVITIES WITH STAKE HOLDERS IN THE VICINITY INCLUDING EMERGENCY RESPONSE AGENCIES SUCH AS HOUSTON POLICE DEPARTMENT, HOUSTON FIRE DEPARTMENT, AND METROPOLITAN TRANSIT AUTHORITY.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ISSUING ALL WORK DIRECTIVES TO ALL SUB-CONTRACTORS, UTILITY COMPANIES, AND ALL OTHER ENTITIES PERFORMING CONSTRUCTION WORK ASSOCIATED WITH THE PROJECT.
14. NOTHING IN THESE NOTES OR PLANS SHALL RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT; INCLUDING SAFETY OF ALL MODES OF TRANSPORTATION, PERSONS, AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.
15. THE OFFICE OF CITY ENGINEER (MOBILITY PERMITS GROUP) PER THE DIRECTION OF THE CITY TRAFFIC ENGINEER HAVE THE RIGHT TO DEMAND THE INSTALLATION OF ADDITIONAL TRAFFIC CONTROL DEVICES OR MODIFICATIONS OF THESE PLANS AND NOTES, AS DEEMED NECESSARY TO PROMOTE THE SAFE AND ORDERLY FLOW OF TRAFFIC, INCLUDING PEDESTRIANS AND BICYCLES, THROUGH THE CONSTRUCTION WORK ZONE. THE CONTRACTOR SHALL COMPLY WITH THESE ADDITIONAL REQUESTS OR MODIFICATIONS WITH DUE DILIGENCE.
16. ALL EXISTING TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE MAINTAINED IN VISIBLE LOCATIONS DURING CONSTRUCTION UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM CITY OF HOUSTON PROJECT MANAGER. THE CONTRACTOR SHALL RESTORE OR REPLACE (AT THE DISCRETION OF THE CITY TRAFFIC ENGINEER) ANY PAVEMENT MARKING OR SIGNING DAMAGE DURING CONSTRUCTION OPERATIONS, INCLUDING RAISED PAVEMENT MARKERS (RPMS).
17. WHEN ENTERING OR LEAVING ROADWAYS CARRYING PUBLIC TRAFFIC, THE CONTRACTOR'S EQUIPMENT, WHETHER EMPTY OR LOADED SHALL IN ALL CASES YIELD TO PUBLIC TRAFFIC WITH THE ASSISTANCE OF CONTRACTOR PROVIDED CERTIFIED FLAGGER/PEACE OFFICER.
18. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL CONES AND/OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAYS, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM CITY OF HOUSTON PROJECT MANAGER.
19. SPILLAGE RESULTING FROM HAULING OPERATIONS ALONG OR ACROSS ANY PUBLIC TRAVELED WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
20. THE CONTRACTOR SHALL SUBMIT AN APPLICATION FOR TEMPORARY PARKING RESTRICTIONS IF THERE ARE PARKING METERS LOCATED AT THE PROPOSED LANE CLOSURES FROM PARKING MANAGEMENT DIVISION (832-393-8690) AT LEAST TEN BUSINESS DAYS BEFORE IMPLEMENTATION OF LANE CLOSURES. IN ADDITION, TEMPORARY NO PARKING SIGNS SHALL BE POSTED 24 HOURS PRIOR TO COMMENCEMENT OF WORK.
21. ADDITIONAL OFF DUTY OFFICERS/FLAGGERS MAY BE REQUESTED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED AT THE DISCRETION OF THE CITY PROJECT MANAGER EVEN IF THEY ARE NOT SPECIFICALLY IDENTIFIED ON THE PROJECT PLANS.
22. THE CONTRACTOR SHALL REPLACE WITHIN 72 HOURS, ALL TRAFFIC SIGNAL LOOP DETECTORS DAMAGED DURING CONSTRUCTION.
23. IN GENERAL, A SOLAR POWERED FLASHING ARROW BOARD SHALL BE REQUIRED ON ALL MAJOR THOROUGHFARE LANES CLOSURES. EXCEPTIONS TO FLASHING ARROW BOARDS AND/OR IMPLEMENTATION ON RESIDENTIAL LANE CLOSURES SHALL BE APPROVED BY CITY TRAFFIC ENGINEER:\N
24. APPROVED TRAFFIC CONTROL PLAN SHALL BE IN PLACE BEFORE STARTING ANY EXCAVATION.
25. WATER FILLED BARRIERS CAN BE USED AS INSTRUCTED BY THE ENGINEER AND APPROVED BY THE CITY FOR PROJECTS WHERE SPACE IS LIMITED AND HEAVY EQUIPMENT TO PLACE CONCRETE BARRIERS IS NOT FEASIBLE. WATER FILLED BARRIERS SHALL NOT BE USED ON ROADWAYS WITH A POSTED SPEED LIMIT MORE THAN 45 MPH.
26. WATER FILLED BARRIERS MUST BE INSTALLED AND MAINTAINED PER THE MANUFACTURER'S REQUIREMENTS AND ROUTINELY INSPECTED FOR DEFECTS.
27. IF WATER FILLED BARRIER IS PROVIDED, USE ENVIRONMENTALLY SAFE ANTI-FREEZING AGENT IN THE WATER WHEN IT IS APPLICABLE PER MANUFACTURER SPECIFICATIONS AND RECOVER AGENT WHEN THE BARRIER IS DRAINED.
28. DISPOSE OF WATER AND AGENT PROPERLY. DO NOT DRAIN WATER FILLED BARRIER INTO OR ACROSS AN EXISTING TRAVEL LANE.
29. PROVIDE BARRIER UNITS THAT ARE CAPABLE OF BEING LIFTED AND MOVED WHEN FILLED IF DRAINING IS NOT POSSIBLE.
30. PROVIDE WATER FILLED BARRIER THAT ACTS AS ITS OWN FREE STANDING, NON-REDIRECTIVE END TREATMENT.
31. WHEN WATER FILLED BARRIERS ARE USED TO CHANNELIZE PEDESTRIANS, THEY MUST HAVE A CONTINUOUS DETECTABLE BOTTOM FOR USERS OF LONG CANES AND THE TOP OF THE UNIT SHALL NOT BE LESS THAN 32 INCHES IN HEIGHT.
32. ANY CLOSURE OF A PEDESTRIAN OR BICYCLE FACILITY SHALL REQUIRE THE SHORTEST DETOUR THAT MAINTAINS THE SAFETY OF PEDESTRIAN AND/OR BICYCLISTS.

SPACING FOR CHANNELIZING DEVICES

A. PLASTIC DRUMS ON MERGING TAPER @ 30' C – C WITH CHEVRON SIGN @ 60' C – C AND WARNING LIGHTS FOR OVERNIGHT CLOSURE.

B. PLASTIC DRUMS ON DOWNSTREAM TAPER @ 30' C – C (RETURN TAPER AND BARRICADE ARE OPTIONAL AND DIVIDED ROADWAY SECTION)

C. PLASTIC DRUMS ON RADII @ 35' C –C.

D. PLASTIC DRUMS ON TANGENT @ 35' C – C WITH VERTICAL PANEL AT 70' C – C AND APPROVED WARNING LIGHT @ 70' C – C (FOR OVERNIGHT CLOSURE).

E. PLASTIC DRUMS IN FRONT OF CONSTRUCTION ZONE @ 20' C – C WITH VERTICAL PANEL AT 40' C – C AND APPROVED WARNING LIGHT @ 40' C – C (FOR OVERNIGHT CLOSURE).

F. CONCRETE TRAFFIC BARRIER (CTB) OR LOW PROFILE CONCRETE TRAFFIC BARRIER (LPCTB) WITH APPROVED REFLECTORS @ 10' C – C IF PAVEMENT DROP IS GREATER THAN 1 FOOT.

G. PLASTIC DRUMS W/GUARD RAIL MOUNTED.

H. SELF- RIGHTING VERTICAL PANEL SPACING.
- 4 LANES TO 2 LANES UNDIVIDED ROADWAY SECTION @ 20' C – C.
- 4 LANES DIVIDED ROADWAY TO ONE SIDE TWO WAY ROADWAY @ 20' C – C.
- LEFT LANE AND RIGHT LANE STORAGE BAYS @ 15' C – C.

I. SPACING SHOWN ON TRAFFIC CONTROL SHALL SUPERSEDE THE ABOVE SPACING.

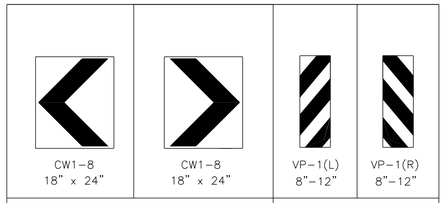
J. SPACING MAY BE ADJUSTED TO PROVIDE DRIVEWAYS, INTERSECTIONS AND /OR MEDIAN OPENINGS.

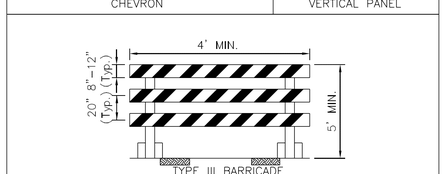
TABLE C3 – TYPICAL SIGN SPACING, TAPER LENGTHS, AND SUGGESTED SPACING OF CHANNELIZATION DEVICES

POSTED SPEED (MPH)	SIGN SPACING "X" (FEET)	MIN. DESIRABLE TAPER LENGTH "L"			SUGGESTED MAXIMUM SPACING OF DEVICE	
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT
30	120'	150'	165'	180'	30'	60'-75'
35	160'	205'	225'	245'	35'	70'-90'
40	240'	265'	295'	320'	40'	80'-100'
45	320'	450'	495'	540'	45'	90'-110'
50	400'	500'	550'	600'	50'	100'-125'
55	500'	550'	605'	660'	55'	110'-140'

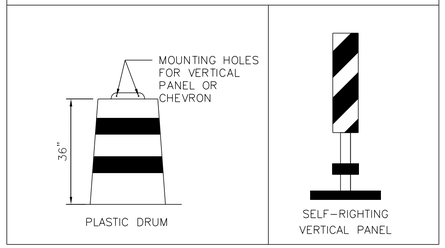
TABLE C4 – STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

POSTED SPEED (MPH)	DISTANCE "D" (FEET)
30	200
35	250
40	305
45	360
50	425
55	495

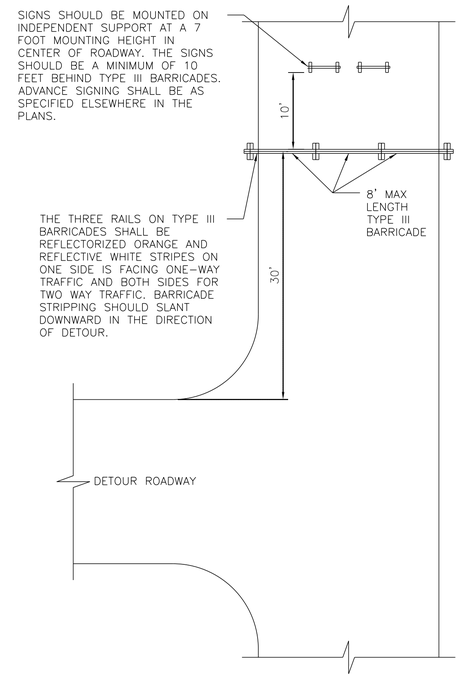




NOTE: STRIPES SHOULD SLOPE DOWNWARDS IN THE DIRECTION TOWARDS WHICH TRAFFIC IS DIRECTED.



CHANNELIZATION AND BARRICADES



PLAN VIEW
TYPE III BARRICADE (POST AND SKID)
TYPICAL APPLICATION

TCP42

LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

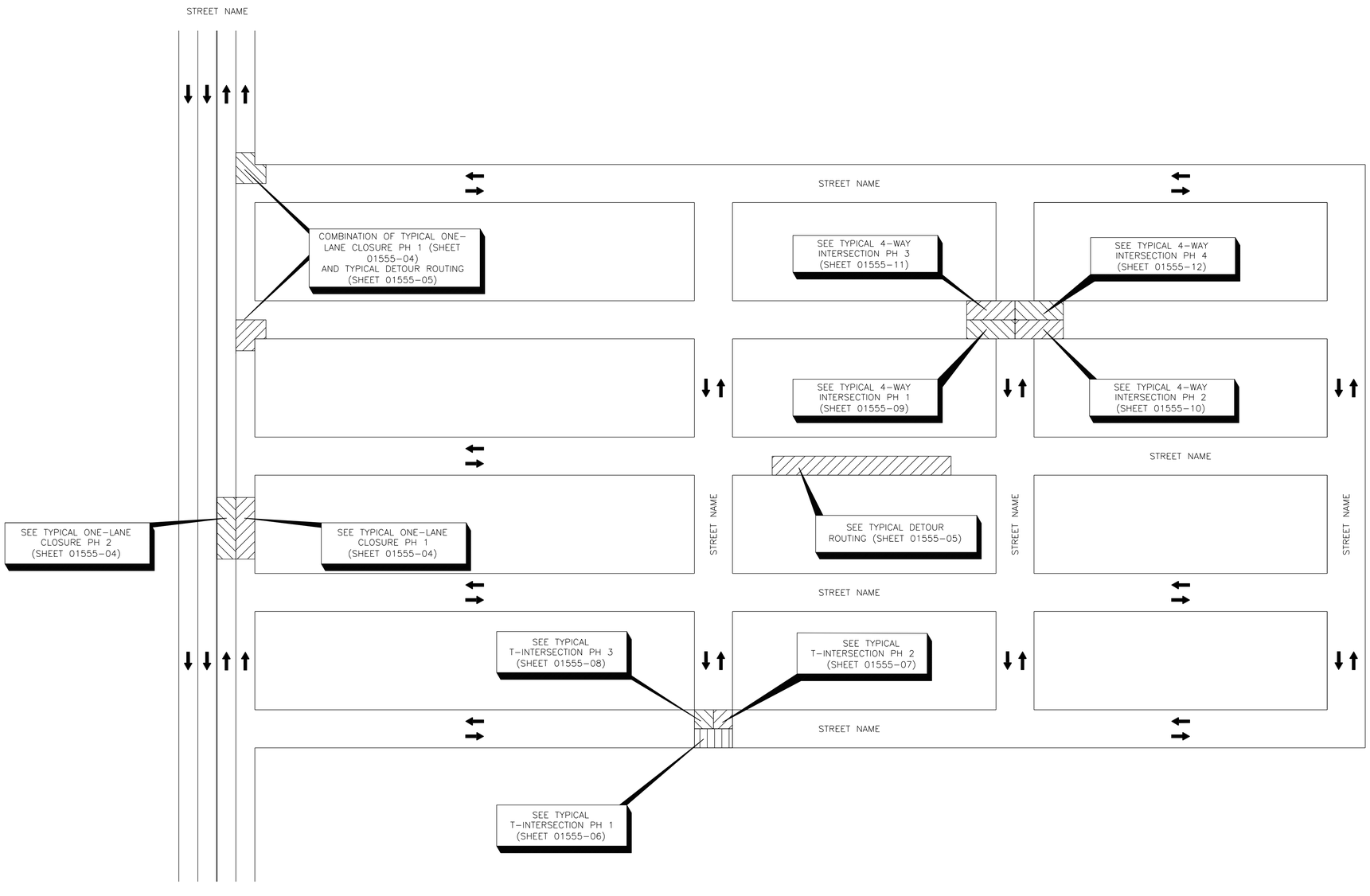
CRMP PACKAGE 6 – AREA 1-BASIN IB043

TCP NOTES CHANNELIZING DEVICES AND BEARRICADES

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 119 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENGINEERING\CIVIL\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TCP OVERALL TRAFFIC CONTROL LAYOUT

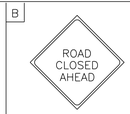
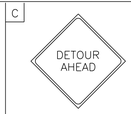
WBS NUMBER
R-001000-0031-3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 120 OF 192

FOR CITY OF HOUSTON USE ONLY

60% SUBMITTAL

TCP43

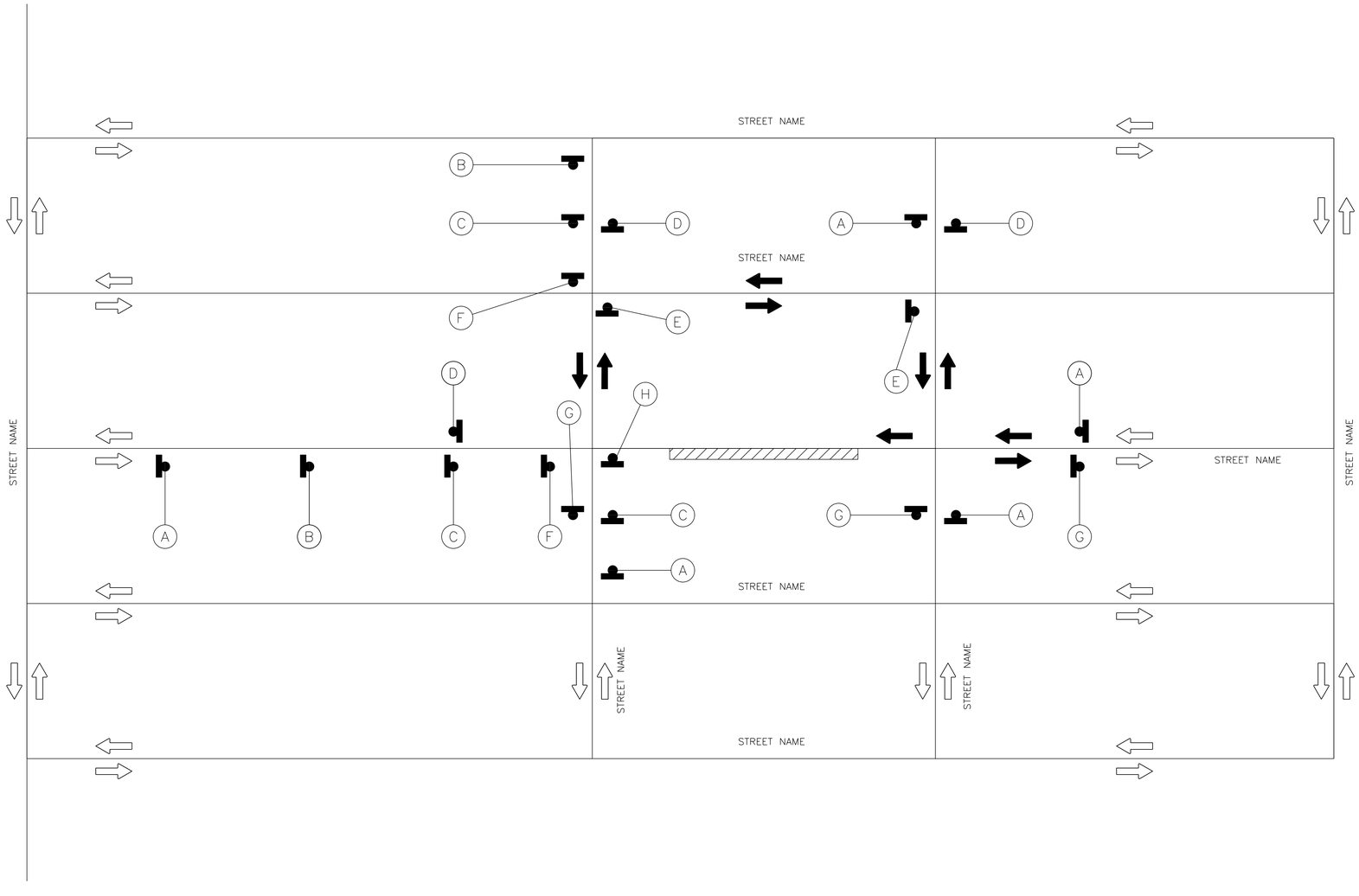
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EN01\SHT\XBX-CRMP-WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

A	B	C	D	E	F	G	H
							
CW20-1	CW20-3	CW20-2	G20-2	M4-9R	M4-9L	M4-8a	M4-9T

LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NO.	DATE	REVISION	APP.



AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TRAFFIC CONTROL LAYOUT

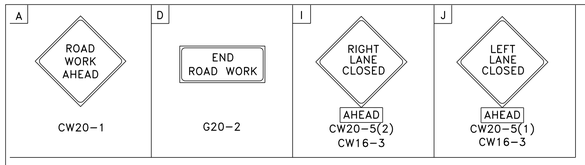
WBS NUMBER
R-001000-0031-3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 121 OF 192

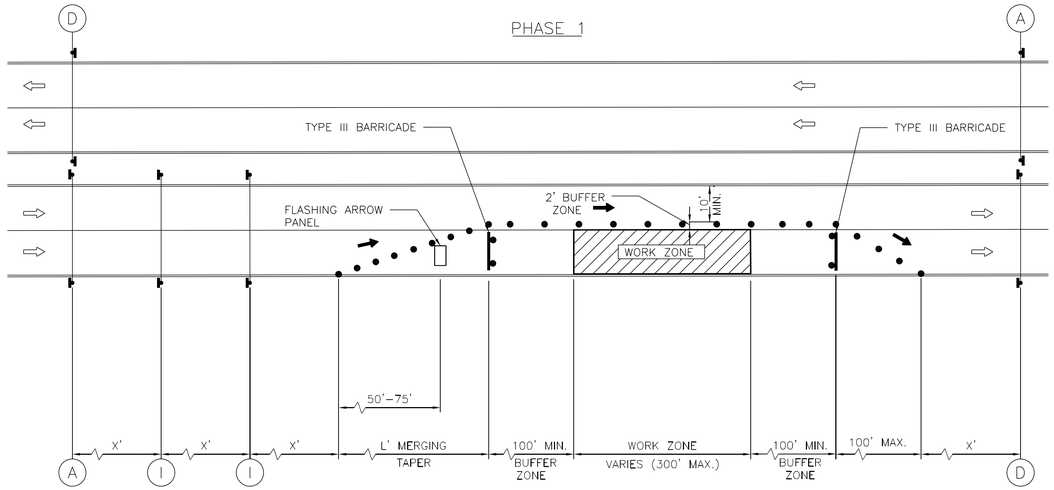
FOR CITY OF HOUSTON USE ONLY

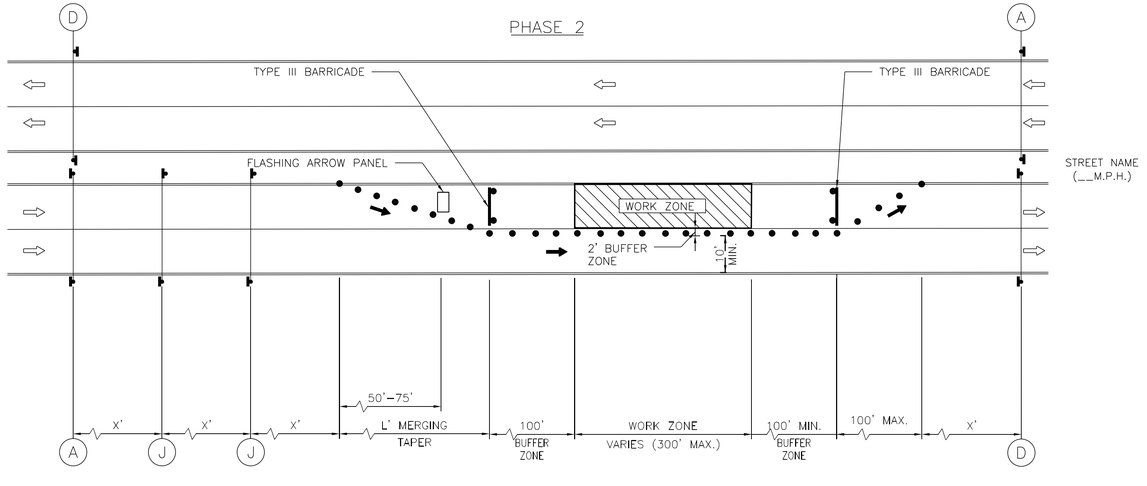
60% SUBMITTAL

TCP44

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENG\TCP\[TCP44 - 60%x-60%x-WATERLINE PLANS.dwg]PLOTTED: 8/18/2025 10:36 AM







LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. RETURN TAPERS AND DOWNSTREAM BARRICADES ARE OPTIONAL ON A DIVIDED ROADWAY SECTION.
2. DOUBLE SIGNS SHALL BE USED ONLY ON ROADWAYS WITH MEDIANS.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TCP ONE LANE CLOSURE PHASE 1 & 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 122 OF 192	

TCP45

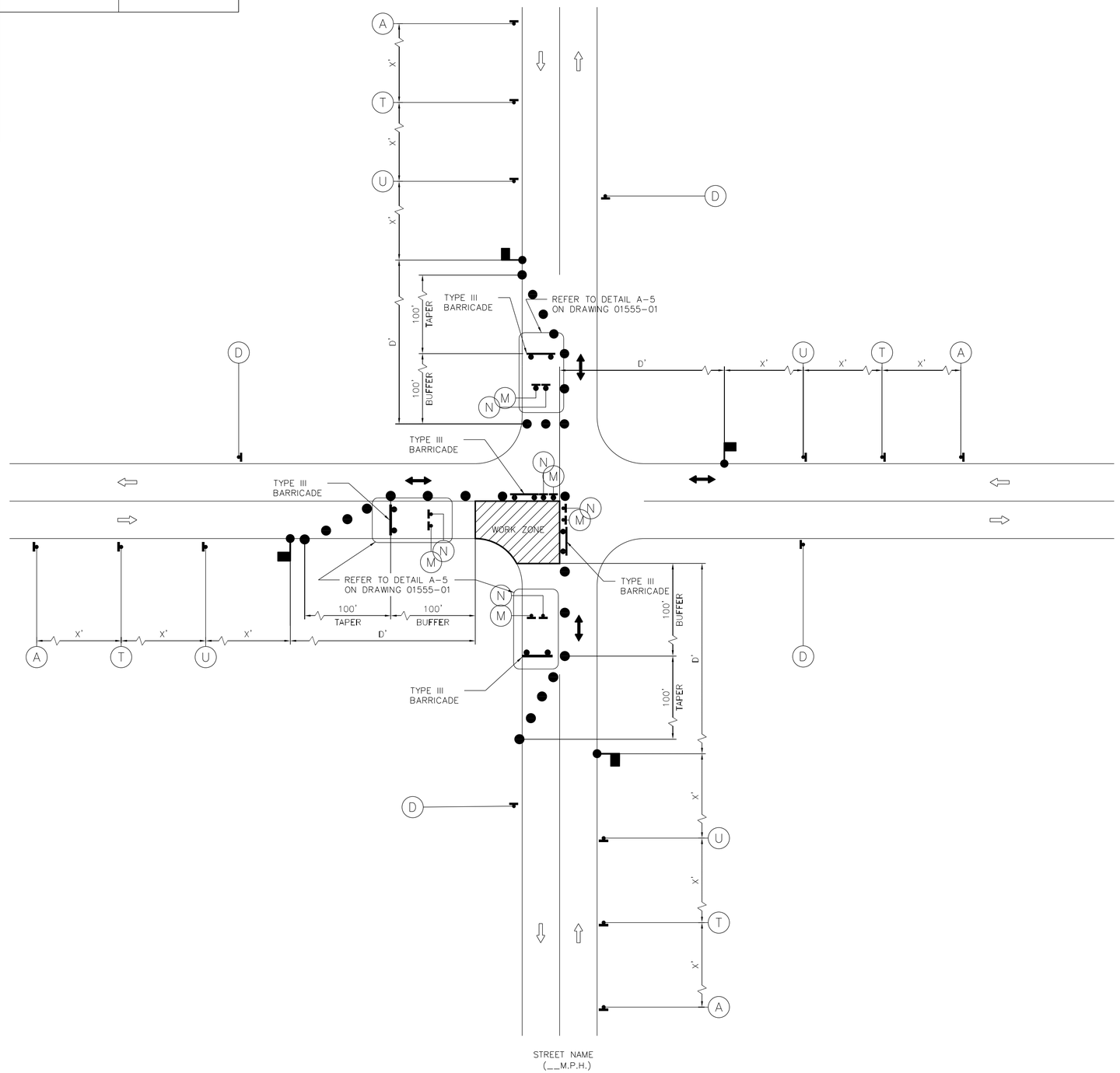
60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\PLOT\PLOT XXX-XXX-WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\EN01_CITY\02x-60xxx-tw WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

A	T	U	D
ROAD WORK AHEAD	ONE LANE ROAD AHEAD		END ROAD WORK
CW20-1	CW20-4	CW20-7	G20-2

M	N
DO NOT ENTER	ROAD CLOSED
R5-1	R11-2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NO.	DATE	REVISION	APP.

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

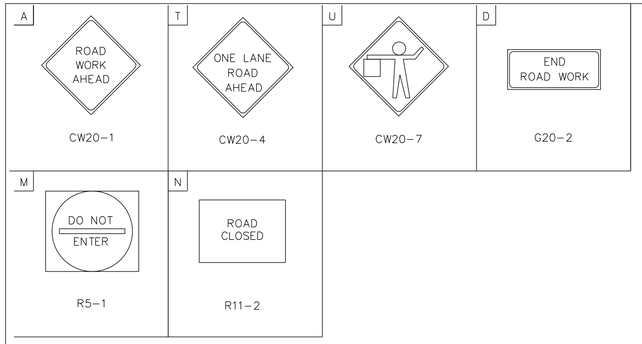
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

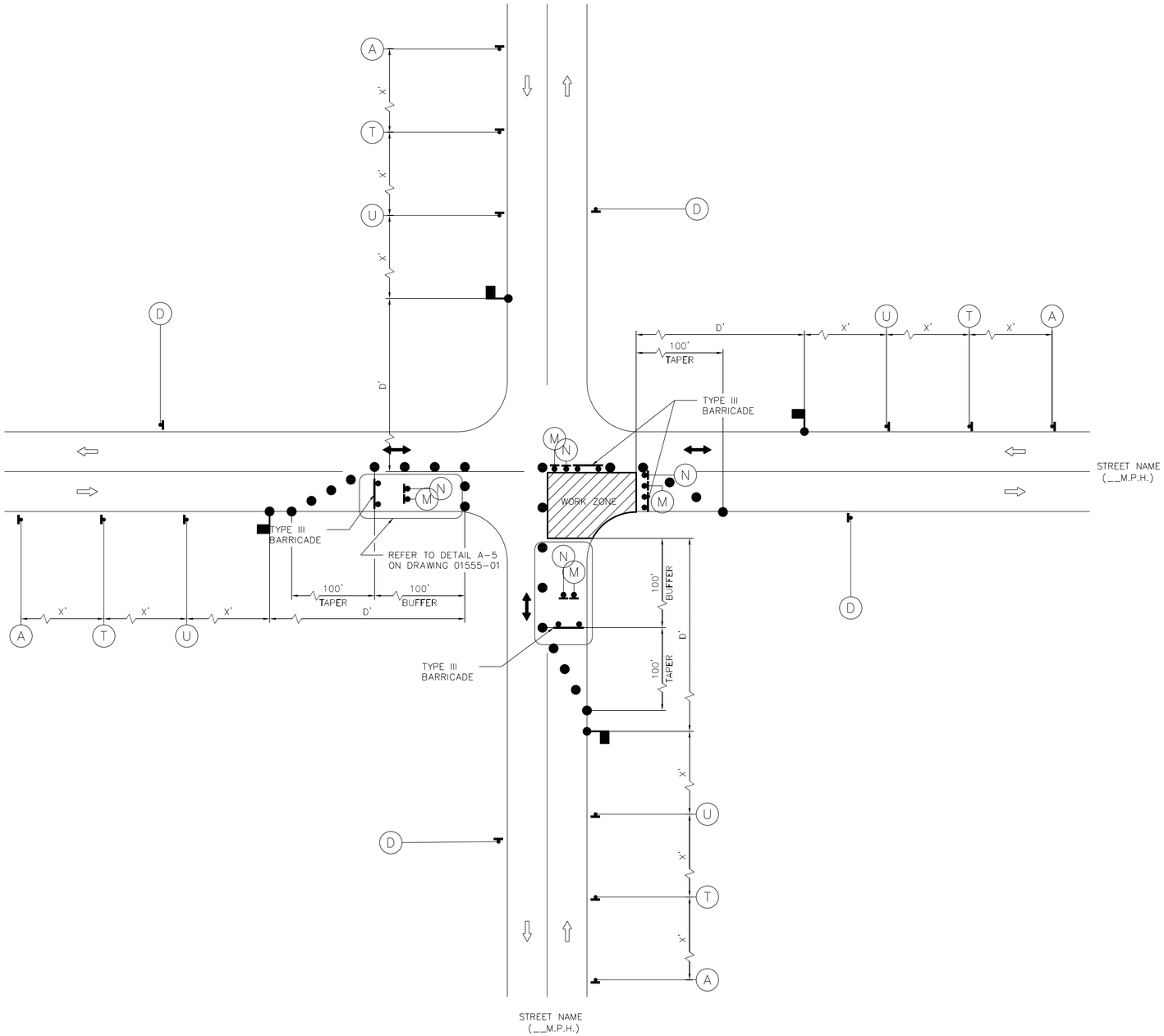
CRMP PACKAGE 6 – AREA 1–BASIN IB043
TCP TYPICAL CONSTRUCTION ZONE AT A 4–WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 1 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 123 OF 192	

TCP46

60% SUBMITTAL





LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NO.	DATE	REVISION	APP.

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043
TCP TYPICAL CONSTRUCTION ZONE AT A 4–WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 2 OF 4

WBS NUMBER
R-001000-0031-3
DRAWING SCALE
1"=40' (H) N/A (V)
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 124 OF 192

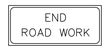
FOR CITY OF HOUSTON USE ONLY

TCP47

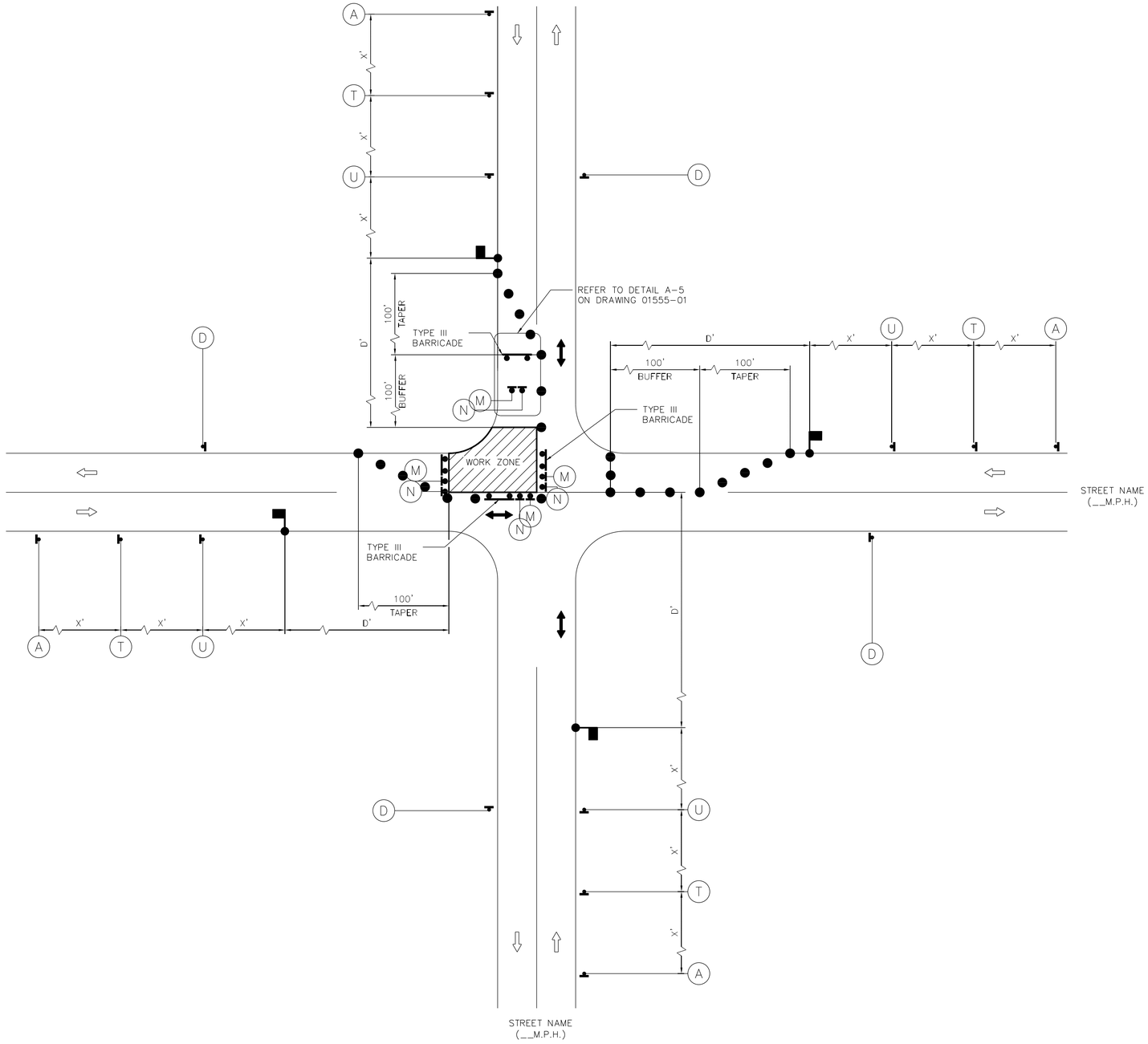
60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENG\CITY\02 CROSS SECTIONS\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRealis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENGINEERING\CRMP-6-XXXX-WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM

A	T	U	D
CW20-1	CW20-4	CW20-7	 G20-2

M	N
R5-1	R11-2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NO.	DATE	REVISION	APP.

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI. PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

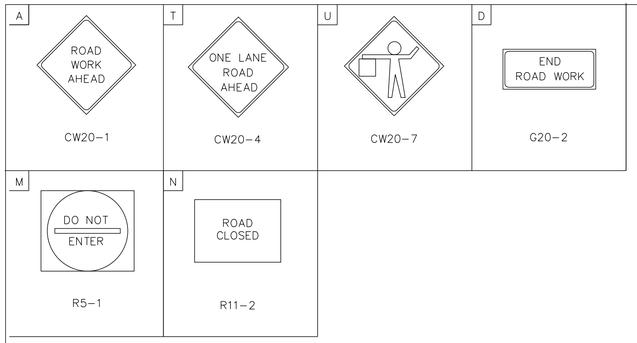
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

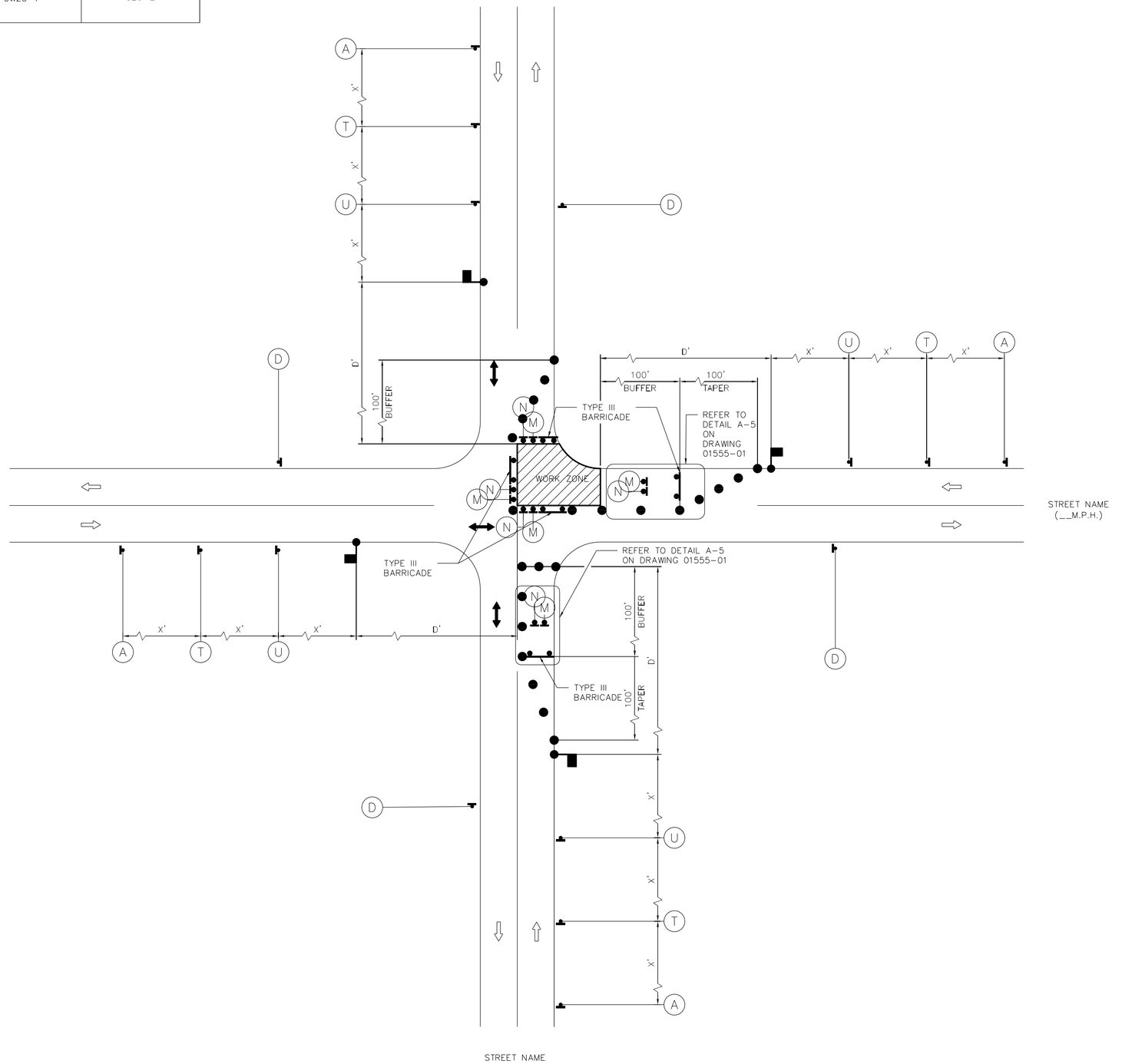
CRMP PACKAGE 6 – AREA 1–BASIN IB043
TCP TYPICAL CONSTRUCTION ZONE AT A 4–WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 3 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 125 OF 192	

TCP48

60% SUBMITTAL





LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

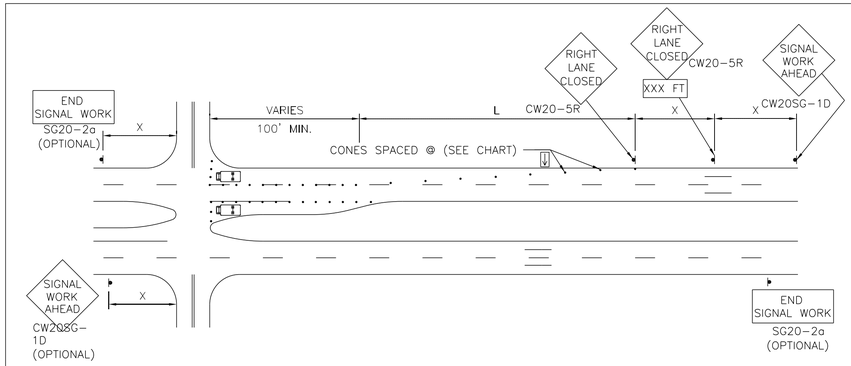
CRMP PACKAGE 6 – AREA 1–BASIN IB043
TCP TYPICAL CONSTRUCTION ZONE AT A 4–WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 4 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 126 OF 192	

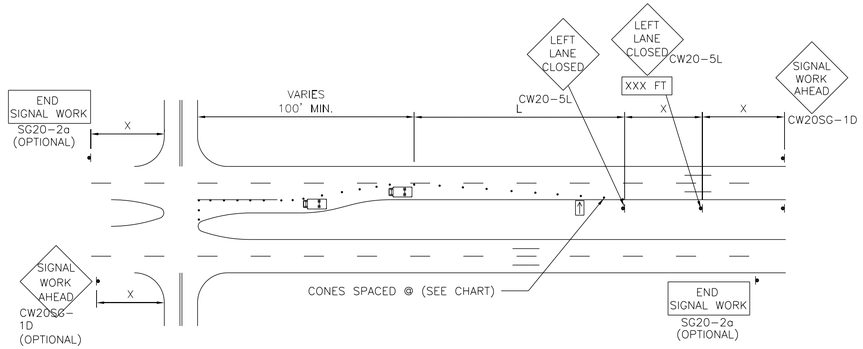
TCP49

60% SUBMITTAL

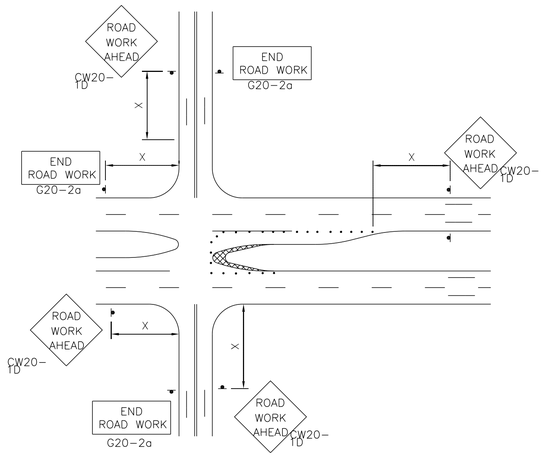
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\PLOT DRAWING\WATERLINE PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



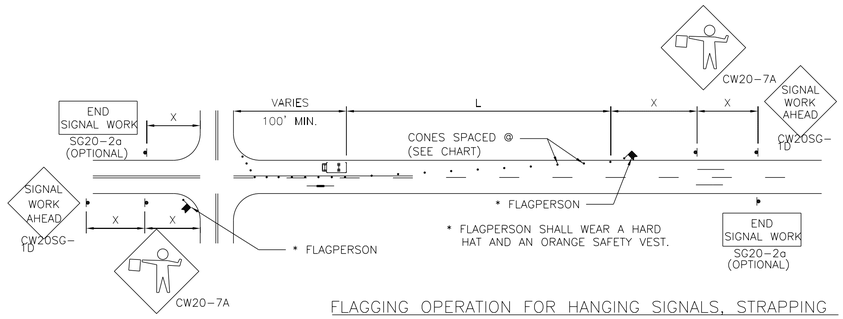
ONE LANE CLOSURE W/ RIGHT LANE AND/OR LEFT TURN LANE CLOSED



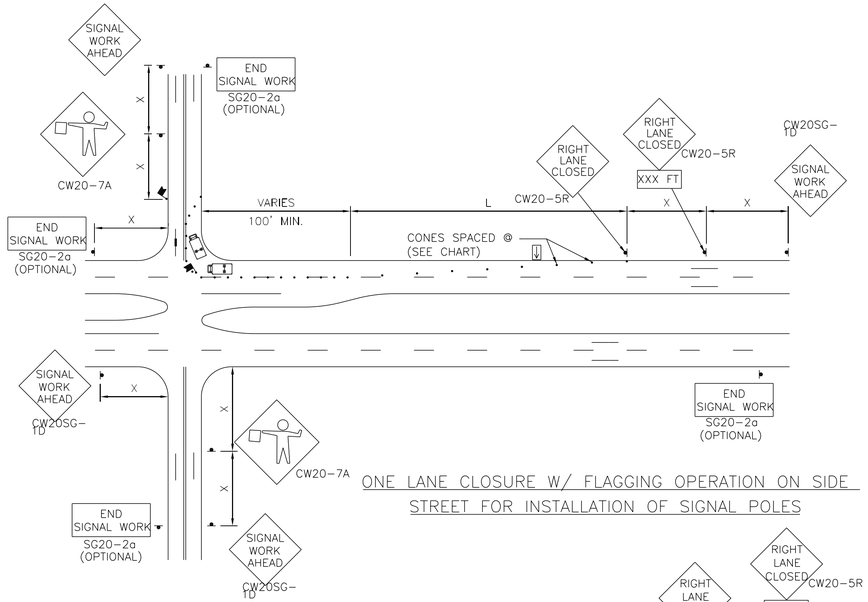
ONE LANE CLOSURE W/ LEFT LANE AND/OR LEFT TURN LANE CLOSED



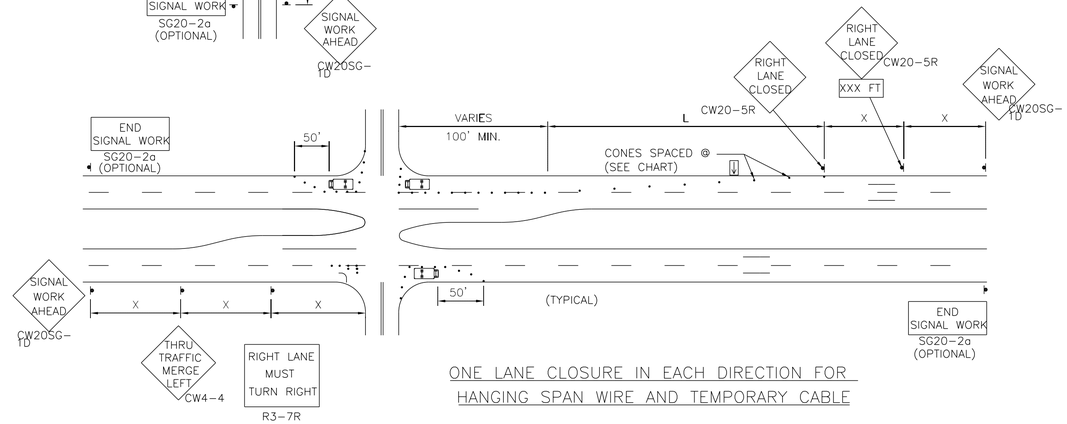
MEDIAN NOSE MODIFICATION



FLAGGING OPERATION FOR HANGING SIGNALS, STRAPPING CABLE, OR INSALLING LOOP DETECTORS



ONE LANE CLOSURE W/ FLAGGING OPERATION ON SIDE STREET FOR INSTALLATION OF SIGNAL POLES



ONE LANE CLOSURE IN EACH DIRECTION FOR HANGING SPAN WIRE AND TEMPORARY CABLE

NOTES:

1. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.
2. THE MINIMUM LANE WIDTH ALLOWED IS 10 FEET. THE MINIMUM BUFFER ZONE BETWEEN THE WORK ZONE AND ADJACENT TRAFFIC IS 2 FEET.
3. FLORESCENT ORANGE SHALL BE THE BACKGROUND COLOR ON ALL WORK ZONE SIGNS.
4. THE CONTRACTOR SHALL REMOVE ADVANCE SIGNS WHEN NO CONSTRUCTION OPERATIONS ARE UNDERWAY.
5. OBSTRUCTIONS OR HAZARDS AT THE WORK AREA SHALL BE CLEARLY MARKED AND DELINEATED AT ALL TIMES.
6. ALL HOLES, TRENCHES OR OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY LIGHTS OR OTHER PROTECTIVE DEVICES.
7. TRENCHES SHALL BE COVERED OR SURROUNDED WITH ORANGE PLASTIC CONSTRUCTION FENCE AS DIRECTED BY THE ENGINEER.
8. FLAGGER AND FCW20-7a SIGN MAY BE REQUIRED ACCORDING TO FIELD CONDITIONS.
9. VEHICLES PARKED IN ROADWAY SHALL BE EQUIPPED WITH TWO STROBES.

LEGEND:

HEAVY WORK VEHICLE

FLASHING ARROW PANEL

TYPICAL TRANSITION LENGTHS

SUGGESTED MAXIMUM SPACING OF DEVICES

POSTED SPEED	FORMULA	MINIMUM DESIRABLE TAPER LENGTHS **			SUGGESTED MAXIMUM SPACING OF DEVICE		MINIMUM SIGN SPACING X DISTANCE
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT	
30	$L=WS^2/60$	150'	165'	180'	30'	60'–75'	120'
35		205'	225'	245'	35'	70'–90'	160'
40		265'	295'	320'	40'	80'100'	240'
45	L=WS	450'	495'	540'	45'	90'–110'	320'
50		500'	550'	600'	50'	100'–125'	400'
55		550'	605'	660'	55'	100'–140'	500'
60		600'	660'	720'	60'	120'–150'	600'

** TAPER LENGTHS HAVE BEEN ROUNDED OFF

L=LENGTH OF TAPER (FT.)
W=WIDTH OF OFFSET (FT.)
S=POSTED SPEED(MPH)

TCP50

NO.	DATE	REVISION	APP.

AGHA ENGINEERING LLC
F-20817
1080 ELDRIDGE PKWY
SUITE #1100
HOUSTON, TX 77077

SURVEYED BY: RODS SURVEYING & UTILITIES FB NO. 000000

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
YAZAN BADRI, PE
144635
TEXAS SERIAL NO.
07/09/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

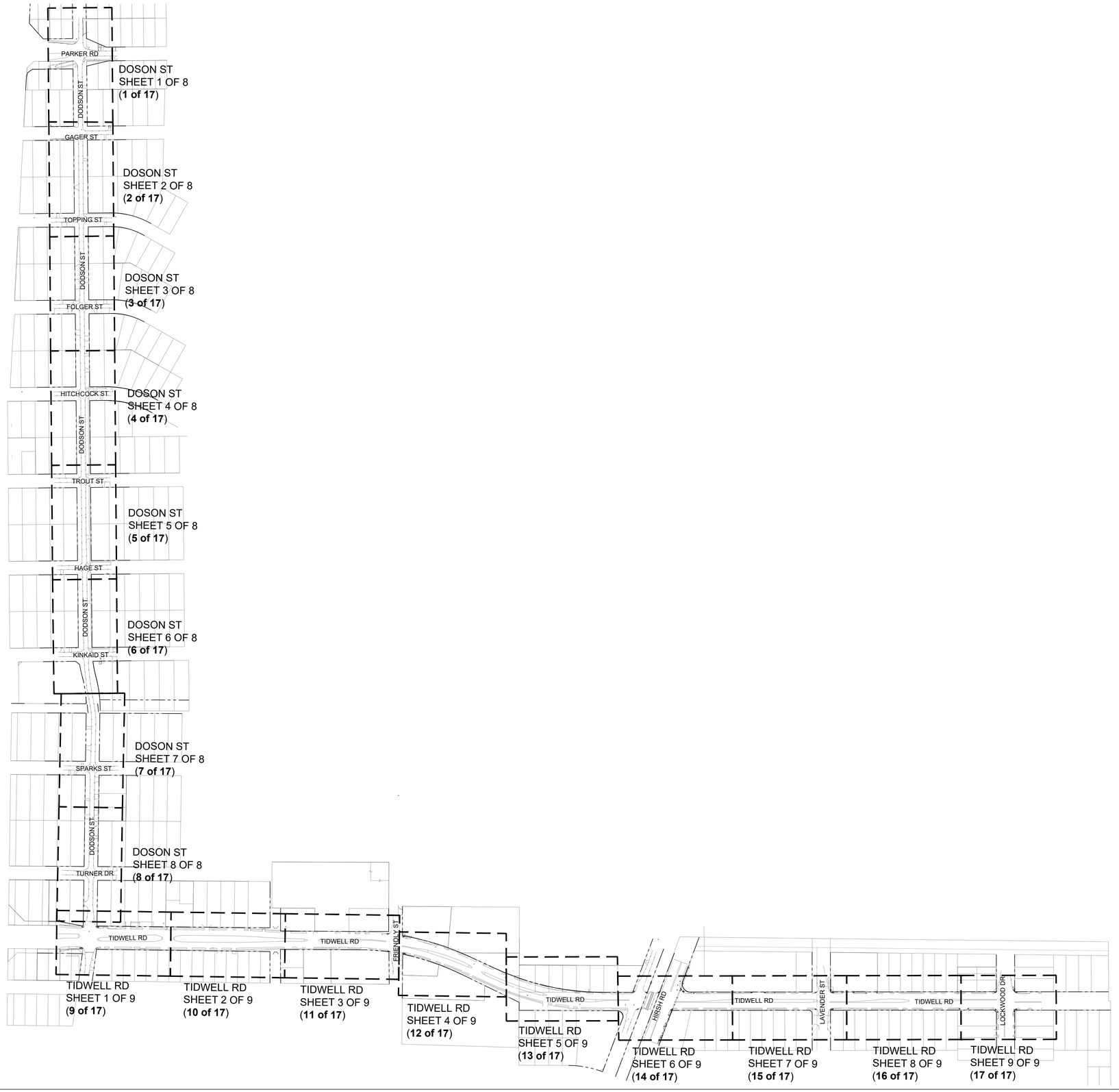
CRMP PACKAGE 6 – AREA 1–BASIN IB043

TRAFFIC CONTROL PLAN FOR SIGNAL CONSTRUCTION

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H) N/A (V)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 127 OF 192	

60% SUBMITTAL

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\ENGINEERING\TRAFFIC CONTROL PLANS.dwg PLOTTED: 8/18/2025 10:36 AM



NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

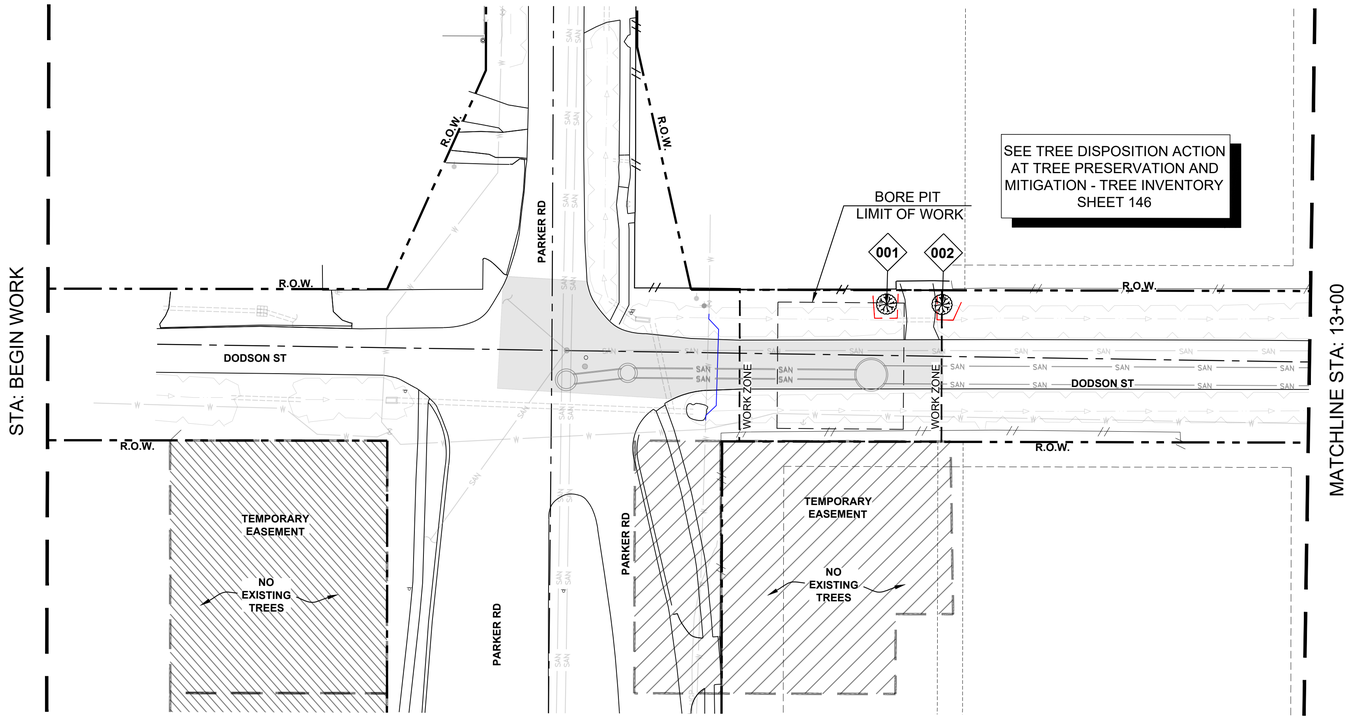
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION
OVERALL SITE ORIENTATION PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NOT TO SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 128 OF 192	

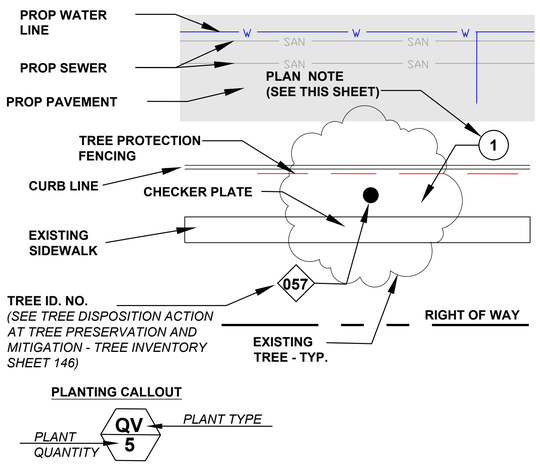
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY) **SEE TREE PRESERVATION DETAILS**
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

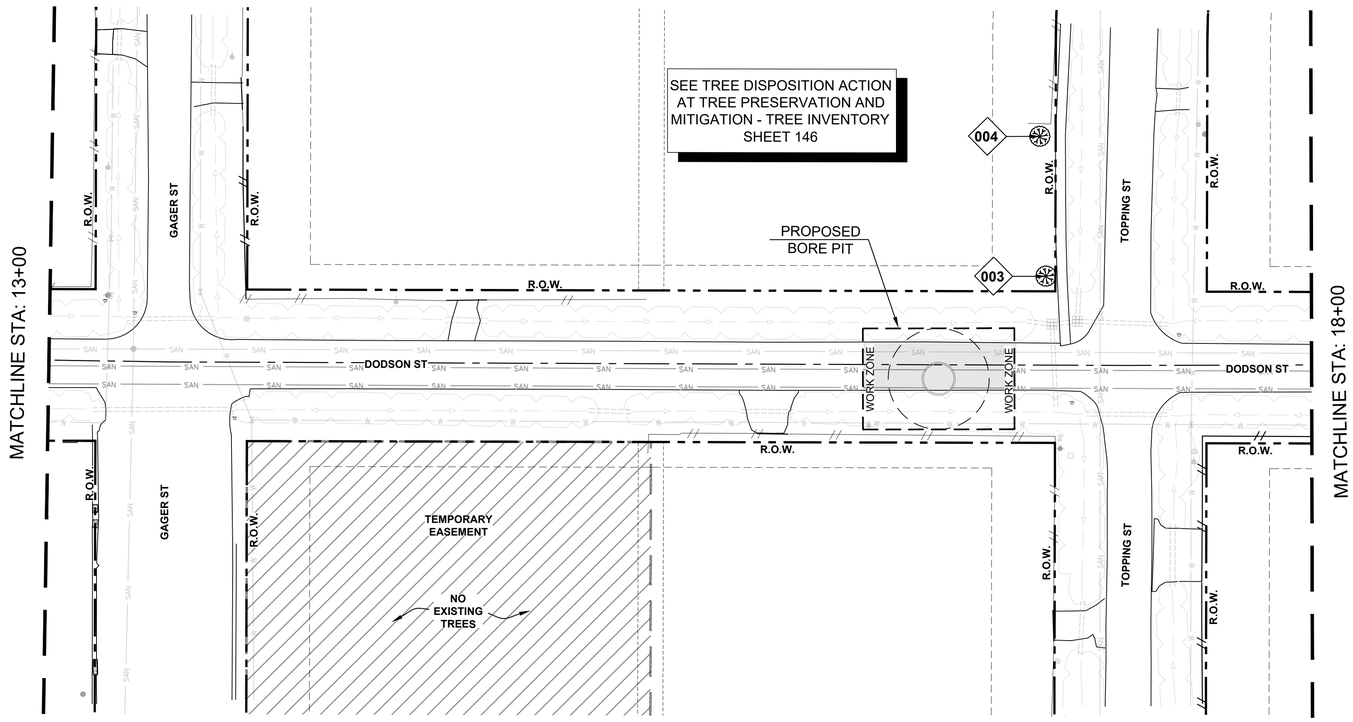
TREE PRESERVATION PLAN

BASELINE A - DODSON ST. SEWER
BEGIN TO STA 13+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 129 OF 192	

60% SUBMITTAL

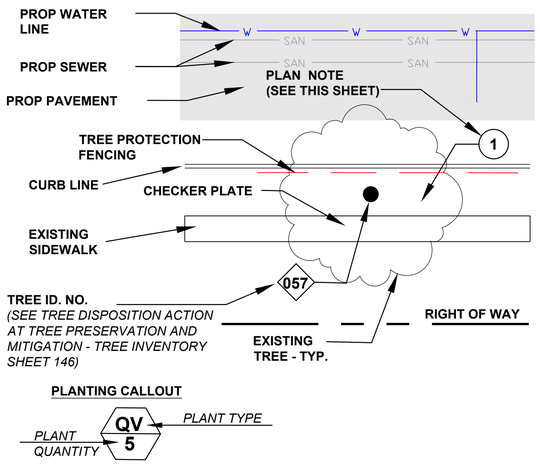
NO.	DATE	REVISION	APP.



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

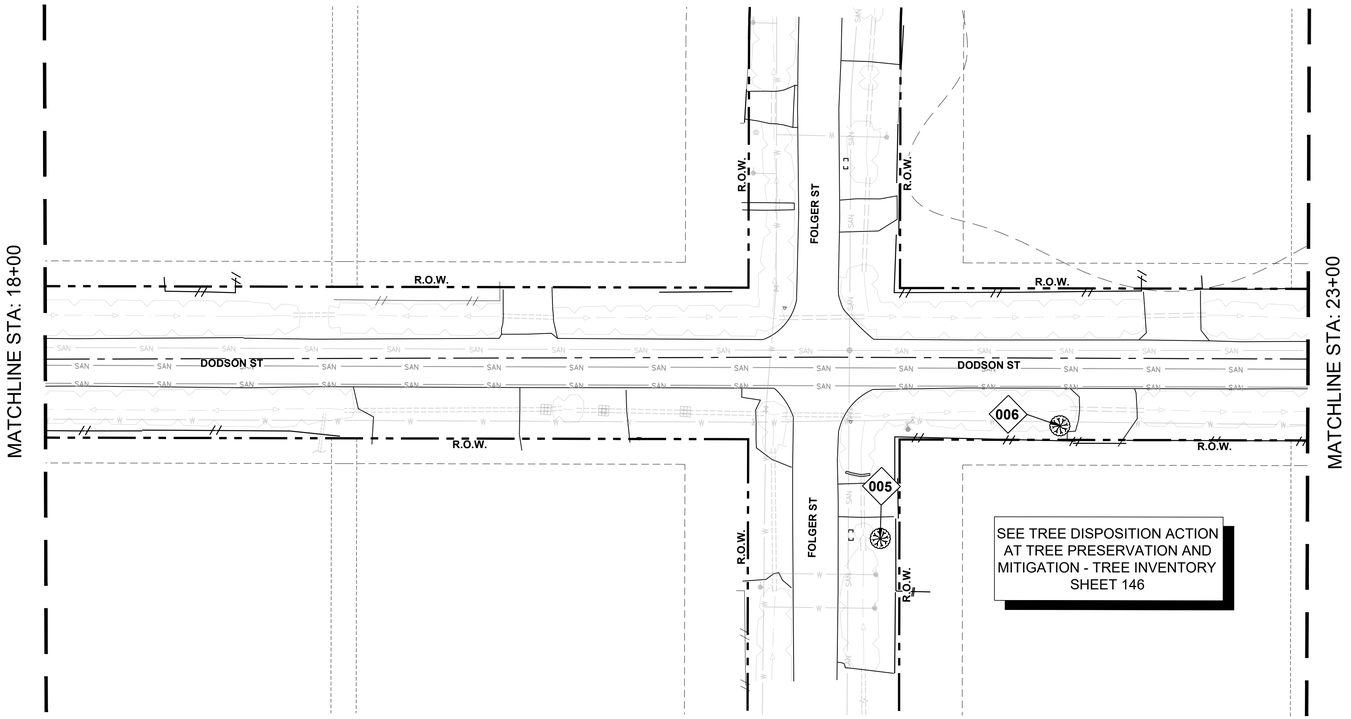
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE A - DODSON ST. SEWER
STA 13+00 TO STA 18+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 130 OF 192	

60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH

PROP WATER LINE

PROP SEWER

PROP PAVEMENT

PLAN NOTE (SEE THIS SHEET)

1

TREE PROTECTION FENCING

CURB LINE

CHECKER PLATE

EXISTING SIDEWALK

057

TREE ID. NO.
(SEE TREE DISPOSITION ACTION AT TREE PRESERVATION AND MITIGATION - TREE INVENTORY SHEET 146)

EXISTING TREE - TYP.

RIGHT OF WAY

PLANTING CALLOUT

PLANT QUANTITY — QV 5 — *PLANT TYPE*

A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

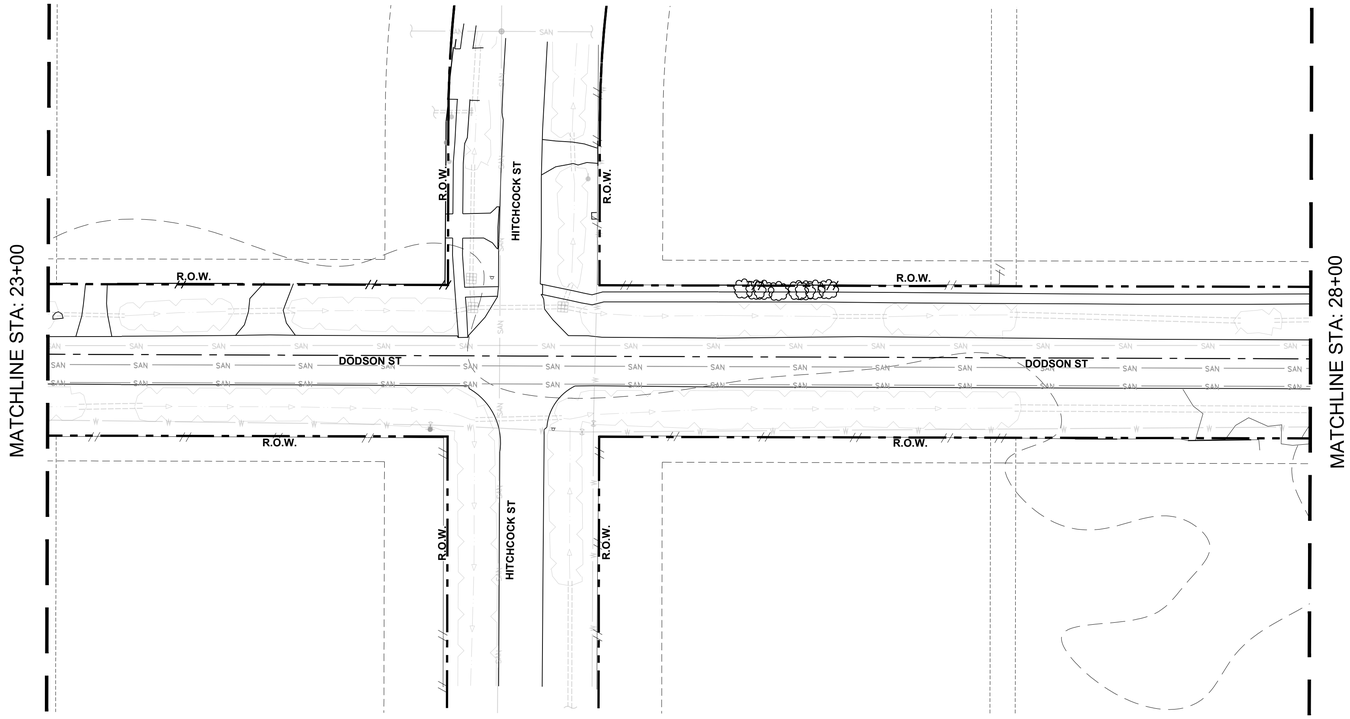
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE A - DODSON ST. SEWER
STA 18+00 TO STA 23+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 131 OF 192	

60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH

PROP WATER LINE

PROP SEWER

PROP PAVEMENT

PLAN NOTE (SEE THIS SHEET)

TREE PROTECTION FENCING

CURB LINE

CHECKER PLATE

EXISTING SIDEWALK

TREE ID. NO.
(SEE TREE DISPOSITION ACTION AT TREE PRESERVATION AND MITIGATION - TREE INVENTORY SHEET 146)

EXISTING TREE - TYP.

RIGHT OF WAY

PLANTING CALLOUT

QV 5

PLANT TYPE

PLANT QUANTITY

A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

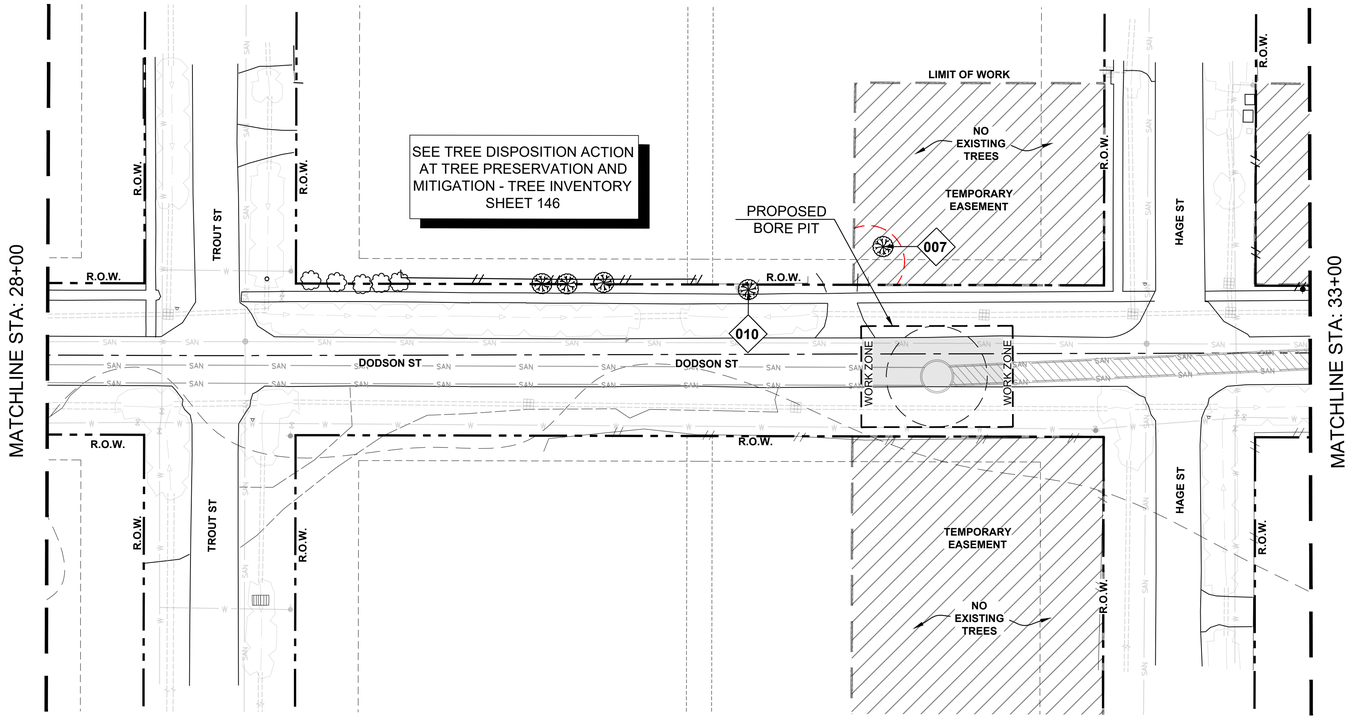
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

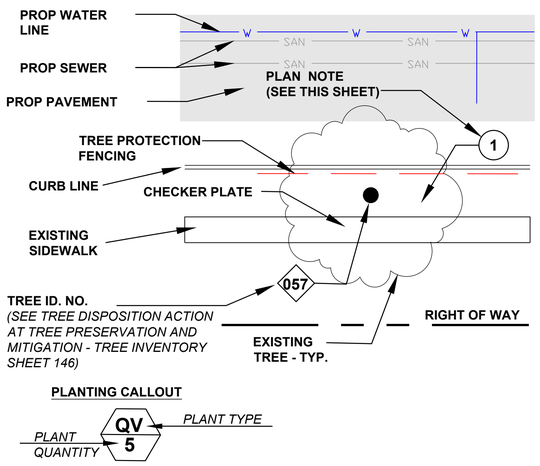
CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE A - DODSON ST. SEWER
STA 23+00 TO STA 28+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 132 OF 192	

60% SUBMITTAL





A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
○	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
○	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

0' 15' 30' 60'
SCALE 1"=30'

NORTH

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

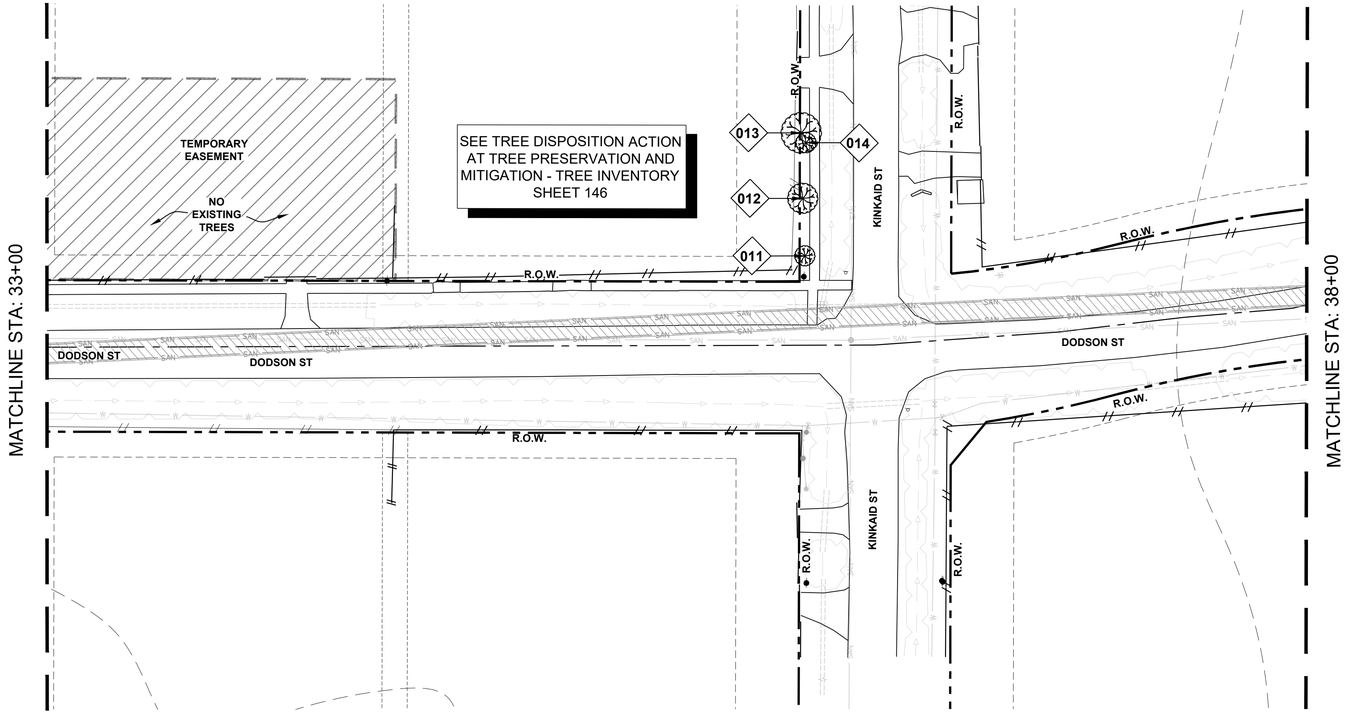
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE A - DODSON ST. SEWER
STA 28+00 TO STA 33+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 133 OF 192	

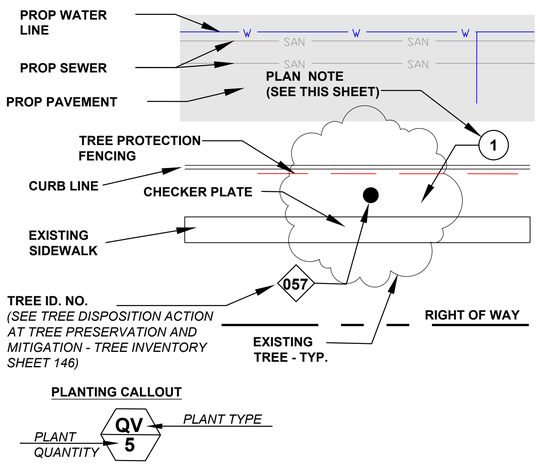
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



PLANTING CALLOUT

A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY) **SEE TREE PRESERVATION DETAILS**
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

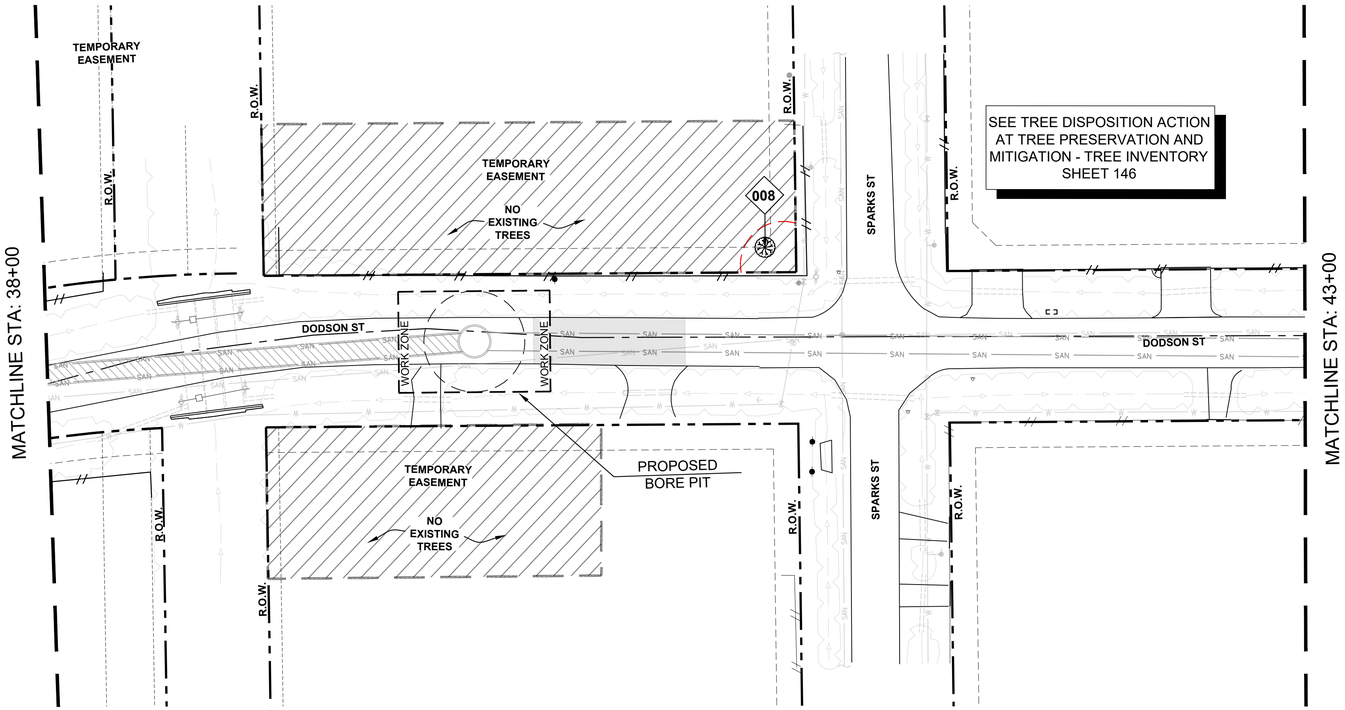
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE A - DODSON ST. SEWER
STA 33+00 TO STA 38+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 134 OF 192	

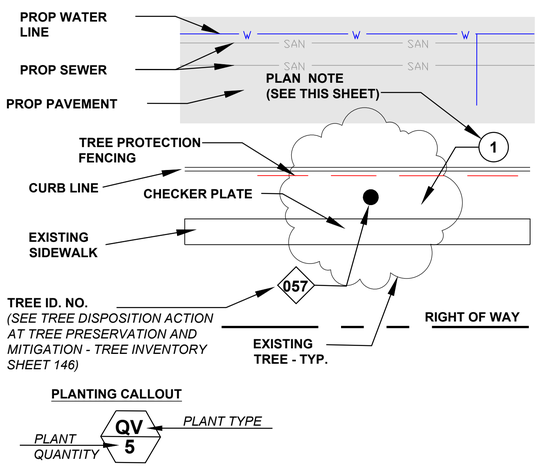
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

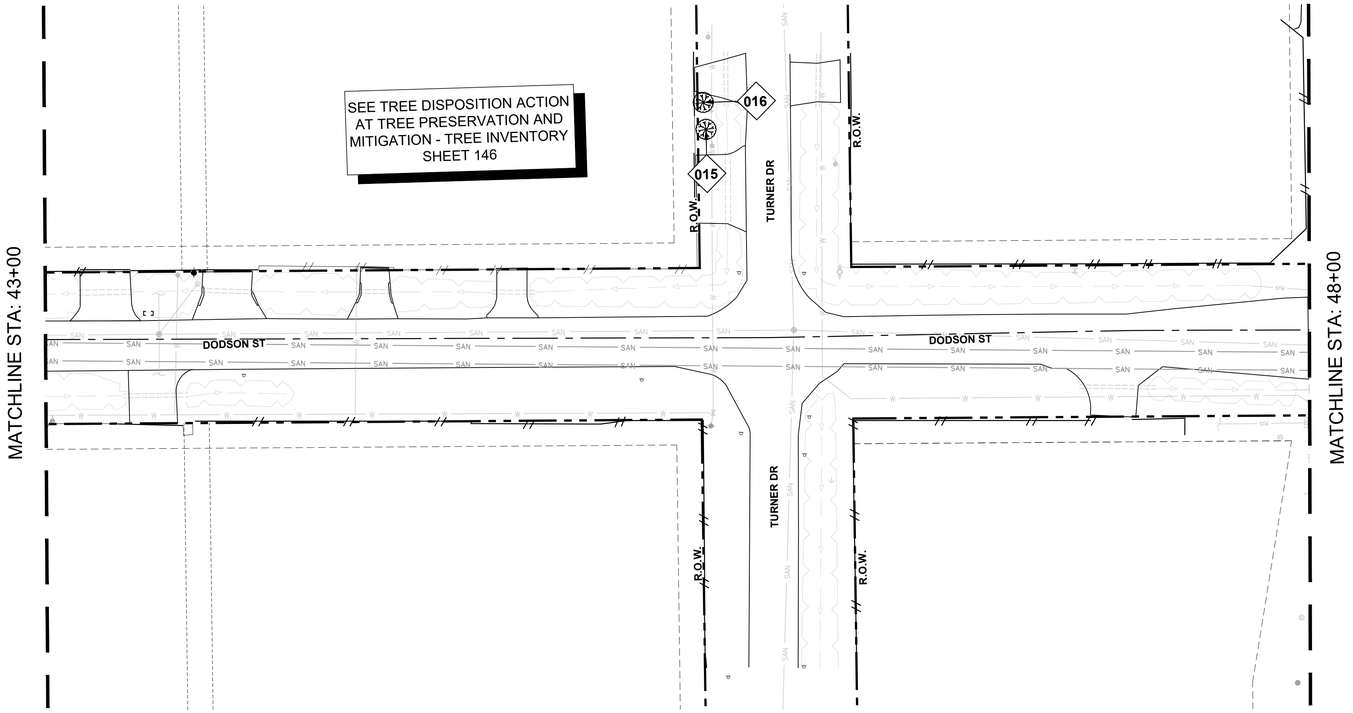
CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN

BASELINE A - DODSON ST. SEWER
STA 38+00 TO STA 43+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 135 OF 192	

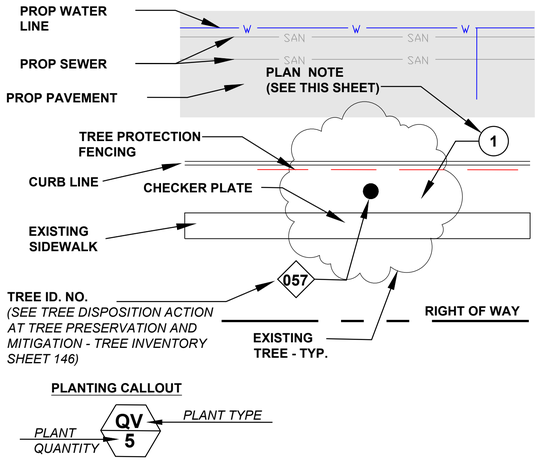
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



PLANTING CALLOUT

A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING.

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

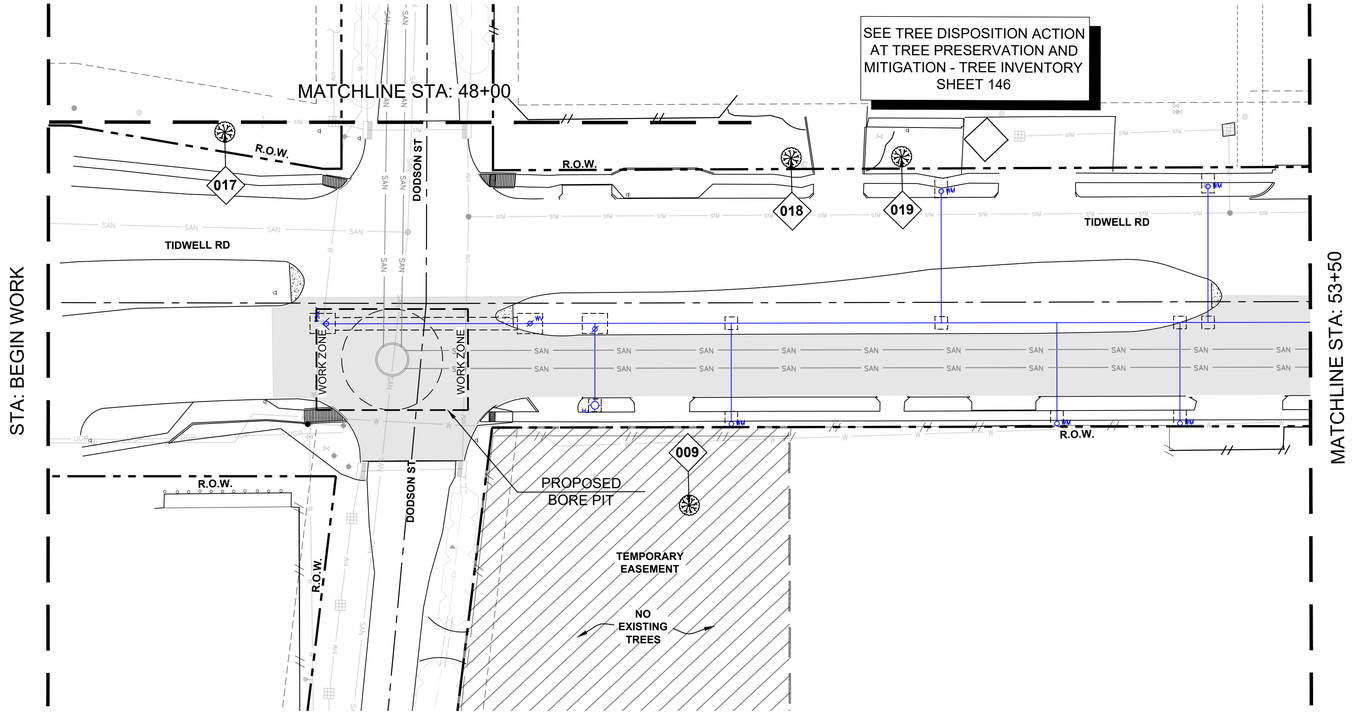
CRMP PACKAGE 6 – AREA 1–BASIN IB043

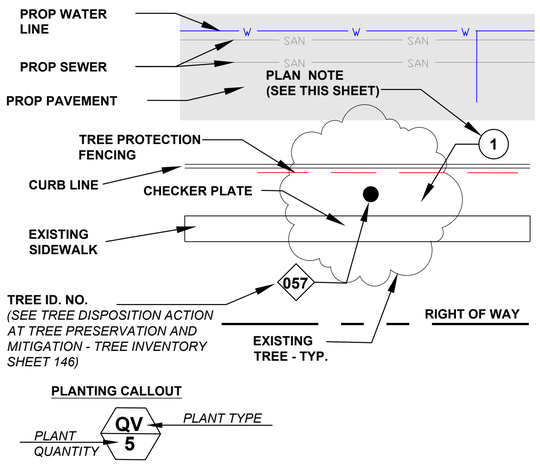
TREE PRESERVATION PLAN

BASELINE A - DODSON ST. SEWER
STA 43+00 TO STA 48+00 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 136 OF 192	

60% SUBMITTAL





A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

0' 15' 30' 60'
SCALE 1"=30'

NORTH

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474
SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

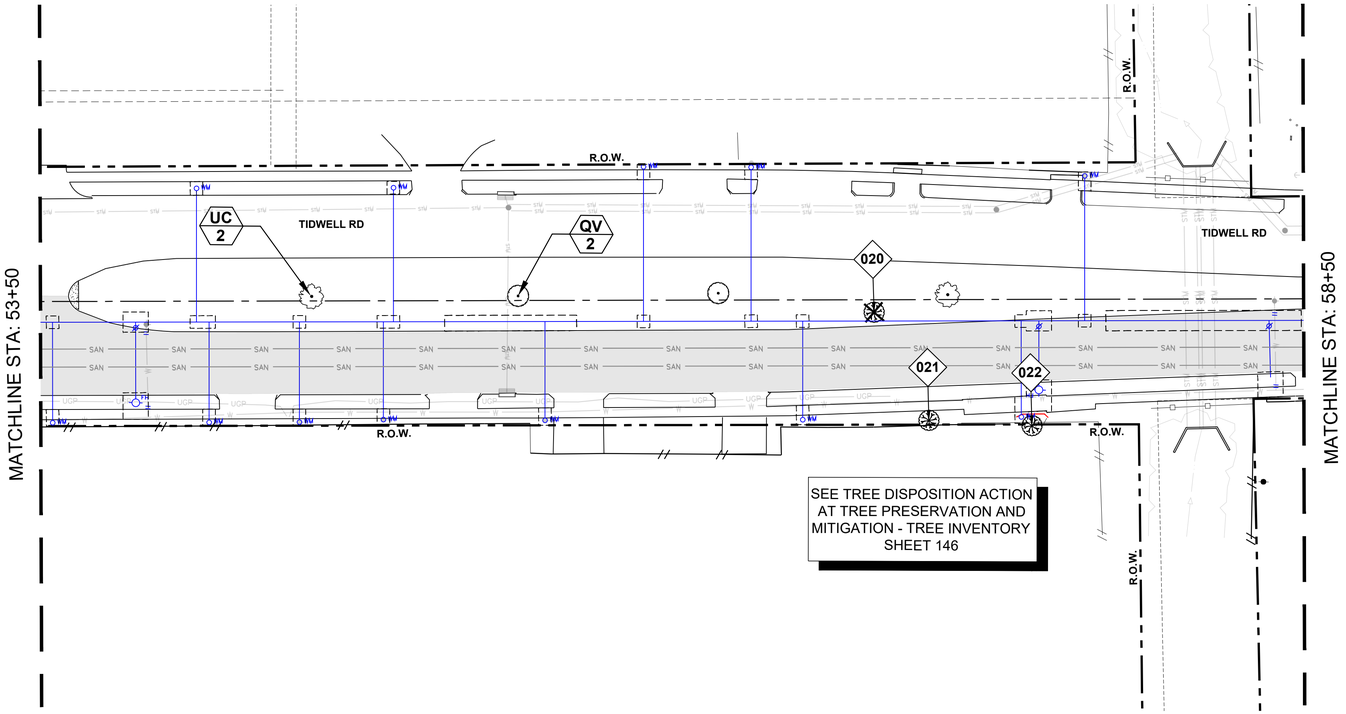
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
BEGIN TO STA 53+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 137 OF 192	

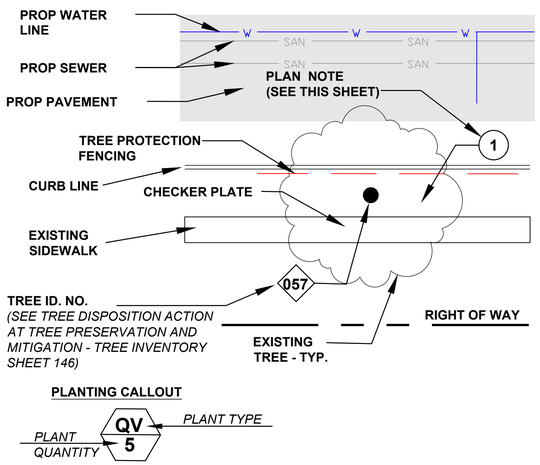
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

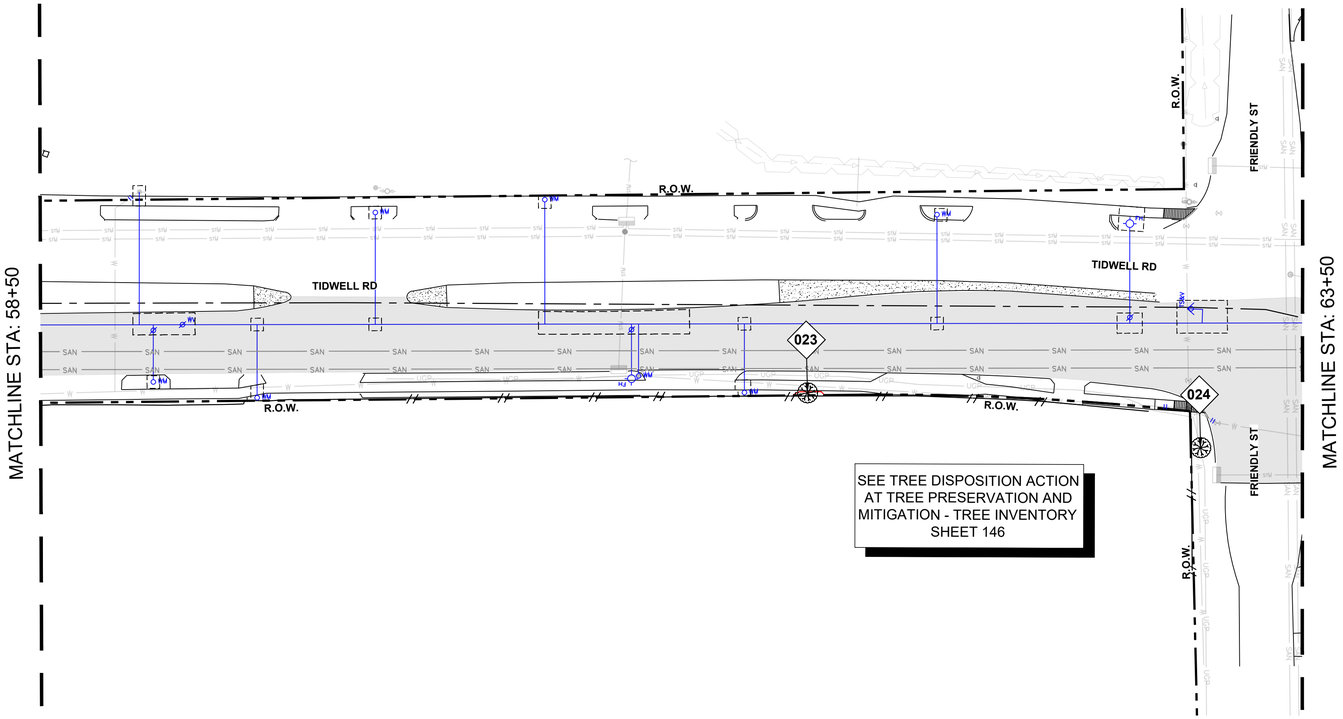
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
STA 53+50 TO STA 58+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 138 OF 192	

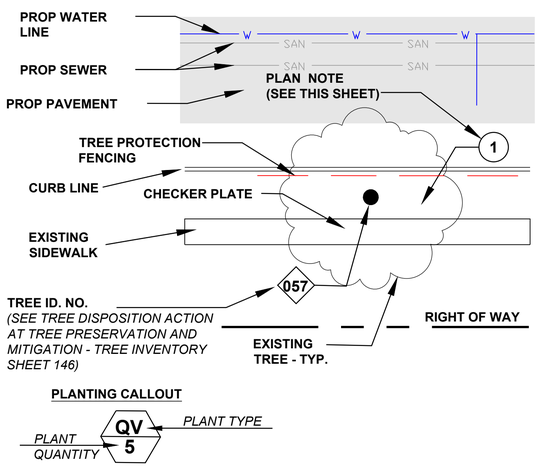
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
○	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
○	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

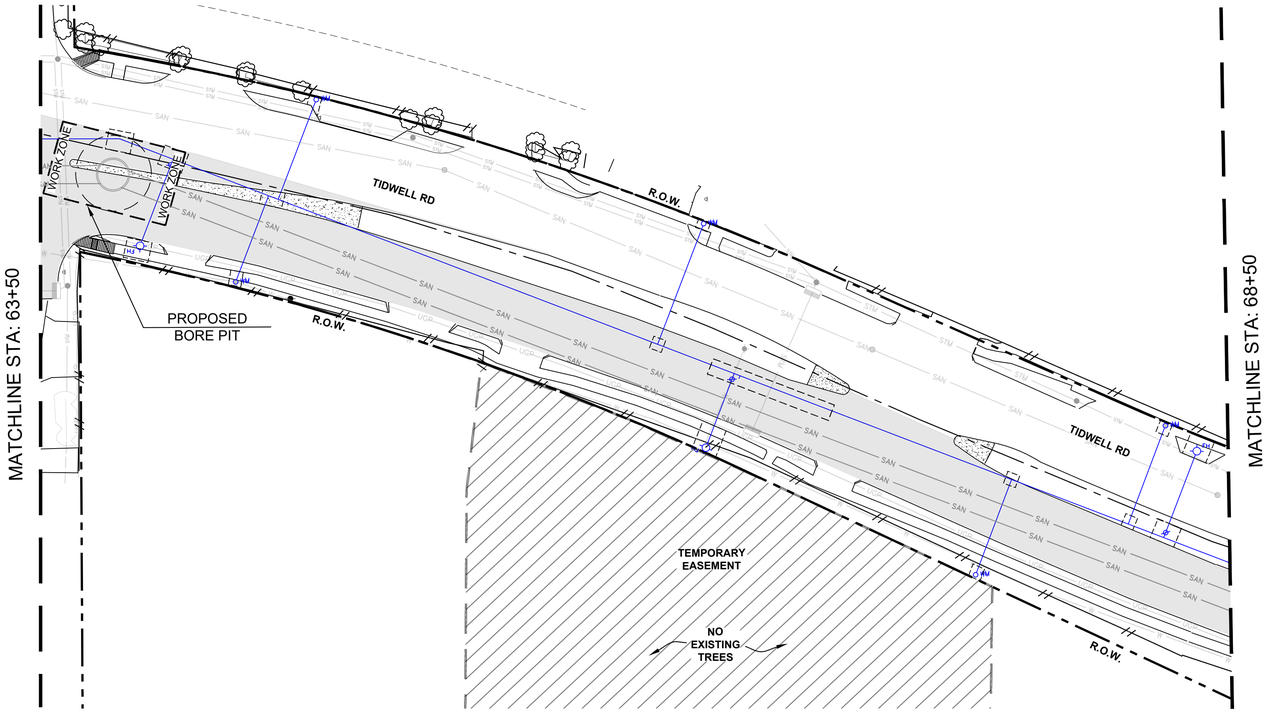
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
STA 58+50 TO STA 63+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 139 OF 192	

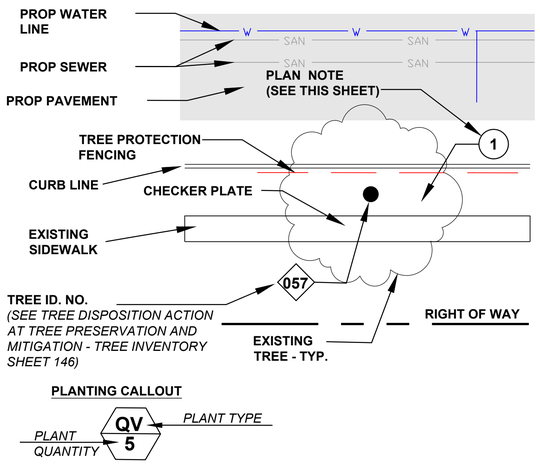
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

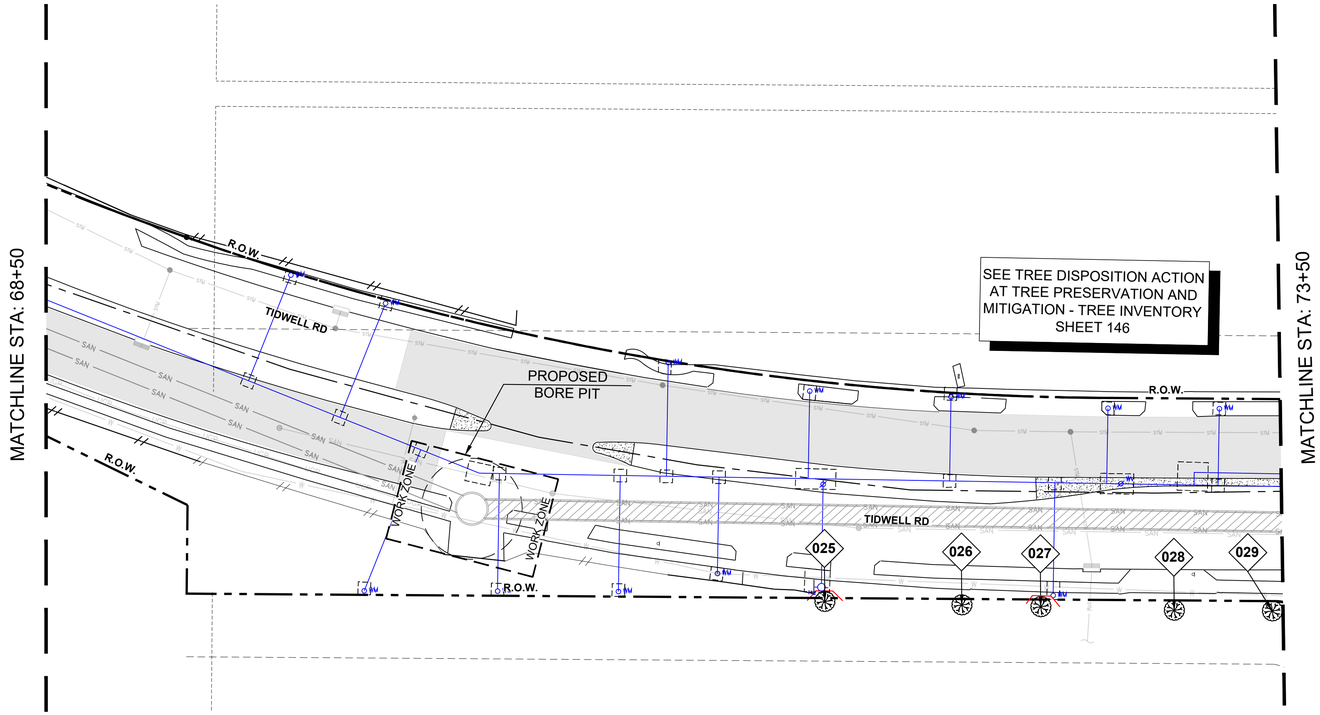
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
STA 63+50 TO STA 68+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 140 OF 192	

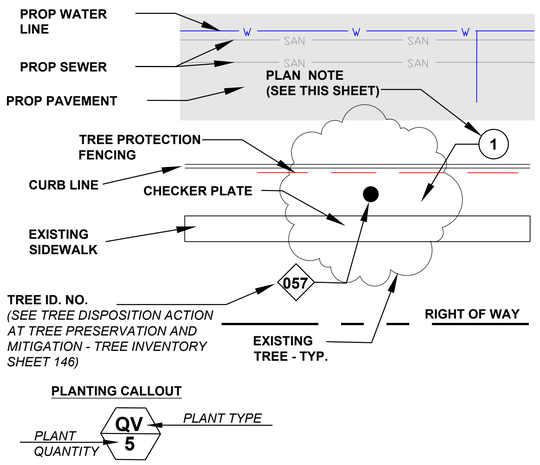
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSECTIONS, ADN 75'-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
○	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
○	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE

FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

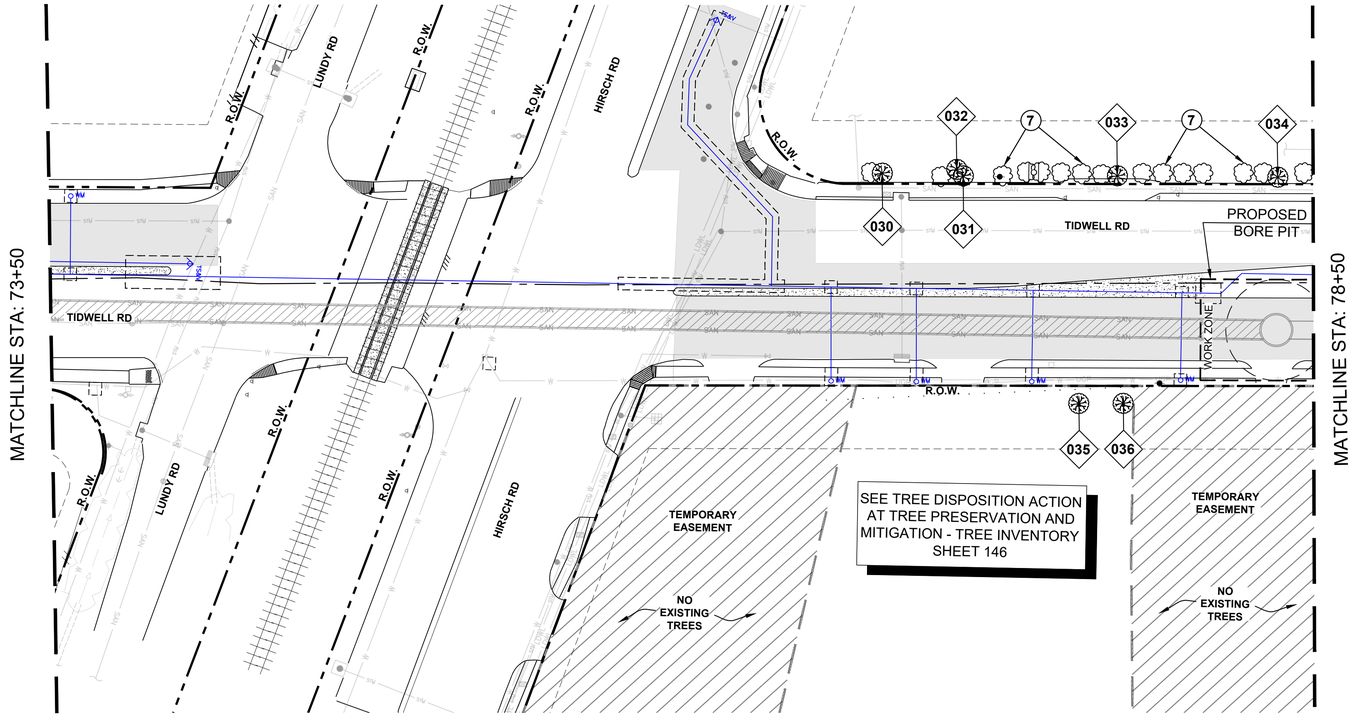
CRMP PACKAGE 6 – AREA 1–BASIN IB043

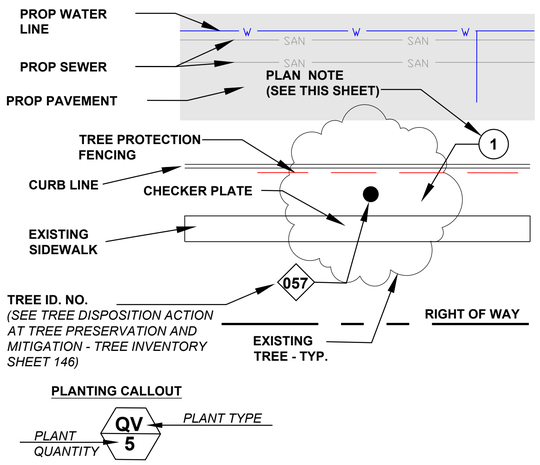
TREE PRESERVATION PLAN

BASELINE B - TIDWELL RD. SEWER
STA 68+50 TO STA 73+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 141 OF 192	

60% SUBMITTAL





A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

0' 15' 30' 60'
SCALE 1"=30'

NORTH

NO. | DATE | REVISION | APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

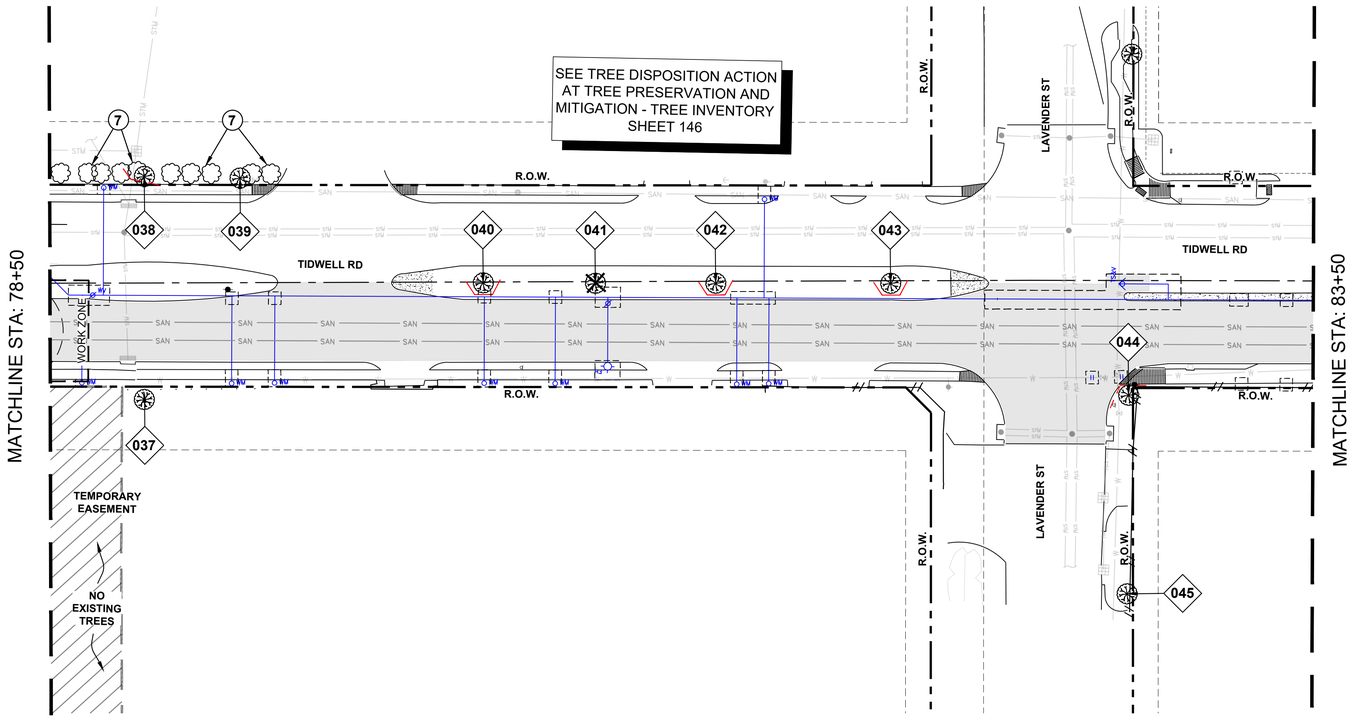
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
STA 73+50 TO STA 78+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 142 OF 192	

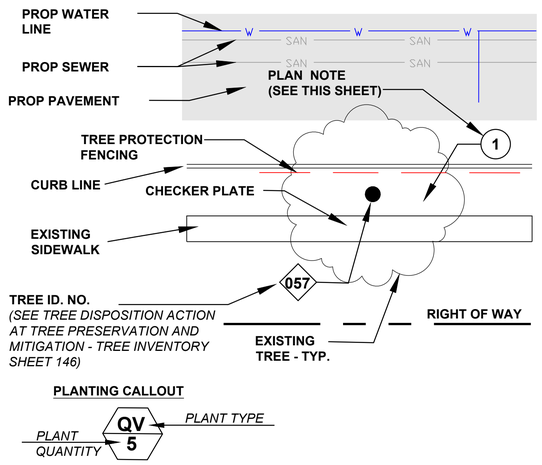
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

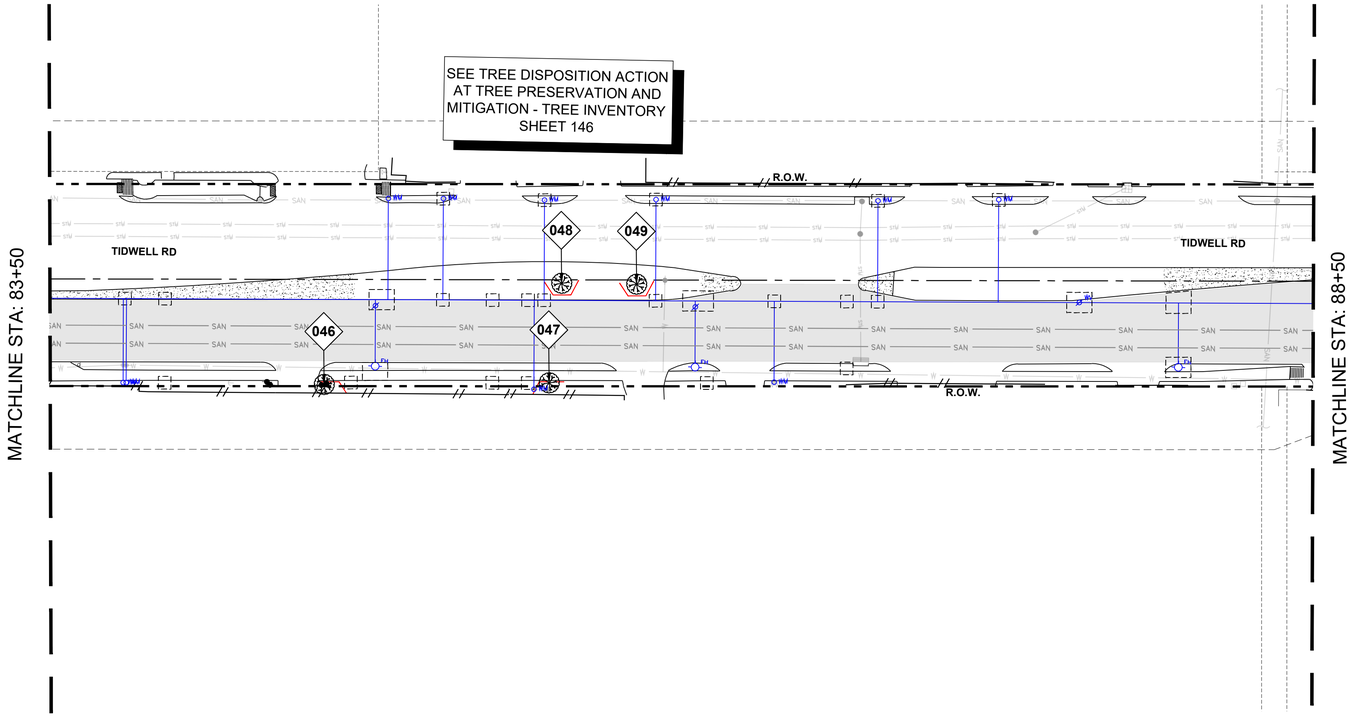
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
STA 78+50 TO STA 83+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 143 OF 192	

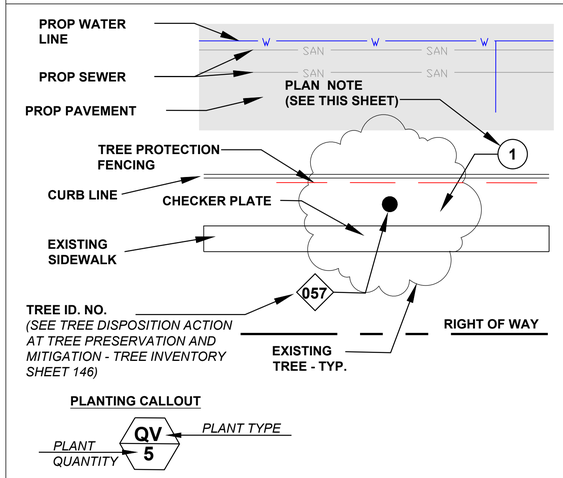
60% SUBMITTAL



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. **SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS** FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY)
   SEE TREE PRESERVATION DETAILS
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

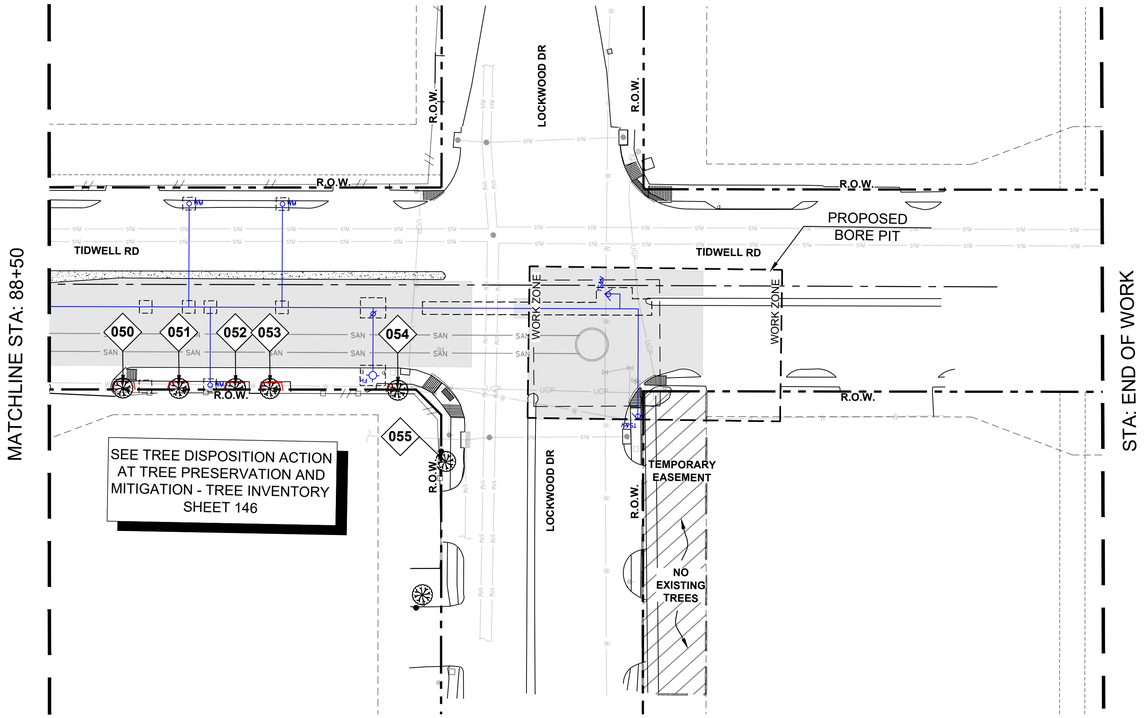
CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
STA 83+50 TO STA 88+50 PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 144 OF 192	

60% SUBMITTAL

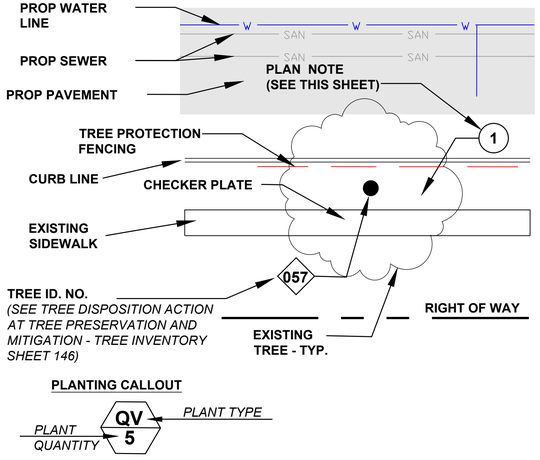
NO.	DATE	REVISION	APP.



0' 15' 30' 60'

SCALE 1"=30'

NORTH



A. CONTRACTOR SHALL SEEK PRIOR APPROVAL FROM THE ARBORIST, CITY URBAN FORESTOR, AND CITY'S REPRESENTATIVE PRIOR TO INITIATION OF TREE REMOVAL AND/OR TREE PROTECTION ACTIVITIES WITHIN THE PROJECT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF HOUSTON.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT NO DAMAGE TO EXISTING TREES TO BE PROTECTED AND/OR THOSE THAT HAVE THEIR TRUNKS OUTSIDE OF THE PROJECT LIMITS BUT HAVE SIGNIFICANT BRANCH OVERHANG INTO THE PROJECT LIMITS.

C. THE CONTRACTOR SHALL NOT, AT ANY TIME, PARK CONSTRUCTION VEHICLES, MATERIALS, OR EQUIPMENT INSIDE OF THE TREE PROTECTION ZONE (TPZ) OF TREES TO BE PROTECTED.

D. SEE TREE PRESERVATION DETAILS AND SPECIFICATIONS FOR DISPOSITION AND CONDITIONAL TREATMENT OF TREES NOTED ON THE DRAWINGS.

E. ALL NOTED TREES ON DRAWINGS MAY REQUIRE ADDITIONAL CONDITIONAL TREATMENT OTHER THAN NOTED ON THE PLANS. ***SEE TREE INVENTORY AND TREE PRESERVATION DETAILS*** *(ALL TREE PRESERVATION WORK REQUIRED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)*

F. CONTRACTOR TO PROVIDE WATER, TREATMENT FOR BORERS AND OTHER INSECTICIDE TREATMENTS FOR TREES TO BE PRESERVED AS NEEDED PER ARBORISTS RECOMMENDATION. (INCIDENTAL TO 01562 AND 02915 AND NOT PAID FOR SEPARATELY.)

G. PROPOSED TREE SHALL BE PLANTED A MINIMUM OF 5'-0" FROM BACK OF CURB AND NO CLOSER THAN 20' O.C. FROM EACH OTHER. TREE MITIGATION PLACEMENT DISTANCES FROM MEDIAN TIP ENDS SHALL BE 50'-0" AT NON-SIGNALIZED INTERSETIONS, ADN 75"-0" AT SIGNALIZED INTERSECTIONS.

H. ALL TREE MITIGATION MATERIALS AND LABOR REQUIRED TO PROVIDE AND INSTALL THE PROPOSED TREES SHALL BE INCIDENTAL TO 02915 - TREE PLANTING

I. CONTRACTOR TO SUBMIT MEANS AND METHODS OF WATERING PROCEDURES FOR NEWLY PLANTED TREES TO ARBORIST FOR REVIEW AND APPROVAL.

J. CONTRACTOR TO WARRANT, PROVIDE WATER, AND MAINTENANCE FOR ALL NEWLY PLANTED TREES FOR A PERIOD OF TWO (2) YEARS FROM DATE OF SUBSTANTIAL COMPLETION TO SUSTAIN HEALTH OF TREE. (INCIDENTAL TO 02915 -TREE PLANTING AND NOT PAID FOR SEPARATELY.)

K. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ALL EXISTING TREES REGARDLESS OF SPECIFIC MEASURES THAT ARE NOTED ON THESE PLANS AND DETAILS AT ALL TIMES AND TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, SPECIFICALLY 01562.

1. PROVIDE CHECKER PLATE OVER ROOT FLARE **SEE TREE PRESERVATION DETAILS**
2. PROVIDE ZERO CURB CUT CONTINUOUS **SEE TREE PRESERVATION DETAILS**
3. UNDEVELOPED PROPERTY - TREE REMOVAL AREA - NO MITIGATION REQUIRED. (INCIDENTAL TO CLEARING AND GRUBBING AND NOT PAID FOR SEPARATELY. SEE ENGINEERING PLANS FOR MORE INFORMATION.)
4. REMOVE SHRUB(S) AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS (INCIDENTAL TO 01562)
5. REDUCE SIDEWALK WIDTH TO 4'-0" AND ADJUST PROPOSED SIDEWALK ("BUMP OUT") AT EXISTING TREE ROOT FLARE(INCIDENTAL AND NOT PAID FOR SEPARATELY) **SEE TREE PRESERVATION DETAILS**
6. PROVIDE 6" CURB AT BACK OF SIDEWALK.
7. PRESERVE EXISTING SHRUBS IN PLACE - NO TREATMENT.
8. ADD 15" REINFORCED CONCRETE WALL. SEE CIVIL DRAWINGS FOR DETAILS
9. REMOVE LANDSCAPE WALLS AS NEED TO ACCOMODATE PROPOSED IMPROVEMENTS

PROPOSED PLANTING: ***CONTRACTOR SHALL MARK TREE LOCATIONS PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER***

TYPE	ABR.	BOTANICAL NAME	COMMON NAME	PLANTED SIZE
	QV	QUERCUS VIRGINIANA	LIVE OAK	4" CAL. MIN.
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL. MIN.
X		REMOVE TREE (INCIDENTAL TO 01562)		

**SEE PLANT LIST ON TREE PRESERVATION DETAILS FOR MORE INFORMATION*

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION PLAN
BASELINE B - TIDWELL RD. SEWER
STA 88+50 TO END PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 145 OF 192	

60% SUBMITTAL

ID #	LOCATION	STATION	SPECIES	DIA. (IN)	CONDITION	STATUS	TREATMENT	MITIGATION
001	East Dodson St	11+33	Arborvitae	18.0		Preserve	B, D	Preservation Treatment
002	East Dodson St	11+54	Arborvitae	18.0		Preserve	B, D	Preservation Treatment
003	North Topping St		Tallow	20.0	Poor	Preserve		No Treatment
004	North Topping St		Verify in Field			Preserve		No Treatment
005	West Dodson St		Verify in Field			Preserve		No Treatment
006	West Dodson St	22+02	Crepe Myrtle	28.0		Preserve		No Treatment
007	East Dodson St	31+31	Oak	28.0		Preserve	D	Preservation Treatment
008	East Dodson St	80+46	Pine	26.0		Preserve	D	Preservation Treatment
009	South Tidwell Rd	51+04	Stump	20.0		Preserve		No Treatment
010	East Dodson St	30+78	Pecan	12.0	Poor	Preserve		No Treatment
011	North Kinkaid St		Cedar	12.0		Preserve		No Treatment
012	North Kinkaid St		Verify in Field			Preserve		No Treatment
013	North Kinkaid St		Verify in Field			Preserve		No Treatment
014	North Kinkaid St		Verify in Field			Preserve		No Treatment
015	North Turner Dr		Verify in Field			Preserve		No Treatment
016	North Turner Dr		Verify in Field			Preserve		No Treatment
017	North Tidwell Rd	49+20	Pear	15.0		Preserve		No Treatment
018	North Tidwell Rd	51+45	Palm	12.0		Preserve		No Treatment
019	North Tidwell Rd	51+88	Palm	12.0		Preserve		No Treatment
020	North Tidwell Rd	56+80	Pear	15.0		Remove	A	Replace Inch For Inch
021	South Tidwell Rd	57+02	Crepe Myrtle	18.0		Preserve		No Treatment
022	South Tidwell Rd	57+43	Oak	36.0		Preserve	B, C, D, E	Preservation Treatment
023	South Tidwell Rd	61+54	Oak	26.0		Preserve	B, D, E	Preservation Treatment
024	West Friendly St		Oak	24.0		Preserve		No Treatment
025	South Tidwell Rd	71+75	Oak	3.0		Preserve	B, D, E	Preservation Treatment
026	South Tidwell Rd	72+24	Oak	3.0		Preserve		No Treatment
027	South Tidwell Rd	72+55	Oak	3.0		Preserve	B, D, E	Preservation Treatment
028	South Tidwell Rd	73+07	Oak	3.0		Preserve		No Treatment
029	South Tidwell Rd	73+46	Oak	3.0		Preserve	D	Preservation Treatment
030	North Tidwell Rd	76+79	Oak	12.0		Preserve		No Treatment
031	North Tidwell Rd	77+11	Oak	10.0		Preserve		No Treatment
032	North Tidwell Rd	77+09	Oak	4.0		Preserve		No Treatment
033	North Tidwell Rd	77+72	Oak	10.0		Preserve		No Treatment
034	North Tidwell Rd	78+36	Oak	10.0		Preserve		No Treatment
035	South Tidwell Rd	77+57	Elm	32.0		Preserve		No Treatment
036	South Tidwell Rd	77+75	Oak	36.0		Preserve		No Treatment
037	South Tidwell Rd	78+87	Oak	26.0		Preserve		No Treatment
038	North Tidwell Rd	78+88	Oak	10.0		Preserve	D	Preservation Treatment
039	North Tidwell Rd	79+25	Oak	10.0		Preserve		No Treatment
040	Median Tidwell Rd	80+22	Oak	12.0		Preserve	B, C, D, E	Preservation Treatment
041	Median Tidwell Rd	80+66	Stump	12.0	Poor	Remove	A	No Replacement
042	Median Tidwell Rd	81+14	Oak	10.0		Preserve	B, D, E	Preservation Treatment
043	Median Tidwell Rd	81+83	Oak	14.0		Preserve	D, E, B	Preservation Treatment
044	South Tidwell Rd	82+77	Palm	6.0		Preserve	B, D, E	Preservation Treatment
045	East Lavender St		Palm	10.0		Preserve		No Treatment
046	South Tidwell Rd	84+58	Elm	12.0		Preserve	B, D, E	Preservation Treatment
047	South Tidwell Rd	85+48	Pecan	16.0		Preserve	B, C, D, E	Preservation Treatment
048	Median Tidwell Rd	85+53	Oak	10.0		Preserve	B, D, E	Preservation Treatment
049	Median Tidwell Rd	85+83	Oak	8.0	Poor	Preserve	B, D, E	Preservation Treatment
050	South Tidwell Rd	88+79	Oak	6.0		Preserve	B, D, E	Preservation Treatment
051	South Tidwell Rd	89+01	Oak	6.0		Preserve	B, D, E	Preservation Treatment
052	South Tidwell Rd	89+24	Oak	6.0		Preserve	B, D, E	Preservation Treatment
053	South Tidwell Rd	89+37	Oak	6.0		Preserve	B, D, E	Preservation Treatment
054	South Tidwell Rd	89+88	Oak	6.0		Preserve	B, D, E	Preservation Treatment
055	West Lockwood Dr		Oak	6.0		Preserve		No Treatment

TREE INVENTORY TREATMENT LEGEND

(ALL WORK CONTAINED HEREIN IS INCIDENTAL TO 01562 UNLESS OTHERWISE NOTED)

A. REMOVE TREE & STUMP GRIND, PROVIDE TOPSOIL BACKFILL AND COMPACT TO NATURAL GRADE (TOPSOIL INCIDENTAL)
B. CANOPY PRUNE MINIMUM 7'-0" ABOVE SIDEWALK
C. ROOT PRUNING: **SEE DETAIL 2, TREE PRES. DETAILS 2 OF 4**
D. TREE PROTECTION FENCING: **SEE DETAIL 1, TREE PRES. DETAILS 2 OF 4**
E. TREE BOARDING : **SEE DETAIL 4, TREE PRES. DETAILS 2 OF 4**
F. PROVIDE 3" MULCH OVER EXISTING TREE ROOTS WITHOUT COVERING ROOT FLARE (MIN. 5'-0" DIA. OR UP TO 6'-0" FROM BASE OF TREE)
G. REMOVE EXISTING SIDEWALK BY HAND IN TREE DRIPLINE, **NO** BACK HOES OR OTHER MOTORIZED EQUIPMENT IS TO BE USED.
H. CHECKER PLATE INSTALLATION **SEE DETAIL #, TREE PRES. DETAILS #**
I. ZERO CURB CUT (COORDINATE WITH CIVIL ENGINEERING DRAWINGS, **SEE DETAIL 3, TREE PRES. DETAILS 2 OF 4**
J. ROOT SHAVING AS NEEDED OR DIRECTED BY ARBORIST OR COH URBAN FORESTER: **SEE SECTION 01562**
K. RAISED CONCRETE SIDEWALK OVER EXISTING ROOTS, **SEE DETAIL #, TREE PRES. DETAILS #**
L. ROOT BARRIER AT BACK OF CURB: **SEE DETAILS 1 & 2, TREE PRES. DETAILS 3 OF 4**
M. TREE TRANSPLANTING (IF REQUIRED)
N. PIPE TRENCHING **SEE DETAIL 1, TREE PRES. DETAILS 4 OF 4**
O. PIPE TUNNELING **SEE DETAIL 2, TREE PRES. DETAILS 4 OF 4**
P. ADD SANDY LOAM SOIL
Q. PROVIDE ADDITIONAL TREE CANOPY PRUNING FOR TREES THAT HAVE CANOPIES EXTENDING INTO THE ROADWAY WORK OR OTHERWISE CONFLICT WITH PROPOSED CONSTRUCTION ACTIVITIES. TREE CANOPY PRUNING SHALL BE DONE ON ALL SIDES TO 'BALANCE' TREE AND NOT JUST ON THE SIDE OF THE CONSTRUCTION ACTIVITIES. WORK ON TREES OUTSIDE OF THE ROW THAT REQUIRE WORK SHALL BE COORDINATED WITH ADJACENT LAND OWNERS.
R. AIR SPADE ONLY (NO HAND DIGGING)
S. TREE CANOPY PRUNING FOR TEMPORARY LIGHTING OVERHEAD WIRE RUNS.
T. ADD CURBING FOR GRADE CHANGES
U. ROOT AERATION WITH AMENDMENTS

PROTECTED TREE SUMMARY	
# OF TREES INVENTORIED	55
# OF TREES GREATER THAN 20" CALIPER	9

*DOES NOT INCLUDE TREES IN INVENTORY TABLES MARKED AS "NOT USED" OR "NOT THERE"

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION AND MITIGATION
TREE INVENTORY
(1 OF 1)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 146 OF 192	
	60% SUBMITTAL

1 TREE INVENTORY

NOT TO SCALE

ID #	LOCATION	SPECIES	CALIPER	REQ. REPLACE	15 Inches = 4 4" Trees
020	North	Pear	15.0	15.0	
041	Median	Stump	12.0	0.0	

NOTE: TREE REPLACEMENT LOCATIONS SHOWN ON PLANS MUST BE COORDINATED WITH ADJACENT PROPERTY OWNER AND CITY OF HOUSTON URBAN FORESTRY PRIOR TO EXCAVATION FOR PLANTING. COORDINATION SHALL BE COMPLETED BY CONSTRUCTION CONTRACTOR'S CERTIFIED ARBORIST. TREES TO BE MAINTAINED AND WATERED FOR 2 YEARS FOLLOWING PLANTING PER STANDARD SPEC 02915. TIMING OF PLANTING MAY BE DELAYED IN PERIODS OF DROUGHT WITH MANDATORY WATER RESTRICTIONS IN PLACE-TIMING TO BE COORDINATED WITH CITY OF HOUSTON URBAN FORESTRY. TREES IN ESPLANADE GROUPINGS TO BE PLANTED IN COMMON BED WITH 4" OF HARDWOOD MULCH BETWEEN TREES.

TREE REMOVAL SUMMARY	
TOTAL INCHES REMOVED	27
TOTAL TREE REPLACEMENT INCHES REQUIRED	15
TOTAL QUANTITY OF 4" CAL. TREES REQUIRED	4
TOTAL QUANTITY OF 4" CAL. TREES PLANTED*	4

1 TREE REMOVAL LIST

NOT TO SCALE

NO. | DATE | REVISION | APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION AND MITIGATION
TREE REMOVAL SUMMARY
(1 OF 1)

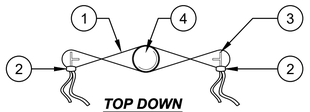
WBS NUMBER
R-001000-0031-3
DRAWING SCALE
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. 147 OF 192

FOR CITY OF HOUSTON USE ONLY

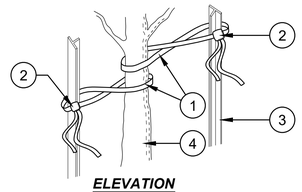
60% SUBMITTAL

4 NOT USED — NOT TO SCALE

2 TREE STAKING — NOT TO SCALE



TOP DOWN



ELEVATION

DETAIL NOTES:

1. 3/4" WIDE GREEN, FLAT WOVEN POLYPROPYLENE ARBORTIE
2. SECURE TO ARBORTIE T-POST WITH A KNOT.
3. STANDARD STEEL T-POST
4. TREE TRUNK

MANUFACTURER NOTES:

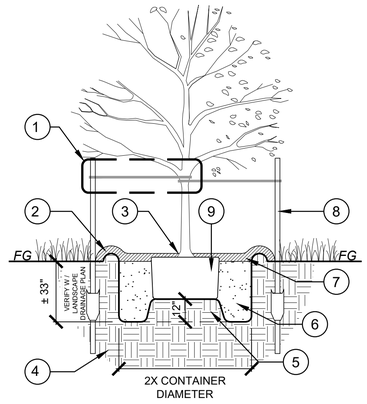
SPECIFIED ARBORTIE GREEN STAKING AND GUYING MATERIAL IS TO BE FLAT WOVEN POLYPROPYLENE MATERIAL. 3/4" WIDE 900LB. BREAK STRENGTH. ARBORTIE SHALL BE FASTENED TO STAKES IN A MANNER WHICH PERMITS TREE MOVEMENT AND SUPPORTS THE TREE.

3 PLANT LIST — NOT TO SCALE

PROPOSED PLANTING: *CONTRACTOR SHALL MARK TREE LOCATION PRIOR TO PLANTING FOR APPROVAL BY CITY FORESTER AND CITY ENGINEER*

SYM.	ABR.	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	NOTES	QTY.
	QV	QUERCUS VIRGINIANA	LIVE OAK	90 GAL. SINGLE TRUNK	4" CAL. MIN. @ ±30' 0" O.C.	2
	UC	ULMUS CRASSIFOLIA	CEDAR ELM	90 GAL. SINGLE TRUNK	4" CAL. MIN. @ ±30' 0" O.C.	2

1 TREE PLANTING — NOT TO SCALE



DETAIL NOTES:

1. TREE TIE DETAIL, **SEE DETAIL #4, THIS SHEET**.
2. FORM RESERVOIR OF MULCH AND NATIVE SOIL (3" MIN./6" MAX. HEIGHT)
3. SET TOP OF ROOT FLARE ±3" ABOVE FINISHED GRADE
4. UNDISTURBED SUB-GRADE (TYPICAL).
5. PROVIDE 1'-0" TALL X 3'-0" DIA. COMPACTED SOIL LEDGE FOR ROOT BALL (SCARIFY BOTTOM AND SIDES OF TREE PIT).
6. PLANTING MIXTURE, SEE SPECIFICATIONS.
7. 4" (MIN.) MULCH TOP DRESSING
8. STEEL 'T' POST (2 MIN. PER TREE, STANDARD) PLACED A MINIMUM OF 2" FROM ROOTBALL.
9. ROOTBALL, SCARIFY AND LOOSEN ROOTS. SET TOP OF BALL/CONTAINER ± 2" ABOVE FINISHED GRADE.

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

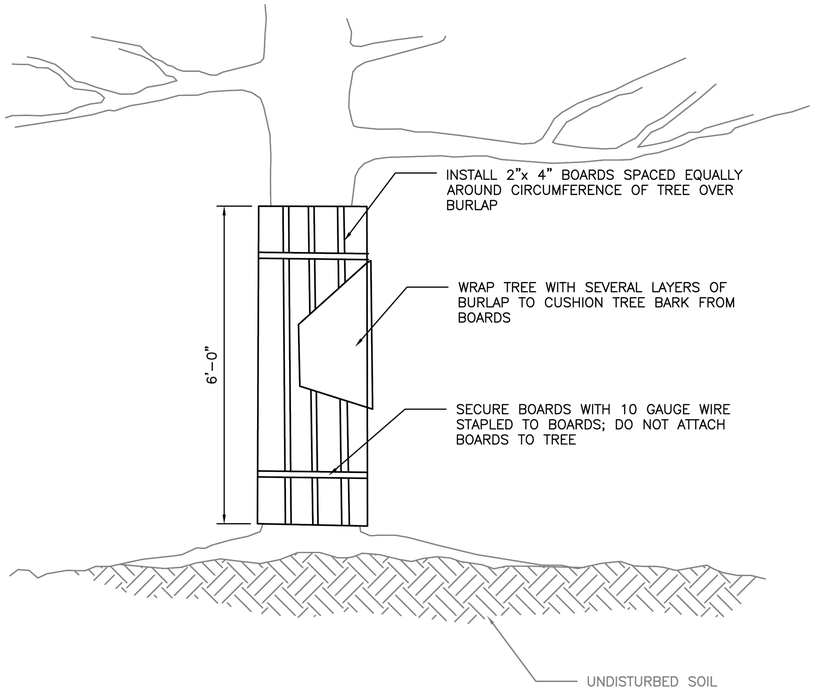
CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

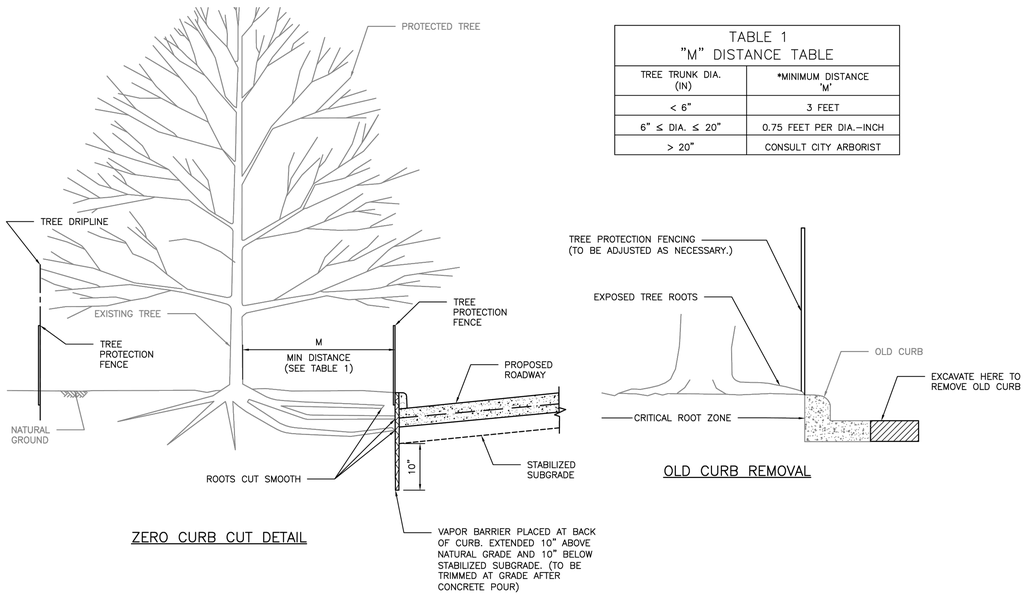
TREE PRESERVATION DETAILS
(1 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 148 OF 192	60% SUBMITTAL



ELEVATION

4 TREE BOARDING — NOT TO SCALE



ZERO CURB CUT DETAIL

TABLE 1 "M" DISTANCE TABLE	
TREE TRUNK DIA. (IN)	*MINIMUM DISTANCE 'M'
< 6"	3 FEET
6" ≤ DIA. ≤ 20"	0.75 FEET PER DIA.–INCH
> 20"	CONSULT CITY ARBORIST

OLD CURB REMOVAL

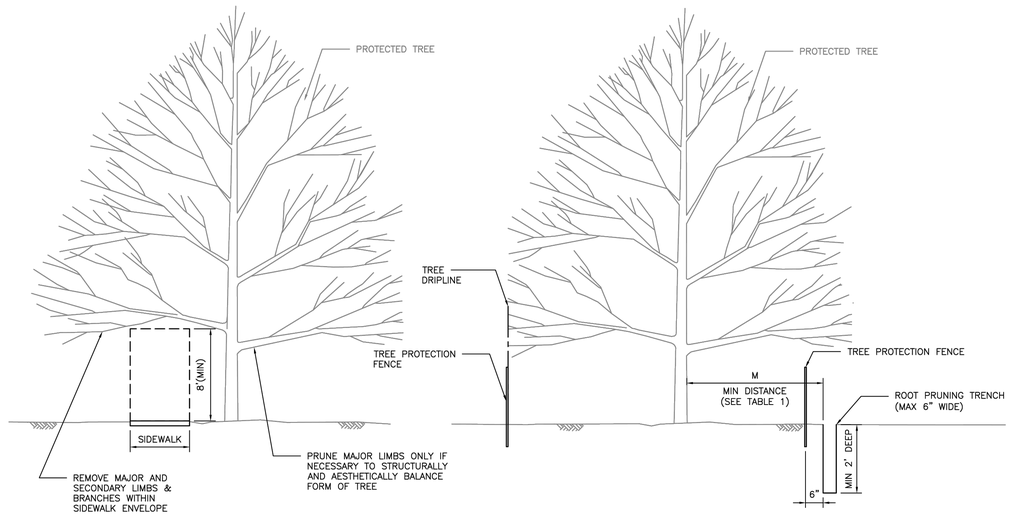
3 ZERO CURB CUT — NOT TO SCALE

ROOT PRUNING NOTE:

1. APPLICABLE TO ROOT PRUNING ON ONE SIDE OF TREE ONLY. CONSULT CITY ARBORIST FOR MORE EXTENSION ROOT PRUNING. FINAL APPROVAL SHALL COME FROM PARKS AND RECREATION DEPARTMENT.
2. SIDEWALK SHALL BE CONSTRUCTED OF EITHER CEMENT, CONCRETE, ASPHALT OR OTHER DURABLE MATERIAL AS THE COUNCIL MAY DESIGNATE (CHAPTER 40–91, CODE OF ORDINANCES).

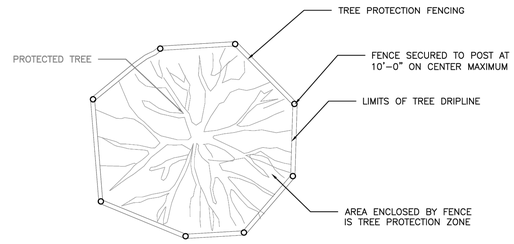
TABLE 1 "M" DISTANCE TABLE	
TREE TRUNK DIA. (IN)	*MINIMUM DISTANCE 'M'
< 6"	3 FEET
6" ≤ DIA. ≤ 20"	0.75 FEET PER DIA.–INCH
> 20"	CONSULT CITY ARBORIST

*MINIMUM DISTANCE FROM TREE TRUNK TO EDGE OF TRENCH

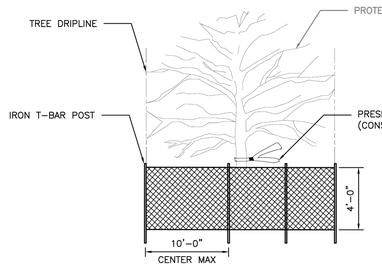


TREE PRUNING — ROOT PRUNING DETAIL

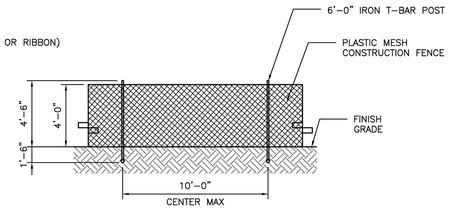
2 TREE AND ROOT PRUNING — NOT TO SCALE



PLAN VIEW
TREE PROTECTION FENCING DETAIL



FRONT VIEW
TREE PROTECTION FENCING DETAIL



DETAIL B–4
PROTECTIVE PLASTIC MESH FENCE

NOTES:

FENCE LOCATION MAY BE ADJUSTED TO ACTUAL SITE CONDITIONS.

1 TREE FENCING — NOT TO SCALE

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

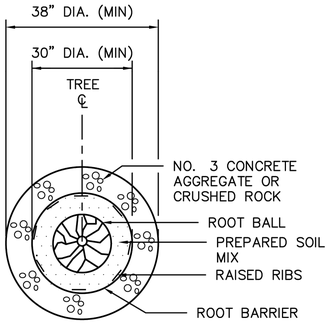
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

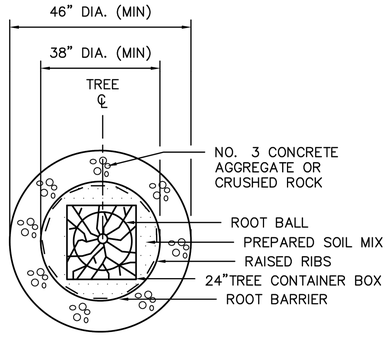
TREE PRESERVATION DETAILS
(2 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 149 OF 192	

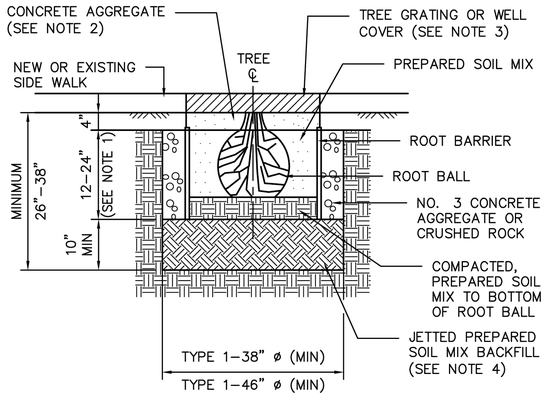
60% SUBMITTAL



PLAN VIEW A
TYPE 1 (15 GAL./4 PANELS)



PLAN VIEW B
TYPE 2 (24" BOX/5 PANELS)

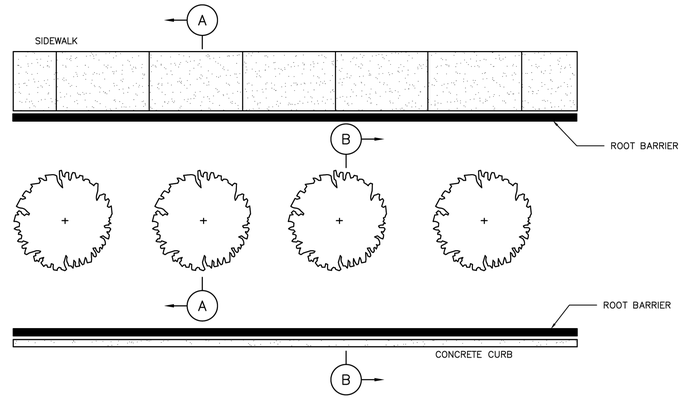


ELEVATION VIEW

NOTES:

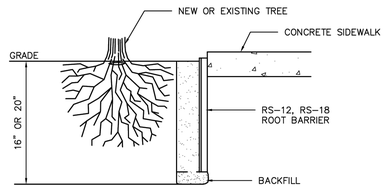
1. ROOT BARRIERS SIZES 12"–24" SHALL BE USED DEPENDS ON THE SIZE OF THE TREE. SIZES 36" AND 48" ARE RECOMMENDED TO BE USED AT SLOPES AND RETAINING WALLS WHEN ADDITIONAL DEPTH IS REQUIRED.
2. CONCRETE AGGREGATE ONLY BE USED TO RAISE THE ELEVATION OF THE WELL COVER/TREE GRATING TO MATCH THE SIDE WALKS. IF TREE WELL COVER IS NOT REQUIRED, THE GRADE SURFACE OF THE TREE WELL SHALL BE 1" LOWER THAN THE SIDE WALK.
3. REFER PROJECT PLAN AND CITY OF HOUSTON STANDARDS FOR TREE GRATING/WELL COVER REQUIREMENTS.
4. PREPARED SOIL MIX SHALL BE PLACED IN PLANTING HOLE AND TEMPED TO BOTTOM OF ROOT BALL ELEVATION PRIOR TO PROCEEDING WITH TREE PLANTING. FOR PLANTING AND TREE MAINTENANCE, REFER STANDARD LANDSCAPE PLANTING SPECIFICATION FOR CITY OF HOUSTON.

2 TREE ROOT BARRIERS - CIRCULAR — NOT TO SCALE

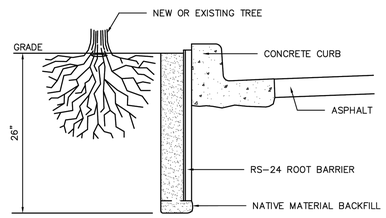


NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. THE RAISED ROOT GUIDING RIBS MUST BE FACING TOWARDS THE TREE ROOTS.
3. THE TOP OF THE BARRIER PANELS MUST BE SLIGHTLY ABOVE GRADE (NEVER BELOW GRADE).
4. POSITION BARRIER PANELS VERTICALLY WITH TOP AGAINST THE STRUCTURE TO BE PROTECTED.
5. SEE LANDSCAPE SITE PLAN TO DETERMINE TREES THAT REQUIRE BARRIER PANEL.
6. KEEP THE BARRIER TOP EDGE AT LEAST 1/2" ABOVE GRADE.



SECTION A–A
SIDEWALK



SECTION B–B
CURB & GUTTER PROTECTIONS

1 TREE ROOT BARRIERS - LINEAR — NOT TO SCALE

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

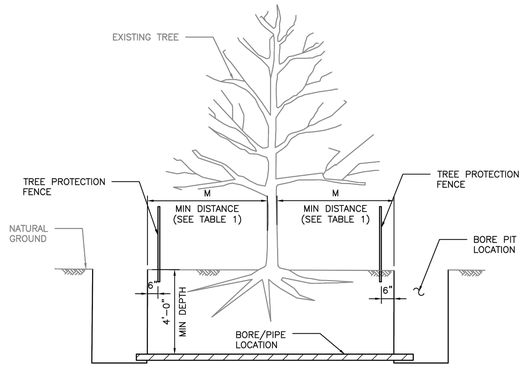
TREE PRESERVATION DETAILS
(3 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 150 OF 192	

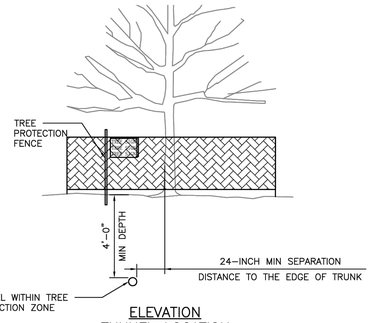
60% SUBMITTAL

TABLE 1 "M" DISTANCE TABLE	
TREE TRUNK DIA. (IN)	*MINIMUM DISTANCE 'M'
< 6"	3 FEET
6" ≤ DIA. ≤ 20"	0.75 FEET PER DIA.–INCH
> 20"	CONSULT CITY ARBORIST

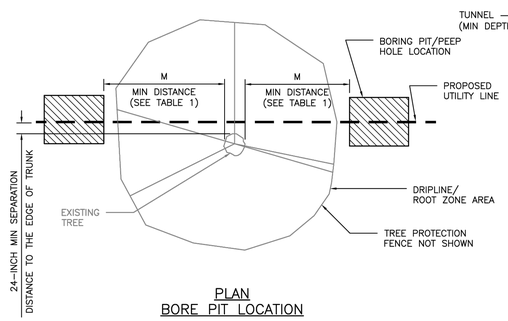
*MINIMUM DISTANCE FROM TREE TRUNK TO EDGE OF BORE PIT.



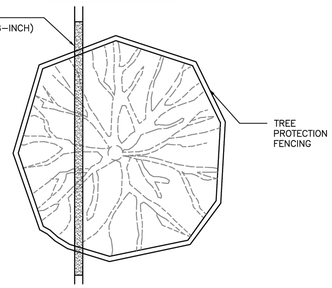
ELEVATION
BORE PIT LOCATION



ELEVATION
TUNNEL LOCATION

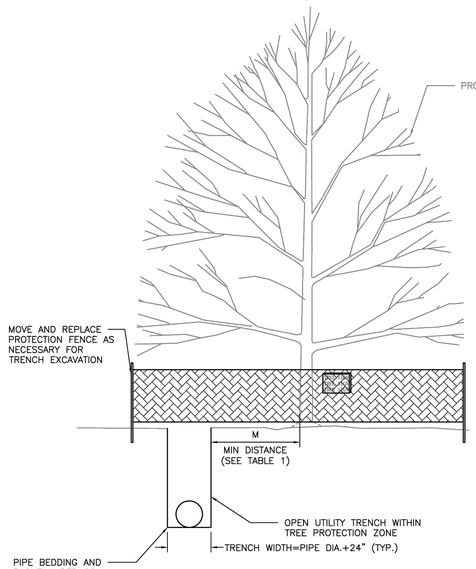


PLAN
BORE PIT LOCATION

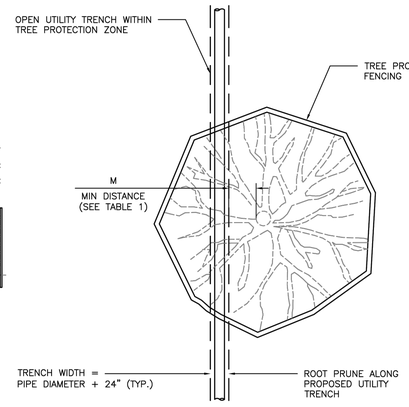


PLAN
TUNNEL LOCATION

2	TUNNELING REQUIREMENTS	NOT TO SCALE



ELEVATION
TRENCH EXCAVATION



PLAN
TRENCH EXCAVATION

TABLE 1 "M" DISTANCE TABLE	
TREE TRUNK DIA. (IN)	*MINIMUM DISTANCE 'M'
< 6"	3 FEET
6" ≤ DIA. ≤ 20"	0.75 FEET PER DIA.–INCH
> 20"	CONSULT CITY ARBORIST

*MINIMUM DISTANCE FROM TREE TRUNK TO EDGE OF UTILITY TRENCH

1	TRENCH REQUIREMENTS	NOT TO SCALE

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

M2L ASSOCIATES, INC.
8955 KATY FWY, # 300 HOUSTON, TX 77024
713-722-8897 • WWW.M2LASSOCIATES.NET
Landscape Architecture • Land Planning • Urban Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER AUTHORITY OF MICHAEL MAUER, REGISTERED LANDSCAPE ARCHITECT, STATE OF TEXAS, LICENSE NO. 1510.

CERTIFIED ARBORIST, STATE OF TEXAS, LICENSE NO. TX-3436A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

TREE PRESERVATION DETAILS
(4 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 151 OF 192	

60% SUBMITTAL

STANDARD SWPPP GENERAL NOTES:

1. CONTRACTOR SHALL IMPLEMENT PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND ROADSIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER SYSTEM AND THEN POLLUTING THE RECEIVING STORM SEWER SYSTEM.

2. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACT SHALL SCHEDULE THE WORK IN SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE, STORAGE OF EXCAVATED MATERIALS ON ROADWAYS IS NOT ALLOWED. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENT OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.

3. CONTRACTOR SHALL CLEAN THE EXISTING STREET INTERSECTION AND DRIVEWAYS DAILY AS NECESSARY TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREA.

4. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.

5. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OF RAINFALL OR GREATER.

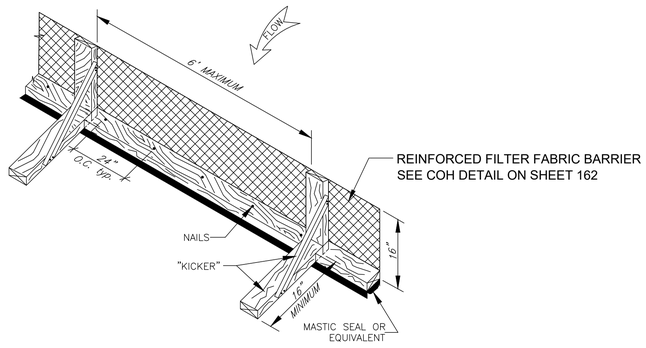
   - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN PERMANENTLY STABILIZED.
   - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
   - STRUCTURAL CONTROL MEASURES
   - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE
   - ANY STANDING WATER IN THE CONSTRUCTION AREA.

6. CONTRACTOR RESPONSIBLE FOR MAINTAINING UNOBSTRUCTED DRAINAGE TO EXISTING DITCHES AND CULVERTS AT ALL TIMES. AREAS DISTURBED BY EXCAVATION AND OR BACKFILLING OPERATIONS SHALL BE PERMANENTLY STABILIZED BY HYDRO-MULCH OR BLOCK SODDING. ROADSIDE DITCH SLOPES STEEPER THAN 4:1 SHALL BE REPLACED BY BLOCK SODDING.

7. SEDIMENT TRAPS SHALL BE PROVIDED FOR ALL DISCHARGE WATER.

8. CONTRACTOR SHALL ONLY USE DESIGNATED CONSTRUCTION ACCESS AND EXIT POINTS FOR ALL THEIR EQUIPMENT.

9. REFERENCE CITY OF HOUSTON STANDARD SPECIFICATION 01570 FOR MORE INFORMATION.



RFB ON PAVEMENT NOTES:

1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES OR TIE WIRES.

2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.

3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER AND ATTACH TO A POST.

4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.

REINFORCED FILTER FABRIC BARRIER ON PAVEMENT DETAIL

NO.	DATE	REVISION	APP.

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP STANDARD GENERAL NOTES & DETAIL

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 152 OF 192	

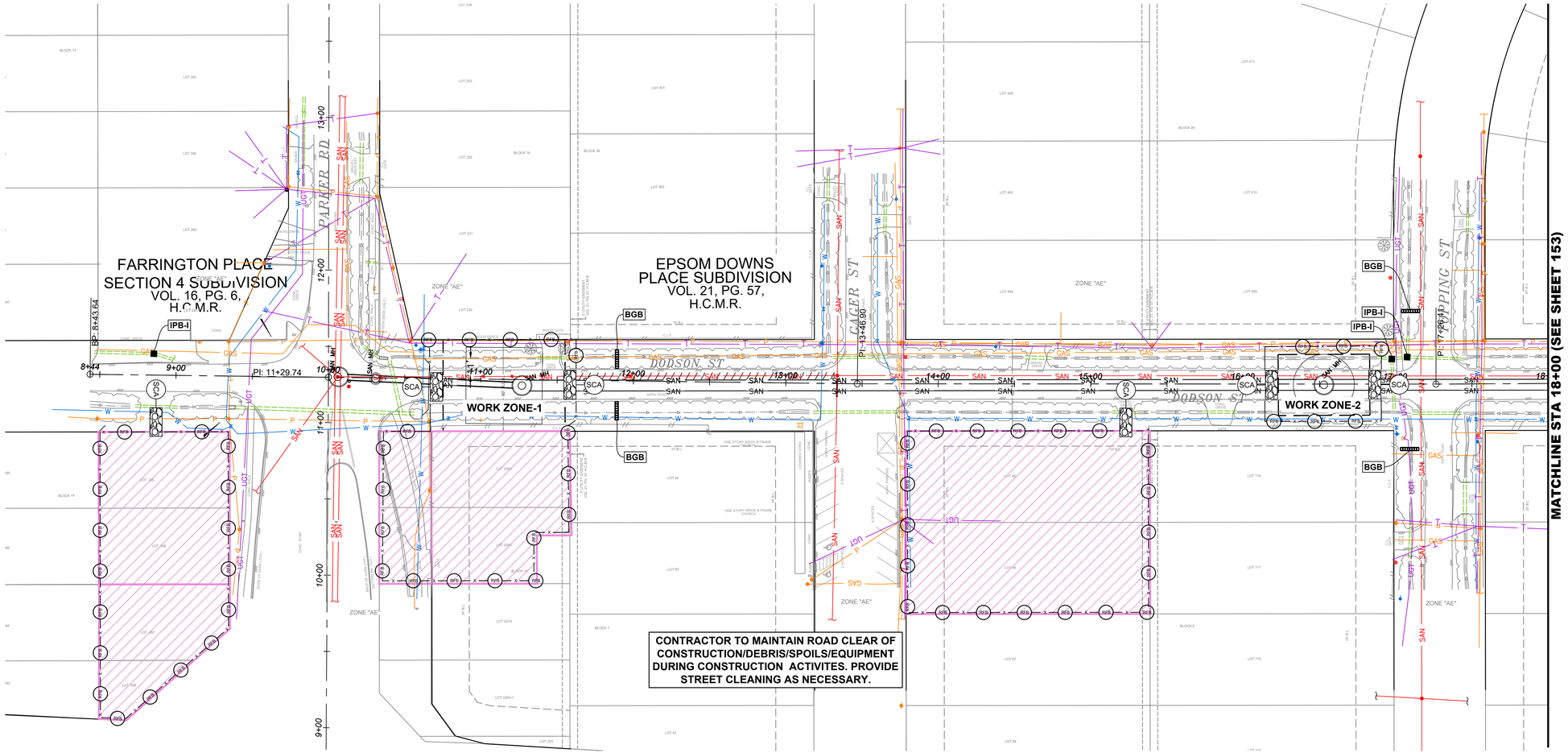
SW3P01

C:\Users\huer5008\AtkinsRéalis\HPW 84 Sewer Design - General. QC1 AQC Reviews\04-Design QC Review_QC Check Prints (CP)\Civil\CRMP Package 6 - Area 1 60% Drawings_CP2-Subs

PLOTTED: 8/15/2025 1:23 PM

PLOT STYLE: COH.ctb

FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\SWPPP STANDARD GENERAL NOTES.dwg



MATCHLINE STA 18+00 (SEE SHEET 153)

40 0 20 40 80

1" = 40'

NO.	DATE	REVISION	APP.

LEGEND:

- REINFORCED FILTER FILTER BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- IPB — INLET PROTECTION BARRIER (IPB-TYPE)
- BGB — BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF
JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026
IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

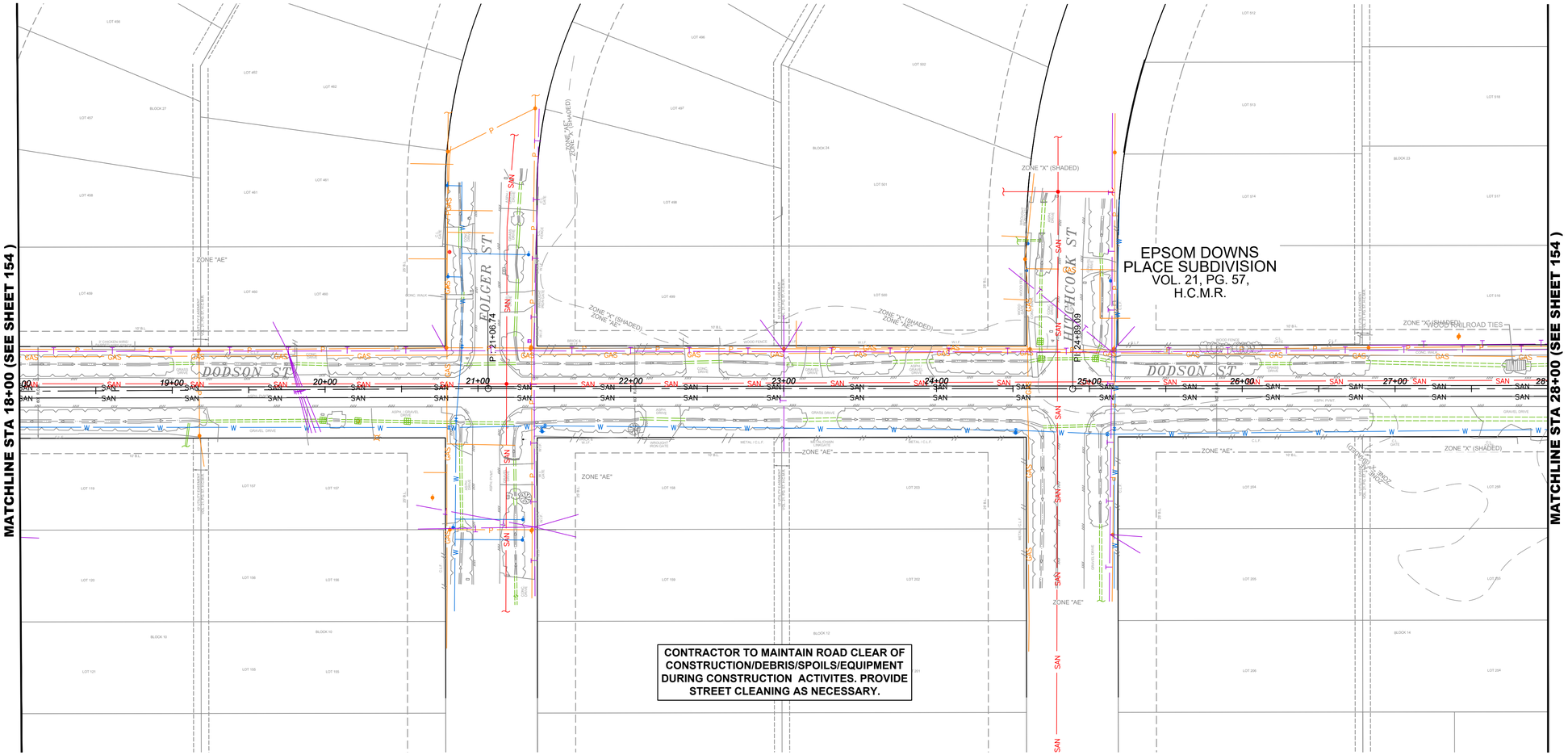
SWPPP
STA 8+44 to STA 18+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 153 OF 192	

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P02

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg



NO.	DATE	REVISION	APP.

40 0 20 40 80

1" = 40'

LEGEND:

- REINFORCED FILTER FILTER BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- IPB — INLET PROTECTION BARRIER (IPB-TYPE)
- BGB — BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP
STA 18+00 to STA 28+00

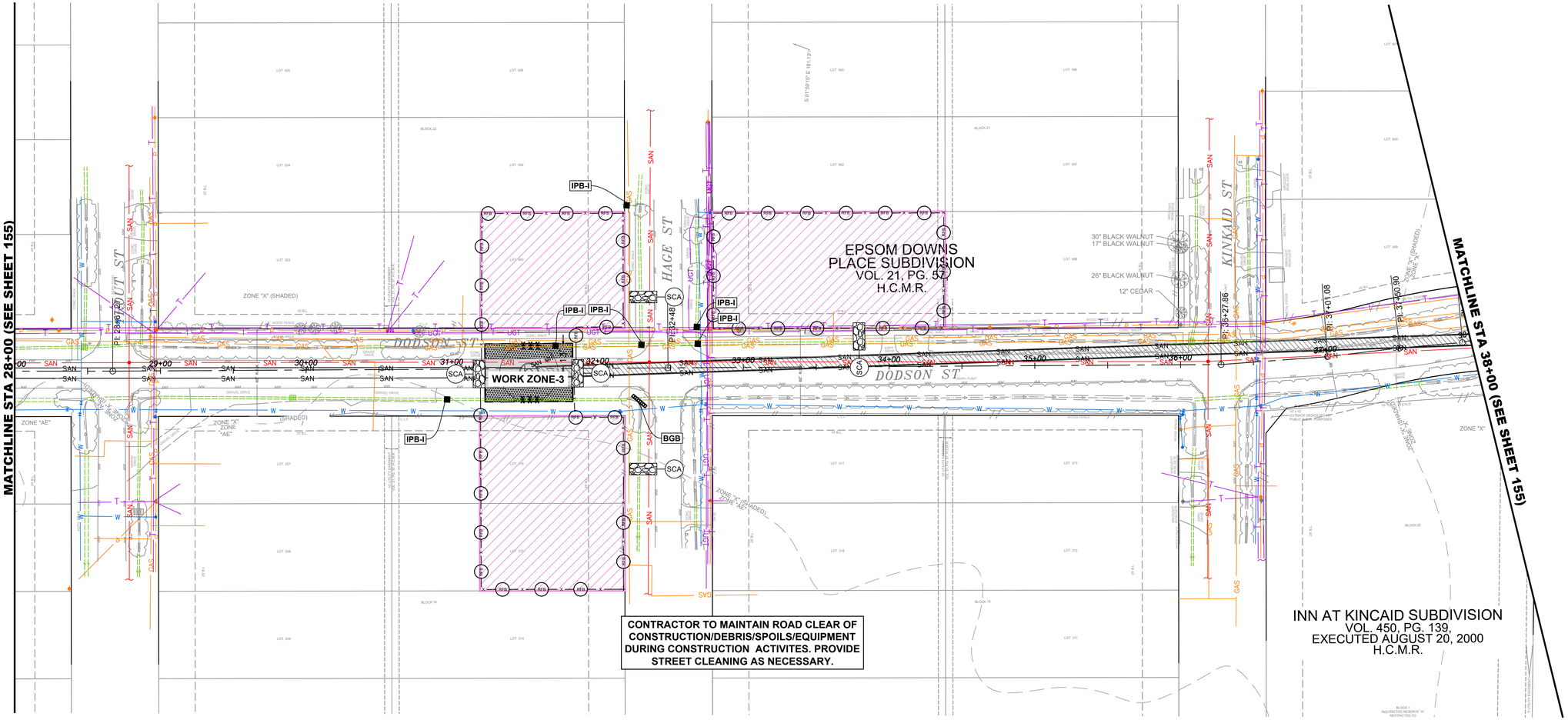
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 154 OF 192	

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P03

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg



NO.	DATE	REVISION	APP.

40 0 20 40 80
1" = 40'

LEGEND:

- REINFORCED FILTER FABRIC BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- IPB — INLET PROTECTION BARRIER (IPB-TYPE)
- BGB — BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P04

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

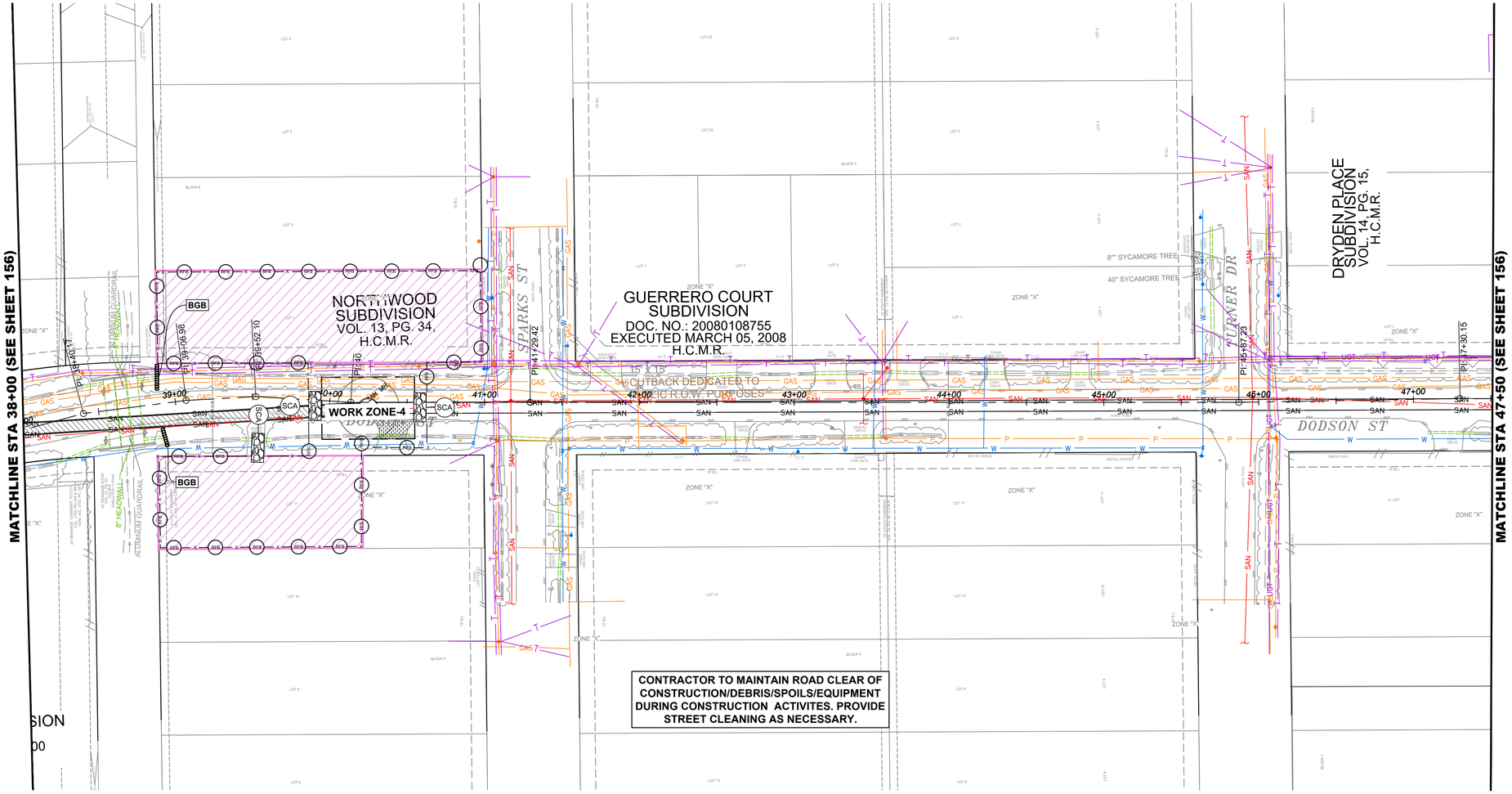
SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP
STA 28+00 to STA 38+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 155 OF 192	



NO.	DATE	REVISION	APP.

40 0 20 40 80

1" = 40'

LEGEND:

- REINFORCED FILTER FABRIC BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- IPB — INLET PROTECTION BARRIER (IPB-TYPE)
- BGB — BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P05

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

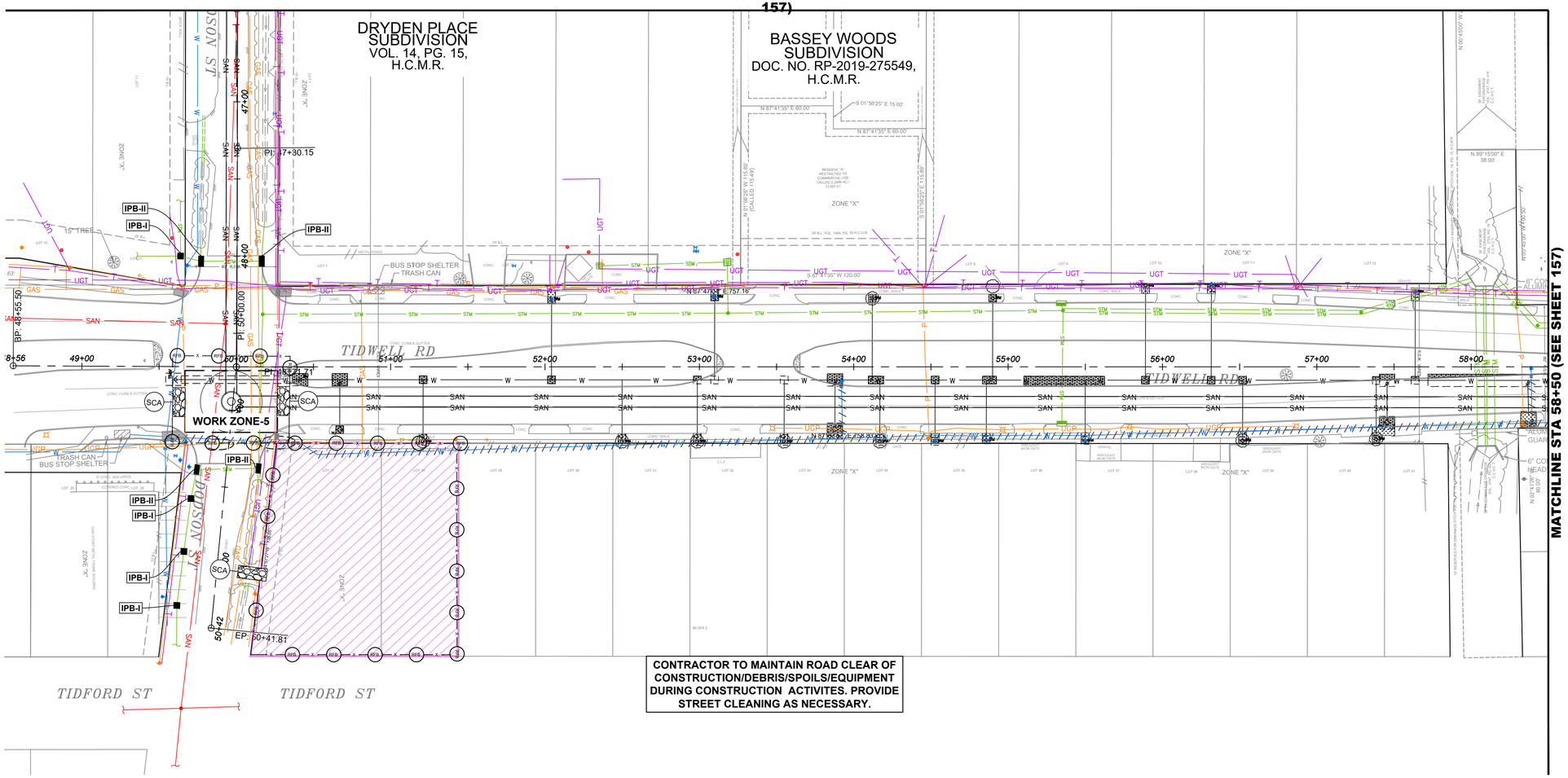
SWPPP
STA 38+00 to STA 47+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 156 OF 192	

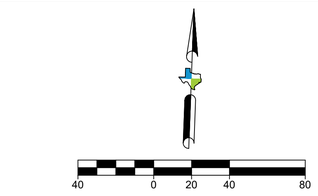
PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg

CONTINUATION STA 47+50 (SEE SHEET 157)



CONTRACTOR TO MAINTAIN ROAD CLEAR OF CONSTRUCTION/DEBRIS/SPOILS/EQUIPMENT DURING CONSTRUCTION ACTIVITES. PROVIDE STREET CLEANING AS NECESSARY.



NO.	DATE	REVISION	APP.

LEGEND:

- REINFORCED FILTER FABRIC BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- INLET PROTECTION BARRIER (IPB-TYPE)
- BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P06

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

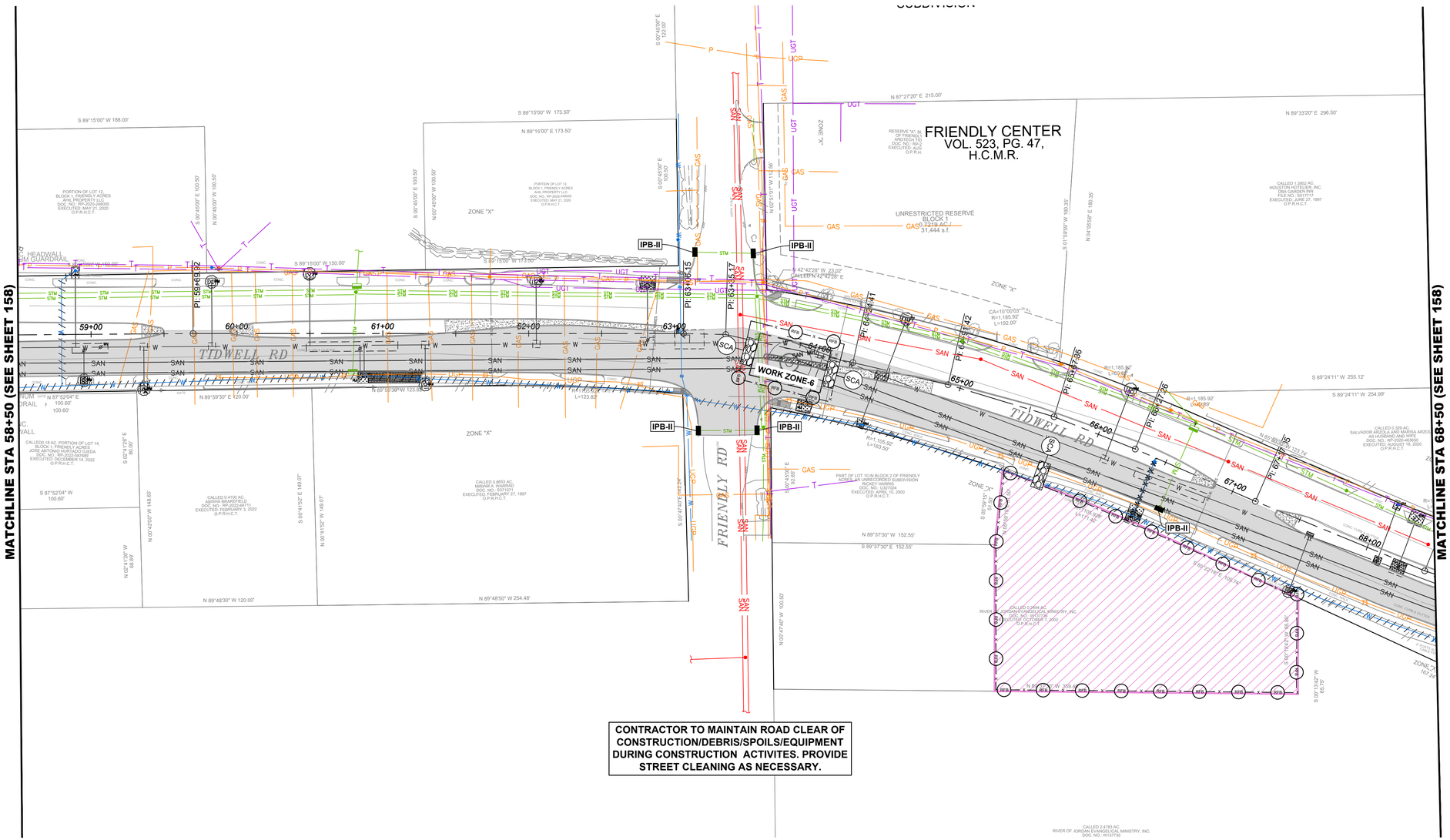
SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP
STA 48+56 to STA 58+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 157 OF 192	



NO.	DATE	REVISION	APP.

1" = 40'

LEGEND:

- REINFORCED FILTER FABRIC BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- INLET PROTECTION BARRIER (IPB-TYPE)
- BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP
STA 58+50 to STA 68+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 158 OF 192	

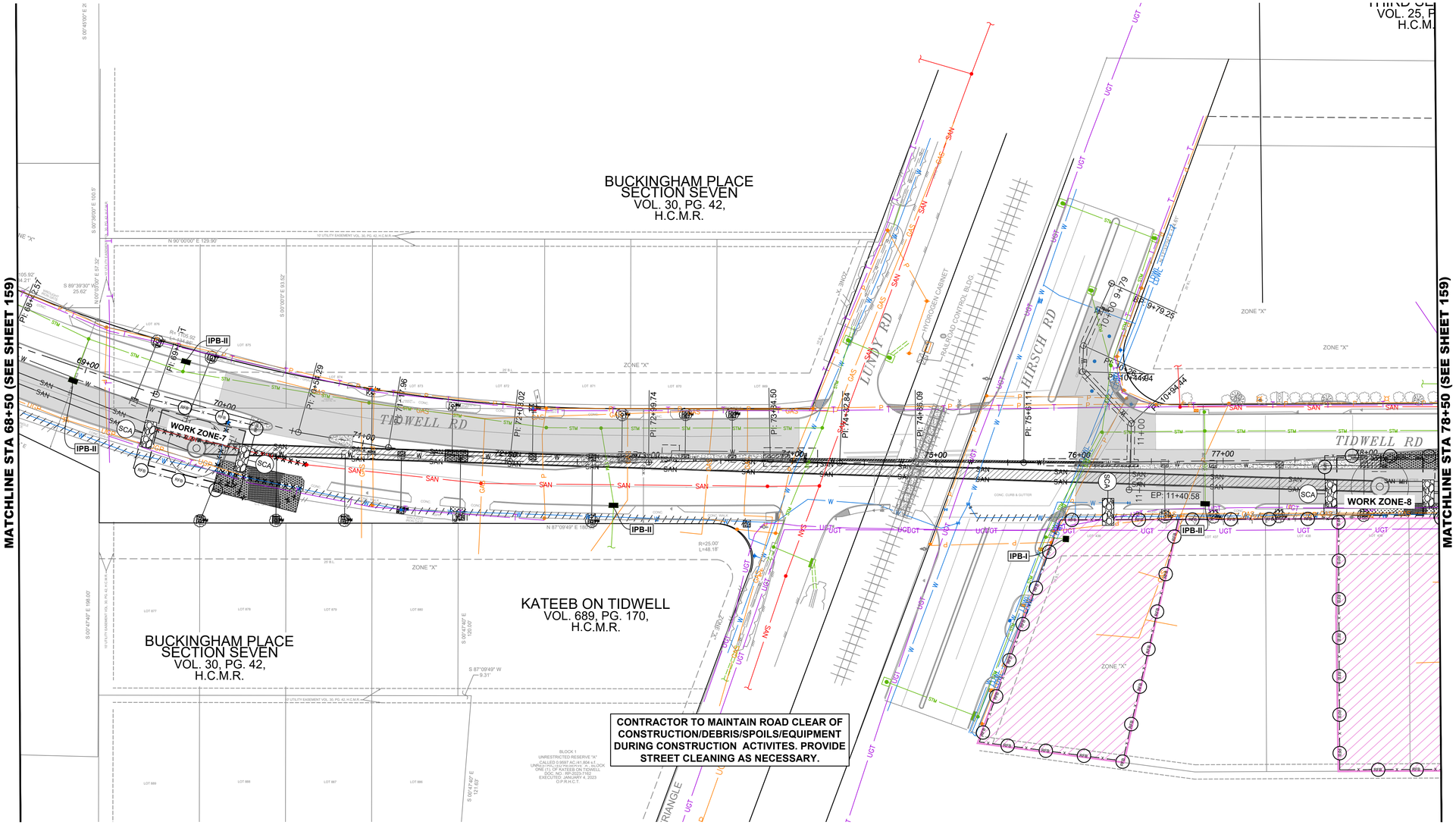
CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P07

PLOTTED: 8/15/2025 1:23 PM

PLOT STYLE: COH.ctb

FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg



1" = 40'

NO.	DATE	REVISION	APP.

LEGEND:

- REINFORCED FILTER FABRIC BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- IPB — INLET PROTECTION BARRIER (IPB-TYPE)
- BGB — BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P08

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

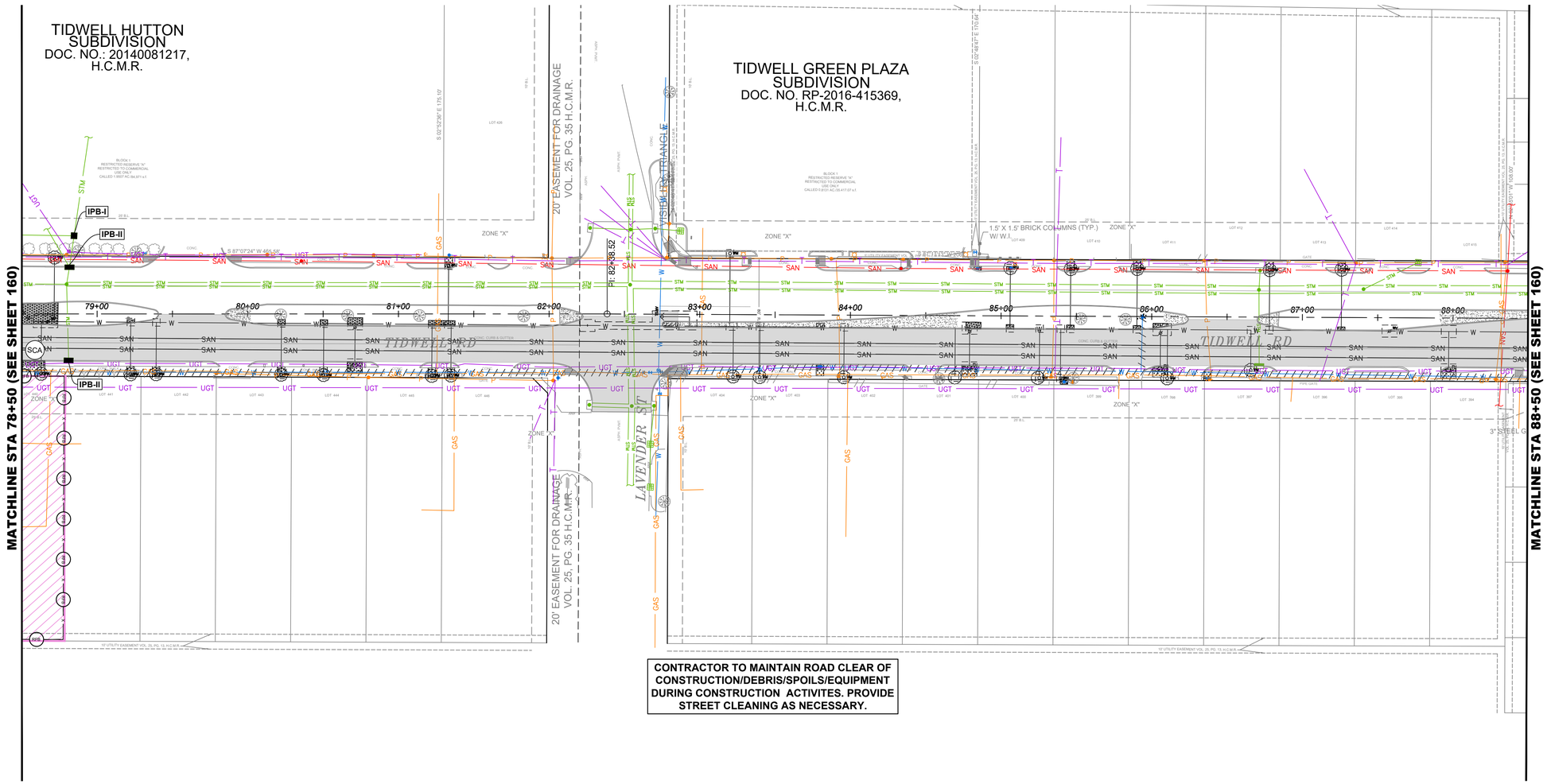
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP
STA 68+50 to STA 78+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 159 OF 192	

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg



40 0 20 40 80

1" = 40'

NO.	DATE	REVISION	APP.

LEGEND:

- REINFORCED FILTER FABRIC BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- IPB — INLET PROTECTION BARRIER (IPB-TYPE)
- BGB — BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P09

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

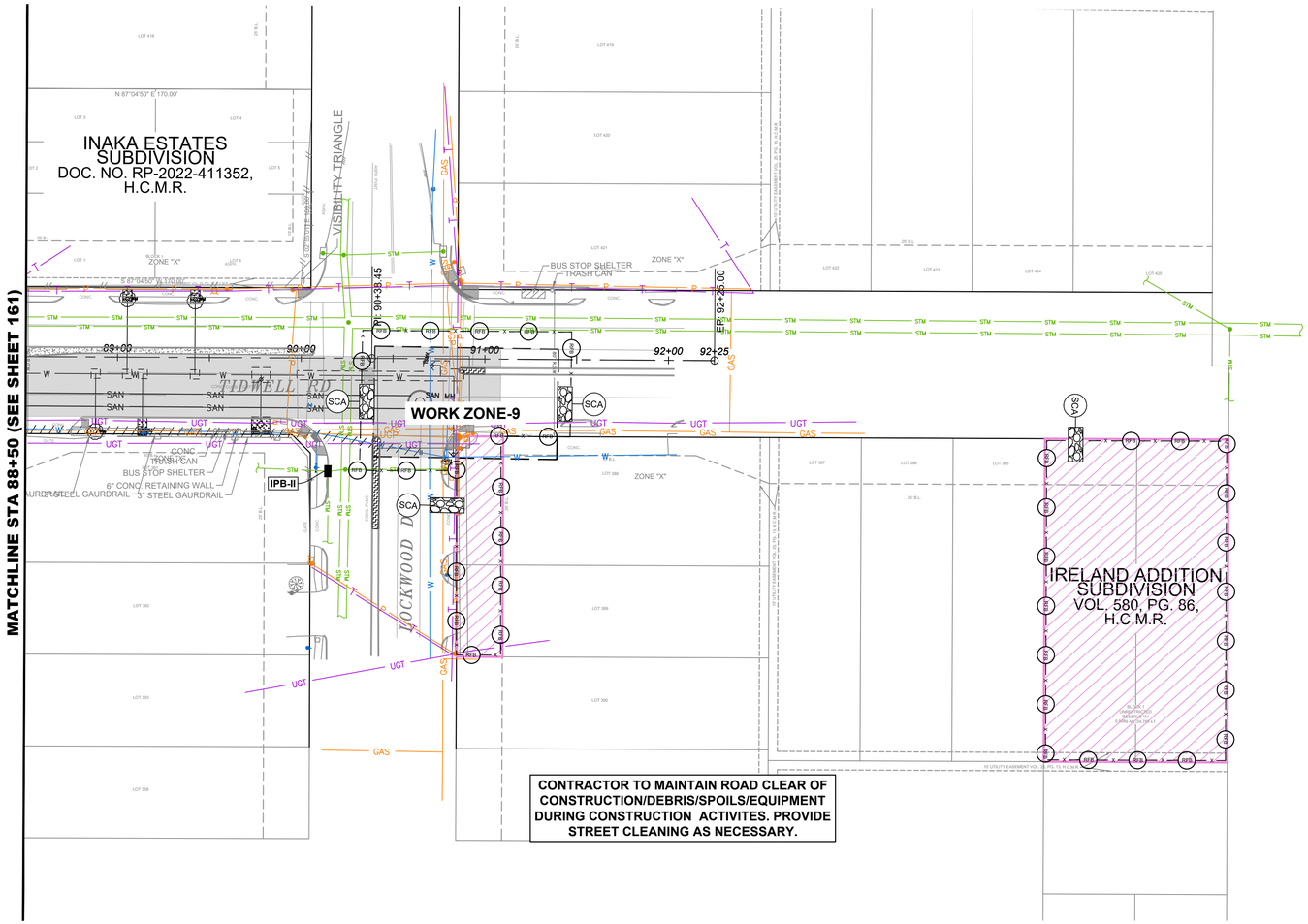
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP
STA 78+50 to STA 88+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 160 OF 192	

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg



1" = 40'

LEGEND:

- REINFORCED FILTER FABRIC BARRIER (RFB)
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY CONSTRUCTION EASEMENT
- INLET PROTECTION BARRIER (IPB-TYPE)
- BAGGED GRAVEL BARRIER (BGB)

NOTES:

1. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS. SOD LANDSCAPED AREAS AND HYDROMULCH REMAINING DISTURBED GRASS AREAS.
2. SEE TREE PROTECTION DRAWINGS FOR REMOVAL AND PROTECTION REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL ALL SWPPP MEASURES WITHIN THE PUBLIC RIGHT-OF-WAY AND ONLY IN AREAS OF ACTIVE CONSTRUCTION INCLUDING TEMPORARY CONSTRUCTION EASEMENTS. NO SWPPP MEASURE SHALL BE INSTALLED ON PRIVATE PROPERTY.
4. CONTRACTOR SHALL KEEP ALL ROADWAYS CLEAN DURING CONSTRUCTION.
5. CONTRACTOR SHALL PLACE THE FILTER FABRIC BARRIER (RFB) IN A WAY THAT DOES NOT IMPEDE DRIVEWAY ACCESS TO PROPERTIES OR PEDESTRIAN SIDEWALK ACCESS AT 12" MIN DISTANCE FROM ROW AND/OR TEMPORARY CONSTRUCTION EASEMENT AREAS.
6. REINFORCED FILTER FABRIC (RFB) SHALL NOT BE PLACED UNDER DRIP LINE OF TREES. CONTRACTOR TO PLACE WATTLES OR EROSION TUBES IN THESE AREAS.
7. CONTRACTOR SHALL REMOVE AND REPLACE INLET PROTECTION BARRIER PER REQUEST BY THE CITY RELATED TO SEVERE WEATHER EVENTS.

NO.	DATE	REVISION	APP.

CAUTION!!!
OVERHEAD POWER LINES AND UNDERGROUND UTILITIES IN & AROUND WORK AREA.
CONTRACTOR TO LOCATE EX. UTILITIES BEFORE COMMENCING WORK.

SW3P10

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF
JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026
IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043
SWPPP
STA 88+50 to END

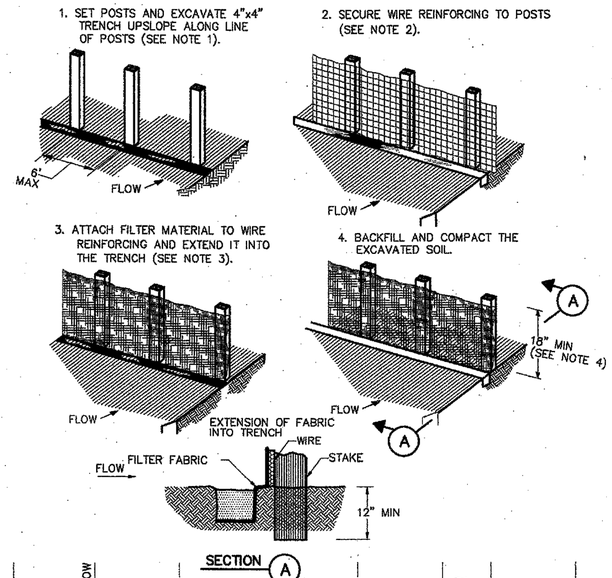
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
1"=40' (H)	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 161 OF 192	

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SW3P.dwg

PLOTTED: 8/15/2025 1:23 PM
PLOT STYLE: COH.ctb
FILE PATH: P:\0134\001 FY23 84-SS CRMP\04 Cadd-GIS\03 SHEETS\03 Civil\CRMP-PKG6-SWPPP-DETAILS.dwg

NO.	DATE	REVISION	APP.

1. SET POSTS AND EXCAVATE 4"x4" TRENCH UPSLOPE ALONG LINE OF POSTS (SEE NOTE 1).
2. SECURE WIRE REINFORCING TO POSTS (SEE NOTE 2).
3. ATTACH FILTER MATERIAL TO WIRE REINFORCING AND EXTEND IT INTO THE TRENCH (SEE NOTE 3).
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



"V-DITCH" SECTION/ELEVATION

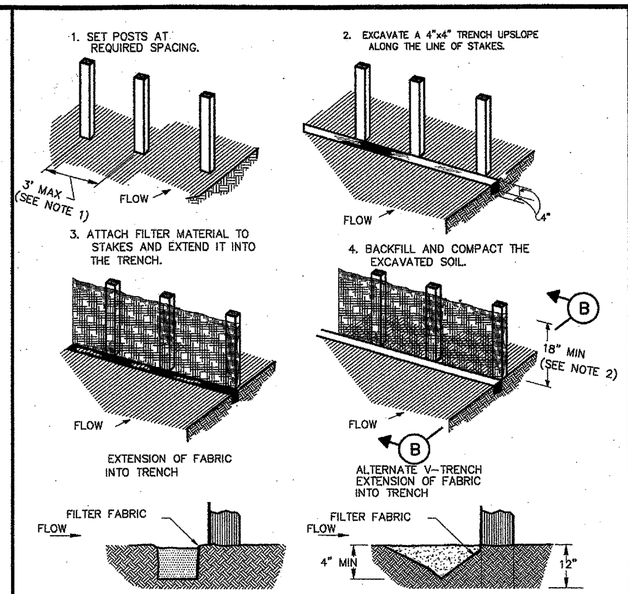
TRAPEZOIDAL SECTION/ELEVATION

CONSTRUCTION NOTES:

1. SET 2 INCH BY 2 INCH WOODEN STAKES SPACED A MAX OF 6 FEET APART AND EMBEDDED A MIN OF 12 INCHES.
2. WOVEN WIRE REINFORCING TO BE FASTENED SECURELY TO BARRIER POSTS WITH STAPLES.
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE REINFORCING, WITH TIES SPACED EVERY 24 INCHES AT TOP AND MIDSECTION.
4. MINIMUM HEIGHT OF FILTER SHOULD BE 18 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.
6. SEE COH STANDARD SPECIFICATION FOR FILTER FABRIC BARRIER.

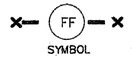
REINFORCED FILTER FABRIC BARRIER

1. SET POSTS AT REQUIRED SPACING.
2. EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.
3. ATTACH FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

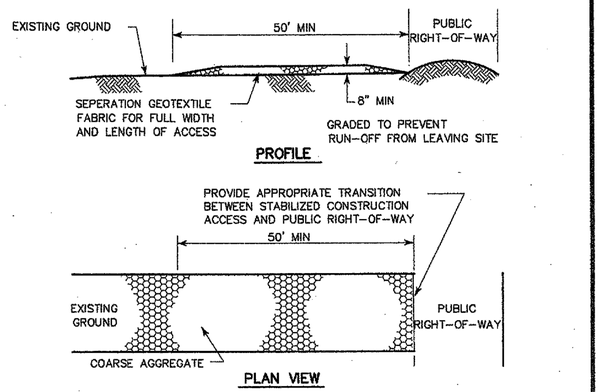


CONSTRUCTION NOTES:

1. 2 INCH THICK BY 2 INCH WOODEN STAKES TO BE SET AT MAX SPACING OF 3 FEET AND EMBEDDED A MIN OF 8 INCHES. IF PREASSEMBLED BARRIER WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAX.
2. ATTACH FILTER FABRIC TO WOODEN STAKES. FILTER FABRIC BARRIER SHALL HAVE A MIN HEIGHT OF 18 INCHES AND MAX HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.
4. SEE COH STANDARD SPECIFICATION FOR FILTER FABRIC BARRIER.



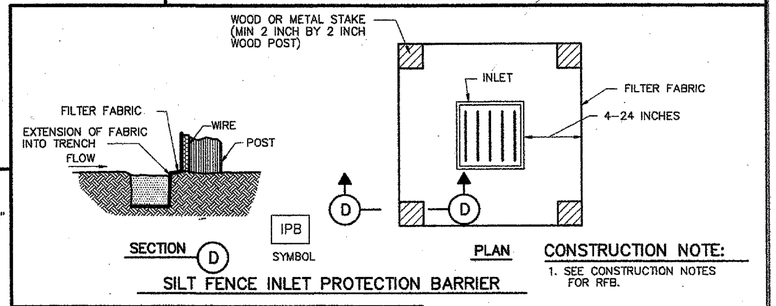
FILTER FABRIC BARRIER



CONSTRUCTION NOTES:

1. LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET.
2. THICKNESS SHALL BE NOT LESS THAN 8 INCHES.
3. WIDTH SHALL BE NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
4. STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION ACCESS, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
5. STABILIZED AREA MAY BE WIDENED OR LENGTHENED TO ACCOMODATE A WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR THE WASHING AREA.
6. COH STANDARD SPECIFICATION FOR STABILIZED CONSTRUCTION ACCESS.
7. STABILIZED CONSTRUCTION ACCESS SHALL BE MAINTAINED FREE OF SEDIMENT FOR THE DURATION OF THE PROJECT.

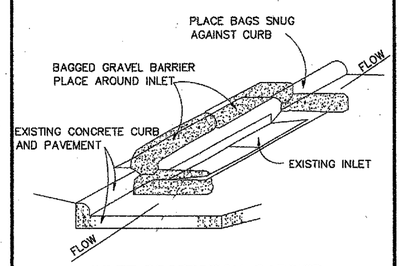
STABILIZED CONSTRUCTION ACCESS



SILT FENCE INLET PROTECTION BARRIER

CONSTRUCTION NOTE:

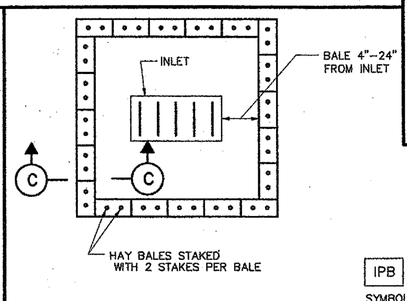
1. SEE CONSTRUCTION NOTES FOR RFB.

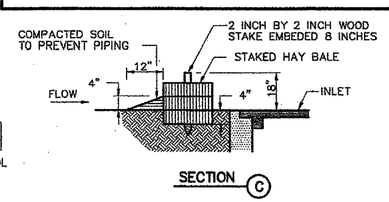


INLET PROTECTION BARRIER

(FOR STAGE II INLETS)

BAGGED GRAVEL BARRIER





HAY BALE INLET PROTECTION BARRIER

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STORM WATER POLLUTION PREVENTION PLAN DETAILS

(NOT TO SCALE)

APPROVED: CITY ENGINEER

APPROVED: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JULY-01-2010

DWG NO: 01571-01

SW3P11

5engineering
11200 WESTHEIMER ROAD, SUITE 353
HOUSTON, TEXAS 77042
(832) 800-3483 | www.5engineering.com
TBPE FIRM NO. F-13748

FOR INTERIM REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF

JUAN A. RAMIREZ HERNANDEZ, P.E.
TEXAS P.E. NO 145241
DATE: July 9th, 2026

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY: NOT APPLICABLE
FB NO. 000000

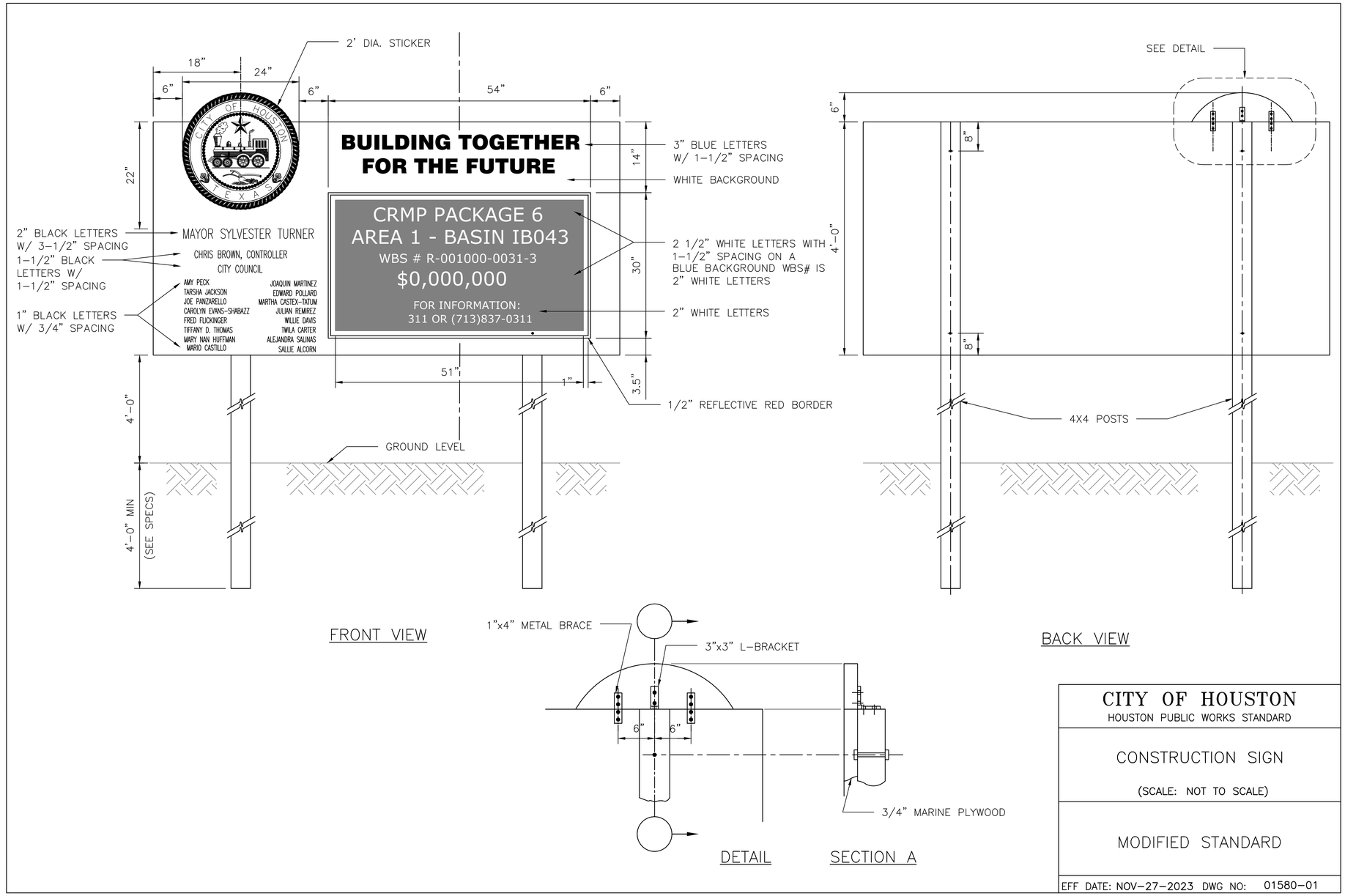
CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SWPPP STANDARD DETAILS (COH)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 162 OF 192	



CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

CONSTRUCTION SIGN

(SCALE: NOT TO SCALE)

MODIFIED STANDARD

EFF DATE: NOV-27-2023 DWG NO: 01580-01

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 1 OF 30

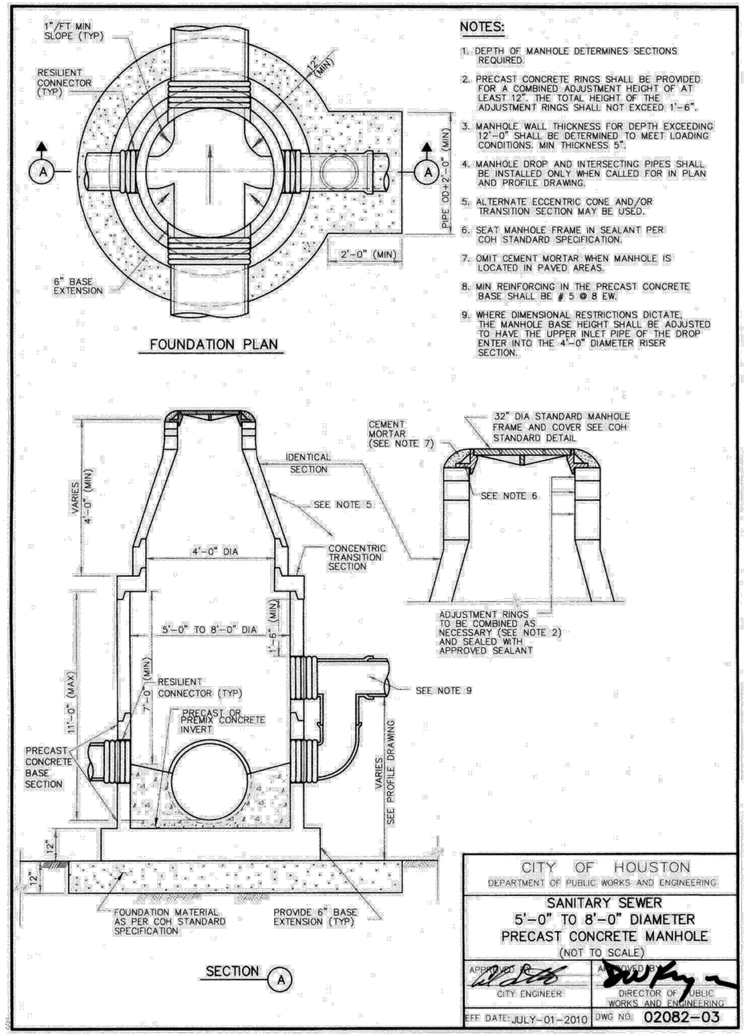
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 163 OF 192	

60% SUBMITTAL

DT-001

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg



NOTES:

1. DEPTH OF MANHOLE DETERMINES SECTIONS REQUIRED.
2. PRECAST CONCRETE RINGS SHALL BE PROVIDED FOR A COMBINED ADJUSTMENT HEIGHT OF AT LEAST 12". THE TOTAL HEIGHT OF THE ADJUSTMENT RINGS SHALL NOT EXCEED 1'-6".
3. MANHOLE WALL THICKNESS FOR DEPTH EXCEEDING 12'-0" SHALL BE DETERMINED TO MEET LOADING CONDITIONS. MIN THICKNESS 5".
4. MANHOLE DROP AND INTERSECTING PIPES SHALL BE INSTALLED ONLY WHEN CALLED FOR IN PLAN AND PROFILE DRAWING.
5. ALTERNATE ECCENTRIC CONE AND/OR TRANSITION SECTION MAY BE USED.
6. SEAT MANHOLE FRAME IN SEALANT PER COH STANDARD SPECIFICATION.
7. OMIT CEMENT MORTAR WHEN MANHOLE IS LOCATED IN PAVED AREAS.
8. MIN REINFORCING IN THE PRECAST CONCRETE BASE SHALL BE # 5 @ 8 EW.
9. WHERE DIMENSIONAL RESTRICTIONS DICTATE, THE MANHOLE BASE HEIGHT SHALL BE ADJUSTED TO HAVE THE UPPER INLET PIPE OF THE DROP ENTER INTO THE 4'-0" DIAMETER RISER SECTION.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SANITARY SEWER
5'-0" TO 8'-0" DIAMETER
PRECAST CONCRETE MANHOLE
(NOT TO SCALE)

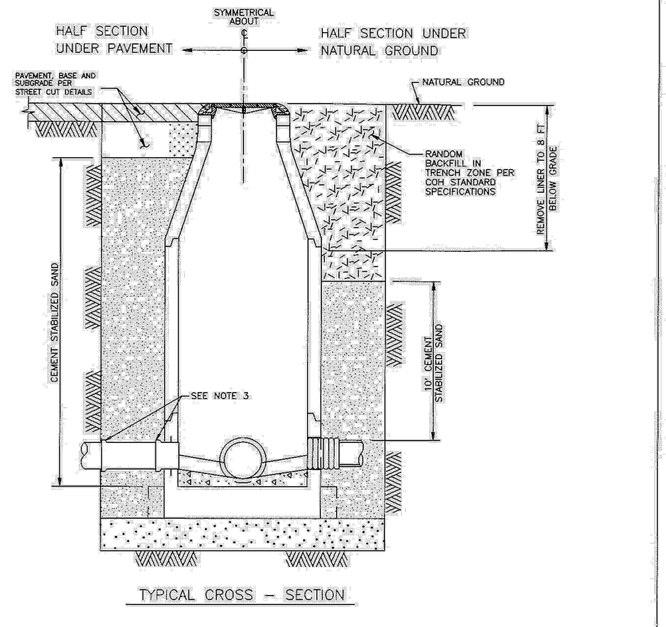
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2010	DWG NO: 02082-03

NOTES:

1. A MANHOLE CONNECTED TO A PIPE THAT IS AT LEAST 15 INCHES IN DIAMETER BUT NOT MORE THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THREE-FOURTHS OF THE LARGEST PIPE'S DIAMETER.
2. A MANHOLE CONNECTED TO A PIPE THAT IS GREATER THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THE LARGEST PIPE'S DIAMETER.

NOTES:

1. GROUTING OF MANHOLE STRUCTURE ANNULAR SPACE WILL BE PERMITTED IN CASES WHERE INSUFFICIENT WORK SPACE EXISTS FOR PLACEMENT AND COMPACTATION OF CEMENT STABILIZED SAND, PER COH STANDARD SPECIFICATION FOR TUNNEL GROUT.
2. THIS DETAIL ALSO APPLIES TO BACKFILL OF SHAFTS WITHOUT STRUCTURES.
3. ARRANGE PIPE JOINTS AS SHOWN WHEN USING RIGID CONNECTION TO CAST IN PLACE MANHOLE BASE.



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER
BACKFILL OF SHAFTS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002	DWG NO: 02317-08

DT-002

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 - AREA 1-BASIN IB043

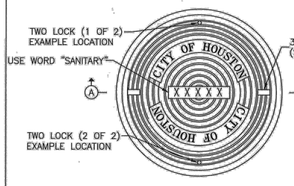
CIVIL DETAILS SHEET 2 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 164 OF 192	
	60% SUBMITTAL

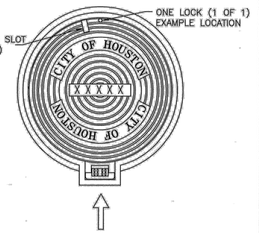
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

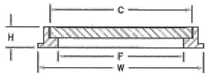
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg

ASSEMBLY VIEW



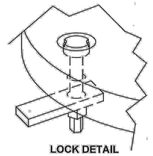
ASSEMBLY VIEW - W/ HINGE



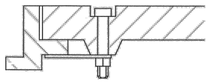


SECTION A-A

COVER SIZE	C	F	H	W
	IN (MAX)	IN (EXACT)	IN (MAX)	IN (MAX)
32"	35.75	30.00	5.00	41.00



LOCK DETAIL

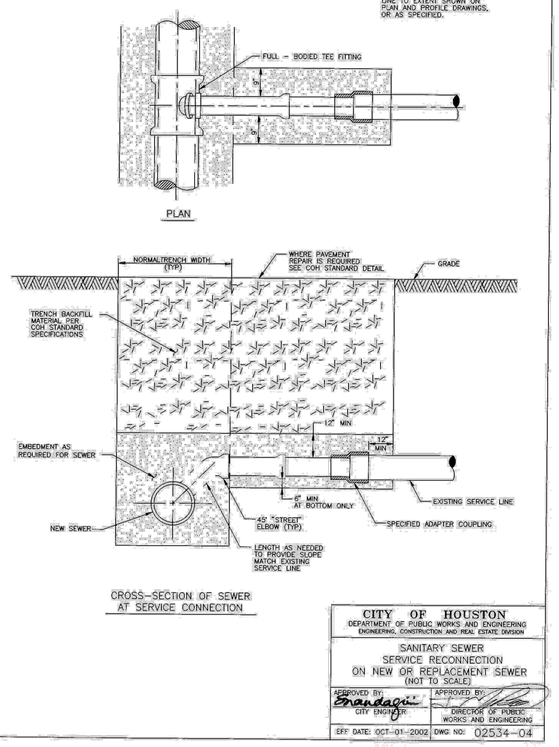


LOCK CUT AWAY SECTION DETAIL

NOTES:

1. FRAME AND COVER MEETS OR EXCEEDS REQUIREMENTS FOR CITY OF HOUSTON SPECIFICATION 02091 – NON METALLIC FRAMES, GRATES, RINGS, AND COVERS.
2. COVER SHALL HAVE A MINIMUM OF ONE (1) 316 STAINLESS STEEL PICK BAR SLOT MOLDED IN THE COMPOSITE MATRIX.
3. LOCK AND BOLT SHALL BE 316 STAINLESS STEEL AND BE ¼" TURN CAM/PADDLE TYPE.
4. MANHOLE DESIGNS WITHOUT HINGES MUST INCLUDE A MINIMUM OF TWO (2) LOCKS LOCATED ON OPPOSITE EDGES. DESIGNS WITH A HINGE MUST INCLUDE A MINIMUM OF ONE (1) LOCK LOCATED OPPOSITE EDGE OF THE HINGE MECHANISM.
5. MANHOLE INSTALLATIONS WITH HINGES SHALL ORIENT HINGES PARALLEL TO TRAFFIC FLOW DIRECTION. THE HINGE WILL BE LOCATED ON THE APPROACHING DIRECTION OF TRAFFIC.

CITY OF HOUSTON HOUSTON PUBLIC WORKS	
NON–METALLIC MANHOLE FRAME AND COVER (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF HOUSTON PUBLIC WORKS
EFF DATE: JUL–01–2021	DWG NO: 02091–01

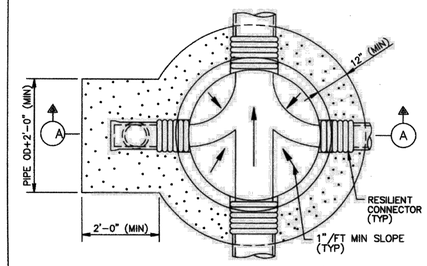


CROSS–SECTION OF SEWER AT SERVICE CONNECTION

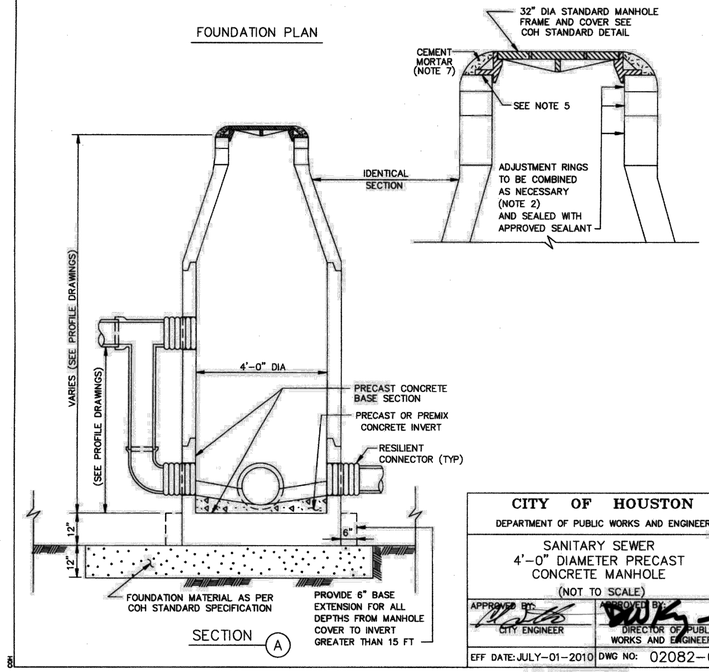
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION	
SANITARY SEWER SERVICE RECONNECTION ON NEW OR REPLACEMENT SEWER (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT–01–2002	DWG NO: 02534–04

NOTES:

1. DEPTH OF MANHOLE DETERMINES SECTIONS REQUIRED.
2. PRECAST CONCRETE RINGS SHALL BE PROVIDED FOR A COMBINED ADJUSTMENT HEIGHT OF AT LEAST 12". THE TOTAL HEIGHT OF THE ADJUSTMENT RINGS SHALL NOT EXCEED 1'–6".
3. MANHOLE WALL THICKNESS FOR DEPTH EXCEEDING 12'–0" SHALL BE DETERMINED TO MEET LOADING CONDITIONS. MIN THICKNESS 5".
4. MANHOLE DROP AND INTERSECTING PIPES SHALL BE INSTALLED ONLY WHEN CALLED FOR IN PLAN AND PROFILE DRAWING.
5. SEAT MANHOLE FRAME IN SEALANT PER COH STANDARD SPECIFICATION.
6. ECCENTRIC PRECAST CONCRETE MANHOLE MAY BE USED.
7. OMIT CEMENT MORTAR WHEN MANHOLE IS LOCATED IN PAVED AREAS.
8. MIN REINFORCING IN THE PRECAST CONCRETE BASE SHALL BE # 5 @ 8 EW.



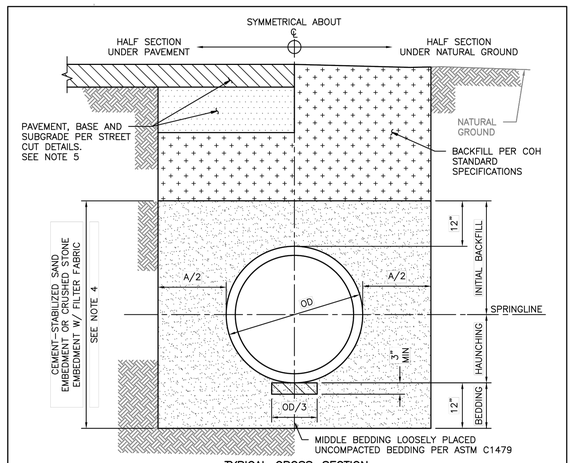
FOUNDATION PLAN



CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
SANITARY SEWER 4'–0" DIAMETER PRECAST CONCRETE MANHOLE (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY–01–2010	DWG NO: 02082–02

NOTES:

1. A MANHOLE LOCATED WITHIN A 100–YEAR FLOOD PLAIN MUST BE GASKETED AND BOLTED DOWN TO PREVENT INFLOW.
2. A MANHOLE COVER THAT IS LOCATED IN A ROADWAY MUST MEET OR EXCEED THE AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS STANDARD M–306 FOR LOAD BEARING.
3. A MANHOLE CONNECTED TO PIPES LESS THAN 15 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST HALF THE LARGEST PIPE'S DIAMETER.
4. A MANHOLE CONNECTED TO A PIPE THAT IS AT LEAST 15 INCHES IN DIAMETER BUT NOT MORE THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THREE–FOURTHS OF THE LARGEST PIPE'S DIAMETER.
5. A MANHOLE CONNECTED TO A PIPE THAT IS GREATER THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THE LARGEST PIPE'S DIAMETER.
6. IN A MANHOLE WITH PIPES OF DIFFERENT SIZES, THE TOPS OF ALL THE PIPES MUST BE AT THE SAME ELEVATION AND FLOW CHANNELS IN THE INVERT MUST BE SLOPED EVENLY FROM PIPE TO PIPE TO PREVENT BACKPRESSURE.
7. A COLLECTION SYSTEM PIPE ENTERING A MANHOLE MORE THAN 24 INCHES ABOVE AN INVERT MUST HAVE A DROP PIPE.
8. A MANHOLE–PIPE CONNECTION MUST USE WATERTIGHT, SIZE–ON–SIZE RESILIENT CONNECTORS THAT ALLOW FOR DIFFERENTIAL SETTLEMENT AND TESTING PER AMERICAN SOCIETY FOR TESTING AND MATERIALS C923.



TYPICAL CROSS–SECTION

NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS PER COH STANDARD. SEE COH STANDARD SPECIFICATION FOR REQUIREMENTS IN OTHER CONDITIONS.
2. MIN TRENCH WIDTH SHALL BE PIPE OD PLUS AN ALLOWANCE "A" FOR THE NOMINAL PIPE SIZE:

NOMINAL PIPE SIZE	"A"
30" OR LESS	24"
36" TO 42"	36"
GREATER THAN 42"	48"

3. MAX TRENCH WIDTH SHALL BE NOT GREATER THAN MIN TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.
4. ALTERNATIVE EMBEDMENT BACKFILL MATERIALS FOR FORCE MAINS MAY BE ALLOWED. SEE COH STANDARD SPECIFICATIONS.
5. REFER TO THE COH STD DETAILS 02951–01 THROUGH 05 FOR STREET CUT REQUIREMENTS.
6. FOR THERMOPLASTIC STORM SEWER PIPE INSTALLATION REFER TO COH STD DETAIL 02317–10G.

DISCLAIMER: THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

CITY OF HOUSTON HOUSTON PUBLIC WORKS STANDARD	
SANITARY OR STORM SEWER BEDDING AND BACKFILL FOR DRY STABLE TRENCH (SCALE: NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF HPW
EFF DATE: MAR–02–2026	DWG NO: 02317–03

DT–003

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

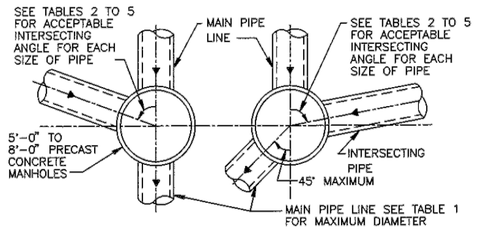
CIVIL DETAILS SHEET 3 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 165 OF 192	

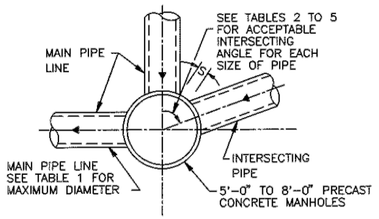
60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPW\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg



FOR MAIN PIPES FROM STRAIGHT THROUGH TO 45° DEFLECTION



FOR MAIN PIPE WITH 45° TO 90° DEFLECTION

TABLE 1

MAXIMUM MAIN PIPE DIAMETER (I D) IN INCHES

MANHOLE DIAMETER (FT)	STRAIGHT THROUGH TO 45° DEFLECTION	WITH 90° DEFLECTION	TABLE TO BE USED
5	36	27	2
6	42	33	3
7	48	36	4
8	60	42	5

TABLE 2

MINIMUM ANGLE AND INTERSECTING PIPE ID SIZES FOR 5'-0" DIA MANHOLE

INTERSECTING PIPE ID SIZES (INCHES)	MINIMUM INTERSECTING ANGLE IN DEGREES FOR VARIOUS MAIN PIPE ID SIZES IN INCHES										
	8"	10"	12"	15"	18"	21"	24"	27"	30"	33"	36"
8	49	50	54	58	61	66	69	73	77	82	86
10		53	57	61	64	68	71	76	79	84	88
12			61	65	68	72	75	80	83	88	–
15				68	71	75	79	83	87	–	–
18					75	79	82	87	90	–	–
21						83	86	90	–	–	–
24							90	–	–	–	–
27					*			–	–	–	–
30									–	–	–
33										–	–
36											–

NOTES ON USE OF STANDARD DETAIL 02082-03

TABLE 3

MINIMUM ANGLE AND INTERSECTING PIPE ID SIZES FOR 6'-0" DIA MANHOLE

INTERSECTING PIPE ID SIZES (INCHES)	MINIMUM INTERSECTING ANGLE IN DEGREES FOR VARIOUS MAIN PIPE ID SIZES IN INCHES										
	8"	10"	12"	15"	18"	21"	24"	27"	30"	33"	36"	42"
8	40	42	45	49	51	54	57	61	63	67	70	78
10		44	47	50	53	56	59	62	65	69	72	79
12			50	54	56	60	62	66	68	72	75	83
15				57	59	62	65	69	71	75	78	85
18					62	65	68	71	74	78	81	88
21						68	71	74	77	81	84	–
24							74	77	80	84	87	–
27								83	85	89	–	–
30					*				–	–	–	–
33										–	–	–
36											–	–
42												–

TABLE 4

MINIMUM ANGLE AND INTERSECTING PIPE ID SIZES FOR 7'-0" DIA MANHOLE

INTERSECTING PIPE ID SIZES (INCHES)	MINIMUM INTERSECTING ANGLE IN DEGREES FOR VARIOUS MAIN PIPE ID SIZES IN INCHES												
	8"	10"	12"	15"	18"	21"	24"	27"	30"	33"	36"	42"	48"
8	35	36	39	42	44	47	49	52	54	57	59	65	71
10		38	40	43	45	48	50	53	55	59	61	67	73
12			43	46	48	51	53	56	58	61	64	70	76
15				48	50	53	55	58	61	64	66	72	78
18					58	56	58	61	63	66	69	74	81
21						58	60	63	66	69	71	77	83
24							63	66	68	71	74	79	86
27								70	72	76	78	84	90
30					*				78	81	83	89	–
33										86	88	–	–
36											–	–	–
42												–	–
48													–

TABLE 5

MINIMUM ANGLE AND INTERSECTING PIPE ID SIZES FOR 8'-0" DIA MANHOLE

INTERSECTING PIPE ID SIZES (INCHES)	MINIMUM INTERSECTING ANGLE IN DEGREES FOR VARIOUS MAIN PIPE ID SIZES IN INCHES														
	8"	10"	12"	15"	18"	21"	24"	27"	30"	33"	36"	42"	48"	54"	60"
8	30	32	34	36	38	41	43	45	47	50	52	56	61	67	74
10		33	35	38	40	42	44	46	48	51	53	58	63	68	77
12			38	40	42	44	46	49	51	53	55	60	65	71	79
15				42	44	47	48	51	53	56	58	62	67	73	81
18					46	49	51	53	55	58	66	64	70	75	83
21						51	53	55	57	60	62	67	72	77	85
24							55	57	59	62	64	69	74	79	89
27								61	63	66	68	73	78	83	–
30					*				67	70	72	77	82	87	–
33										74	76	81	86	–	–
36											81	86	–	–	–
42												–	–	–	–
48													–	–	–
54														–	–
60															–

* NOT APPLICABLE
(INTERSECTING PIPE GREATER THAN MAIN PIPE)

NOTES TO SPECIFIER:

1. *"–" INDICATES THAT A SPECIAL DESIGN OR THE NEXT LARGER MANHOLE SIZE SHALL BE USED.*
2. *TABLES 2 TO 5 ARE BASED ON A MIN SEPARATION DISTANCE "S" OF 15.5" OR INTERSECTION PIPE OD/2, WHICHEVER IS GREATER, BETWEEN MAIN AND INTERSECTING PIPES ALONG THE MANHOLE INSIDE WALL ARC.*
3. *PIPE WALL THICKNESS USED IN TABLES 2 TO 5 ARE BASED ON RCP. THE DESIGN ENGINEER MAY CALCULATE TO SEE IF THINNER WALL PIPES CAN MEET THE SEPARATION CRITERIA FOR ANGLES SMALLER THAN THE TABLES ALLOW.*
4. *LIMITATIONS TO BASE HEIGHT ARE BASED ON RESISTING BUOYANT UPLIFT FORCES BASED ON WATER AT GROUND SURFACE AND A SAFETY FACTOR OF 1.20.*
5. *A SPECIAL DESIGN IS REQUIRED IF MANHOLE ID IS GREATER THAN 8 FT.*

NOTES:

1. A MANHOLE LOCATED WITHIN A 100-YEAR FLOOD PLAIN MUST BE GASKETED AND BOLTED DOWN TO PREVENT INFLOW.
2. A MANHOLE COVER THAT IS LOCATED IN A ROADWAY MUST MEET OR EXCEED THE AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS STANDARD M-306 FOR LOAD BEARING.
3. A MANHOLE CONNECTED TO PIPES LESS THAN 15 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST HALF THE LARGEST PIPE'S DIAMETER.
4. A MANHOLE CONNECTED TO A PIPE THAT IS AT LEAST 15 INCHES IN DIAMETER BUT NOT MORE THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THREE-FOURTHS OF THE LARGEST PIPE'S DIAMETER.
5. A MANHOLE CONNECTED TO A PIPE THAT IS GREATER THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THE LARGEST PIPE'S DIAMETER.
6. IN A MANHOLE WITH PIPES OF DIFFERENT SIZES, THE TOPS OF ALL THE PIPES MUST BE AT THE SAME ELEVATION AND FLOW CHANNELS IN THE INVERT MUST BE SLOPED EVENLY FROM PIPE TO PIPE TO PREVENT BACKPRESSURE.
7. A COLLECTION SYSTEM PIPE ENTERING A MANHOLE MORE THAN 24 INCHES ABOVE AN INVERT MUST HAVE A DROP PIPE.
8. A MANHOLE-PIPE CONNECTION MUST USE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTORS THAT ALLOW FOR DIFFERENTIAL SETTLEMENT AND TESTING PER AMERICAN SOCIETY FOR TESTING AND MATERIALS C923.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE GROUP

SANITARY SEWER
5'-0" TO 8'-0" DIAMETER
PRECAST CONCRETE MANHOLE NOTES
(NOT TO SCALE)

APPROVED BY:	APPROVED BY:
CITY ENGINEER	DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002	DWG NO: 02082N-03

DT-004

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

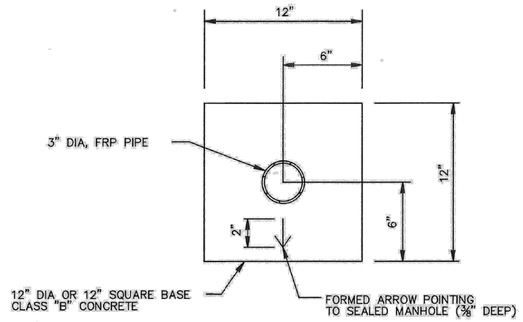
CIVIL DETAILS SHEET 4 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 166 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

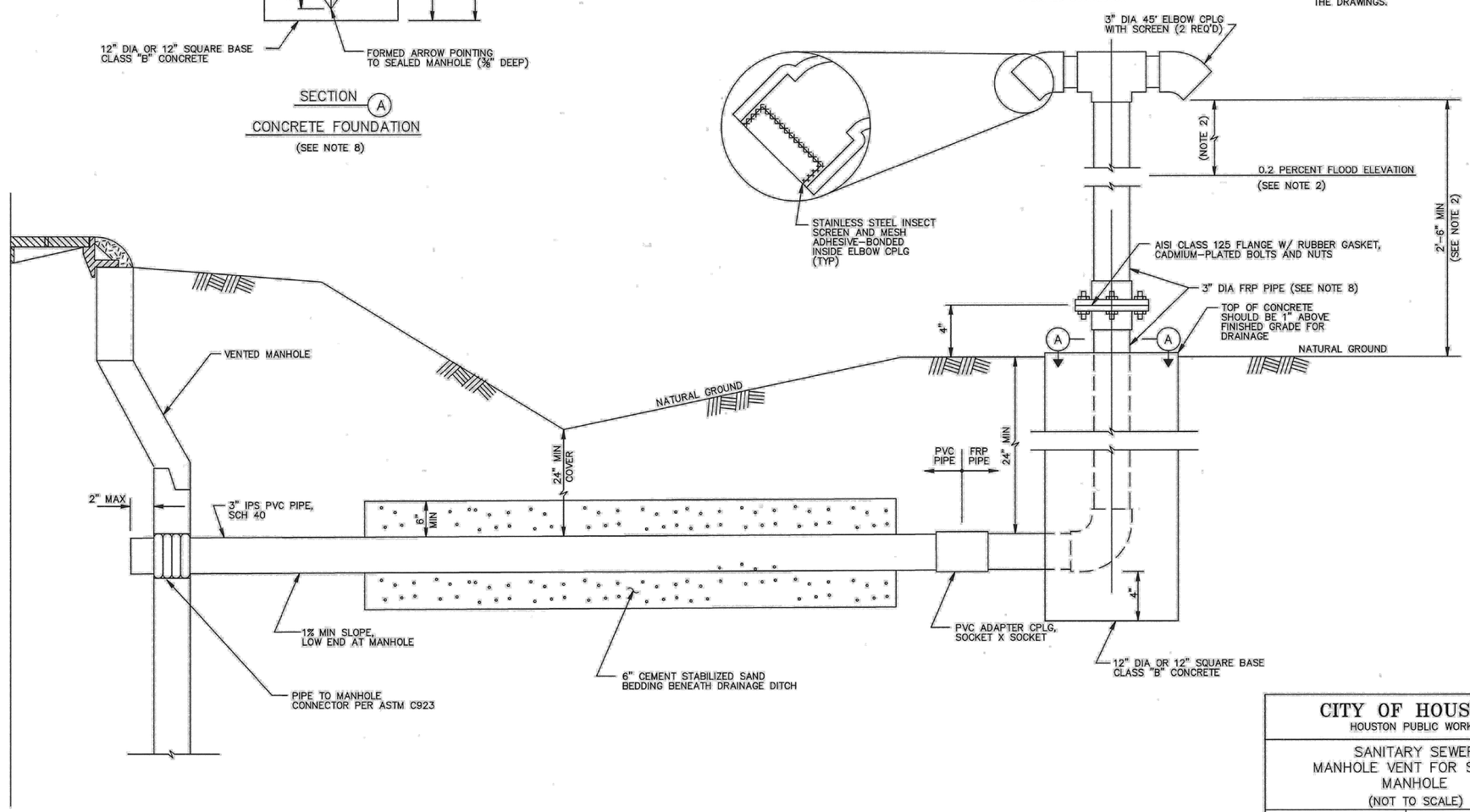
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg



SECTION (A)
CONCRETE FOUNDATION
(SEE NOTE 8)

NOTES:

1. INSTALL AT LOCATION AND BASED ON 0.2 PERCENT FLOOD ELEVATION SHOWN ON PLAN AND PROFILE DWGS.
2. MINIMUM VENT HEIGHT ELEVATION IS TO BE 2'-6" ABOVE THE NATURAL GROUND OR AS REQUIRED BY CHAPTER 19 SECTION 19-33 OF THE CITY OF HOUSTON CODE OF ORDINANCES, WHICHEVER IS HIGHER.
3. WHEN FLOODPROOFED VENTS ARE SPECIFIED BY THE EOR, REFER TO THE CONTRACT DOCUMENTS FOR CONSTRUCTION REQUIREMENTS.
4. DRAIN TO VENTED (ADJACENT) MH AT MIN 1% SLOPE. CONNECT TO MANHOLE WITH SPECIFIED CONNECTOR.
5. WHEN VENT CROSSES DRAINAGE DITCH, PROVIDE CEMENT STABILIZED SAND BEDDING
6. THE VENT IS TO BE INSTALLED WITHIN THE RIGHT OF WAY.
7. SEE COH STANDARD SPECIFICATIONS FOR PROTECTIVE COATING REQUIREMENTS FOR EXPOSED FRP PIPE.
8. THIS STANDARD DETAIL SETS THE MINIMUM REQUIREMENTS FOR THE MANHOLE VENT'S CONCRETE FOUNDATION AND VENT PIPE SIZE. THE EOR IS RESPONSIBLE FOR THE ADEQUACY AND DESIGN OF THE CONCRETE FOUNDATION AND VENT PIPE SIZE AND SHALL PROVIDE CONSTRUCTION DETAILS IN THE DRAWINGS.



CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SANITARY SEWER
MANHOLE VENT FOR SEALED MANHOLE
(NOT TO SCALE)

APPROVED BY: Suhail Kanwar CITY ENGINEER	APPROVED BY: Carol Haddock DIRECTOR OF HOUSTON PUBLIC WORKS
EFF DATE: JUL-01-2021	DWG NO: 02082-06

DT-005

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

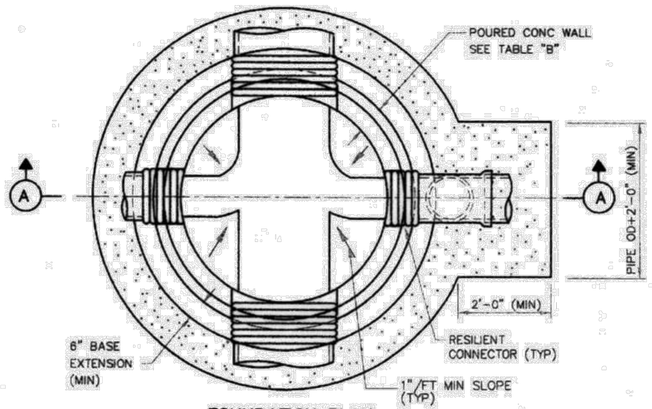
DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

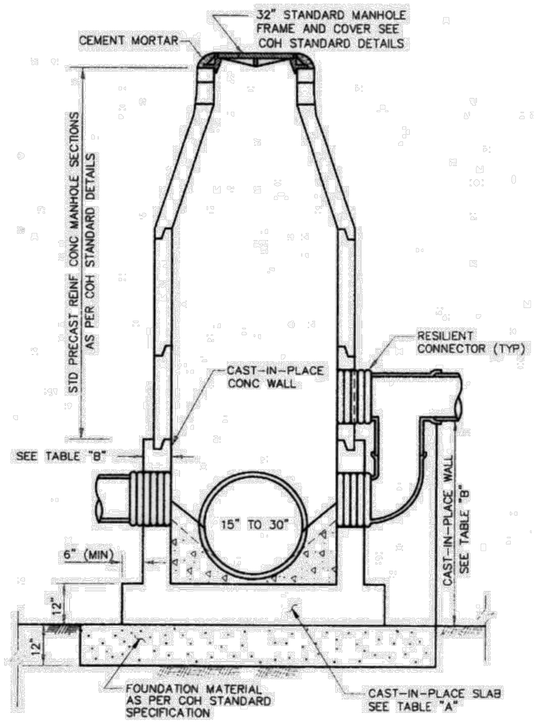
CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 5 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 167 OF 192	
	60% SUBMITTAL



FOUNDATION PLAN



ELEVATION (A)

NOTES:

1. SEAT MANHOLE FRAME IN SEALANT PER COH STANDARD SPECIFICATION.
2. OMIT CEMENT MORTAR WHEN MANHOLE IS LOCATED IN PAVED AREAS.
3. MANHOLE DROP AND INTERSECTING PIPES SHALL BE INSTALLED ONLY WHEN CALLED FOR IN PLAN AND PROFILE DRAWING.

NOTES ON USE OF STANDARD DETAIL

TABLE "A"

BASE SLAB REINFORCING AND THICKNESS

MH INSIDE DIA (FT)	DEPTH TO INV (FT)	BASE THICKNESS	REINFORCING (E W, T & B)
8	≤ 20	1'-0"	# 6 @ 10"
	≤ 25	1'-2"	# 6 @ 8"
	≤ 30	1'-4"	# 6 @ 7"
	≤ 40	1'-6"	# 6 @ 6"
	≤ 50	1'-8"	# 6 @ 6"
	≤ 60	1'-10"	# 6 @ 6"
6	≤ 15	1'-0"	# 5 @ 8"
	≤ 20	1'-0"	# 5 @ 8"
	≤ 25	1'-2"	# 5 @ 7"
	≤ 30	1'-2"	# 5 @ 6"
	≤ 40	1'-2"	# 6 @ 8"
	≤ 50	1'-4"	# 6 @ 8"
	≤ 60	1'-4"	# 6 @ 7"
5	≤ 15	1'-0"	# 5 @ 8"
	≤ 20	1'-0"	# 5 @ 7"
	≤ 25	1'-0"	# 5 @ 6"
	≤ 30	1'-0"	# 6 @ 10"
	≤ 40	1'-2"	# 6 @ 10"
	≤ 50	1'-2"	# 6 @ 9"
	≤ 60	1'-2"	# 6 @ 8"
4	≤ 20	1'-0"	# 5 @ 8"
	≤ 25	1'-0"	# 5 @ 8"
	≤ 30	1'-0"	# 5 @ 7"
	≤ 40	1'-0"	# 6 @ 10"

TABLE "B"

WALL REINFORCING AND THICKNESS

MH INSIDE DIA (FT)	DEPTH TO PIPE TO INV (FT)	MAXIMUM CAST-IN-PLACE WALL HEIGHT	WALL THICKNESS	REINFORCING AT EACH FACE	
				VERTICAL	HORIZONTAL
8	≤ 20	6'-0"	0'-10"	# 6 @ 12"	# 6 @ 12"
	≤ 25	6'-6"	0'-10"	# 6 @ 10"	
	≤ 30	7'-0"	0'-10"	# 6 @ 8"	
	≤ 40	8'-0"	1'-0"	# 6 @ 8"	
	≤ 50	9'-0"	1'-2"	# 6 @ 6"	
	≤ 60	10'-0"	1'-4"	# 6 @ 6"	
6	≤ 15	5'-0"	0'-8"	# 5 @ 12"	# 5 @ 12"
	≤ 20	5'-8"	0'-8"	# 5 @ 8"	
	≤ 25	6'-0"	0'-9"	# 5 @ 8"	
	≤ 30	6'-0"	0'-9"	# 5 @ 6"	# 5 @ 8"
	≤ 40	7'-0"	0'-10"	# 5 @ 8"	
	≤ 50	7'-0"	1'-0"	# 6 @ 8"	
	≤ 60	8'-0"	1'-2"	# 6 @ 7"	
5	≤ 15	5'-0"	0'-8"	# 5 @ 8"	# 4 @ 12"
	≤ 20	5'-4"	0'-8"	# 5 @ 7"	
	≤ 25	5'-8"	0'-10"	# 5 @ 6"	
	≤ 30	6'-0"	0'-10"	# 6 @ 10"	# 5 @ 12"
	≤ 40	6'-4"	0'-10"	# 6 @ 10"	
	≤ 50	6'-8"	1'-0"	# 6 @ 8"	
	≤ 60	7'-0"	1'-0"	# 6 @ 8"	
4	≤ 20	4'-6"	0'-8"	# 5 @ 12"	# 4 @ 12"
	≤ 25	5'-0"	0'-8"	# 5 @ 10"	
	≤ 30	5'-8"	0'-10"	# 6 @ 12"	
	≤ 40	6'-0"	0'-10"	# 6 @ 12"	

NOTE TO SPECIFIER:

1. TABLES "A" AND "B" WILL BE USED TO DESIGN THE CAST-IN-PLACE BASE AND WALL FOR VARIOUS MANHOLE DIAMETER AND DEPTH.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SANITARY SEWER
PRECAST CONCRETE MANHOLE
WITH CAST-IN-PLACE BASE
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JULY-01-2010 | DWG NO: 02082-08

DT-006

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

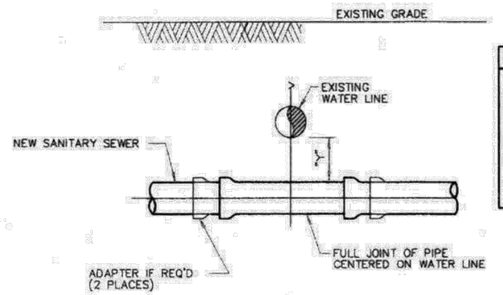
CIVIL DETAILS SHEET 6 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 168 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg



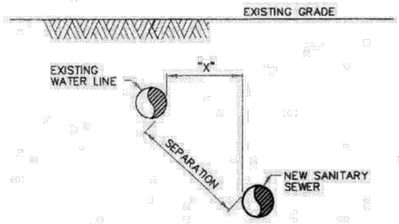
INSTALLATION REQUIREMENTS

1. IF "Y" IS GREATER THAN 1' AND "Y" IS LESS THAN 2', USE MINIMUM 18 FT JOINT OF PRESSURE-RATED PIPE PER COH STANDARD DRAWING.
2. IF "Y" IS GREATER THAN 2' AND "Y" IS LESS THAN 9', USE GRAVITY SEWER PIPE IN CEMENT-STABILIZED SAND EMBEDMENT.
3. IF "Y" IS GREATER THAN 9', USE STANDARD EMBEDMENT AND NORMAL JOINT SPACING.

NEW SANITARY SEWER CROSSING EXISTING WATER LINE

NOTES:

1. SANITARY SEWER MUST BE BELOW WATER LINE WHEREVER POSSIBLE. WHEN WATERLINE IS BELOW THE SANITARY SEWER PROVIDE MINIMUM 2 FT SEPARATION AND INSTALL PIPE IN ACCORDANCE TO CHAPTER 7 TABLE 7.3 OF COH DESIGN MANUAL.
2. WHEN PRESSURE-RATED PIPE IS REQUIRED, PROVIDE PIPE WITH MINIMUM 150 psi PRESSURE RATING.
3. ADAPTERS MUST BE FACTORY MOLDED OR FABRICATED, WITH RING STIFFNES AT LEAST EQUAL TO THE ADJOINING SANITARY SEWER PIPE, AND USING RESILIENT GASKET OR SEAL MATERIAL. FLEXIBLE RUBBER "BOOT" TYPE ADAPTERS WILL NOT BE ACCEPTED.
4. INSTALL FORCE MAINS SAME AS FOR GRAVITY SEWER, USING SPECIFIED PRESSURE PIPE.
5. "Y" MUST ALWAYS BE GREATER THAN OR EQUAL TO 1 FT FOR PRESSURE RATED SS AND 2 FT FOR NON-PRESSURE RATED SS.
6. "X" MUST BE GREATER THAN OR EQUAL TO 4 FT.
7. ALTERNATIVES MAY BE SHOWN ON THE DRAWINGS OR DESCRIBED IN THE SPECIFICATIONS.
8. SEPARATION REQUIREMENTS SHOWN HERE DO NOT APPLY TO SERVICE CONNECTIONS – REFER TO PLUMBING CODE FOR APPLICABLE REQUIREMENTS.



INSTALLATION REQUIREMENTS

1. IF SEPARATION IS LESS THAN 9', USE PRESSURE-RATED PIPE MH TO MH. "X" MUST BE AT LEAST 4 FT. VERTICAL SEPARATION MUST BE AT LEAST 2 FT.
2. IF SEPARATION IS 9' OR GREATER, USE STANDARD PIPE AND EMBEDMENT.

NEW SANITARY SEWER PARALLEL TO EXISTING WATER LINE

INSTALLING SANITARY SEWERS CROSSING OR PARALLEL TO WATER LINES

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SANITARY SEWER
INSTALLING SANITARY SEWERS
CROSSING OR PARALLEL TO WATER LINES
(NOT TO SCALE)

APPROVED	APPROVED
CITY ENGINEER	DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2010	DWG NO: 02531-05

DT-007

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 7 OF 30

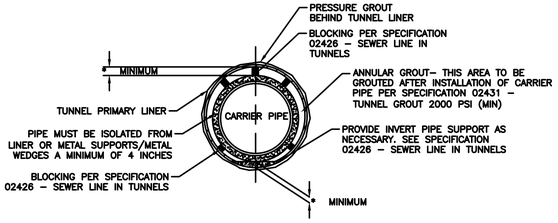
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 169 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 8/18/2025 10:36 AM
FILE PATH: P:\2026 Projects\2026-00-0051500 - Atkins-COH CRMP 84-In Sanitary Sewer\Eng\Analysis\Markups\SAN CARRIER PIPE DETAIL DRAFT.dwg

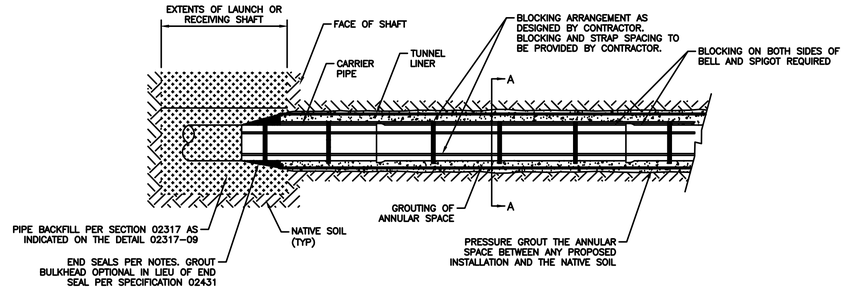
TABLE 1: MINIMUM TUNNEL LINER / CASING SIZES AND THICKNESS						
LOCATION	WATER MAIN DIA	PIPE MATERIAL	NOMINAL DIAMETER (CASING O.D.) WALL THICKNESS			
			2– FLANGE LINER PLATE	4–FLANGE LINER PLATE	STEEL CASING DIAMETER	STEEL CASING THICKNESS
DODSON ST 31+82 TO 39+41	84"	FRP	110"/ 0.164 (8 GA)	108"/ 0.179 (7 GA)	108"	0.500"
DODSON ST 70+65 TO 78+06	84"	FRP	N/A	N/A	108"	1.000"

TABLE 1 NOTES:
1. DIAMETER OF LINER PLATE IS AT NEUTRAL AXIS.
2. LINER PLATE IS TWO FLANGED AND NOMINALLY 2–INCH CORRUGATION BY 6–INCH PROFILE.
3. STEEL CASING REQUIRED FOR UNION PACIFIC RAILROAD CROSSING.



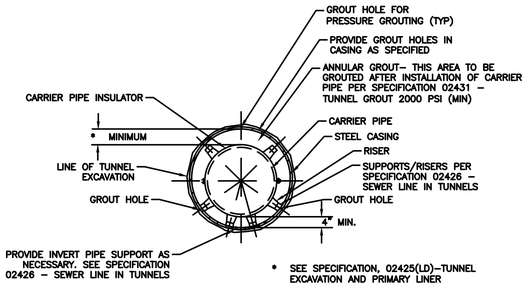
SECTION A–A

① SANITARY SEWER CARRIER PIPE INSTALLATION IN TUNNEL USING BLOCKING
N.T.S.



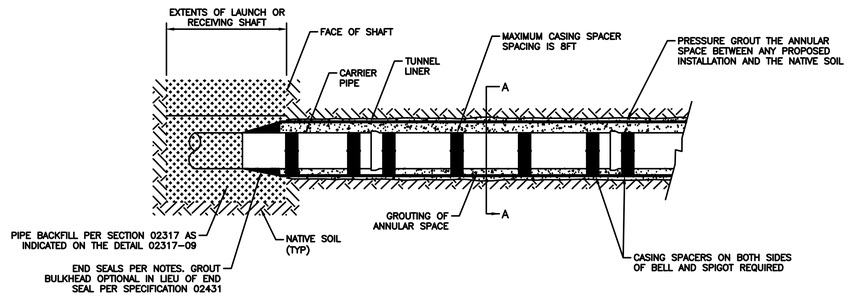
SANITARY SEWER CARRIER PIPE INSTALLATION IN TUNNEL USING BLOCKING
N.T.S.

GENERAL NOTES:
1. DETAIL IS FOR FIBERGLASS REINFORCED PIPE (FRP).
2. MINIMUM CLEARANCES SHOWN ON THE PLAN & PROFILE DRAWINGS ARE TO THE O.D. OF TUNNEL LINER. ADJUST PROFILE AS REQUIRED TO MAINTAIN CLEARANCES IDENTIFIED. NO SEPARATE PAY.
3. DIAMETERS INDICATED ON PLANS ARE NOMINAL DIAMETERS.



SECTION B–B

② SANITARY SEWER CARRIER PIPE INSTALLATION IN TUNNEL USING CASING SPACERS
N.T.S.



SANITARY SEWER CARRIER PIPE INSTALLATION IN TUNNEL USING CASING SPACERS
N.T.S.

TUNNEL PRIMARY LINER NOTES:

1. LENGTH OF ENCASEMENT SHALL BE AS SHOWN ON THE PLAN & PROFILE DRAWINGS.
2. LAY CASING PIPE IN OPEN CUT, TUNNEL OR BORE, AS NOTED ON PLAN & PROFILE DRAWINGS.
3. SEE SPECIFICATIONS 02425, 02426 AND 02431.
4. ALL CASINGS IN PPCA ARE TO BE GROUTED.
5. INSTALL HOLD DOWN JACKS OR BLOCKING BETWEEN TUNNEL PRIMARY LINER AND CARRIER PIPE ON EACH JOINT TO RESIST FORCES/MOVEMENTS DURING ANNULAR GROUTING OF THE PRIMARY LINER AND CARRIER PIPE.
6. CONTRACTOR SHALL PLACE ANNULAR GROUT IN LIFTS TO PREVENT FLOATING.
7. MINIMUM CLEARANCES SHOWN ON THE PLAN AND PROFILE ARE TO THE O.D. OF THE TUNNEL PRIMARY LINER, ADJUST TUNNEL PROFILE AS REQUIRED TO MAINTAIN CLEARANCES IDENTIFIED.
8. PROVIDE GROUT PORT SPACINGS TO MEET SPACING AND GROUT TIMING REQUIREMENTS.
9. TEST CARRIER PIPE AND TUNNEL PRIMARY LINER FOR ELECTRICAL ISOLATION BY A CERTIFIED CATHODIC PROTECTION TECHNICIAN, BEFORE AND AFTER ANNULAR GROUTING PLACEMENT AND PRIOR TO BACKFILLING TUNNEL SHAFTS.
10. ALL CARRIER PIPE SHALL BE FULLY RESTRAINED.
11. ALL WELDED ITEMS TO THE TUNNEL PRIMARY LINER DURING CONSTRUCTION SHALL BE REMOVED AND GROUND DOWN TO PREVENT UNINTENDED CONTACT WITH CARRIER PIPE.
12. TUNNEL PRIMARY LINER END SEALS SHALL BE SIZED BY CONTRACTOR TO ACCOMMODATE THE DIAMETER OF THE TUNNEL PRIMARY LINER. SECURE/STABILIZE THE END SEALS DURING ANNULAR GROUT FILLING.

DT-008

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
Phone: (713) 541-3530
www.Ardurra.com
Engineering License TBPE Firm Reg #F-10053
Ardurra Group, Inc. Surveying Firm 10194688

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474
SURVEYED BY:
FB NO.

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
DAVID R. CASTELLANO, P.E.
P.E. SERIAL No. 97308
DATE: 06/22/26

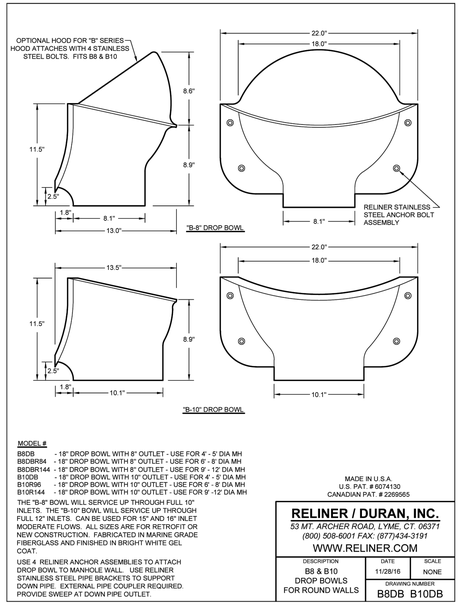
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

SANITARY LINE TUNNEL & CASING DETAILS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
N/A	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 170 OF 192	

60% SUBMITTAL



MODEL #

B8DB	- 18" DROP BOWL WITH 8" OUTLET - USE FOR 4' - 5' DIA MH
B8DBR84	- 18" DROP BOWL WITH 8" OUTLET - USE FOR 6' - 8' DIA MH
B8DBR144	- 18" DROP BOWL WITH 8" OUTLET - USE FOR 9' - 12' DIA MH
B10DB	- 18" DROP BOWL WITH 10" OUTLET - USE FOR 4' - 5' DIA MH
B10R96	- 18" DROP BOWL WITH 10" OUTLET - USE FOR 6' - 8' DIA MH
B10R144	- 18" DROP BOWL WITH 10" OUTLET - USE FOR 9' -12' DIA MH

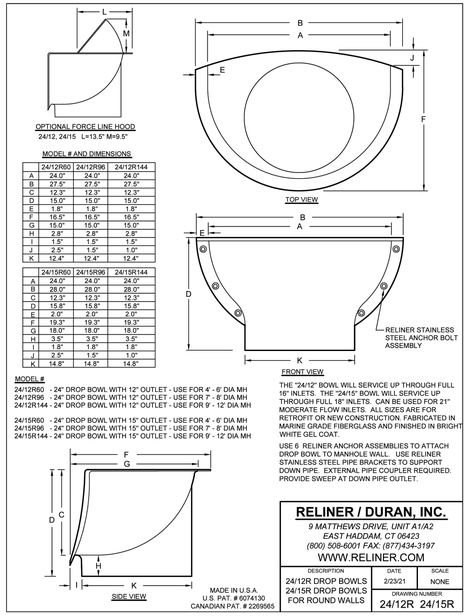
THE "B-8" BOWL WILL SERVICE UP THROUGH FULL 10" INLETS. THE "B-10" BOWL WILL SERVICE UP THROUGH FULL 12" INLETS. CAN BE USED FOR 15" AND 16" INLET MODERATE FLOWS. ALL SIZES ARE FOR RETROFIT OR NEW CONSTRUCTION. FABRICATED IN MARINE GRADE FIBERGLASS AND FINISHED IN BRIGHT WHITE GEL COAT.

USE 4 RELINER ANCHOR ASSEMBLIES TO ATTACH DROP BOWL TO MANHOLE WALL. USE RELINER STAINLESS STEEL PIPE BRACKETS TO SUPPORT DOWN PIPE. EXTERNAL PIPE COUPLER REQUIRED. PROVIDE SWEEP AT DOWN PIPE OUTLET.

MADE IN U.S.A.
U.S. PAT. # 6074130
CANADIAN PAT. # 2269565

RELINER / DURAN, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 508-6001 FAX: (877)434-3191
WWW.RELINER.COM

DESCRIPTION	DATE	SCALE
B8 & B10 DROP BOWLS FOR ROUND WALLS	11/28/16	NONE
	DRAWING NUMBER	B8DB B10DB



OPTIONAL FORCE LINE HOOD
24/12, 24/15 L=13.5" M=9.5"

MODEL # AND DIMENSIONS

	24/12R60	24/12R96	24/12R144
A	24.0"	24.0"	24.0"
B	27.5"	27.5"	27.5"
C	12.3"	12.3"	12.3"
D	15.0"	15.0"	15.0"
E	1.8"	1.8"	1.8"
F	16.5"	16.5"	16.5"
G	15.0"	15.0"	15.0"
H	2.8"	2.8"	2.8"
I	1.5"	1.5"	1.5"
J	2.5"	1.5"	1.0"
K	12.4"	12.4"	12.4"

	24/15R60	24/15R96	24/15R144
A	24.0"	24.0"	24.0"
B	28.0"	28.0"	28.0"
C	12.3"	12.3"	12.3"
D	15.8"	15.8"	15.8"
E	2.0"	2.0"	2.0"
F	19.3"	19.3"	19.3"
G	18.0"	18.0"	18.0"
H	3.5"	3.5"	3.5"
I	1.8"	1.8"	1.8"
J	2.5"	1.5"	1.0"
K	14.8"	14.8"	14.8"

MODEL #
24/12R60 - 24" DROP BOWL WITH 12" OUTLET - USE FOR 4' - 6' DIA MH
24/12R96 - 24" DROP BOWL WITH 12" OUTLET - USE FOR 7' - 8' DIA MH
24/12R144 - 24" DROP BOWL WITH 12" OUTLET - USE FOR 9' - 12' DIA MH

24/15R60 - 24" DROP BOWL WITH 15" OUTLET - USE FOR 4' - 6' DIA MH
24/15R96 - 24" DROP BOWL WITH 15" OUTLET - USE FOR 7 - 8' DIA MH
24/15R144 - 24" DROP BOWL WITH 15" OUTLET - USE FOR 9' - 12' DIA MH

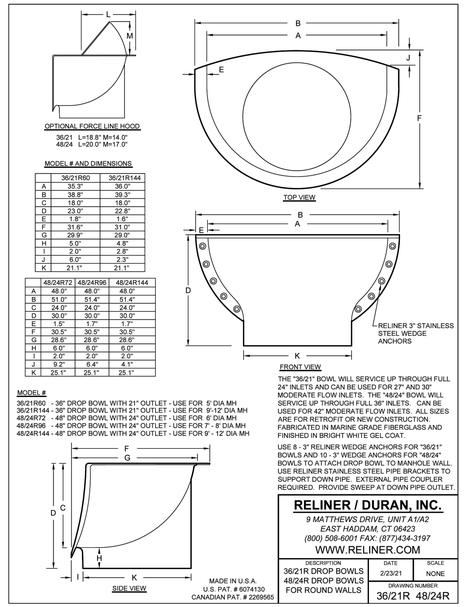
THE "24/12" BOWL WILL SERVICE UP THROUGH FULL 16" INLETS. THE "24/15" BOWL WILL SERVICE UP THROUGH FULL 18" INLETS. CAN BE USED FOR 21" MODERATE FLOW INLETS. ALL SIZES ARE FOR RETROFIT OR NEW CONSTRUCTION. FABRICATED IN MARINE GRADE FIBERGLASS AND FINISHED IN BRIGHT WHITE GEL COAT.

USE 6 RELINER ANCHOR ASSEMBLIES TO ATTACH DROP BOWL TO MANHOLE WALL. USE RELINER STAINLESS STEEL PIPE BRACKETS TO SUPPORT DOWN PIPE. EXTERNAL PIPE COUPLER REQUIRED. PROVIDE SWEEP AT DOWN PIPE OUTLET.

MADE IN U.S.A.
U.S. PAT. # 6074130
CANADIAN PAT. # 2269565

RELINER / DURAN, INC.
9 MATTHEWS DRIVE, UNIT A1/A2
EAST HADDAM, CT 06423
(800) 508-6001 FAX: (877)434-3197
WWW.RELINER.COM

DESCRIPTION	DATE	SCALE
24/12R DROP BOWLS 24/15R DROP BOWLS FOR ROUND WALLS	2/23/21	NONE
	DRAWING NUMBER	24/12R 24/15R



OPTIONAL FORCE LINE HOOD
36/21 L=18.8" M=14.0"
48/24 L=20.0" M=17.0"

MODEL # AND DIMENSIONS

	36/21R60	36/21R144
A	35.3"	36.0"
B	38.8"	39.3"
C	18.0"	18.0"
D	23.0"	22.8"
E	1.8"	1.6"
F	31.6"	31.0"
G	29.9"	29.0"
H	5.0"	4.8"
I	2.0"	2.8"
J	6.0"	2.3"
K	21.1"	21.1"

	48/24R72	48/24R96	48/24R144
A	48.0"	48.0"	48.0"
B	51.0"	51.4"	51.4"
C	24.0"	24.0"	24.0"
D	30.0"	30.0"	30.0"
E	1.5"	1.7"	1.7"
F	30.5"	30.5"	30.5"
G	28.6"	28.6"	28.6"
H	6.0"	6.0"	6.0"
I	2.0"	2.0"	2.0"
J	9.2"	6.4"	4.1"
K	25.1"	25.1"	25.1"

MODEL #
36/21R60 - 36" DROP BOWL WITH 21" OUTLET - USE FOR 5' DIA MH
36/21R144 - 36" DROP BOWL WITH 21" OUTLET - USE FOR 9'-12' DIA MH
48/24R72 - 48" DROP BOWL WITH 24" OUTLET - USE FOR 6' DIA MH
48/24R96 - 48" DROP BOWL WITH 24" OUTLET - USE FOR 7' - 8' DIA MH
48/24R144 - 48" DROP BOWL WITH 24" OUTLET - USE FOR 9' - 12' DIA MH

THE "36/21" BOWL WILL SERVICE UP THROUGH FULL 24" INLETS AND CAN BE USED FOR 27" AND 30" MODERATE FLOW INLETS. THE "48/24" BOWL WILL SERVICE UP THROUGH FULL 36" INLETS. CAN BE USED FOR 42" MODERATE FLOW INLETS. ALL SIZES ARE FOR RETROFIT OR NEW CONSTRUCTION. FABRICATED IN MARINE GRADE FIBERGLASS AND FINISHED IN BRIGHT WHITE GEL COAT.

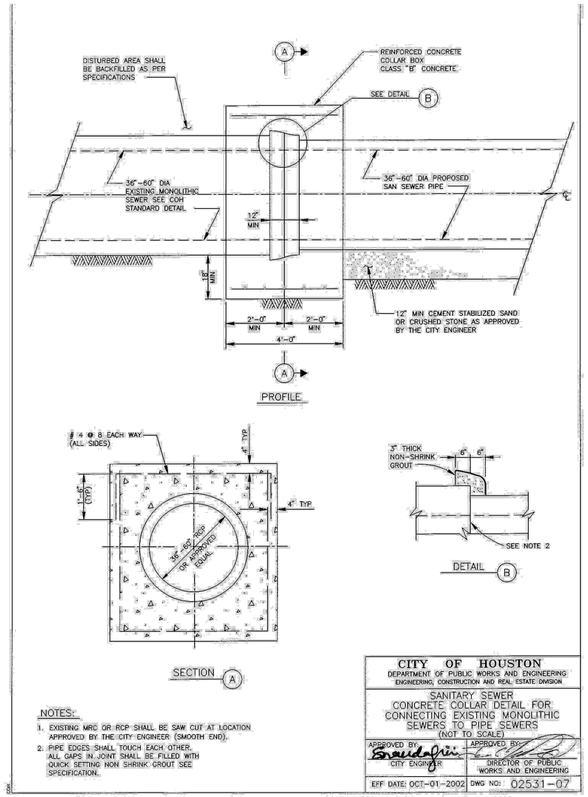
USE 8 - 3" RELINER WEDGE ANCHORS FOR "36/21" BOWLS AND 10 - 3" WEDGE ANCHORS FOR "48/24" BOWLS TO ATTACH DROP BOWL TO MANHOLE WALL. USE RELINER STAINLESS STEEL PIPE BRACKETS TO SUPPORT DOWN PIPE. EXTERNAL PIPE COUPLER REQUIRED. PROVIDE SWEEP AT DOWN PIPE OUTLET.

MADE IN U.S.A.
U.S. PAT. # 6074130
CANADIAN PAT. # 2269565

RELINER / DURAN, INC.
9 MATTHEWS DRIVE, UNIT A1/A2
EAST HADDAM, CT 06423
(800) 508-6001 FAX: (877)434-3197
WWW.RELINER.COM

DESCRIPTION	DATE	SCALE
36/21R DROP BOWLS 48/24R DROP BOWLS FOR ROUND WALLS	2/23/21	NONE
	DRAWING NUMBER	36/21R 48/24R

1 DROP BOWL
SCALE: NTS



NOTES:
1. EXISTING MRC OR RCP SHALL BE SAW CUT AT LOCATION APPROVED BY THE CITY ENGINEER (SMOOTH END).
2. PIPE EDGES SHALL TOUCH EACH OTHER. ALL GAPS IN JOINT SHALL BE FILLED WITH QUICK SETTING NON SHRINK GROUT SEE SPECIFICATION.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER
CONCRETE COLLAR DETAIL FOR CONNECTING EXISTING MONOLITHIC SEWERS TO PIPE SEWERS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER
APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: OCT-01-2002 DWG NO: 02531-07

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 9 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 171 OF 192	

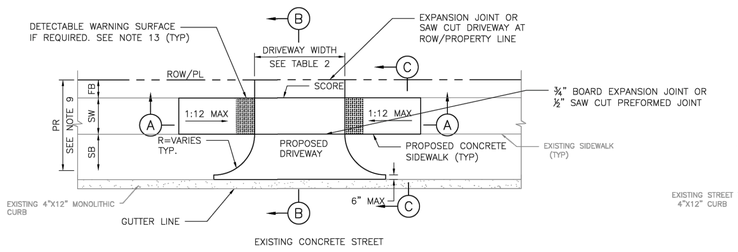
60% SUBMITTAL

DT-009

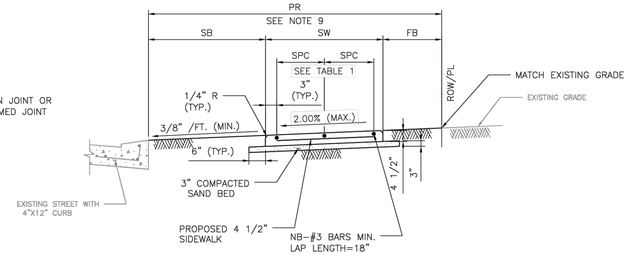
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

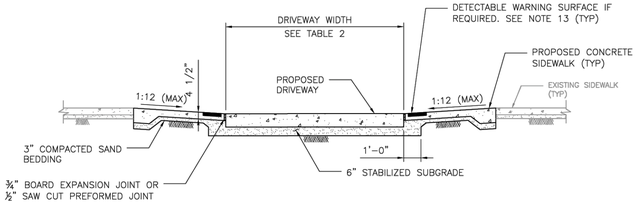
JocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5



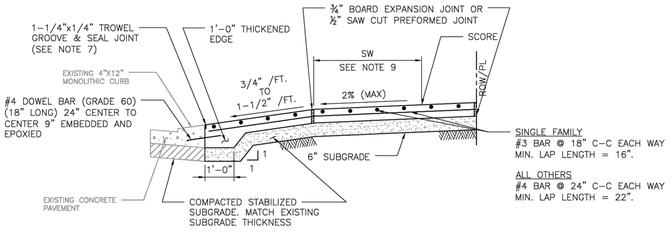
PLAN VIEW
DRIVEWAY



SECTION C–C
TYPICAL SIDEWALK SECTION



SECTION A–A
PROPOSED SIDEWALK, THROUGH DRIVEWAY WITH EXCESSIVE GRADES



SECTION B–B
TYPICAL DRIVEWAY SECTION

TABLE 1

REINFORCING STEEL INFORMATION
FOR 4 ½ " THICK SIDEWALKS
EXPANSION JOINT SPACING = 40 FT
fc' = 3,500 PSI AND fy = 60,000 PSI
REFER TO CONTRACT DRAWINGS FOR SIDEWALKS WIDER THAN 6 FEET.

SIDEWALK THICKNESS (IN)	SIDEWALK WIDTH (FT)	LONGITUDINAL STEEL			TRANSVERSE STEEL #3 BARS SPACING (IN)
		#3 BARS			
		NO. OF BARS "NB"	SPACING "SPC" (IN)	END BAR SPACING (IN)	
4.5	5	3	27	3	48
4.5	6	4	22	3	48

TABLE 2

DRIVEWAY DESIGN CRITERIA (1)(2)

TRAFFIC TYPE	TYPE A DRIVEWAY (FOR SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES)				TYPE B DRIVEWAY (SHARED ACCESS/SHARED DRIVEWAY)				TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)			
	WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
ONE-WAY	10	12	4	10	12(5)	16(5)	4(5)	10(5)	15	20	10	20
TWO-WAY	10(3)	24(4)	4	10	16(6)	24	4	10	24	35	10	20

(1) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTICLE 15.2.07.C.1.F FOR DRIVEWAYS THAT REQUIRE A VEHICLE SWEPT PATH ANALYSIS.
(2) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTCILES 15.2.07.C.1.G.(1) AND 15.2.07.C.1.G.(2) FOR TYPE 1 PAE AND TYPE 2 PAE REQUIREMENTS.
(3) THE MINIMUM WIDTH FOR JOINT ACCESS DRIVEWAY IS 12 FT.
(4) REFER TO CHAPTER 42 OF THE CODE OF ORDINANCES FOR DRIVEWAY WIDTHS FOR NARROW LOTS.
(5) ONLY MURS AND COURTYARD STYLE DEVELOPMENTS ON CORNER LOTS CAN HAVE ONE-WAY DRIVEWAYS.
(6) REFER TO CHAPTER 42, SECTION 42-146 OF THE CODE OF ORDINANCES FOR EXCEPTIONS TO THE MINIMUM DRIVEWAY WIDTH FOR SHARED DRIVEWAYS.

NOTES:

1. REPAIR, RECONSTRUCTION OR REPLACEMENT OF SIDEWALKS SHALL MEET PERMITTING REQUIREMENTS OF CODE OF ORDINANCES SECTION 40-552.
2. FOR REPAIR, RECONSTRUCTION, OR REPLACEMENT OF EXISTING SIDEWALKS:
   - 2.1. EXISTING SIDEWALKS LESS THAN OR EQUAL TO 20 FEET IN TOTAL LENGTH:
     - 2.1.1. THE PROPOSED SIDEWALK WIDTH WILL BE ALLOWED TO MATCH THE EXISTING SIDEWALK.
   - 2.2. EXISTING SIDEWALKS GREATER THAN 20 FEET IN TOTAL LENGTH:
     - 2.2.1. THE SIDEWALK WIDTH FOR THE ENTIRE PROPERTY WIDTH SHALL BE IMPROVED TO MEET WIDTH REQUIREMENTS ACCORDING TO THE LATEST INFRASTRUCTURE DESIGN MANUAL.
   - 2.3. 20 FOOT TOTAL LENGTH IS DEFINED AS:
     - 2.3.1. UP TO 10 FEET ON BOTH SIDES OF THE DRIVEWAY; OR
     - 2.3.2. UP TO 20 FEET WHEN SIDEWALK AFFECTED IS LOCATED ONLY ON ONE SIDE OF THE DRIVEWAY.
3. IF AVAILABLE ROW IS NOT SUFFICIENT TO ACCOMMODATE SIDEWALK WIDTH (SW) ACCORDING TO IDM REQUIREMENTS, ENGINEER SHALL OBTAIN A VARIANCE FROM THE CITY ENGINEER.
4. DRIVEWAYS SHALL BE 6" THICK FOR SINGLE FAMILY OR DUPLEXES.
5. DRIVEWAYS AND SIDEWALKS SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE AND INCLUDE 5 1/2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.
6. THE OUTER DOWEL BARS ARE TO BE LOCATED 12" FROM END OF PROPOSED EDGE OF DRIVEWAY RETURN. EXTEND DOWEL 3" INCHES INTO PROPOSED DRIVEWAY AND BEND REMAINING BAR TO EXTEND TO RADIUS RETURN BOTH SIDES.
7. TROWEL GROOVE SEALANT SHALL BE LOW MODULUS SILICONE OR POLYURETHANE SEALANT.
8. ALL JOINTS ALONG THE SIDEWALK SHALL BE CONSTRUCTED ACCORDING TO DRAWING 02752-02 AND SPECIFICATION 02752.
9. REFER TO CONTRACT DRAWINGS FOR PEDESTRIAN REALM (PR), SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.
10. CEMENT STABILIZED SAND 1.5 SACKS OF CEMENT PER TON OF DRY SAND.
11. ALL RAMPS AND SIDEWALKS/WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOUSTON PUBLIC WORKS STANDARDS, TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THE REQUIREMENTS, THE STRICTEST REQUIREMENTS SHALL GOVERN.
12. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.
13. DETECTABLE WARNING SURFACES:
    - 13.1. SIDEWALK SHALL HAVE A DETECTABLE WARNING SURFACE WHERE:
      - 13.1.1. SIDEWALK INTERSECTS TYPE C DRIVEWAYS (COMMERCIAL DRIVEWAYS) THAT ARE STOP, YIELD OR TRAFFIC SIGNAL CONTROLLED; OR
      - 13.1.2. SIDEWALK SLOPE IS GREATER THAN 1:20 AND INTERSECTS A TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)
    - 13.2. DETECTABLE WARNING SURFACES ARE OPTIONAL WHERE SIDEWALKS INTERSECT TYPE A DRIVEWAYS (SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES) OR TYPE B DRIVEWAYS (SHARED ACCESS/SHARED DRIVEWAYS).
    - 13.3. REFER TO STANDARD DETAILS 02775-06 TO 02775-07 FOR DETECTABLE WARNING SURFACE STANDARDS.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulail kanwar 0EF5500C0E9F4F6...	DocuSigned by: BINH NGUYEN 50A2081FDA750BC3...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Stahlbock 4B5C1195E7B04A4...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 02754-01A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

DRIVEWAY DETAIL WITH 4"x12" CURB FOR LOCAL RESIDENTIAL STREETS

DRAWING SCALE
NOT TO SCALE

FOR CITY OF HOUSTON USE ONLY

DT-010

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

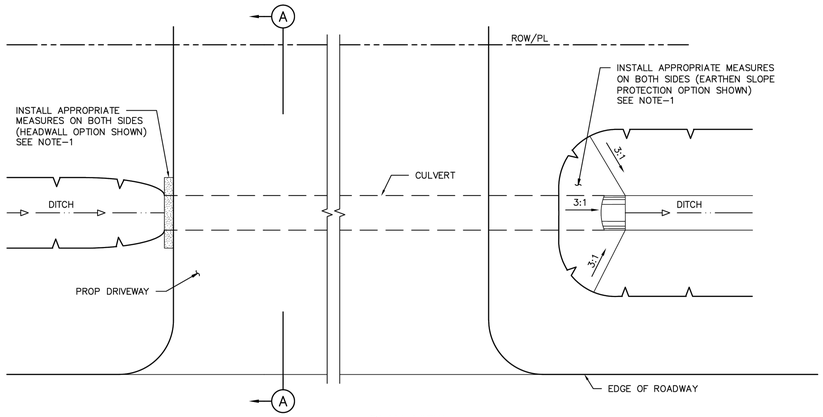
CIVIL DETAILS SHEET 10 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 172 OF 192	

60% SUBMITTAL

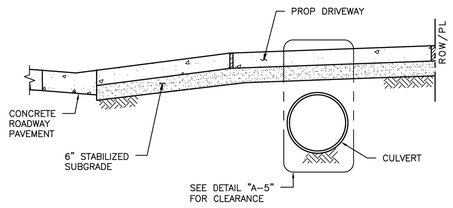
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE. WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



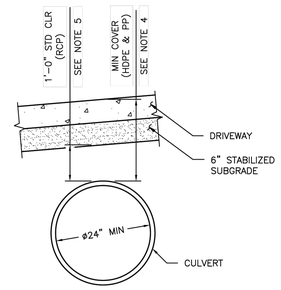
PLAN VIEW

STANDARD OPEN DITCH DRIVEWAY



SECTION A–A

STANDARD PIPE CULVERT CLEARANCE



DETAIL A–5

CULVERT CLEARANCE

NOTES:

1. PIPE CULVERTS SHALL CONFORM TO CHAPTER 9 DESIGN REQUIREMENTS OF THE INFRASTRUCTURE DESIGN MANUAL AND MATERIAL REQUIREMENTS OF STANDARD CONSTRUCTION SPECIFICATION SECTION 02631.
   - 1.1. INSTALL APPROPRIATE MEASURES (E.G., HEADWALLS, SAFETY END TREATMENTS, RIPRAP, SLOPED PAVING, EARTHEN SLOPE PROTECTION, ETC.) AT BOTH SIDES OF INLET AND OUTLET OF A CULVERT AS REQUIRED.
   - 1.2. CURBED OR FLUSH HEADWALL OR SAFETY END TREATMENT SHALL BE PROVIDED FOR COMMERCIAL DRIVEWAY CULVERTS.
   - 1.3. RIP RAP, SLOPED PAVING AND EARTHEN SLOPE PROTECTION ARE ONLY ALLOWED FOR SINGLE FAMILY RESIDENTIAL DRIVEWAY CULVERTS LOCATED ALONG LOCAL STREETS.
   - 1.4. WHERE EARTHEN SLOPE PROTECTION IS SPECIFIED, FACTORS SUCH AS EROSION CONTROL, SOIL AND PIPE STRENGTH TO CARRY ERRANT VEHICLE LOADS SHALL BE DESIGN CONSIDERATIONS.
   - 1.5. WHERE EARTHEN SLOPES ARE SPECIFIED, THE SLOPE SHALL NOT BE STEEPER THAN 3H:1V. THE PIPE END SHALL EXTEND 2 FT MINIMUM BEYOND THE EDGE OF DRIVEWAY PAVEMENT ON EACH SIDE OF THE DRIVEWAY CULVERT.
2. CULVERT SIZE WILL BE APPROVED BY CITY ENGINEER WITH 24" DIAMETER MINIMUM.
3. DRIVEWAY MATERIAL WITHIN THE RIGHT OF WAY SHALL BE CONCRETE OR ASPHALT.
4. FOR MIN COVER REQUIREMENTS FOR THERMOPLASTIC PIPES (HDPE & PP) REFER TO COH STD DETAIL 02317–10G.
5. FOR RCP WHERE STANDARD 1'–0" CLEARANCE IS NOT FEASIBLE, MINIMUM CLEARANCE OF 6" IS ALLOWED WHEN APPROVED BY THE OFFICE OF THE CITY ENGINEER (OCE).
6. DITCH FLOW LINE DIRECTION DEPICTED IS SHOWN AS AN EXAMPLE AND MAY NOT MATCH SITE SPECIFIC CONDITIONS. REFER TO CONTRACT DRAWINGS FOR FLOW LINE DIRECTION AND ELEVATIONS.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

DRIVEWAYS WITH CULVERTS ON OPEN DITCH TYPE STREETS
(SCALE: NOT TO SCALE)

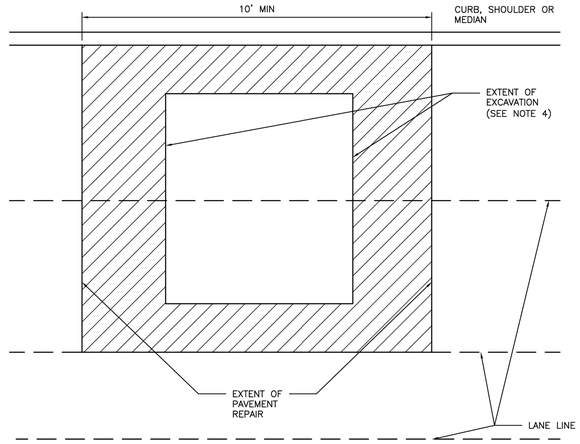
APPROVED BY:

Signed by: 18EB0029291940C... — CITY ENGINEER
DocuSigned by: 50E481BCC2B417... — CITY TRAFFIC ENGINEER
Signed by: DC4E5CFDCF4540B... — DIRECTOR OF HPW

EFF DATE: MAR–02–2026 | DWG NO: 02754–02

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



NOTES:

1. EXTENT OF PAVEMENT REPAIR SHALL BE PERPENDICULAR AND PARALLEL TO TRAVEL WAY.
2. FLEXIBLE BASE: REPLACE BASE TO SAME THICKNESS PLUS TWO INCHES (2") FOR EXTENT OF EXCAVATION. USE APPROVED BASE MATERIAL TYPE.*
3. SURFACE COURSE:
   - 3.1. WIDTH: SURFACE MILL AND OVERLAY FULL WIDTH OF LANE(S) TO NEAREST LANE DIVIDER BEYOND EDGE OF EXCAVATION.
   - 3.2. LENGTH: MINIMUM LENGTH OF SURFACE MILL ALONG TRAVEL WAY IS 10'.
   - 3.3. REPLACE PAVEMENT MARKINGS IN ACCORDANCE WITH CITY OF HOUSTON STANDARD SPECIFICATIONS 02764–RAISED PAVEMENT MARKERS AND 02767–THERMOPLASTIC PAVEMENT MARKINGS.
4. EXTENT OF EXCAVATION INCLUDES 18" OVER CUT AS SHOWN ON STANDARD DETAIL 02951–04 PAVEMENT REPAIR DETAIL FOR STREET CUTS (FLEX–BASE PAVEMENT AND CONCRETE PAVEMENT).
5. ADDITIONAL REQUIREMENTS FOR ASPHALT OVERLAY ON CONCRETE PAVEMENT:
   - 5.1. REPLACE CONCRETE FOR EXTENT OF EXCAVATION. REPLACE TO SAME THICKNESS PLUS TWO INCHES (2").
   - 5.2. WIDTH:
     - 5.2.1. IF EXCAVATION EXTENDS MORE THAN HALF OF A LANE, REPLACE ENTIRE LANE OF CONCRETE. OTHERWISE USE STANDARD DETAIL 02951–04 THROUGH 05.
   - 5.3. SAW CUT AND EXPOSE 15" OF REINFORCING STEEL AROUND EDGE OF CONCRETE REPLACEMENT. IF NO REINFORCING STEEL EXISTS, USE HORIZONTAL DOWELS PER CITY OF HOUSTON STANDARD SPECIFICATION SECTION 02951–PAVEMENT REPAIR AND RESTORATION.
   - 5.4. REPLACE CURB WHEN ADJACENT LANE IS REPLACED.
   - 5.5. MAINTAIN CONCRETE EXPANSION JOINTS AT EXISTING LOCATIONS UNLESS OTHERWISE APPROVED BY CITY ENGINEER.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

STREET CUT FOR ASPHALT PAVEMENT REPLACEMENT/RESTORATION FOR PAVEMENT OF ALL AGES
(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: 9EFB0DC641F3478... — CITY ENGINEER
DocuSigned by: 95A29EFDA758440D... — CITY TRAFFIC ENGINEER
DocuSigned by: A93C410D72E3460... — DIRECTOR OF HPW

EFF DATE: NOV–27–2023 | DWG NO: 02951–03

NOTES:

1. A MANHOLE LOCATED WITHIN A 100–YEAR FLOOD PLAIN MUST BE GASKETED AND BOLTED DOWN TO PREVENT INFLOW.
2. A MANHOLE COVER THAT IS LOCATED IN A ROADWAY MUST MEET OR EXCEED THE AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS STANDARD M–306 FOR LOAD BEARING.
3. A MANHOLE CONNECTED TO PIPES LESS THAN 15 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST HALF THE LARGEST PIPE'S DIAMETER.
4. A MANHOLE CONNECTED TO A PIPE THAT IS AT LEAST 15 INCHES IN DIAMETER BUT NOT MORE THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THREE–FOURTHS OF THE LARGEST PIPE'S DIAMETER.
5. A MANHOLE CONNECTED TO A PIPE THAT IS GREATER THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THE LARGEST PIPE'S DIAMETER.
6. IN A MANHOLE WITH PIPES OF DIFFERENT SIZES, THE TOPS OF ALL THE PIPES MUST BE AT THE SAME ELEVATION AND FLOW CHANNELS IN THE INVERT MUST BE SLOPED EVENLY FROM PIPE TO PIPE TO PREVENT BACKPRESSURE.
7. A COLLECTION SYSTEM PIPE ENTERING A MANHOLE MORE THAN 24 INCHES ABOVE AN INVERT MUST HAVE A DROP PIPE.
8. A MANHOLE–PIPE CONNECTION MUST USE WATERTIGHT, SIZE–ON–SIZE RESILIENT CONNECTORS THAT ALLOW FOR DIFFERENTIAL SETTLEMENT AND TESTING PER AMERICAN SOCIETY FOR TESTING AND MATERIALS C923.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 11 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 173 OF 192	

60% SUBMITTAL

DT–011

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\100–CIVIL–DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPW\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 Files\01 DELIVER WORK\CIVIL\DR\100-CIVIL-DETAILS.dwg

SANITARY SEWER VENT STACK WITH ACTIVATED CARBON ODOR CONTROL

1. VENT STACK SCRUBBER IS CONSTRUCTED FROM HDPE OR FRP HDPE OR FRP, SUITABLE FOR EXPOSURE AND CORROSIVE SEWER GAS ENVIRONMENTS.

2. STANDARD VENT STACK SCRUBBER CONSISTS OF THE FOLLOWING:
   A) 18" FLANGE ADAPTER
   B) 18" × 6' SDR 19 MEDIA CHAMBER (APPROXIMATELY 6 CUBIC FEET)
   C) 316 STAINLESS STEEL MEDIA RETAINING SCREEN
   D) WEATHER GUARD WITH 316 VENT SCREEN
   E) APPROXIMATE OVERALL DIMENSIONS 14" × 8'
   F) MEDIA IS AN ACTIVATED CARBON WITH WEAR INDICATOR

3. VENT STACK SCRUBBER SHOULD BE ATTACHED TO A STAND PIPE VIA 316 STAINLESS STEEL CLAMPS AND/OR FLANGED CONNECTIONS, PER APPROVAL REQUIREMENTS AND CITY OF HOUSTON APPROVAL.

4. STAND POST SHALL BE SUPPORTED BY 3" HOT DIPPED GALVANIZED PIPE WITH ATTACHMENT POINT WELDED IN PLACE.

5. THE ACTIVATED CARBON MEDIA HAS A USEFUL LIFE AND IS REQUIRED TO BE REPLACED AS NEEDED. CARBON MEDIA SHALL BE SPECIFICALLY DESIGNED FOR REMOVAL OF HYDROGEN SULFIDE GAS (H_2S) AND TYPICAL SEWER ODORS.

6. VENT IS TO BE INSTALLED WITHIN THE RIGHT-OF-WAY AT LOCATIONS SHOWN ON THE DRAWINGS.

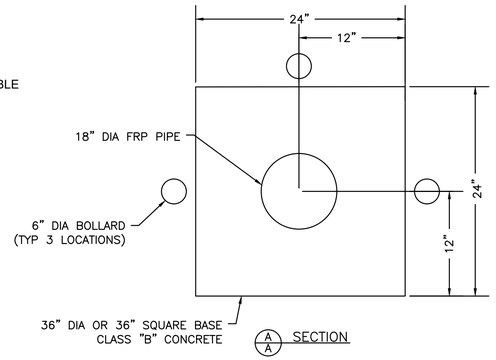
7. SEE COH STANDARD SPECIFICATIONS FOR INSTALLATION AND PROTECTIVE COATING REQUIREMENTS FOR EXPOSED FRP PIPE.

8. ODOR CONTROL UNIT SHALL BE RATED TO ACCOMMODATE THE FULL VENT AIRFLOW WITHOUT RESTRICTING PRESSURE RELIEF DURING PEAK SURCHARGE OR RELIEF FLOW CONDITIONS.

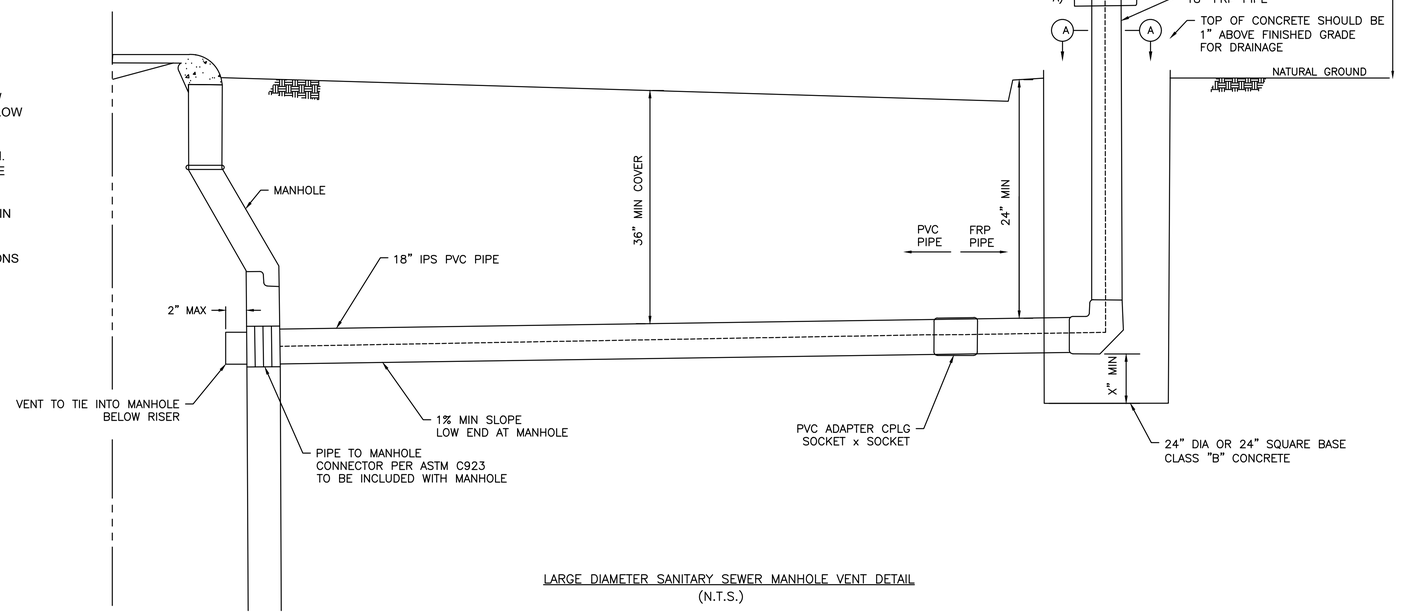
9. VENT RISER SHALL CONNECT TO THE MANHOLE BARREL ABOVE THE SEWER CROWN. VENT STACK HEIGHT SHALL BE A MINIMUM OF 3' ABOVE FINISHED GRADE AND ABOVE THE 100-YEAR FLOOD ELEVATION, WHERE APPLICABLE.

10. THE VENT RISER SHALL BE PROTECTED BY THREE (3) BOLLARDS THAT SHALL BE 6" IN DIAMETER.

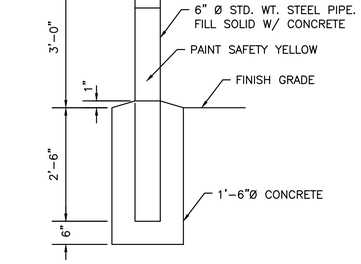
11. ALL EXPOSED COMPONENTS SHALL COMPLY WITH CITY OF HOUSTON SPECIFICATIONS FOR MATERIALS, COATINGS, AND CORROSION PROTECTION.



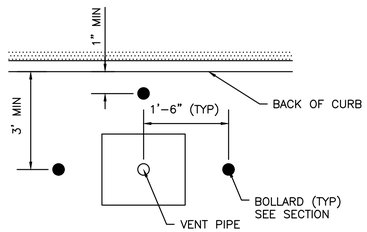
CONCRETE FOUNDATION



LARGE DIAMETER SANITARY SEWER MANHOLE VENT DETAIL
(N.T.S.)



BOLLARD SECTION
(NTS)



VENT PIPE WITH 3 BOLLARDS
(NTS)

1 BOLLARD
SCALE: NTS

NOTES:

1. A MANHOLE LOCATED WITHIN A 100-YEAR FLOOD PLAIN MUST BE GASKETED AND BOLTED DOWN TO PREVENT INFLOW.
2. A MANHOLE COVER THAT IS LOCATED IN A ROADWAY MUST MEET OR EXCEED THE AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS STANDARD M-306 FOR LOAD BEARING.
3. A MANHOLE CONNECTED TO PIPES LESS THAN 15 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST HALF THE LARGEST PIPE'S DIAMETER.
4. A MANHOLE CONNECTED TO A PIPE THAT IS AT LEAST 15 INCHES IN DIAMETER BUT NOT MORE THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THREE-FOURTHS OF THE LARGEST PIPE'S DIAMETER.
5. A MANHOLE CONNECTED TO A PIPE THAT IS GREATER THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THE LARGEST PIPE'S DIAMETER.
6. IN A MANHOLE WITH PIPES OF DIFFERENT SIZES, THE TOPS OF ALL THE PIPES MUST BE AT THE SAME ELEVATION AND FLOW CHANNELS IN THE INVERT MUST BE SLOPED EVENLY FROM PIPE TO PIPE TO PREVENT BACKPRESSURE.
7. A COLLECTION SYSTEM PIPE ENTERING A MANHOLE MORE THAN 24 INCHES ABOVE AN INVERT MUST HAVE A DROP PIPE.
8. A MANHOLE-PIPE CONNECTION MUST USE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTORS THAT ALLOW FOR DIFFERENTIAL SETTLEMENT AND TESTING PER AMERICAN SOCIETY FOR TESTING AND MATERIALS C923.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1-BASIN IB043

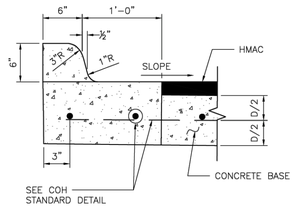
CIVIL DETAILS SHEET 12 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 174 OF 192	

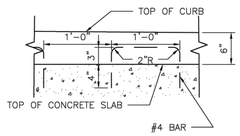
60% SUBMITTAL

DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5

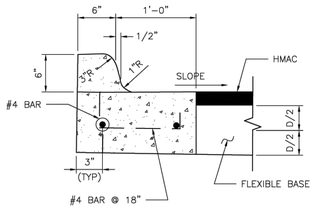
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



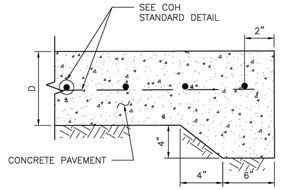
ESPLANADE CURB CONNECTED TO CONCRETE BASE



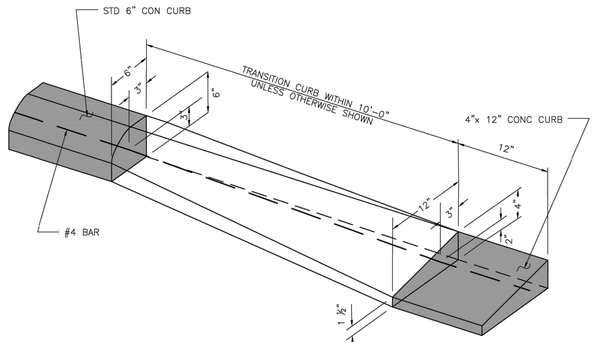
ALTERNATE CONCRETE CURB REINFORCEMENT



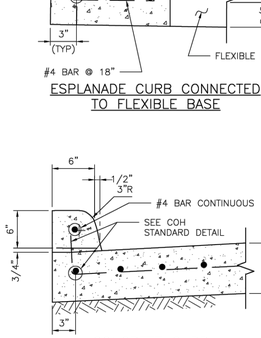
ESPLANADE CURB CONNECTED TO FLEXIBLE BASE



STANDARD CONCRETE PAVING HEADER

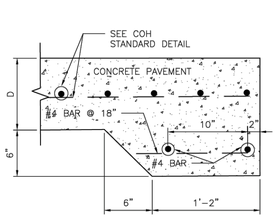


CURB TRANSITION
(SEE NOTES)

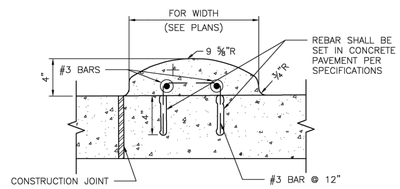


CONCRETE CURB

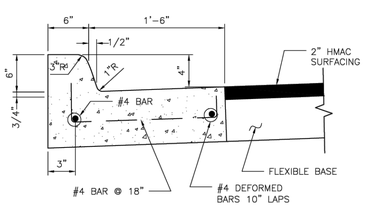
WHEN CONCRETE CURB IS TO BE PLACED EXISTING CONCRETE USE BASE #4 BAR @ 18x10" LONG, DOWELED AND SET IN EPOXY GROUT. SET #4 DOWEL BARS, 25" LONG AT 12" C-C WHEN PAVEMENT SECTION POURED.



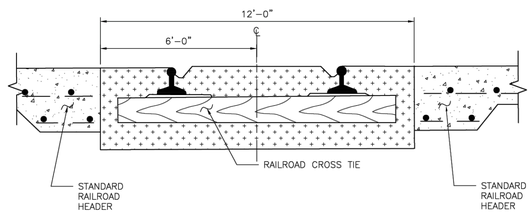
STANDARD RAILROAD HEADER



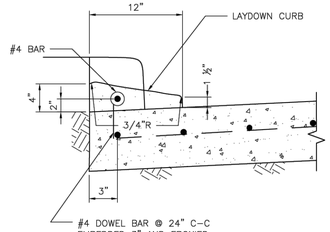
MOUNTABLE CURB



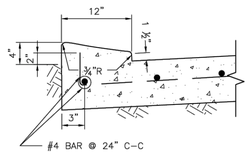
MONOLITHIC CURB AND GUTTER



STANDARD RAILROAD CROSSING – SINGLE TRACK



4-INCH x 12-INCH TRANSITION CURB
(SEE NOTES)



4-INCH x 12-INCH MONOLITHIC CURB
(SEE NOTES)

4"x12" MONOLITHIC AND TRANSITION CURB NOTES:

1. 6-INCH CONCRETE CURB TO BE CONSTRUCTED ON ALL ESPLANADES, ISLANDS, NON-RESIDENTIAL STREETS, AND RESIDENTIAL STREETS.
2. TRANSITIONS FROM 6- INCH CONCRETE CURB TO 4-INCH x 12-INCH CONCRETE CURB TO BE ACCOMPLISHED WITHIN 10 FEET, UNLESS OTHERWISE SHOWN. IF THIS 10-FEET TRANSITION CURB IS NOT POURED MONOLITHICALLY WITH THE PAVEMENT, THEN REINFORCING STEEL AS SHOWN IN "4-INCH x 12-INCH TRANSITION CURB" IS TO BE INSTALLED.

NO.	DATE	REVISION	APP.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukut Kanwar	DocuSigned by: KHANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Hallock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 02771-01

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

CURB, CURB AND GUTTER AND HEADER DETAILS

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DT-013

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

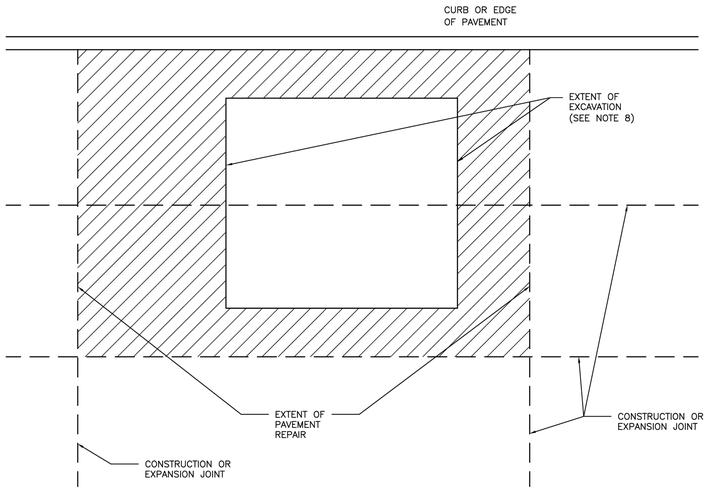
CIVIL DETAILS SHEET 13 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 175 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\200-CIVIL-DETAILS.dwg

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6



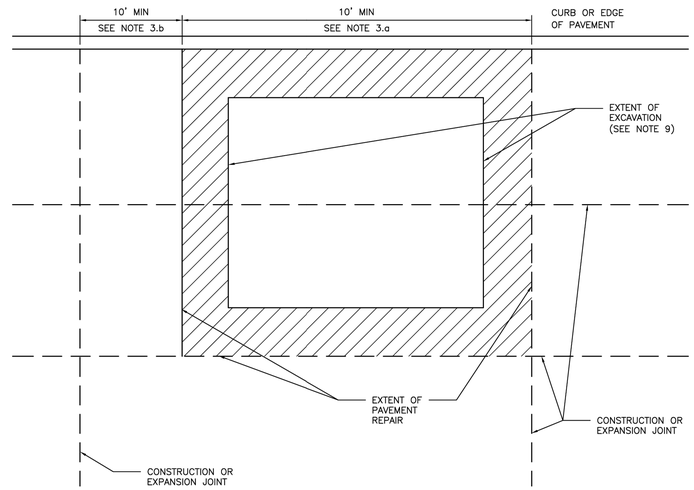
NOTES:

1. EXTENT OF PAVEMENT REPAIR SHALL BE PERPENDICULAR AND PARALLEL TO TRAVEL WAY.
2. REPLACE ENTIRE PANEL WIDTH AND LENGTH TO NEAREST CONSTRUCTION OR EXPANSION JOINT BEYOND EDGE OF EXCAVATION.
3. SAW CUT AND EXPOSE 15" OF REINFORCING STEEL WITHIN EXISTING PAVEMENT. PROVIDE HORIZONTAL DOWELS (PER SPECIFICATION SECTION 02951–PAVEMENT REPAIR AND RESTORATION) IF EXISTING REINFORCING IS BROKEN OFF.
4. REPLACE CURB WHEN ADJACENT LANE IS REPLACED.
5. MAINTAIN EXPANSION JOINTS AT EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
6. SPECIALTY PAVEMENTS (IE: BRICK PAVERS) TO BE REPLACED WITH MATCHING PAVEMENT IN ALL CASES.
7. REPLACE PAVEMENT MARKINGS IN ACCORDANCE WITH CITY OF HOUSTON STANDARD SPECIFICATIONS 02764–RAISED PAVEMENT MARKERS AND 02767–THERMOPLASTIC PAVEMENT MARKINGS.
8. EXTENT OF EXCAVATION INCLUDES 18" OVERCUT AS SHOWN ON STANDARD DETAIL 02951–04 PAVEMENT REPAIR DETAIL FOR STREET CUTS (FLEX–BASE PAVEMENT & CONCRETE PAVEMENT).

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SITE CONDITIONS ASSOCIATED WITH THE USE OF THIS STANDARD. IT REMAINS THE RESPONSIBILITY OF THE ENGINEER OF RECORD (EOR) TO ADDRESS THESE CONDITIONS AND TO ADAPT THE DESIGN AS NECESSARY. THE EOR WHO SEALS, SIGNS AND DATES THIS STANDARD FOR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

CITY OF HOUSTON HOUSTON PUBLIC WORKS STANDARD	
STREET CUT FOR CONCRETE PAVEMENT REPLACEMENT/RESTORATION AGE OF PAVEMENT ≤ 5YRS (SCALE: NOT TO SCALE)	
APPROVED BY:	
DocuSigned by: Sukait Kanwar 9EF89B0C841F547B... CITY ENGINEER DocuSigned by: HUNG NGUYEN 95A26EFDA75B4CD... CITY TRAFFIC ENGINEER	DocuSigned by: Carl Hallbeck A93C41087284463... DIRECTOR OF HPW
EFF DATE: NOV–27–2023	DWG NO: 02951–01

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6



NOTES:

1. EXTENT OF PAVEMENT REPAIR SHALL BE PERPENDICULAR AND PARALLEL TO TRAVEL WAY.
2. WIDTH:
   REPLACE PANEL WIDTH TO NEAREST CONSTRUCTION OR EXPANSION JOINT BEYOND EDGE OF EXCAVATION.
3. LENGTH:
   a. MINIMUM LENGTH OF PAVEMENT REPAIR ALONG TRAVEL WAY IS 10' FROM THE NEAREST JOINT.
   b. IF EXTENT OF PAVEMENT REPAIR IS LESS THAN 10' FROM EXISTING CONSTRUCTION OR EXPANSION JOINT, EXTEND PAVEMENT REPAIR TO EXISTING JOINT.
4. SAW CUT AND EXPOSE 15" OF REINFORCING STEEL AROUND EDGE OF PANEL REPLACEMENT. PROVIDE HORIZONTAL DOWELS (PER SPECIFICATION SECTION 02951–PAVEMENT REPAIR AND RESTORATION) IF REINFORCING IS BROKEN OFF OR DOES NOT EXIST.
5. REPLACE CURB WHEN ADJACENT LANE IS REPLACED.
6. MAINTAIN EXPANSION JOINTS AT EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
7. SPECIALTY PAVEMENTS (IE: BRICK PAVERS) TO BE REPLACED WITH MATCHING PAVEMENT IN ALL CASES.
8. REPLACE PAVEMENT MARKINGS IN ACCORDANCE WITH CITY OF HOUSTON STANDARD SPECIFICATIONS 02764–RAISED PAVEMENT MARKERS AND 02767–THERMOPLASTIC PAVEMENT MARKINGS.
9. EXTENT OF EXCAVATION INCLUDES 18" OVERCUT AS SHOWN ON STANDARD DETAIL 02951–04 PAVEMENT REPAIR DETAIL FOR STREET CUTS (FLEX–BASE PAVEMENT & CONCRETE PAVEMENT).

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SITE CONDITIONS ASSOCIATED WITH THE USE OF THIS STANDARD. IT REMAINS THE RESPONSIBILITY OF THE ENGINEER OF RECORD (EOR) TO ADDRESS THESE CONDITIONS AND TO ADAPT THE DESIGN AS NECESSARY. THE EOR WHO SEALS, SIGNS AND DATES THIS STANDARD FOR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

CITY OF HOUSTON HOUSTON PUBLIC WORKS STANDARD	
STREET CUT FOR CONCRETE PAVEMENT REPLACEMENT/RESTORATION AGE OF PAVEMENT > 5YRS (SCALE: NOT TO SCALE)	
APPROVED BY:	
DocuSigned by: Sukait Kanwar 9EF89B0C841F547B... CITY ENGINEER DocuSigned by: HUNG NGUYEN 95A26EFDA75B4CD... CITY TRAFFIC ENGINEER	DocuSigned by: Carl Hallbeck A93C41087284463... DIRECTOR OF HPW
EFF DATE: NOV–27–2023	DWG NO: 02951–02

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 14 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 176 OF 192	

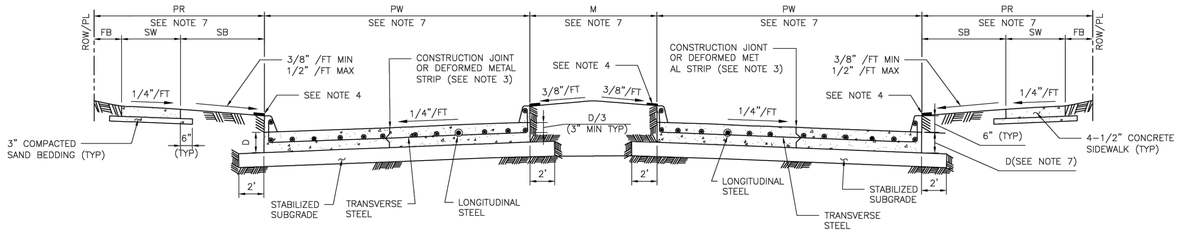
60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\200–CIVIL–DETAILS.dwg

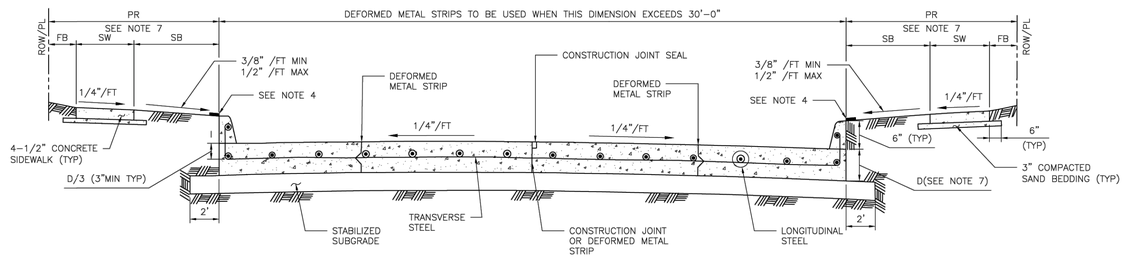
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\200-CIVIL-DETAILS.dwg

DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5



TYPICAL DOUBLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH CURBS



TYPICAL SINGLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH CURBS

TABLE 1

REINFORCING STEEL BAR SIZES AND SPACINGS FOR VARIOUS PAVEMENT THICKNESSES (D) WITH: MAXIMUM TRANSVERSE CONTROL JOINT SPACING = 20'–0"
MAXIMUM EXPANSION JOINT SPACING = 80'–0"
fc' = 4,000 PSI/28 DAYS AND FY = 60,000 PSI

PAVEMENT THICKNESS "D" (IN)	PAVEMENT WIDTH "PW" (FT)	LONGITUDINAL STEEL									TRAVERSE STEEL		
		#4 BARS			#5 BARS			#6 BARS			#4 BARS	#5 BARS	#6 BARS
		NUMBER OF BARS	SPACING (IN)	END BAR SPACING (IN)	NUMBER OF BARS	SPACING (IN)	END BAR SPACING (IN)	NUMBER OF BARS	SPACING (IN)	END BAR SPACING (IN)	SPACING (IN)	SPACING (IN)	SPACING (IN)
6	28	17	20.50	4.00	–	–	–	–	–	–	36	–	–
7	25	17	18.25	4.00	–	–	–	–	–	–	36	–	–
7	35	24	18.00	3.00	–	–	–	–	–	–	36	–	–
7	36	25	17.75	3.00	–	–	–	–	–	–	36	–	–
7	37	25	18.25	3.00	–	–	–	–	–	–	36	–	–
7	41	28	18.00	3.00	–	–	–	–	–	–	36	–	–
7	45	31	17.75	3.75	–	–	–	–	–	–	36	–	–
8	25	20	15.50	2.75	13	24.50	3.0	–	–	–	36	36	–
8	34	27	15.50	2.50	17	25.00	4.0	–	–	–	36	36	–
8	35	27	16.00	2.00	18	24.25	4.0	–	–	–	36	36	–
8	36	28	15.75	3.25	18	25.00	3.0	–	–	–	30	36	–
8	44	24	15.75	4.00	22	24.75	4.0	–	–	–	30	36	–
8	45	35	15.75	2.25	23	24.25	3.0	–	–	–	30	36	–
9	25	22	14.00	3.00	14	22.50	4.0	–	–	–	36	36	–
9	34	31	13.50	2.00	19	22.25	3.5	–	–	–	30	36	–
9	35	31	13.75	3.75	20	21.75	3.5	–	–	–	30	36	–
9	36	32	13.75	3.00	21	21.25	3.5	–	–	–	30	36	–
9	44	39	13.75	2.75	25	21.75	3.0	–	–	–	24	36	–
9	45	39	14.00	4.00	26	21.25	4.5	–	–	–	24	36	–
10	25	24	12.75	3.50	17	18.25	4.0	–	–	–	36	36	36
10	34	33	12.50	4.00	21	20.00	4.0	–	–	–	30	36	36
10	35	34	12.50	3.75	23	18.75	4.0	–	–	–	30	36	36
10	36	35	12.50	3.50	24	18.50	3.0	–	–	–	30	36	36
10	44	44	12.00	4.00	29	18.50	4.5	–	–	–	24	36	36
10	45	44	12.50	3.00	29	19.00	3.0	–	–	–	24	36	36
11	25	27	11.25	3.00	17	18.25	4.0	12	26.75	3	36	36	36
11	34	36	11.50	2.75	24	17.50	2.5	17	25.00	4	24	36	36
11	35	37	11.50	3.00	24	18.00	3.0	17	25.75	4	24	36	36
11	36	40	11.00	2.00	25	17.75	3.0	17	26.50	4	24	36	36
11	44	48	11.125	2.50	30	18.00	3.0	21	26.00	4	24	36	36
11	45	49	11.125	3.00	31	17.75	4.0	22	25.50	3	24	36	36
12	25	–	–	–	19	16.25	4.0	13	24.50	3	36	36	36
12	34	–	–	–	26	16.00	4.0	18	23.50	4	24	36	36
12	35	–	–	–	26	16.50	4.0	19	23.00	3	24	36	36
12	36	–	–	–	27	16.25	4.5	20	22.25	4.5	24	36	36
12	44	–	–	–	33	16.25	4.0	24	22.50	5	24	30	36
12	45	–	–	–	35	15.75	3.0	25	22.25	3	24	30	36

MINIMUM LAP LENGTH (L):
A. # 4 BARS ; L = 22 INCHES
B. # 5 BARS ; L = 27 INCHES
C. # 6 BARS ; L = 32 INCHES

NOTES:

1. THE MAXIMUM WIDTH BETWEEN LONGITUDINAL JOINTS SHALL NOT EXCEED 15'–0".
2. ALL EARTHEN AREAS ARE TO BE HYDROMULCHED UNLESS SHOWN OTHERWISE ON DRAWINGS.
3. CONTRACTOR MAY SAW CUT IN LIEU OF DEFORMED METAL STRIP.
4. USE STRIP OF SOD GRASS TO PREVENT EROSION UNTIL STAND OF GRASS IS ESTABLISHED.
5. AN EQUAL OR LARGER AREA OF WELDED REINFORCEMENT BAR CONFORMING TO ASTM A497, MAY BE SUBSTITUTED FOR REBARS LISTED IN TABLE 1.
6. IF AVAILABLE ROW IS NOT SUFFICIENT TO ACCOMMODATE SIDEWALK WIDTH (SW) ACCORDING TO IDM REQUIREMENTS, ENGINEER SHALL OBTAIN A VARIANCE FROM THE CITY ENGINEER.
7. REFER TO CONTRACT DRAWINGS FOR PAVEMENT WIDTH (PW) AND PAVEMENT THICKNESS (D), MEDIAN (M), PEDESTRIAN REALM (PR), SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.

NO.	DATE	REVISION	APP.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Kanwar 5EF8B80641F9478...	DocuSigned by: HAING NGUYEN 59A35EFDA7B84CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock A0EA1FB8FB0F4FA...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02751–01

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

CONCRETE PAVEMENT DETAILS

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DT–015

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

SURVEYED BY:
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

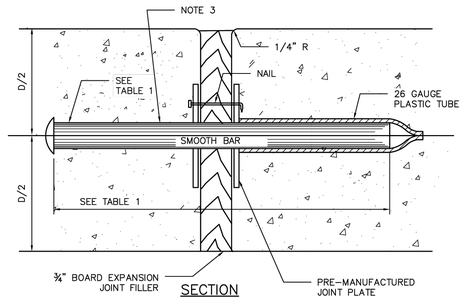
CIVIL DETAILS SHEET 15 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 177 OF 192	

60% SUBMITTAL

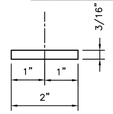
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE ASSUMES RESPONSIBILITY FOR DESIGN ADEQUACY. THE EOR MUST ADDRESS ANY SITE SPECIFIC ISSUES THAT MAY AFFECT THE SUITABILITY OF THESE DESIGNS FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

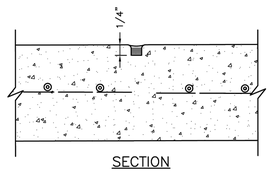


SECTION

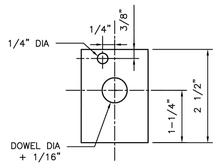
DOWEL TYPE EXPANSION JOINT



PLAN VIEW
JOINT PLATE



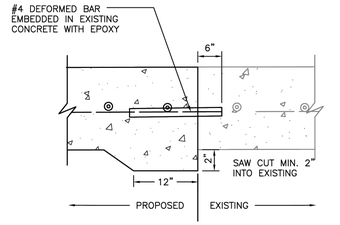
SECTION
CONTROL JOINT



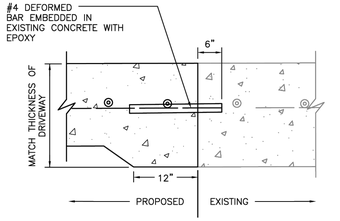
ELEVATION VIEW
JOINT PLATE

TABLE 1

PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
4 1/2	1/2	18	12
5	1/2	18	12
6	3/4	18	12
7	1	18	12



SECTION
SIDEWALK TO EXISTING SIDEWALK



SECTION
SIDEWALK TO EXISTING DRIVEWAY

NOTES:

1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS.
2. EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED AT A MAXIMUM DISTANCE OF 3 FEET MAXIMUM SPACING FOR CONTROL JOINTS SHALL BE 5 FEET.
3. CENTER DOWEL HORIZONTALLY ON JOINT.
4. CENTER DOWEL VERTICALLY IN CONCRETE AS NEEDED TO MAINTAIN A 2 INCH MINIMUM COVER.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

SIDEWALK EXPANSION AND CONSTRUCTION JOINT DETAILS

(SCALE: NOT TO SCALE)

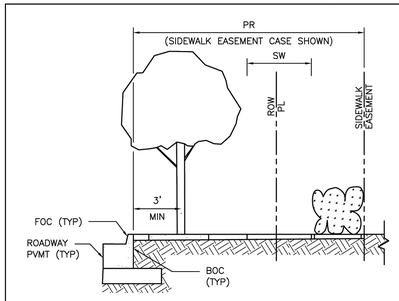
APPROVED BY:

Docusigned by: Sulal Tanwar — CITY ENGINEER
Docusigned by: Carol Haddock — DIRECTOR OF HPW
Docusigned by: Hung Nguyen — CITY TRAFFIC ENGINEER

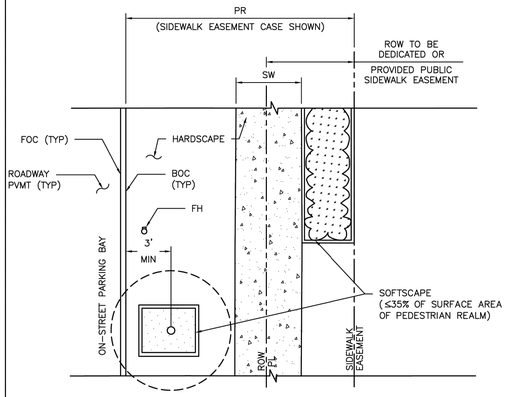
EFF DATE: NOV-27-2023 | DWG NO: 02752-02

DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5

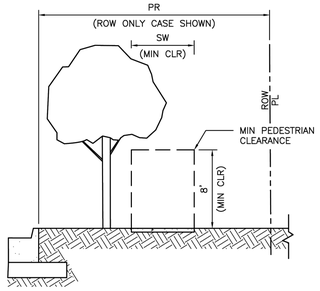
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE ASSUMES RESPONSIBILITY FOR DESIGN ADEQUACY. THE EOR MUST ADDRESS ANY SITE SPECIFIC ISSUES THAT MAY AFFECT THE SUITABILITY OF THESE DESIGNS FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



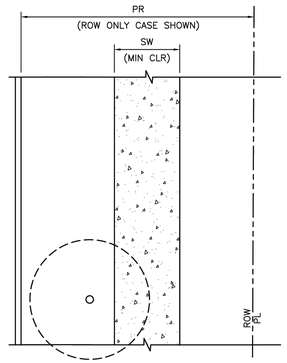
ELEVATION



PLAN
PEDESTRIAN REALM PERFORMANCE STANDARD



ELEVATION



PLAN
SIDEWALK & CLEAR PEDESTRIAN ZONE
MANDATORY MINIMUM REQUIREMENT

NOTES

1. REFER TO CONTRACT DRAWINGS FOR PEDESTRIAN REALM (PR), AND SIDEWALK (SW) WIDTHS.
2. THE MINIMUM UNOBSTRUCTED VERTICAL CLEARANCE OF A SIDEWALK IS EIGHT (8) FEET AS MEASURED VERTICALLY FROM THE SURFACE OF THE SIDEWALK. FOR VERTICAL CLEARANCE TO IMPROVEMENTS CONSTRUCTED OVER A SIDEWALK WITHIN THE PEDESTRIAN REALM, REFER TO THE CONTRACT DRAWINGS.
3. FOR PEDESTRIAN REALM DESIGN BACKGROUND, REFER TO CHAPTER 42 OF THE CODE OF ORDINANCES, ARTICLE IV – ENHANCED PEDESTRIAN REALM STANDARDS AND THE USERS' GUIDE FOR WALKABLE PLACES AND TRANSIT-ORIENTED DEVELOPMENT.
4. FOR ADDITIONAL PLANTING REQUIREMENTS, REFER TO CHAPTER 33 OF THE CODE OF ORDINANCES, SECTION 129 – GENERAL PLANTING STANDARDS.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

SIDEWALK AND CLEAR ZONE TRANSIT CORRIDOR STREET

(SCALE: NOT TO SCALE)

APPROVED BY:

Docusigned by: Sulal Tanwar — CITY ENGINEER
Docusigned by: Carol Haddock — DIRECTOR OF HPW
Docusigned by: Hung Nguyen — CITY TRAFFIC ENGINEER

EFF DATE: NOV-27-2023 | DWG NO: 02775-08

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 16 OF 30

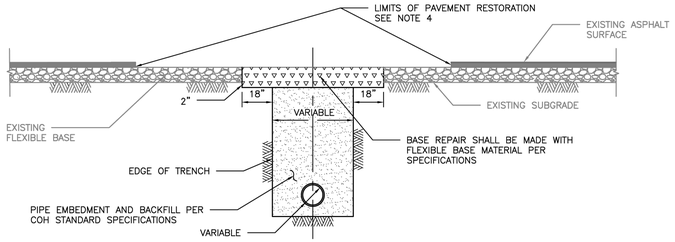
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 178 OF 192	

60% SUBMITTAL

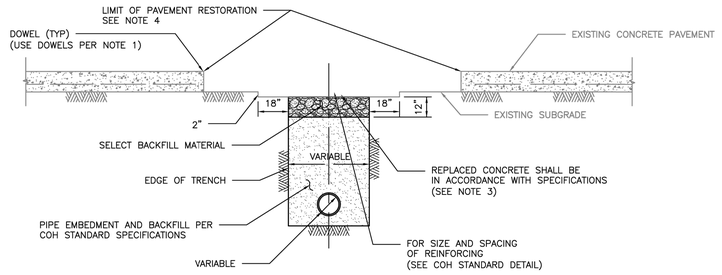
DT-016

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\200-CIVIL-DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6



ELEVATION A
REPAIR OF FLEXIBLE BASE PAVEMENT



ELEVATION B
REPAIR OF REINFORCED CONCRETE PAVEMENT

NOTES:

1. EXPOSE 15" OF REINFORCING STEEL AT PROPOSED SAWED JOINT. IF NO REINFORCING STEEL EXISTS, USE HORIZONTAL DOWELS. HORIZONTAL DOWELS SHALL BE #6 BAR, 24" LONG, 24" C-C, DRILLED AND EMBEDDED 8" INTO THE CENTER OF THE EXISTING SLAB. WITH "PO ROC" OR EQUAL.
2. IF REINFORCED CONCRETE IS OVERLAYED WITH ASPHALT, REPLACE WITH 2" MIN HMAC SURFACING.
3. REFER TO STANDARD DETAIL 02751-01 FOR REINFORCING STEEL REQUIREMENTS.
4. REFER TO STANDARD DETAIL 02951-01 THROUGH 03 FOR PAVEMENT RESTORATION LIMITS.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

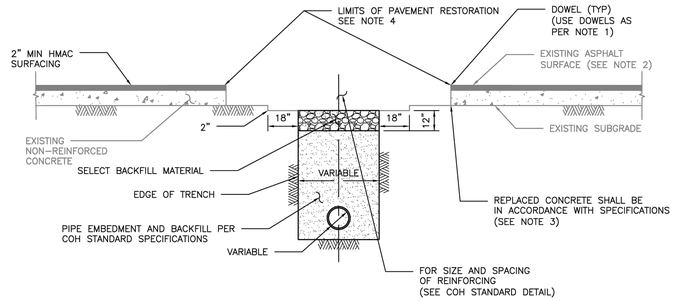
PAVEMENT REPAIR DETAIL
FOR STREET CUTS
(FLEX-BASE PAVEMENT & CONCRETE PAVEMENT)
(SCALE: NOT TO SCALE)

APPROVED BY:

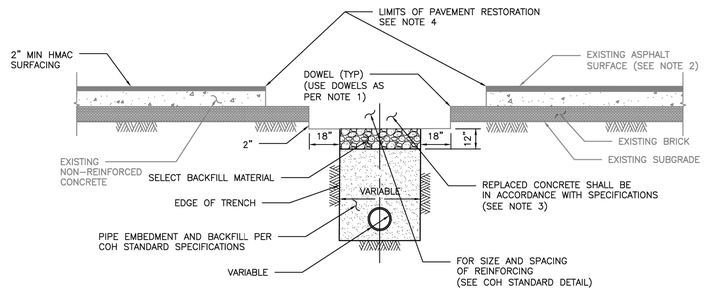
DocuSigned by: Suhail Kanwar — CITY ENGINEER
DocuSigned by: KHANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carol Haddock — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 02951-04

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6



ELEVATION C
REPAIR OF NON-REINFORCED CONCRETE PAVEMENT



ELEVATION D
REPAIR OF NON-REINFORCED CONCRETE PAVEMENT WITH BRICK

NOTES:

1. EXPOSE 15" OF REINFORCING STEEL AT PROPOSED SAWED JOINT. IF NO REINFORCING STEEL EXISTS, USE HORIZONTAL DOWELS. HORIZONTAL DOWELS SHALL BE #6 BAR, 24" LONG, 24" C-C, DRILLED AND EMBEDDED 8" INTO THE CENTER OF THE EXISTING SLAB. WITH "PO ROC" OR EQUAL.
2. IF REINFORCED CONCRETE IS OVERLAYED REPLACE WITH SAME THICKNESS OF HMAC SURFACING.
3. REFER TO STANDARD DETAIL 02751-01 FOR REINFORCING STEEL REQUIREMENT
4. REFER TO STANDARD DETAILS 02951-01 THROUGH 03 FOR PAVEMENT RESTORATION LIMITS.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

PAVEMENT REPAIR DETAIL
FOR STREET CUTS
(NON-REINFORCED CONCRETE & BRICK PAVEMENT)
(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Suhail Kanwar — CITY ENGINEER
DocuSigned by: KHANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carol Haddock — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 02951-05

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ASSUMES RESPONSIBILITY FOR DESIGNING AND DETAILING THE PROJECT IN ACCORDANCE WITH GOOD ENGINEERING PRACTICE. THE EOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE REQUIREMENTS AND BY AUTHORIZING THEIR USE ON THE PROJECT, ASSUMES RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.
WHEREVER, THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ASSUMES RESPONSIBILITY FOR DESIGNING AND DETAILING THE PROJECT IN ACCORDANCE WITH GOOD ENGINEERING PRACTICE. THE EOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE REQUIREMENTS AND BY AUTHORIZING THEIR USE ON THE PROJECT, ASSUMES RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.
WHEREVER, THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 - AREA 1-BASIN IB043

CIVIL DETAILS SHEET 17 OF 30

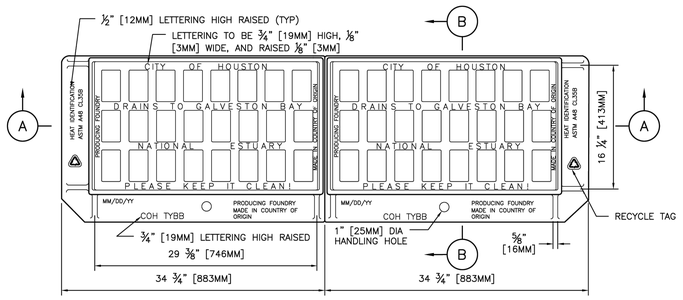
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 179 OF 192	

60% SUBMITTAL

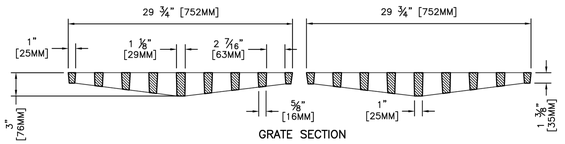
DT-017

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\200-CIVIL-DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

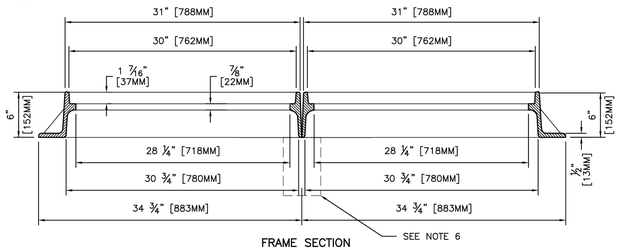
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE ASSUMES RESPONSIBILITY FOR PROPER DESIGN AND SAFETY MEASURES IN THE USE OF THESE STANDARDS. THE EOR IS ALSO RESPONSIBLE FOR COORDINATING ANY DESIGN ADJUSTMENTS WITH THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



TOP VIEW

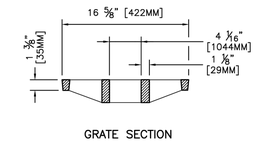


GRATE SECTION

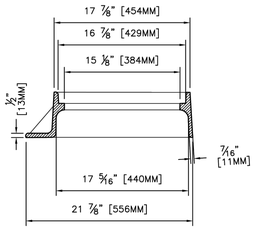


FRAME SECTION

SECTION A–A



GRATE SECTION



FRAME SECTION

SECTION B–B

NOTES:

1. APPROXIMATE WEIGHTS:

   EACH GRATE – 115 LBS (52KGS)
   EACH FRAME – 120 LBS (55KGS)
   EACH UNIT – 235 LBS (107KGS)

2. MATERIAL– GRAY IRON ASTM A48 CL35B.
3. CASTING MUST BE MANUFACTURED AND PROOF TESTED IN ACCORDANCE WITH AASHTO M306.
4. EJ V4243 ASY OR APPROVED EQUAL
   TYPE B–B 480 SQ. IN. [3096 SQ. CM.]
   TYPE B 240 SQ. IN. [1548 SQ. CM.]
5. IDENTIFICATION MARKINGS MUST COMPLY WITH CITY SPECIFICATIONS. MARKINGS NOT SHOWN ON THIS DETAIL MUST BE PLACED ON THE CASTING:
   A. PROVIDE ALL FRAME MARKINGS ON THE TOP SIDE OF THE FRAME.
   B. PROVIDE GRATE AND COVER MARKINGS ON EITHER TOP OR BOTTOM OF CASTING.
6. FOR INLET MAINTENANCE REFER TO COH STD 02632–04. FOR NEW INLET CONSTRUCTION REFER TO COH STD 02633–02.

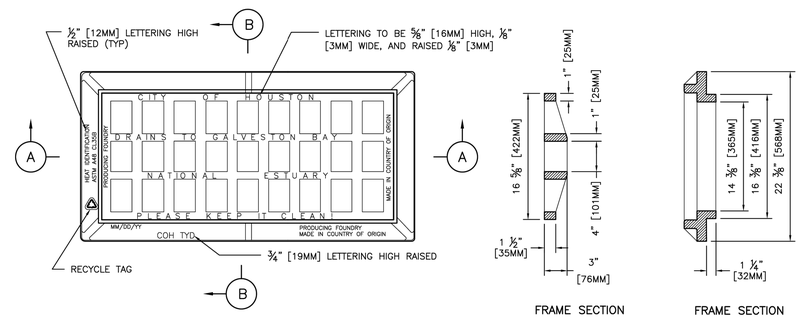
CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

STORM SEWER FRAME AND GRATE FOR TYPE "B–B" INLET DOUBLE ASSEMBLY
(SCALE: NOT TO SCALE)

APPROVED BY:

CITY ENGINEER	DIRECTOR OF HPW
EFF DATE: MAR–02–2026	DWG NO: 02090–05

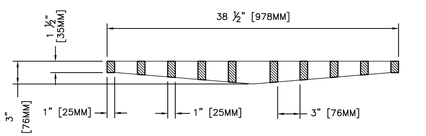
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE ASSUMES RESPONSIBILITY FOR PROPER DESIGN AND SAFETY MEASURES IN THE USE OF THESE STANDARDS. THE EOR IS ALSO RESPONSIBLE FOR COORDINATING ANY DESIGN ADJUSTMENTS WITH THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



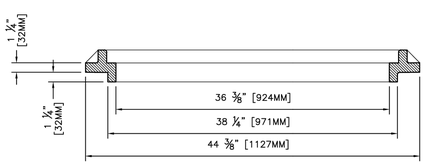
TOP VIEW

FRAME SECTION FRAME SECTION

SECTION B–B



GRATE SECTION



FRAME SECTION

SECTION A–A

NOTES:

1. APPROXIMATE WEIGHTS:

   GRATE – 125 LBS (57KGS)
   FRAME – 108 LBS (49KGS)
   UNIT – 233 LBS (106KGS)

2. MATERIAL– GRAY IRON ASTM A48 CL35B.
3. CASTING MUST BE MANUFACTURED AND PROOF TESTED IN ACCORDANCE WITH AASHTO M306.
4. OPEN AREA OF GRATE:
   324 SQ. IN. [2090 SQ. CM.].
5. IDENTIFICATION MARKINGS MUST COMPLY WITH CITY SPECIFICATIONS. MARKINGS NOT SHOWN ON THIS DETAIL MUST BE PLACED ON THE CASTING:
   A. PROVIDE ALL FRAME MARKINGS ON THE TOP SIDE OF THE FRAME.
   B. PROVIDE GRATE AND COVER MARKINGS ON EITHER TOP OR BOTTOM OF CASTING.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

STORM SEWER TYPE "D" INLET GRATE AND FRAME
(SCALE: NOT TO SCALE)

APPROVED BY:

CITY ENGINEER	DIRECTOR OF HPW
EFF DATE: MAR–02–2026	DWG NO: 02090–06

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474
SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 18 OF 30

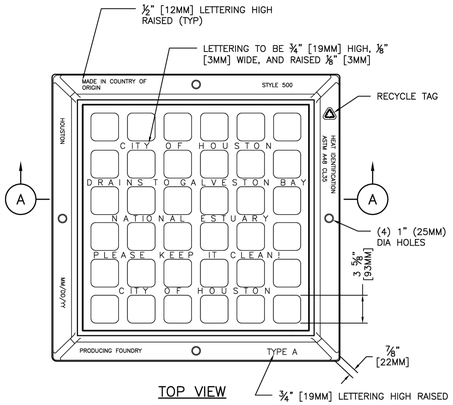
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 180 OF 192	

60% SUBMITTAL

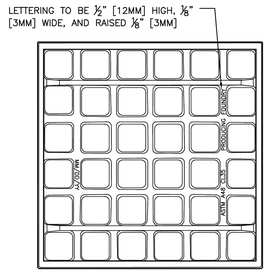
DT–018

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\200–CIVIL–DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

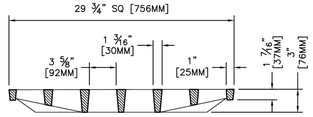
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\200-CIVIL-DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026



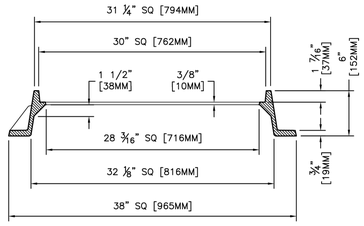
TOP VIEW



BOTTOM VIEW OF GRATE



GRATE SECTION



FRAME SECTION

SECTION A–A

NOTES:

1. APPROXIMATE WEIGHTS:

   GRATE – 190 LBS (86KG)
   FRAME – 235 LBS (107KG)
   UNIT – 425 LBS (193KG)

2. MATERIAL– GRAY IRON ASTM A48 CL35B.
3. CASTING MUST BE MANUFACTURED AND PROOF TESTED IN ACCORDANCE WITH AASHTO M306.
4. EJ V4880 ASY OR APPROVED EQUAL.
5. OPEN AREA OF GRATE 473 SQ. IN. [3051 SQ.CM.].
6. IDENTIFICATION MARKINGS MUST COMPLY WITH CITY SPECIFICATIONS. MARKINGS NOT SHOWN ON THIS DETAIL MUST BE PLACED ON THE CASTING:

   A. PROVIDE ALL FRAME MARKINGS ON THE TOP SIDE OF THE FRAME.
   B. PROVIDE GRATE AND COVER MARKINGS ON EITHER TOP OR BOTTOM OF CASTING.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

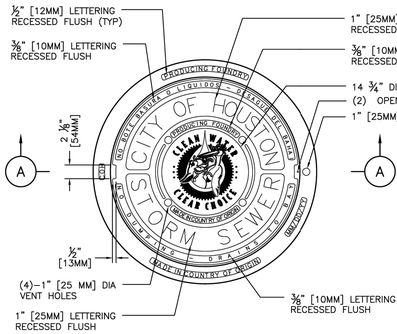
STORM SEWER TYPE "A" INLET GRATE AND FRAME

(SCALE: NOT TO SCALE)

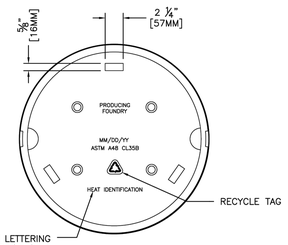
APPROVED BY:

Signed by: 19DE8802957F94DC...	Signed by: DC4E3D7FDCF454EB...
CITY ENGINEER	DIRECTOR OF HPW
EFF DATE: MAR–02–2026	DWG NO: 02090–07

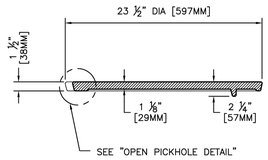
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE ASSUMES RESPONSIBILITY FOR THE DESIGN AND ASSOCIATED CONSTRUCTION DOCUMENTS. THE EOR IS RESPONSIBLE FOR THE SAFETY OF THE METHODS AND PROCEDURES THAT ARE USED IN CONJUNCTION WITH THE USE OF THIS STANDARD. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



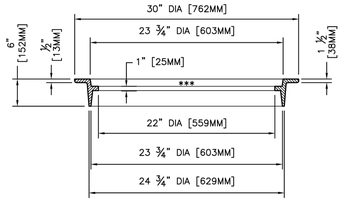
TOP VIEW



BOTTOM VIEW OF COVER



COVER SECTION



*** MACHINED SURFACE

FRAME SECTION

SECTION A–A

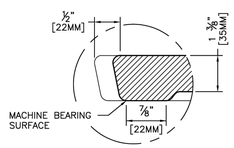
NOTES:

1. APPROXIMATE WEIGHTS:

   FRAME – 120 LBS (55KGS)
   COVER – 130 LBS (59KGS)
   UNIT – 250 LBS (114KGS)

2. MATERIALS – GRAY IRON ASTM A48 CL35B.
3. CASTING MUST BE MANUFACTURED AND PROOF TESTED IN ACCORDANCE WITH AASHTO M306.
4. EJ V1814 ASY OR APPROVED EQUAL.
5. IDENTIFICATION MARKINGS MUST COMPLY WITH CITY SPECIFICATIONS. MARKINGS NOT SHOWN ON THIS DETAIL MUST BE PLACED ON THE CASTING:

   A. PROVIDE ALL FRAME MARKINGS ON THE TOP SIDE OF THE FRAME.
   B. PROVIDE GRATE AND COVER MARKINGS ON EITHER TOP OR BOTTOM OF CASTING.



OPEN PICKHOLE DETAIL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

STORM SEWER TYPE "C", "C–1" AND "C–2" INLET FRAME AND COVER

(SCALE: NOT TO SCALE)

APPROVED BY:

Signed by: 19DE8802957F94DC...	Signed by: DC4E3D7FDCF454EB...
CITY ENGINEER	DIRECTOR OF HPW
EFF DATE: MAR–02–2026	DWG NO: 02090–08

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE ASSUMES RESPONSIBILITY FOR THE DESIGN AND ASSOCIATED CONSTRUCTION DOCUMENTS. THE EOR IS RESPONSIBLE FOR THE SAFETY OF THE METHODS AND PROCEDURES THAT ARE USED IN CONJUNCTION WITH THE USE OF THIS STANDARD. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

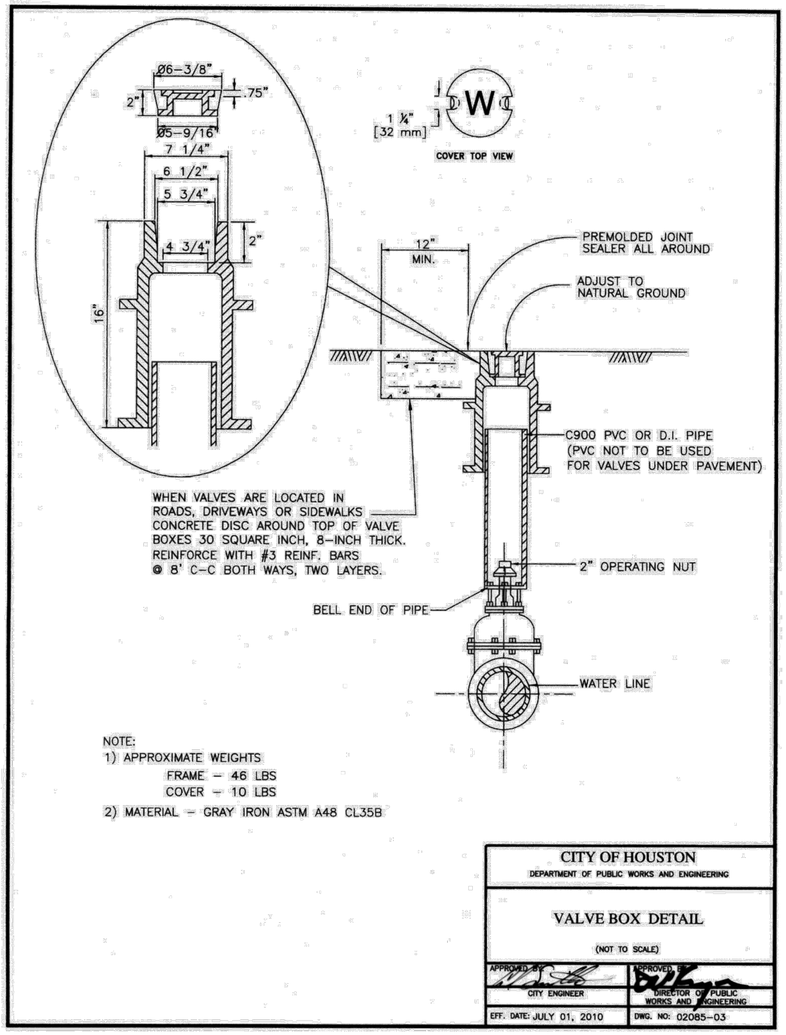
CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 19 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 181 OF 192	

60% SUBMITTAL

DT–019

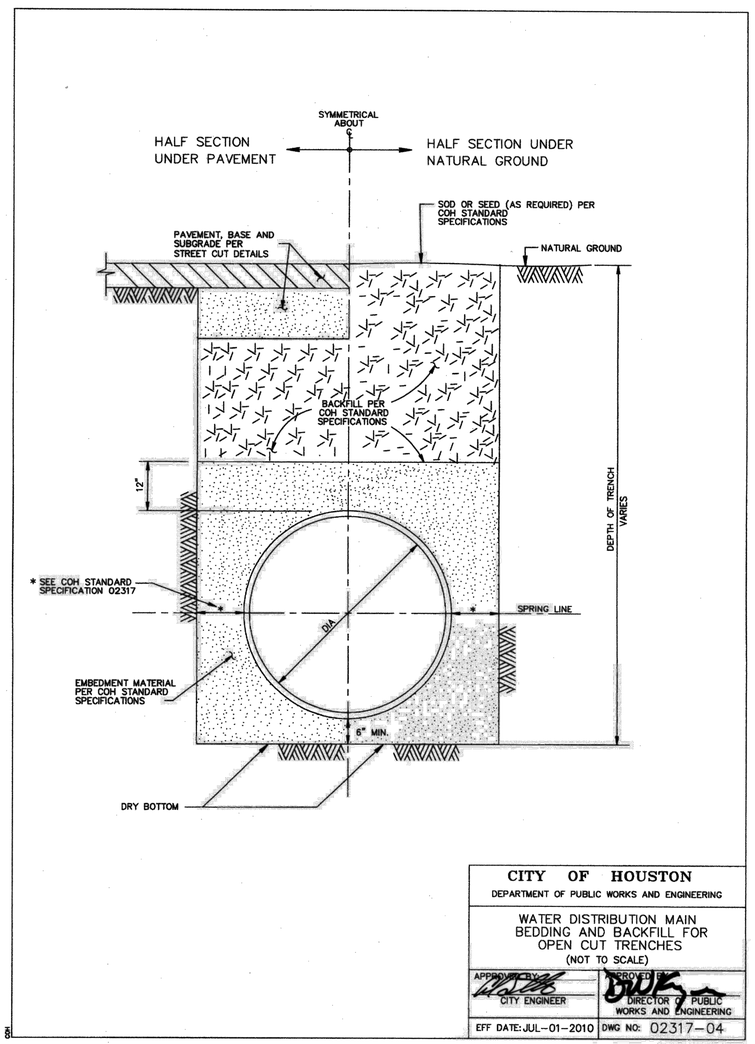


NOTE:
1) APPROXIMATE WEIGHTS
FRAME – 46 LBS
COVER – 10 LBS
2) MATERIAL – GRAY IRON ASTM A48 CL35B

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

VALVE BOX DETAIL
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF. DATE: JULY 01, 2010	DWG. NO: 02085-03



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER DISTRIBUTION MAIN BEDDING AND BACKFILL FOR OPEN CUT TRENCHES
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2010	DWG NO: 02317-04

DT-020

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

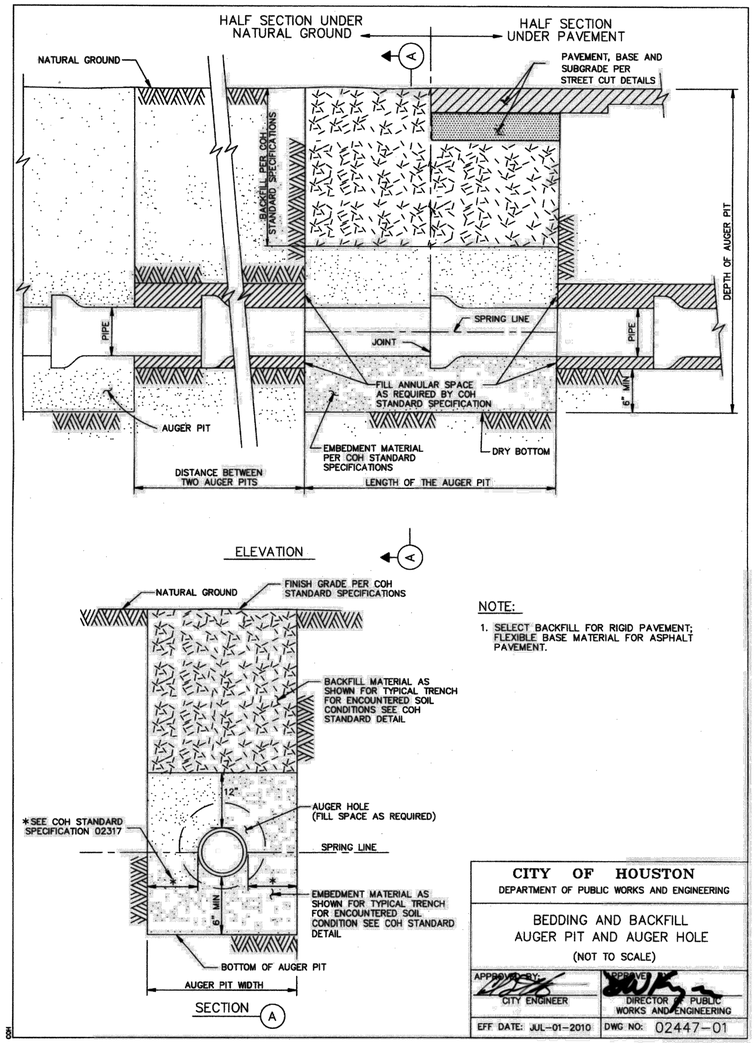
CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 20 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 182 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg



NOTE:

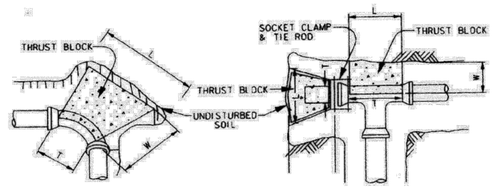
1. SELECT BACKFILL FOR RIGID PAVEMENT; FLEXIBLE BASE MATERIAL FOR ASPHALT PAVEMENT.

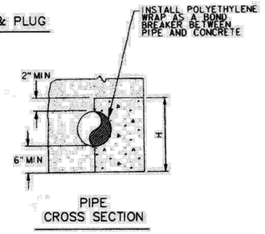
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

BEDDING AND BACKFILL
AUGER PIT AND AUGER HOLE
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JUL-01-2010 | DWG NO: 02447-01





PIPE
CROSS SECTION

MINIMUM BLOCKING DIMENSION IN INCHES

PIPE SIZE	90° BEND				45° BEND				TEE/PLUG			
	W	H	L	T	W	H	L	T	W	H	L	T
4"	6	12	14	10	6	8	11	8	6	10	12	12
6"	8	14	26	12	8	14	14	12	8	14	19	19
8"	10	16	40	16	10	18	20	16	10	18	26	26
10"	12	24	42	18	12	22	25	18	12	24	30	30
12"	14	36	40	30	14	26	30	22	14	26	40	40

CORRECTION FACTORS

SOIL TYPE	SOIL BEARING STRENGTH S_b (lb/ft²)	MULTIPLY "L" AND "H" BY
SOFT CLAY	1000	1.73
SILT	1500	1.41
SANDY SILT	3000	1.00
SAND	4000	0.87
SANDY CLAY	6000	0.71
HARD CLAY	9000	0.58

NOTES:

1. DEPTH "W" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE.
2. BLOCKING MUST BE PLACED AGAINST UNDISTURBED EARTH. WHERE THIS IS NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND UNDISTURBED SOIL MUST BE COMPACTED TO AT LEAST 90% STANDARD PROCTOR DENSITY.
3. PROVIDE CONCRETE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 03315 – CONCRETE FOR UTILITY CONSTRUCTION.
4. BLOCKING DIMENSIONS SHOWN ARE BASED ON 3000 PSI SOIL BEARING STRENGTH AND 125 PSI INTERNAL WATER PRESSURE. FOR OTHER SOIL CONDITIONS, MULTIPLY DIMENSIONS "L" AND "H" BY THE APPROPRIATE CORRECTION FACTOR.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

THRUST BLOCK DETAIL
FOR WATER LINES
(4-INCH TO 12 INCH)
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JULY-01-2010 | DWG NO: 02511-02

DT-021

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

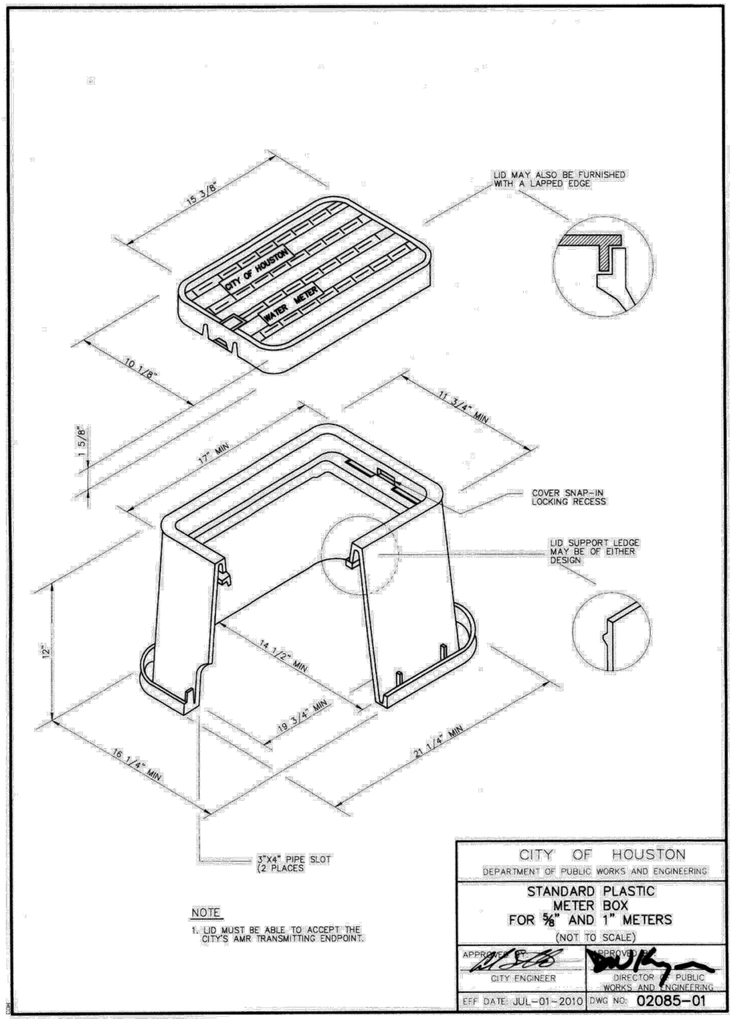
CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 21 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 183 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg



NOTE

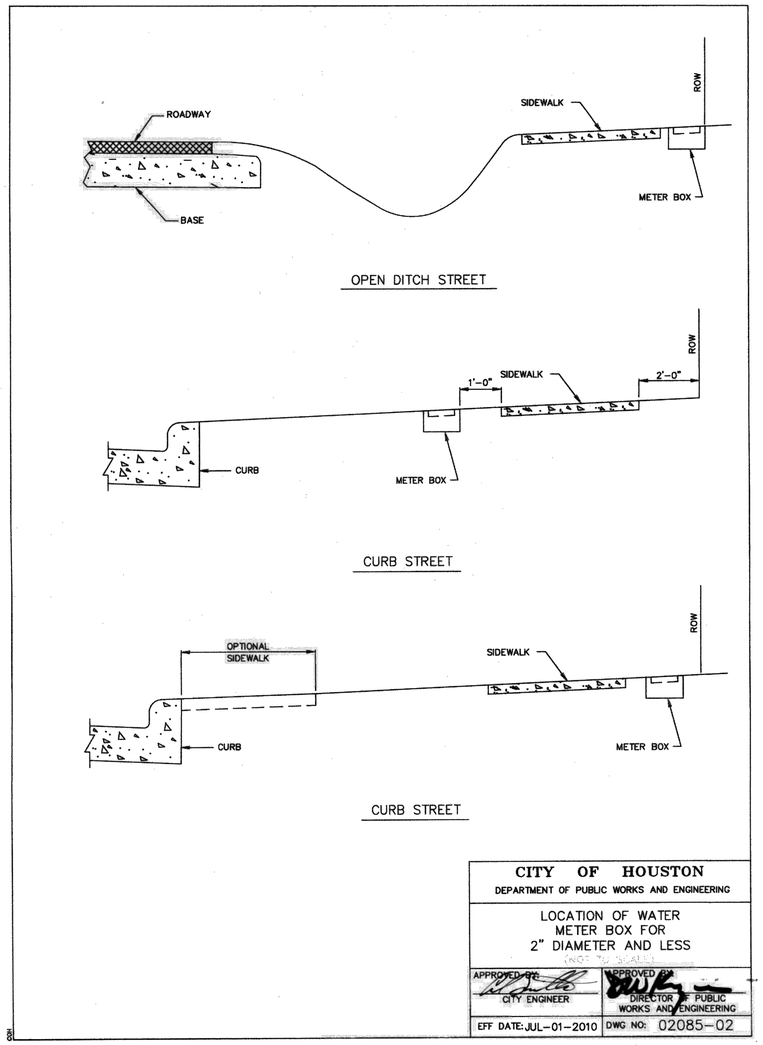
1. LID MUST BE ABLE TO ACCEPT THE CITY'S AMR TRANSMITTING ENDPOINT.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STANDARD PLASTIC METER BOX FOR ⅝" AND 1" METERS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JUL-01-2010 | DWG NO: 02085-01



OPEN DITCH STREET

CURB STREET

CURB STREET

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

LOCATION OF WATER METER BOX FOR 2" DIAMETER AND LESS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JUL-01-2010 | DWG NO: 02085-02

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 22 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 184 OF 192	

60% SUBMITTAL

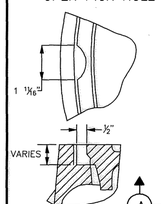
DT-022

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg

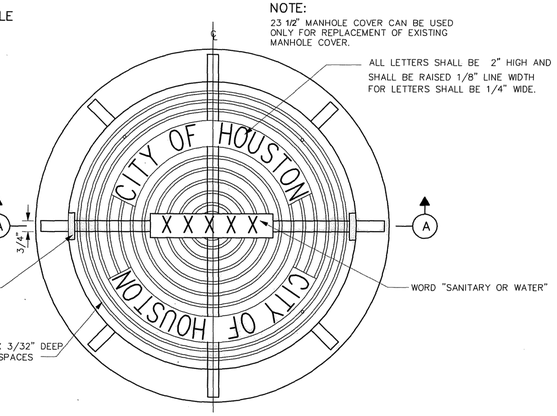
NO.	DATE	REVISION	APP.

TYPE 1
OPEN PICK HOLE



OTHER OPEN PICK HOLES ARE STANDARD ON CERTAIN COVERS.

NOTE:
23 1/2" MANHOLE COVER CAN BE USED ONLY FOR REPLACEMENT OF EXISTING MANHOLE COVER.



ALL LETTERS SHALL BE 2" HIGH AND SHALL BE RAISED 1/8" LINE WIDTH FOR LETTERS SHALL BE 1/4" WIDE.

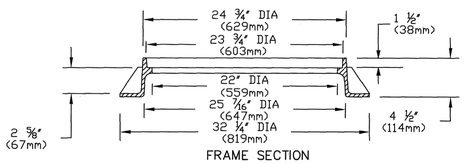
1/2" x 2 1/2" RECESS (SEE SECTION OF COVER THRU RECESS)

WORD "SANITARY OR WATER"

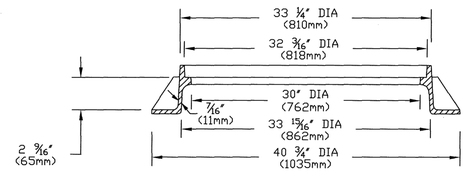
GROOVES 3/16" DIA X 3/32" DEEP APPROX 3/4" TO 1" SPACES

PLAN

23 1/2" MANHOLE COVER WITH FRAME



FRAME SECTION



SECTION (A)

32" MANHOLE COVER WITH FRAME

1) NOTE: APPROXIMATE WEIGHTS.
FRAME- 170 LBS 77 kg
COVER- 270 LBS 123 kg
UNIT- 440 LBS 200 kg
2) MATERIAL- GRAY IRON ASTM A48 CL35B
3) CASTING TO MEET M306 PROOF LOAD SPECIFICATION
4) MODEL V-14240 ASY OR APPROVED EQUAL

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SANITARY SEWER AND WATER MANHOLE FRAME AND COVER

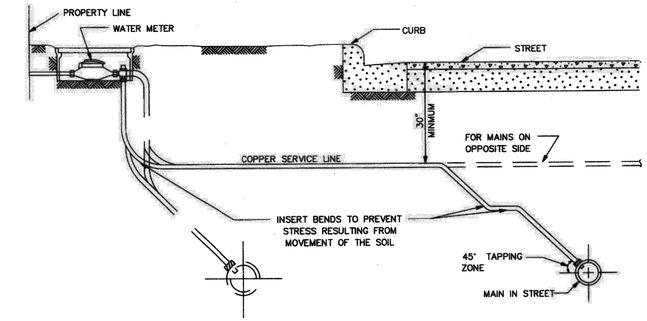
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER
APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

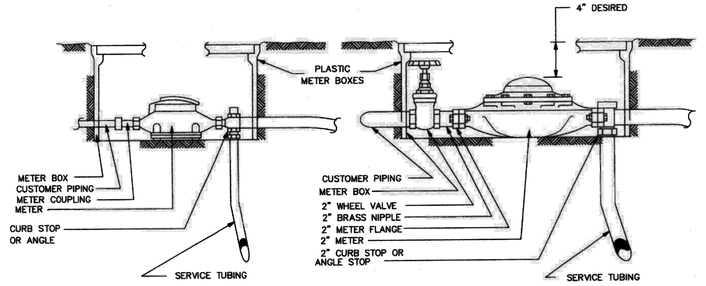
EFF DATE: JUL-01-2016 DWG NO: 02090-01

NOTES:

1 1/2" METER SET IS SAME AS 2" EXCEPT WHEEL VALVE IS NOT REQUIRED.



TYPICAL SECTION SERVICE LINE



5/8", 3/4" AND 1" METER SET

2" METER SET

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

TYPICAL METER SETTINGS

(NOT TO SCALE)

APPROVED BY: CITY ENGINEER
APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JULY-01-2010 DWG NO: 02526-01

DT-023

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

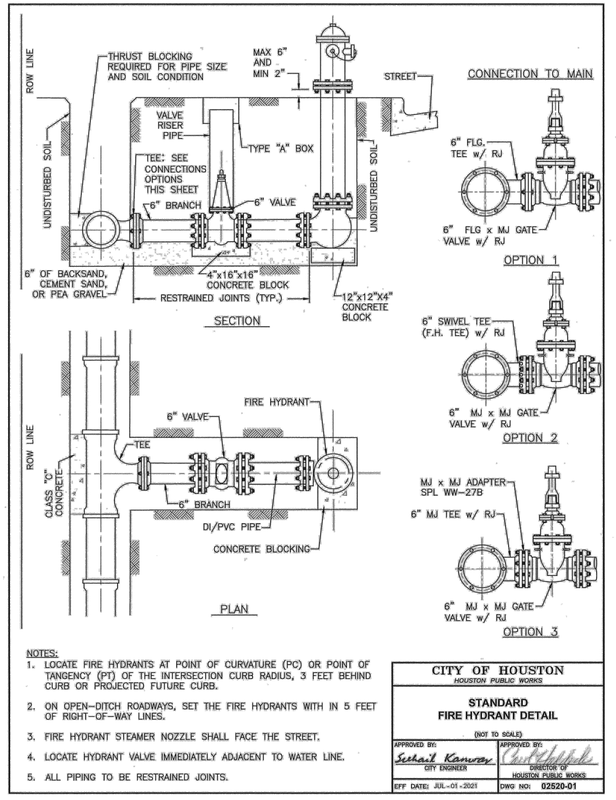
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 23 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 185 OF 192	

60% SUBMITTAL



NOTES:

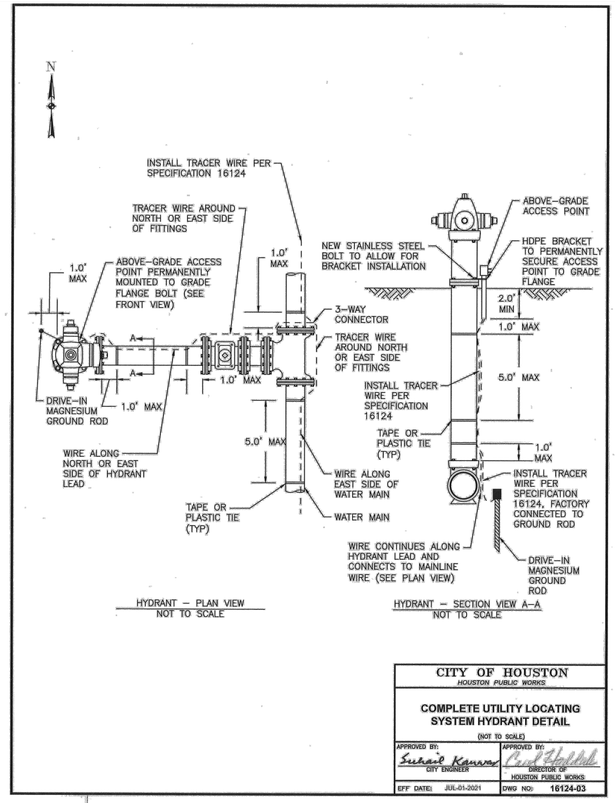
1. LOCATE FIRE HYDRANTS AT POINT OF CURVATURE (PC) OR POINT OF TANGENCY (PT) OF THE INTERSECTION CURB RADIUS, 3 FEET BEHIND CURB OR PROJECTED FUTURE CURB.
2. ON OPEN-DITCH ROADWAYS, SET THE FIRE HYDRANTS WITH IN 5 FEET OF RIGHT-OF-WAY LINES.
3. FIRE HYDRANT STEAMER NOZZLE SHALL FACE THE STREET.
4. LOCATE HYDRANT VALVE IMMEDIATELY ADJACENT TO WATER LINE.
5. ALL PIPING TO BE RESTRAINED JOINTS.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

STANDARD FIRE HYDRANT DETAIL

(NOT TO SCALE)

APPROVED BY:	APPROVED BY:
Suhail Kanuga, CITY ENGINEER	DIRECTOR OF HOUSTON PUBLIC WORKS
EFF DATE: JUL-01-2021	DWG NO: 02520-01



CITY OF HOUSTON
HOUSTON PUBLIC WORKS

COMPLETE UTILITY LOCATING SYSTEM HYDRANT DETAIL

(NOT TO SCALE)

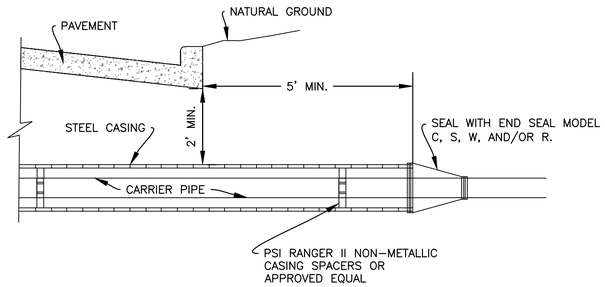
APPROVED BY:	APPROVED BY:
Suhail Kanuga, CITY ENGINEER	DIRECTOR OF HOUSTON PUBLIC WORKS
EFF DATE: JUL-01-2021	DWG NO: 16124-03

NO.	DATE	REVISION	APP.

NOTES:

1. CASING SIZE AND THICKNESS SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE DEPT. OF PUBLIC WORKS AND OTHER PERMITS, AS REQUIRED.
2. MAINTAIN 2 INCHES MINIMUM CLEARANCE BETWEEN THE MAXIMUM OUTSIDE DIAMETER OF CARRIER PIPE AND CASING AT ALL LOCATIONS.
3. DIMENSIONS ARE APPROXIMATE ONLY. CONTRACTOR SHALL INSTALL ADEQUATELY SIZED CASING TO ACCOMMODATE THE CARRIE PIPE.
4. CASING SIZE MAY DIFFER BASED ON PIPE MANUFACTURER USED AND JOINTS REQUIRED. ENGINEER SHALL SUBMIT SEALED DRAWINGS FOR ANY CHANGES.
5. CASING SIZE MAY INCREASE ON LONG BORES AT CONTRACTOR'S DISCRETION.

SCHEDULE OF CASING		
CARRIER PIPE	NOMINAL CASING	MIN. WALL THICKNESS (IN.)
6"	12"	0.250
8"	16"	0.375
10"	18"	0.500
12"	20"	0.500
16"	26"	0.500
18"	26"	0.500
20"	30"	0.500
24"	36"	0.500
30"	48"	0.500

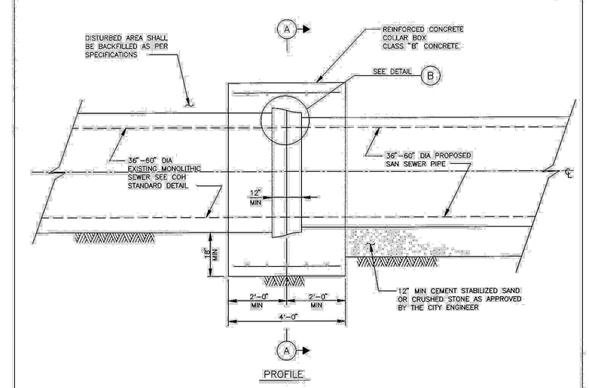


ELEVATION VIEW

SPACING REQUIREMENTS:

1. MAX. 8' BETWEEN SPACERS
2. MAX. 2' FROM CASING PIPE END.
3. MAX. 2' ON EACH SIDE OF BELL OR MACHANICAL JOINT.

WATER LINE ENCASEMENT



NOTES:

1. EXISTING MRC OR RCP SHALL BE SAW CUT AT LOCATION APPROVED BY THE CITY ENGINEER (SMOOTH END).
2. PIPE EDGES SHALL TOUCH EACH OTHER. ALL GAPS IN JOINT SHALL BE FILLED WITH QUICK SETTING NON SHRINK GROUT SEE SPECIFICATION.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER CONCRETE COLLAR DETAIL FOR CONNECTING EXISTING MONOLITHIC SEWERS TO PIPE SEWERS
(NOT TO SCALE)

APPROVED BY:	APPROVED BY:
CITY ENGINEER	DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002	DWG NO: 02531-07

DT-024

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 - AREA 1-BASIN IB043

CIVIL DETAILS SHEET 24 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 186 OF 192	

60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg

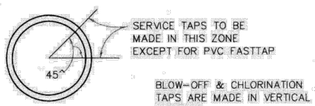
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg

NO.	DATE	REVISION	APP.

PIPE TAPPING SCHEDULE

WATER MAIN TYPE AND DIAMETER	SERVICE SIZE			
	3/4"	1"	1 1/2"	2"
4" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
4" ASBESTOS (EXISTING) CEMENT	WBSS	WBSS	DSS, WBSS	DSS, WBSS
4" PVC (AWWA C900)	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" ASBESTOS (EXISTING) CEMENT	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" PVC (AWWA C900)	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
12" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
12" ASBESTOS (EXISTING) CEMENT	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
12" PVC (AWWA C900)	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
16" AND UP CAST IRON OR DUCTILE IRON	DWBSS	DWBSS	DWBSS	DWBSS
16" AND UP ASBESTOS (EXISTING) CEMENT	DWBSS	DWBSS	DWBSS	DWBSS
16" AND UP PVC (AWWA C900)	DWBSS	DWBSS	DWBSS	DWBSS

DSS – DUAL STRAP SADDLES
WBSS – WIDE BAND STRAP SADDLES
DWBSS – DUAL WIDE BAND STRAP SADDLES



SERVICE TAPS TO BE MADE IN THIS ZONE EXCEPT FOR PVC FASTTAP

BLOW-OFF & CHLORINATION TAPS ARE MADE IN VERTICAL POSITION

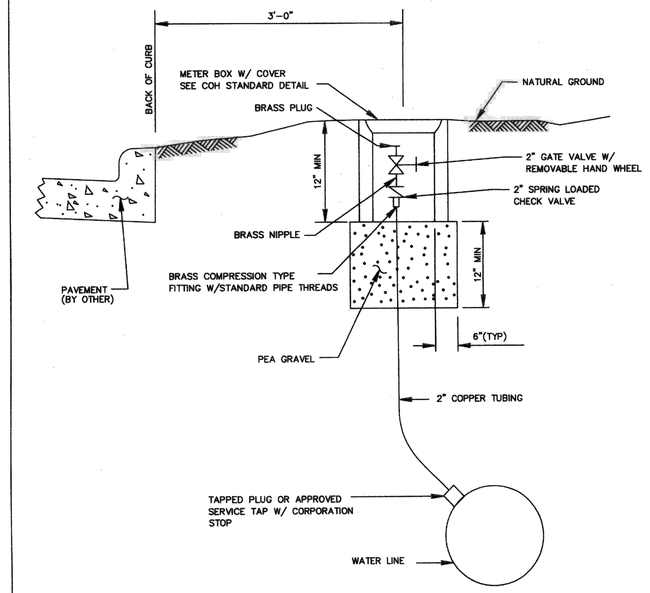
WIDE BAND SINGLE SADDLE OR DUAL SADDLES

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SERVICE TAPS

(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2010	DWG NO: 02512-02



GENERAL NOTES:

1. PLACE GATE VALVE VERTICAL TO GROUND WITH END OF BRASS PLUG 3 INCHES FROM SURFACE
2. PLACE METER BOX CENTER AROUND GATE VALVE BOX WITH LONG SIDE PARALLEL TO VALVE.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

PERMANENT
BLOW-OFF-DETAIL

(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2010	DWG NO: 02524-01

DT-025

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 25 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 187 OF 192	

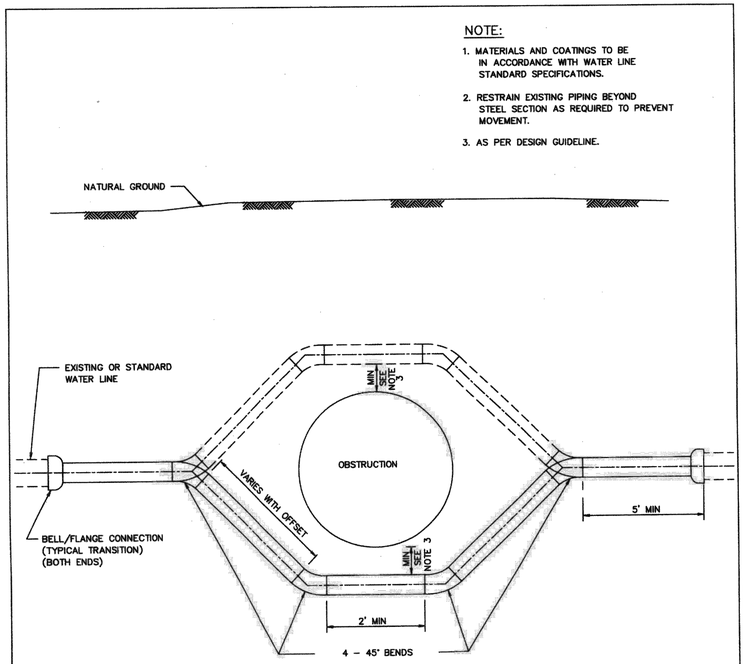
60% SUBMITTAL

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg

NO.	DATE	REVISION	APP.

NOTE:

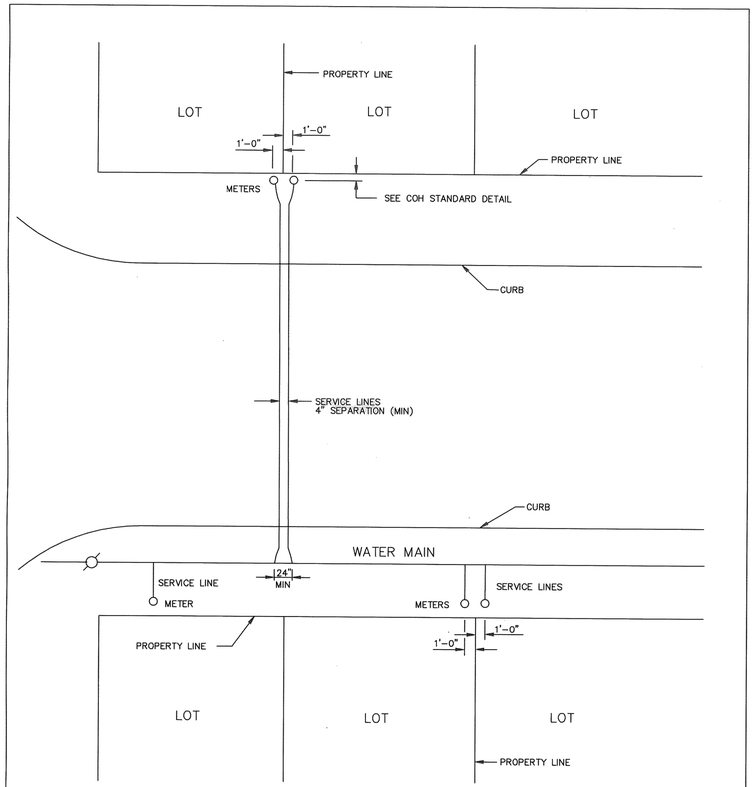
1. MATERIALS AND COATINGS TO BE IN ACCORDANCE WITH WATER LINE STANDARD SPECIFICATIONS.
2. RESTRAIN EXISTING PIPING BEYOND STEEL SECTION AS REQUIRED TO PREVENT MOVEMENT.
3. AS PER DESIGN GUIDELINE.



PIPE OFFSET ALTERNATES

1. DUCTILE IRON PIPE PRESSURE 250 PSI WITH APPROVED RESTRAINED JOINTS.
2. PVC PIPE WITH INTEGRAL RESTRAINED JOINT SYSTEM, OR DUCTILE - IRON RESTRINED JOINT FITTINGS, EPOXY LINED AND COATED. USE 250 PSI AWWA C900 DR 14 FOR PVC RESTRAINED JOINTS.
3. PVC NOT ALLOWED FOR GREATER THAN 20 FT OF COVER OR FOR DIAMETER LARGER THAN 20 IN.
4. USE ONLY DUCTILE IRON AND PVC PRODUCTS LISTED ON OCE DIVISION APPROVED PRODUCTS LIST AND IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS.

CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
TYPICAL STEEL PIPE OFFSET SECTION FOR WATER LINES (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2010	DWG NO: 02511-01



GENERAL NOTES:

1. TWO SERVICE LINES MAY BE INSTALLED IN SAME TRENCH PROVIDING 4" CLEARANCE IS MAINTAINED.
2. ONE METER PER SERVICE LINE

CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
TYPICAL 3/4" THROUGH 2" SERVICE ARRANGEMENTS (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2016	DWG NO: 02512-01

DT-026

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800-873-9429
TBPE REG No. F-474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

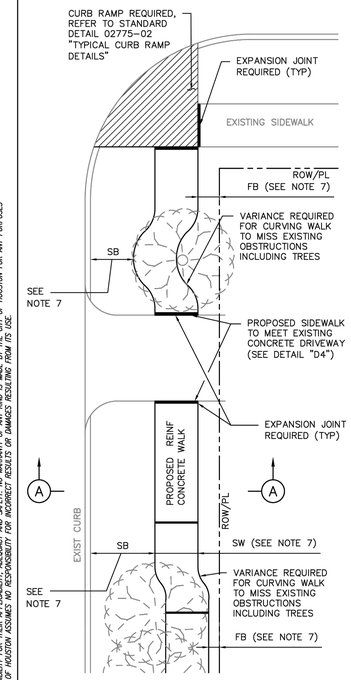
CRMP PACKAGE 6 - AREA 1-BASIN IB043

CIVIL DETAILS SHEET 26 OF 30

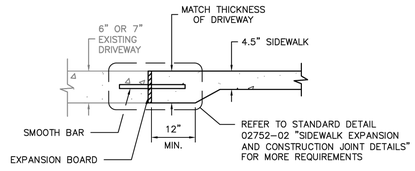
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0031-3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 188 OF 192	

60% SUBMITTAL

DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5



PLAN VIEW

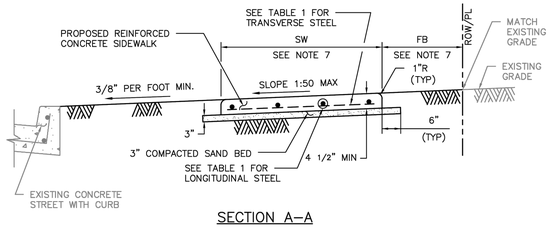


DETAIL D4
DRIVEWAY/SIDEWALK HEADER

TABLE 1

REINFORCING STEEL INFORMATION
FOR 4 ½ " THICK SIDEWALKS
EXPANSION JOINT SPACING = 40 FT
fc' = 3,500 PSI AND fy = 60,000 PSI
REFER TO CONTRACT DRAWINGS FOR SIDEWALKS WIDER THAN 6 FEET.

SIDEWALK THICKNESS (IN)	SIDEWALK WIDTH (FT)	LONGITUDINAL STEEL			TRANSVERSE STEEL #3 BARS SPACING (IN)
		#3 BARS			
		NO. OF BARS	SPACING (IN)	END BAR SPACING (IN)	
4.5	5	3	27	3	48
4.5	6	4	22	3	48



SECTION A–A

NOTES:

1. 6X6 – W2.9XW2.9 WELDED WIRE FABRIC MAY BE USED IN LIEU OF THE REINFORCING STEEL GIVEN IN TABLE 1.
2. REINFORCED CONCRETE SIDEWALKS THRU DRIVEWAYS OPENINGS SHALL BE EITHER 6" THICK OR 7" THICK AS SPECIFIED ON 6" STABILIZED SUBGRADE. FOR THE REINFORCING STEEL REQUIREMENTS, SEE CITY OF HOUSTON STANDARD DETAILS 02754–01A, 02754–01B, 02754–03, AND 02754–04.
3. MAXIMUM SPACING FOR EXPANSION JOINTS SHALL BE 40 FEET.
4. CONTRACTOR SHALL CONSTRUCT SIDEWALK IN A MANNER NOT TO BLOCK THE NATURAL DRAINAGE FROM ADJACENT PROPERTY.
5. ALL RAMPS AND SIDEWALKS/WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOUSTON PUBLIC WORKS STANDARDS, TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THE REQUIREMENTS, THE STRICTEST REQUIREMENTS SHALL GOVERN.
6. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON UNLESS NOTED OTHERWISE.
7. REFER TO CONTRACT DRAWINGS FOR SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TYPICAL SIDEWALK LAYOUT AND DETAILS FOR STREETS WITH CURBS
(SCALE: NOT TO SCALE)

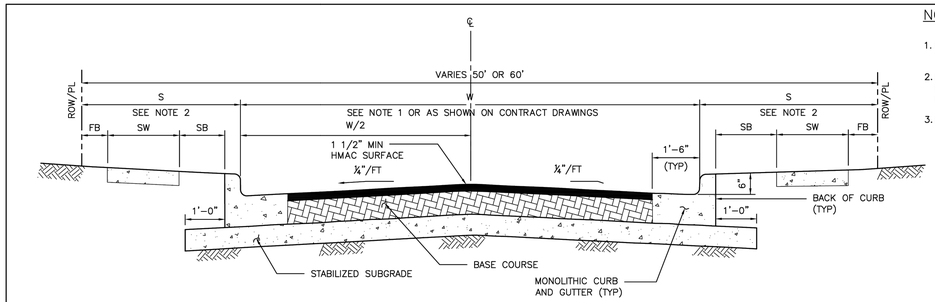
APPROVED BY:

DocuSigned by: Sulail Kanwar — CITY ENGINEER
DocuSigned by: KHANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carol Haddock — DIRECTOR OF HPW

EFF DATE: NOV–27–2023 | DWG NO: 02775–01

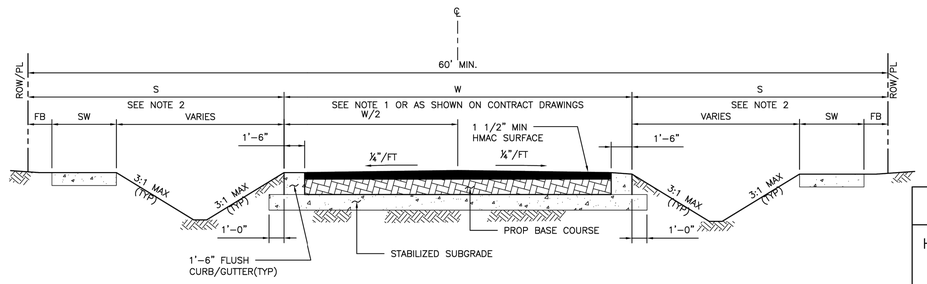
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORING THEIR USE ASSUMES RESPONSIBILITY FOR PROPER DESIGN AND SAFETY OF THE DESIGN. THIS STANDARD IS MADE AVAILABLE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5



HMAC PAVEMENT – CURB & GUTTER SECTION

(NOT APPLICABLE TO ETJ OF CITY OF HOUSTON)



HMAC PAVEMENT – DITCH SECTION

(NOT APPLICABLE TO ETJ OF CITY OF HOUSTON)

NOTES:

1. FOR TRAVEL WAY WIDTH (W) REFER TO IDM SECTION 10.3.03.A.
2. REFER TO CONTRACT DRAWINGS FOR "S" DIMENSION (S), SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.
3. BASE COURSE SHALL BE:
   ALTERNATES:
   A) 6" (MIN) HOT MIX ASPHALTIC CONCRETE.
   B) 8" (MIN) CRUSHED CONCRETE.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

HOT MIX ASPHALTIC CONCRETE PAVEMENT DETAILS
(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Sulail Kanwar — CITY ENGINEER
DocuSigned by: KHANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carol Haddock — DIRECTOR OF HPW

EFF DATE: NOV–27–2023 | DWG NO: 02741–01

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORING THEIR USE ASSUMES RESPONSIBILITY FOR PROPER DESIGN AND SAFETY OF THE DESIGN. THIS STANDARD IS MADE AVAILABLE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474
SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 27 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 189 OF 192	

60% SUBMITTAL

DT–027

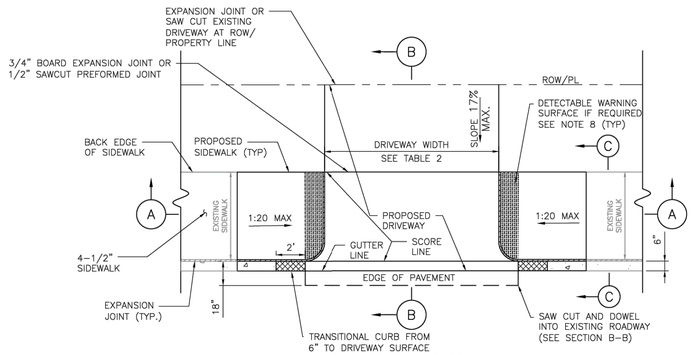
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch San Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300–CIVIL–DETAILS.dwg

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026

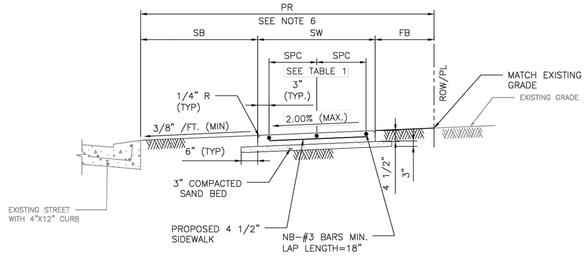
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643-CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300-CIVIL-DETAILS.dwg

DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5

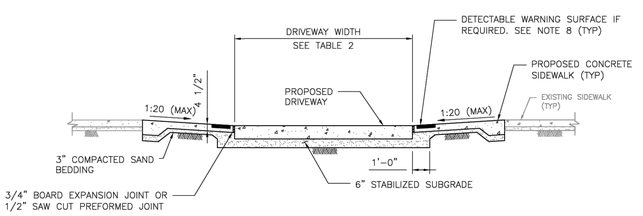
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



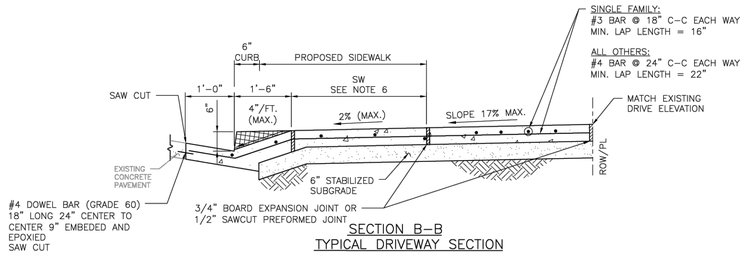
PLAN VIEW – DRIVEWAY



SECTION C–C
TYPICAL SIDEWALK SECTION



SECTION A–A
PROPOSED SIDEWALK THROUGH DRIVEWAY



SECTION B–B
TYPICAL DRIVEWAY SECTION

NOTES:

1. REPAIR, RECONSTRUCTION OR REPLACEMENT OF SIDEWALKS SHALL MEET PERMITTING REQUIREMENTS OF CODE OF ORDINANCES SECTION 40–552.
2. FOR REPAIR, RECONSTRUCTION, OR REPLACEMENT OF EXISTING SIDEWALKS:
   - 2.1. EXISTING SIDEWALKS LESS THAN OR EQUAL TO 20 FEET IN TOTAL LENGTH:
     - 2.1.1. THE PROPOSED SIDEWALK WIDTH WILL BE ALLOWED TO MATCH THE EXISTING SIDEWALK.
   - 2.2. EXISTING SIDEWALKS GREATER THAN 20 FEET IN TOTAL LENGTH:
     - 2.2.1. THE SIDEWALK WIDTH FOR THE ENTIRE PROPERTY WIDTH SHALL BE IMPROVED TO MEET WIDTH REQUIREMENTS ACCORDING TO THE LATEST INFRASTRUCTURE DESIGN MANUAL.
   - 2.3. 20 FOOT TOTAL LENGTH IS DEFINED AS:
     - 2.3.1. UP TO 10 FEET ON BOTH SIDES OF THE DRIVEWAY; OR
     - 2.3.2. UP TO 20 FEET WHEN SIDEWALK AFFECTED IS LOCATED ONLY ON ONE SIDE OF THE DRIVEWAY.
3. PROPOSED SIDEWALKS THAT DO NOT FALL WITHIN THE SCOPE DEFINED IN NOTE 2 SHALL BE DESIGNED ACCORDING TO IDM REQUIREMENTS AND CONSTRUCTED ACCORDING TO THE CONTRACT DRAWINGS.
4. ALL RAMPS AND SIDEWALKS/WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOUSTON PUBLIC WORKS STANDARDS, TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THE REQUIREMENTS, THE STRICTEST REQUIREMENTS SHALL GOVERN.
5. CURB RAMPS THAT ARE STEEPER THAN A 1:20 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.
6. REFER TO CONTRACT DRAWINGS FOR PEDESTRIAN REALM (PR), SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.
7. DRIVEWAYS SHALL BE MINIMUM 6" THICK FOR SINGLE FAMILY AND DUPLEXES. DRIVEWAYS SHALL BE MINIMUM 7" THICK FOR ALL OTHERS (I.E. COMMERCIAL, INDUSTRIAL, ETC.)
8. DETECTABLE WARNING SURFACES:
   - 8.1. SIDEWALK SHALL HAVE A DETECTABLE WARNING SURFACE WHERE SIDEWALK INTERSECTS TYPE C DRIVEWAYS (COMMERCIAL DRIVEWAYS) THAT ARE STOP, YIELD, OR TRAFFIC SIGNAL CONTROLLED.
   - 8.2. DETECTABLE WARNING SURFACES ARE OPTIONAL WHERE SIDEWALKS INTERSECT TYPE A DRIVEWAYS (SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES) OR TYPE B DRIVEWAYS (SHARED ACCESS/SHARED DRIVEWAYS).
   - 8.3. REFER TO STANDARD DETAILS 02775–06 TO 02775–07 FOR DETECTABLE WARNING SURFACE STANDARDS.

TABLE 1

REINFORCING STEEL INFORMATION
FOR 4 ½ " THICK SIDEWALKS
EXPANSION JOINT SPACING = 40 FT
fc' = 3,500 PSI AND fy = 60,000 PSI
REFER TO CONTRACT DRAWINGS FOR SIDEWALKS WIDER THAN 6 FEET.

SIDEWALK THICKNESS (IN)	SIDEWALK WIDTH (FT)	LONGITUDINAL STEEL #3 BARS			TRANSVERSE STEEL #3 BARS SPACING (IN)
		NO. OF BARS "NB"	SPACING "SPC" (IN)	END BAR SPACING (IN)	
4.5	5	3	27	3	48
4.5	6	4	22	3	48

TABLE 2

DRIVEWAY DESIGN CRITERIA (1)(2)

TRAFFIC TYPE	TYPE A DRIVEWAY (FOR SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES)				TYPE B DRIVEWAY (SHARED ACCESS/SHARED DRIVEWAY)				TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)			
	WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
ONE–WAY	10	12	4	10	12(5)	16(5)	4(5)	10(5)	15	20	10	20
TWO–WAY	10(3)	24(4)	4	10	16(6)	24	4	10	24	35	10	20

(1) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTICLE 15.2.07.C.1.F FOR DRIVEWAYS THAT REQUIRE A VEHICLE SWEPT PATH ANALYSIS.
(2) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTCILES 15.2.07.C.1.G.(1) AND 15.2.07.C.1.G.(2) FOR TYPE 1 PAE AND TYPE 2 PAE REQUIREMENTS.
(3) THE MINIMUM WIDTH FOR JOINT ACCESS DRIVEWAY IS 12 FT.
(4) REFER TO CHAPTER 42 OF THE CODE OF ORDINANCES FOR DRIVEWAY WIDTHS FOR NARROW LOTS.
(5) ONLY MURS AND COURTYARD STYLE DEVELOPMENTS ON CORNER LOTS CAN HAVE ONE–WAY DRIVEWAYS.
(6) REFER TO CHAPTER 42, SECTION 42–146 OF THE CODE OF ORDINANCES FOR EXCEPTIONS TO THE MINIMUM DRIVEWAY WIDTH FOR SHARED DRIVEWAYS.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulaal Kanwar	DocuSigned by: LHANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02754–04

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

PROPOSED SIDEWALK THROUGH DRIVEWAY WITH MINIMAL ELEVATION DIFFERENCE

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DT–028

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

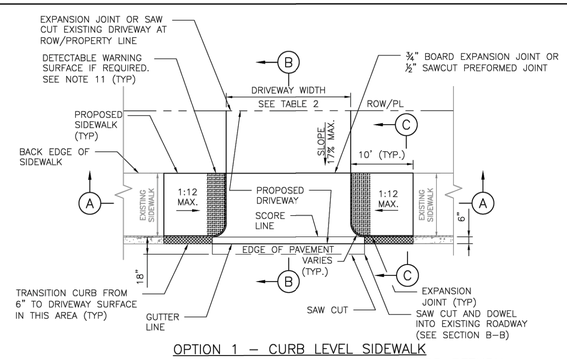
CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 28 OF 30

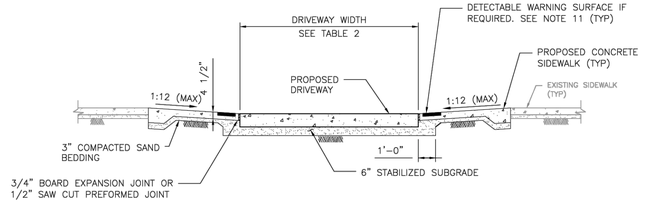
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 190 OF 192	

60% SUBMITTAL

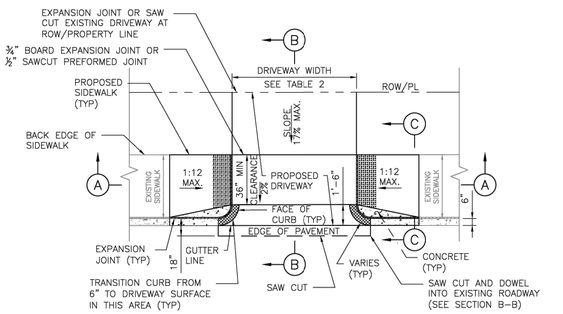
DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B86D5



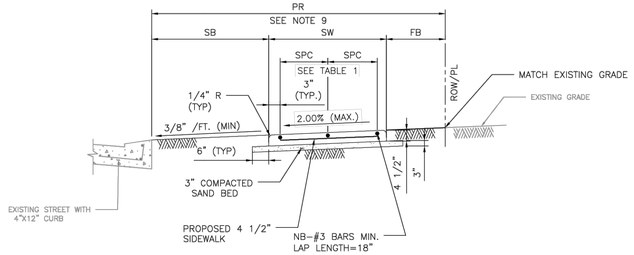
OPTION 1 – CURB LEVEL SIDEWALK
PLAN VIEW – DRIVEWAY WITHOUT CURB AT CURB RETURN



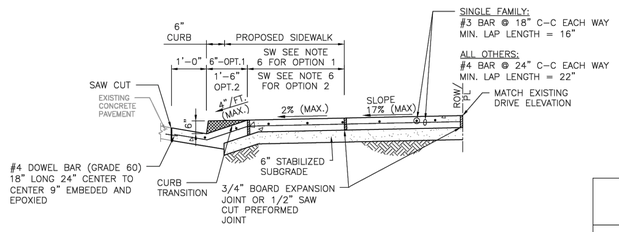
SECTION A–A
PROPOSED SIDEWALK THROUGH DRIVEWAY



OPTION 2 – CURB LEVEL SIDEWALK
PLAN VIEW – DRIVEWAY WITH CURB AT CURB RETURN



SECTION C–C
TYPICAL SIDEWALK SECTION



SECTION B–B
TYPICAL DRIVEWAY SECTION THROUGH DRIVEWAY

TABLE 1

REINFORCING STEEL INFORMATION
FOR 4 ½ " THICK SIDEWALKS
EXPANSION JOINT SPACING = 40 FT
f'_c = 3,500 PSI AND f_y = 60,000 PSI
REFER TO CONTRACT DRAWINGS FOR SIDEWALKS WIDER THAN 6 FEET.

SIDEWALK THICKNESS (IN)	SIDEWALK WIDTH (FT)	LONGITUDINAL STEEL			TRANSVERSE STEEL #3 BARS SPACING (IN)
		#3 BARS			
		NO. OF BARS "NB"	SPACING "SPC" (IN)	END BAR SPACING (IN)	
4.5	5	3	27	3	48
4.5	6	4	22	3	48

TABLE 2

DRIVEWAY DESIGN CRITERIA (1)(2)

TRAFFIC TYPE	TYPE A DRIVEWAY (FOR SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES)				TYPE B DRIVEWAY (SHARED ACCESS/SHARED DRIVEWAY)				TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)			
	WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
ONE–WAY	10	12	4	10	12(5)	16(5)	4(5)	10(5)	15	20	10	20
TWO–WAY	10(3)	24(4)	4	10	16(6)	24	4	10	24	35	10	20

(1) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTICLE 15.2.07.C.1.F FOR DRIVEWAYS THAT REQUIRE A VEHICLE SWEPT PATH ANALYSIS.
(2) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTCILES 15.2.07.C.1.G.(1) AND 15.2.07.C.1.G.(2) FOR TYPE 1 PAE AND TYPE 2 PAE REQUIREMENTS.
(3) THE MINIMUM WIDTH FOR JOINT ACCESS DRIVEWAY IS 12 FT.
(4) REFER TO CHAPTER 42 OF THE CODE OF ORDINANCES FOR DRIVEWAY WIDTHS FOR NARROW LOTS.
(5) ONLY MURS AND COURTYARD STYLE DEVELOPMENTS ON CORNER LOTS CAN HAVE ONE–WAY DRIVEWAYS.
(6) REFER TO CHAPTER 42, SECTION 42–146 OF THE CODE OF ORDINANCES FOR EXCEPTIONS TO THE MINIMUM DRIVEWAY WIDTH FOR SHARED DRIVEWAYS.

NOTES:

1. REPAIR, RECONSTRUCTION OR REPLACEMENT OF SIDEWALKS SHALL MEET PERMITTING REQUIREMENTS OF CODE OF ORDINANCES SECTION 40–552.
2. FOR REPAIR, RECONSTRUCTION, OR REPLACEMENT OF EXISTING SIDEWALKS:
   - 2.1. EXISTING SIDEWALKS LESS THAN OR EQUAL TO 20 FEET IN TOTAL LENGTH:
     - 2.1.1. THE PROPOSED SIDEWALK WIDTH WILL BE ALLOWED TO MATCH THE EXISTING SIDEWALK.
   - 2.2. EXISTING SIDEWALKS GREATER THAN 20 FEET IN TOTAL LENGTH:
     - 2.2.1. THE SIDEWALK WIDTH FOR THE ENTIRE PROPERTY WIDTH SHALL BE IMPROVED TO MEET WIDTH REQUIREMENTS ACCORDING TO THE LATEST INFRASTRUCTURE DESIGN MANUAL.
   - 2.3. 20 FOOT TOTAL LENGTH IS DEFINED AS:
     - 2.3.1. UP TO 10 FEET ON BOTH SIDES OF THE DRIVEWAY; OR
     - 2.3.2. UP TO 20 FEET WHEN SIDEWALK AFFECTED IS LOCATED ONLY ON ONE SIDE OF THE DRIVEWAY.
3. PROPOSED SIDEWALKS THAT DO NOT FALL WITHIN THE SCOPE DEFINED IN NOTE 2 SHALL BE DESIGNED ACCORDING TO IDM REQUIREMENTS AND CONSTRUCTED ACCORDING TO THE CONTRACT DRAWINGS.
4. DRIVEWAY WIDTH VARIES TO MATCH EXISTING DRIVE.
5. DRIVEWAY DETAIL TO PROVIDE FOR SIDEWALK TRANSITION FROM EXISTING BACK OF CURB TO PROPOSED DRIVEWAY EDGE.
6. DRIVEWAY WITH WIDTH >5' @ 2% CROSS SLOPE QUALIFIES AS PASSING SPACE. (SEE OPTION 1 AND OPTION 2 PLANS)
7. ALL RAMPS AND SIDEWALKS/WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOUSTON PUBLIC WORKS STANDARDS, TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THE REQUIREMENTS, THE STRICTEST REQUIREMENTS SHALL GOVERN.
8. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.
9. REFER TO CONTRACT DRAWINGS FOR PEDESTRIAN REALM (PR), SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.
10. DRIVEWAYS SHALL BE MINIMUM 6" THICK FOR SINGLE FAMILY AND DUPLEXES. DRIVEWAYS SHALL BE MINIMUM 7" THICK FOR ALL OTHERS (I.E. COMMERCIAL, INDUSTRIAL, ETC.)
11. DETECTABLE WARNING SURFACES:
    - 11.1. SIDEWALK SHALL HAVE A DETECTABLE WARNING SURFACE WHERE:
      - 11.1.1. SIDEWALK INTERSECTS TYPE C DRIVEWAYS (COMMERCIAL DRIVEWAYS) THAT ARE STOP, YIELD OR TRAFFIC SIGNAL CONTROLLED; OR
      - 11.1.2. SIDEWALK SLOPE IS GREATER THAN 1:20 AND INTERSECTS A TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)
    - 11.2. DETECTABLE WARNING SURFACES ARE OPTIONAL WHERE SIDEWALKS INTERSECT TYPE A DRIVEWAYS (SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES) OR TYPE B DRIVEWAYS (SHARED ACCESS/SHARED DRIVEWAYS).
    - 11.3. REFER TO STANDARD DETAILS 02775–06 TO 02775–07 FOR DETECTABLE WARNING SURFACE STANDARDS.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulat Kanwar	DocuSigned by: HANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02754–03

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

PROPOSED SIDEWALK THROUGH DRIVEWAY WITH EXCESSIVE ELEVATION DIFFERENCE

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NOT TO SCALE

DT–029

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474

SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 29 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 191 OF 192	

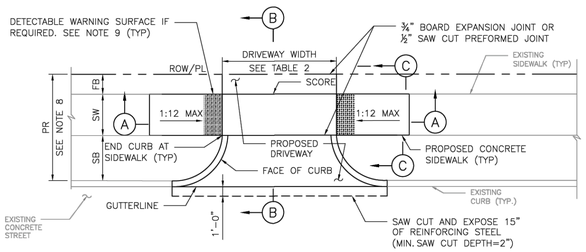
60% SUBMITTAL

NO.	DATE	REVISION	APP.

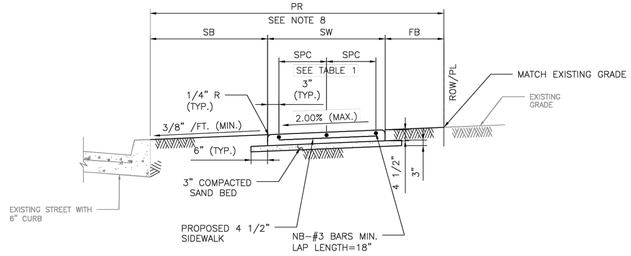
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO ADOPT SAFE PRACTICES AND PROCEDURES APPROPRIATE TO THE SPECIFIC LOCATION. THE DESIGN ENGINEER IS RESPONSIBLE FOR THE CORRECT USE OF THIS STANDARD. USE OF THIS STANDARD IN ANY MANNER IMPLIES AGREEMENT WITH THE FOREGOING AND RELEASES THE CITY OF HOUSTON FROM ANY AND ALL LIABILITY RESULTING FROM SUCH USE. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

PLOT STYLE: COH.ctb PLOTTED: 7/6/2026
FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300–CIVIL–DETAILS.dwg

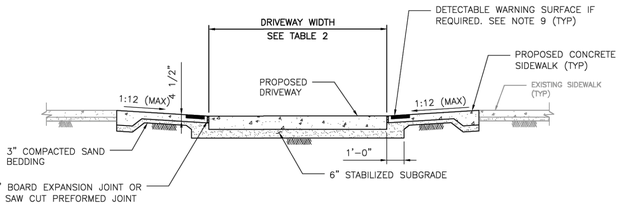
DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5



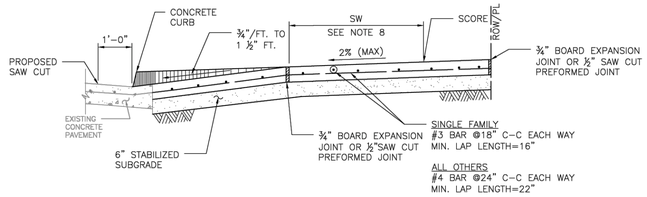
PLAN VIEW
DRIVEWAY



SECTION C–C
TYPICAL SIDEWALK SECTION



SECTION A–A
PROPOSED SIDEWALK THROUGH DRIVEWAY
WITH EXCESSIVE ELEVATION DIFFERENCE
WITH EXISTING SIDEWALK



SECTION B–B
TYPICAL DRIVEWAY SECTION

NOTES:

1. REPAIR, RECONSTRUCTION OR REPLACEMENT OF SIDEWALKS SHALL MEET PERMITTING REQUIREMENTS OF CODE OF ORDINANCES SECTION 40–552.
2. FOR REPAIR, RECONSTRUCTION, OR REPLACEMENT OF EXISTING SIDEWALKS:
   - 2.1. EXISTING SIDEWALKS LESS THAN OR EQUAL TO 20 FEET IN TOTAL LENGTH:
     - 2.1.1. THE PROPOSED SIDEWALK WIDTH WILL BE ALLOWED TO MATCH THE EXISTING SIDEWALK.
   - 2.2. EXISTING SIDEWALKS GREATER THAN 20 FEET IN TOTAL LENGTH:
     - 2.2.1. THE SIDEWALK WIDTH FOR THE ENTIRE PROPERTY WIDTH SHALL BE IMPROVED TO MEET WIDTH REQUIREMENTS ACCORDING TO THE LATEST INFRASTRUCTURE DESIGN MANUAL.
   - 2.3. 20 FOOT TOTAL LENGTH IS DEFINED AS:
     - 2.3.1. UP TO 10 FEET ON BOTH SIDES OF THE DRIVEWAY; OR
     - 2.3.2. UP TO 20 FEET WHEN SIDEWALK AFFECTED IS LOCATED ONLY ON ONE SIDE OF THE DRIVEWAY.
3. ALL JOINTS ALONG THE SIDEWALK SHALL BE CONSTRUCTED ACCORDING TO DRAWING 02752–02 AND SPECIFICATION 02752.
4. DRIVEWAYS SHALL BE MINIMUM 6" THICK FOR SINGLE FAMILY AND DUPLEXES. DRIVEWAYS SHALL BE MINIMUM 7" THICK FOR ALL OTHERS (I.E. COMMERCIAL, INDUSTRIAL, ETC.)
5. DRIVEWAYS AND SIDEWALKS SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE AND INCLUDE 5 1/2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.
6. ALL RAMPS AND SIDEWALKS/WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOUSTON PUBLIC WORKS STANDARDS, TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THE REQUIREMENTS, THE STRICTEST REQUIREMENTS SHALL GOVERN.
7. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.
8. REFER TO CONTRACT DRAWINGS FOR PEDESTRIAN REALM (PR), SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.
9. DETECTABLE WARNING SURFACES:
   - 9.1. SIDEWALK SHALL HAVE A DETECTABLE WARNING SURFACE WHERE:
     - 9.1.1. SIDEWALK INTERSECTS TYPE C DRIVEWAYS (COMMERCIAL DRIVEWAYS) THAT ARE STOP, YIELD, OR TRAFFIC SIGNAL CONTROLLED; OR
     - 9.1.2. SIDEWALK SLOPE IS GREATER THAN 1:20 AND INTERSECTS A TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)
   - 9.2. DETECTABLE WARNING SURFACES ARE OPTIONAL WHERE SIDEWALKS INTERSECT TYPE A DRIVEWAYS (SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES) OR TYPE B DRIVEWAYS (SHARED ACCESS/SHARED DRIVEWAYS).
   - 9.3. REFER TO STANDARD DETAILS 02775–06 TO 02775–07 FOR DETECTABLE WARNING SURFACE STANDARDS.

TABLE 1

REINFORCING STEEL INFORMATION
FOR 4 ½ " THICK SIDEWALKS
EXPANSION JOINT SPACING = 40 FT
fc' = 3,500 PSI AND fy = 60,000 PSI
REFER TO CONTRACT DRAWINGS FOR SIDEWALKS WIDER THAN 6 FEET.

SIDEWALK THICKNESS (IN)	SIDEWALK WIDTH (FT)	LONGITUDINAL STEEL			TRANSVERSE STEEL #3 BARS SPACING (IN)
		#3 BARS			
		NO. OF BARS "NB"	SPACING "SPC" (IN)	END BAR SPACING (IN)	
4.5	5	3	27	3	48
4.5	6	4	22	3	48

TABLE 2

DRIVEWAY DESIGN CRITERIA (1)(2)

TRAFFIC TYPE	TYPE A DRIVEWAY (FOR SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES)				TYPE B DRIVEWAY (SHARED ACCESS/SHARED DRIVEWAY)				TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)			
	WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
ONE–WAY	10	12	4	10	12(5)	16(5)	4(5)	10(5)	15	20	10	20
TWO–WAY	10(3)	24(4)	4	10	16(6)	24	4	10	24	35	10	20

(1) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTICLE 15.2.07.C.1.F FOR DRIVEWAYS THAT REQUIRE A VEHICLE SWEPT PATH ANALYSIS.
(2) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTCILES 15.2.07.C.1.G.(1) AND 15.2.07.C.1.G.(2) FOR TYPE 1 PAE AND TYPE 2 PAE REQUIREMENTS.
(3) THE MINIMUM WIDTH FOR JOINT ACCESS DRIVEWAY IS 12 FT.
(4) REFER TO CHAPTER 42 OF THE CODE OF ORDINANCES FOR DRIVEWAY WIDTHS FOR NARROW LOTS.
(5) ONLY MURS AND COURTYARD STYLE DEVELOPMENTS ON CORNER LOTS CAN HAVE ONE–WAY DRIVEWAYS.
(6) REFER TO CHAPTER 42, SECTION 42–146 OF THE CODE OF ORDINANCES FOR EXCEPTIONS TO THE MINIMUM DRIVEWAY WIDTH FOR SHARED DRIVEWAYS.

APPROVED BY:	APPROVED BY:
DocuSigned by: Suhail Kanwar	DocuSigned by: KHANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carol Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02754–01B

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

DRIVEWAY DETAIL WITH 6" CURBED STREETS

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DT–030

NO.	DATE	REVISION	APP.

AtkinsRéalis
ATKINSREALIS USA INC.
920 MEMORIAL CITY WAY,
STE 400 HOUSTON, TX 77024
TEL: 800–873–9429
TBPE REG No. F–474
SURVEYED BY:
FB NO.

DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.
ROEL E. HUERTA, PE
116890
TEXAS SERIAL NO.
7/9/2026
DATE

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 6 – AREA 1–BASIN IB043

CIVIL DETAILS SHEET 30 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0031–3	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 192 OF 192	

60% SUBMITTAL

DISCLAIMER:
THE USER OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

FILE PATH: C:\Users\PAUL7345\DC\ACCDocs\AtkinsRéalis EDPM\100117643–CRMP 84 Inch Son Sewer Pkg 6\Project Files\01 DELIVER WORK\CIVIL\DR\300–CIVIL–DETAILS.dwg
PLOT STYLE: COH.ctb PLOTTED: 7/6/2026