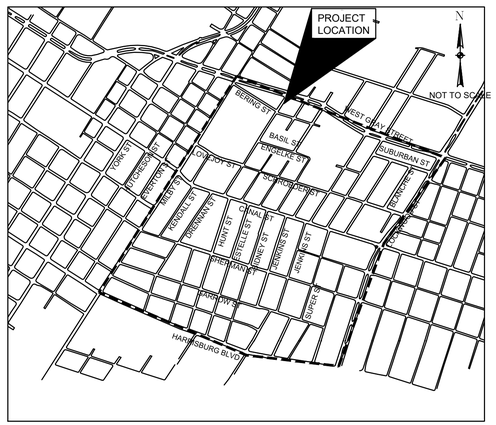
CITY OF HOUSTON
HOUSTON PUBLIC WORKS
CAPITAL PROJECTS
WATER LINE REPLACEMENT IN SECOND WARD AREA
(90% SUBMITTAL)

WBS NO. S-000035-0270-4

LOCATION MAP



VICINITY MAP
KEY MAP NO 494- N,P,S,T
GIMS MAP NO 5456A,
5456B, 5457C, 5457D
COUNCIL DISTRICT H

TDLR EABPR _____

MAYOR
JOHN WHITMIRE

CONTROLLER
CHRIS HOLLINS

DISTRICT
COUNCIL MEMBERS

AMY PECK — DISTRICT A
TARSHA JACKSON — DISTRICT B
ABBIE KAMIN — 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
LETITIA PLUMMER — POSITION 4
SALLIE ALCORN — POSITION 5

NO.	DATE	REVISION	APP.
3	MM/DD/YY	BRIEF DESCRIPTION	XXX
2	MM/DD/YY	BRIEF DESCRIPTION	XXX
1	MM/DD/YY	BRIEF DESCRIPTION	XXX

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

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PARKS–FORESTRY DEPT.

METRO

HOUSTON WATER

TRANSPORTATION & DRAINAGE OPERATIONS

CAPITAL PROJECTS

SURVEY

CITY ENGINEER DATE

DIRECTOR OF HOUSTON PUBLIC WORKS DATE

SHEET NO 1 OF 275 SHEETS

FOR CITY OF HOUSTON USE ONLY

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DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

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ABBREVIATIONS

&	AND
@	AT
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ACI	AMERICAN CONCRETE INSTITUTE
ABAND	ABANDONED
ACP	ASPHALT CONCRETE PAVEMENT
ADJ	ADJUSTMENT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
APTS	APARTMENTS
ASB	ASPHALT STABILIZED BASE
ASPH	ASPHALT
ASSY	ASSEMBLY
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATTY	ATTORNEY
AWWA	AMERICAN WATER WORKS ASSOCIATION
AVE	AVENUE
B	BORING
B/C	BACK OF CURB
BL	BASE LINE
BEG	BEGINNING
BLDG	BUILDING
BLVD	BOULIVARD
BND	BOUND
BOTT	BOTTOM
BR	BRICK
C	CUT, CONDUIT
C TO C, C–C OR C. C.	CENTER TO CENTER
CA	CONTROL AIR
CCW	COUNTER CLOCKWISE
CEM	CEMENT
C.O.	CLEAN OUT
CI	CAST IRON
CIP	CAST IRON PIPE
CITY	CITY OF HOUSTON
$\underline{\text{CL}}$ OR C	CENTERLINE
CLEAR OR CLR	CLEARANCE
CMP	CORRUGATED METAL PIPE
CNTRL	CONTROL
CO	COMPANY
COH	CITY OF HOUSTON
CONC	CONCRETE
COND	CONDUIT
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
C.R.S.I.	CONCRETE REINFORCING STEEL INSTITUTE
CSB	CEMENT STABILIZED BASE
CTB	CONCRETE TRAFFIC BARRIER
CV	CHECK VALVE
CW	CLOCKWISE
D	DEGREE OF CURVE (ARC) DEFINITION
DEF	DEFORMED
DEP	DEPTH
DET.	DETAIL
DIA OR ø	DIAMETER
DIP	DUCTILE IRON PIPE
DIST	DISTANCE
DMJ	DOUBLE MECHANICAL JOINT
DOTT	DIRECTOR OF TRAFFIC & TRANSPORTATION
DR	DRAIN LINE
DR	DRIVE
DS	DRILLED SHAFT
D/W	DRIVEWAY
DWG	DRAWING
E	EAST
EA	EACH
EDB	ELECTRIC DUCT BANK
EFF	EFFLUENT
ELEC	ELECTRIC
ELEV OR EL	ELEVATION
EMB	EMBANKMENT
E.O.P.	EDGE OF PAVEMENT
E.R.	END OF RETURN
EWEF	EACH WAY EACH FACE
EXC	EXCAVATION
EX	EXISTING
EP	EXPANSION
EQ	EQUAL(LY)
F	FRIDAY
F.B.	FIELD BOOK
F.F. OR F–F	FACE TO FACE
FH	FIRE HYDRANT
FJ	FLEXIBLE JOINTS
F/L	FLOW LINE
FLG	FLANGE(ED)
FM	FORCE MAIN
FT	FEET
FTG	FOOTING
FWY	FREEWAY
GA	GAUGE
GAL.	GALLON
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
H.C.F.C.D.	HARRIS COUNTY FLOOD CONTROL DISTRICT
H.C.M.R.	HARRIS COUNTY MAP RECORD
HMAC	HOT MIX ASPHALT CONCRETE
HP	HIGH PRESSURE (GAS LINE), HORSE POWER
H.P.	HIGH POINT
HP	HORSE POWER
HL&P OR HLP	HOUSTON LIGHTING & POWER CO.
HORIZ	HORIZONTAL
HWY	HIGHWAY
I	TOTAL INTERSECTION ANGLE
ID	INSIDE DIAMETER
INC	INCORPORATED
INV OR IE	INVERT ELEVATION
IP	IRON PIPE OR INTERMEDIATE PRESSURE
IR	IRON ROD
I.R.	INSIDE RADIUS
JT	JOINT
LBS	POUNDS
LN	LANE
LD	LEAD
L.P.	LOW POINT
LS	LUMP SUM
L, OR LC	LENGTH OF CIRCULAR CURVE
LF	LINEAL FEET
LRST	LEAKING REGISTERED STORAGE TANK
LT	LEFT OR LIGHT
M	MONDAY
MAT'L	MATERIAL
MAX	MAXIMUM
M.C.C.	MOTOR CONTROL CENTER
MFG	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MON	MONUMENT
MP	MILE POST
MRC	MONOLITHIC REINFORCED CONCRETE SEWER
MTD	MULTI TILE DUCT
MTL	MATERIAL
MTP	MATCH TOP PAVEMENT
MW	MONITORING WELL
N	NORTH
NA	NOT APPLICABLE
N.E.R.	NORTH END OF RETURN
NG	NATURAL GROUND
N.T.S.	NOT TO SCALE
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NW	NORTH WEST
OC	ON CENTER
OD	OUTSIDE DIAMETER
O/E	OVERHEAD ELECTRIC
OH	OVERHEAD
OPNG	OPENING
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PG	PAGE
P/L	PROPERTY LINE OR PIPE LINE
PC	POINT OF CURVATURE
PC OR POC	POINT ON CURVE
PCC	PORTLAND CEMENT CONCRETE OR POINT OF COMPOUND
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POT	POINT ON TANGENT
PP	POWER POLE
PL	PROPERTY LINE OR PLACES
PROP	PROPOSED
PRP	PRESSURE RATED PIPE
PS	PUMP STATION
PSI	POUNDS PER SQUARE INCH
PT	POINT OR POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE OR POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PW	PLANT WATER OR POTABLE WATER
Ⓡ	INFORMATION FROM RECORD DRAWINGS
R	RADIUS OF CIRCULAR CURVE
RCP	REINFORCED CONCRETE PIPE
RCB	REINFORCED CONCRETE BOX
RD	ROAD
RE OR REF	REFERENCE
REINF OR REIN	REINFORCED, REINFORCING OR REINFORCEMENT
REM	REMOVABLE
REQD	REQUIRED
RJ	RESTRAINED JOINTS
ROW	RIGHT OF WAY
RPM	ROTATIONS PER MINUTE
RR	RAIL ROAD
R/R	RAILROAD
RT	RIGHT
S	SLOPE, SOUGH
SAN	SANITARY
SC	SCUM LINE
SCH	SCHEDULE
SD	STORM DRAIN
S.E.R.	SOUTH END OF RETURN
SEW	SEWER
SF	SQUARE FEET
SG	SLUICE GRATE OR SLIDE GRATE
SH	STATE HIGHWAY
SIG	SIGNAL
SL	SLUDGE
SPC	SPACED OR SPACING
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL OR SANITARY SEWER
ST	SAINT OR STREET
STA	STATION ALONG BASELINE OR CENTERLINE
STAL	STABILIZED
STD	STANDARD
STL	STEEL
STM	STORM
SWBT	SOUTHWESTERN BELL TELEPHONE COMPANY
S/W	SIDEWALK
SY	SQUARE YARD
SYMM	SYMMETRICAL
T	TANGENT
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB
TEMP	TEMPORARY
TDOT	TEXAS DEPARTMENT OF TRANSPORTATION
TG	TOP OF GRATE
THK.	THICK
T.M.U.T.C.D.	TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
TOC	TOP OF CONCRETE
TRAF OR TRF	TRAFFIC
TRV OR TRAV	TRAVERSE
TY	TYPE
TYP	TYPICAL
USC&GS	UNITED STATES COASTAL & GEODETIC SURVEY
UTIL	UTILITY
V	VERTICAL
VAR	VARIABLE
VCP	VITRIFIED CLAY PIPE
VOL	VOLUME
VP	VERTICAL PANEL
W	WEST
W/	WITH
WL	WATER LINE
SW	WATER STOP
W.S. LINE	WASTE SLUDGE LINE
WWF	WOVEN WIRE FABRIC
WWTP	WASTEWATER TREATMENT PLANT
XING OR X–ING	CROSSING
YELL	YELLOW

NO.	DATE	REVISION	APP.

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

ABBREVIATIONS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 4 OF 275	

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FILE PATH: O:\2019\395062\Drawings\SHEETS\004-SYMBOLS.dwg

EXISTING PLAN VIEW

- WATER METER
- WATER VALVE (GATE)
- WATER VALVE (BUTTERFLY)
- WATER VALVE (IRRIGATION CONTROL)
- WATER VALVE ABANDONDED
- FIRE HYDRANT/FLUSHING VALVE
- TAPPING SLEEVE & VALVE
- REDUCER
- ROUND CONNECTION
- SANITARY SEWER CLEANOUT & MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER INLETS
- CULVERT PIPE AND HEADWALL
- TOP OF CURB ELEVATION
- GUTTER ELEVATION
- TOP OF PAVEMENT ELEVATION
- CONTOUR LINE
- 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
- CENTERPOINT ENERGY AERIAL LINE
- CENTERPOINT ENERGY UNDERGROUND LINE
- GAS LINE
- MISC UNDERGROUND LINE
- PIPELINE OR WESTERN UNION CONDUIT
- AT&T CONDUIT
- CABLE TV
- RAILROAD LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- SANITARY SEWER FORCE MAIN
- RECLAIMED WATER LINE
- NON-POTABLE WATER LINE
- GAS METER
- GAS VALVE
- MISC UNDERGROUND PIPELINE LABLE

PROPOSED PLAN VIEW

- WATER METER
- WATER VALVE (GATE)
- WATER VALVE (BUTTERFLY)
- FIRE HYDRANT/FLUSHING VALVE
- TAPPING SLEEVE & VALVE
- REDUCER
- ROUND CONNECTION
- SANITARY SEWER CLEANOUT & MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER INLETS
- CULVERT PIPE AND HEADWALL
- TOP OF CURB ELEVATION
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- CONTOUR LINE
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- PROPERTY LINE
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- FENCE LINE, WOOD
- FENCE LINE, CHAIN LINK
- FENCE LINE, BARBED WIRE
- FENCE LINE, HOG WIRE
- EDGE OF CONCRETE
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- CENTERPOINT ENERGY UNDERGROUND LINE
- GAS LINE
- MISC UNDERGROUND LINE
- PIPELINE OR WESTERN UNION CONDUIT
- AT&T CONDUIT
- CABLE TV
- MATCH LINE
- RAILROAD LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- SANITARY SEWER FORCE MAIN
- RECLAIMED WATER LINE
- NON-POTABLE WATER LINE
- GAS METER
- GAS VALVE
- MISC UNDERGROUND PIPELINE LABLE

EXISTING PLAN VIEW

- PAVING HEADER
- BUILDING, RESIDENTIAL
- BUILDING, COMMERCIAL
- TREE
- HEDGE
- IRON PIPE OR IRON ROD MONUMENT
- POINT OF INTERSECTION (PI)
- POINT OF CURVE (PC)
- POINT OF TANGENCY (PT)
- POWER POLE
- POWER POLE W/DOWN GUY

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
- SOUTH OR WEST CULVERT
- CENTERLINE OF ROW
- CENTERPOINT ENERGY CONDUIT
- GAS LINE
- WESTERN UNION
- AT&T CONDUIT
- WATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- SANITARY SEWER FORCE MAIN
- RECLAIMED WATER LINE
- NON-POTABLE WATER LINE
- CENTERPOINT ENERGY MANHOLE
- AT&T MANHOLE
- WATER LINE MANHOLE
- SANITARY SEWER MANHOLE & CLEANOUT
- STORM SEWER MANHOLE
- STORM SEWER INLET

PROPOSED PLAN VIEW

- PAVING HEADER
- BUILDING, RESIDENTIAL
- BUILDING, COMMERCIAL
- TREE
- HEDGE
- IRON PIPE OR IRON ROD MONUMENT
- POINT OF INTERSECTION (PI)
- POINT OF CURVE (PC)
- POINT OF TANGENCY (PT)
- POWER POLE
- POWER POLE W/DOWN GUY

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
- SOUTH OR WEST CULVERT
- CENTERLINE OF ROW
- CENTERPOINT ENERGY CONDUIT
- GAS LINE
- WESTERN UNION
- AT&T CONDUIT
- WATER LINE
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- STORM SEWER LINE
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- AT&T MANHOLE
- WATER LINE MANHOLE
- SANITARY SEWER MANHOLE & CLEANOUT
- STORM SEWER MANHOLE
- STORM SEWER INLET

MISC STANDARD ELEMENTS

- COH NORTH ARROW
- COH BAR SCALE (0' 10' 20' 40'; SCALE: 1"=20')
- REVISION CLOUD/DELTA
- KEY NOTE CALLOUT

APP. | REVISION | NO. | DATE

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SYMBOLS

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NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 5 OF 275	

90% SUBMITTAL

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FILE PATH: O:\2019\395062\Drawings\SHEETS\005 & 006 - GENERAL NOTES.dwg

GENERAL NOTES

1. CONSTRUCT WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING IN ACCORDANCE WITH THE LATEST EDITION OF THE PUBLICATIONS STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING, AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING PUBLISHED BY HOUSTON PUBLIC WORKS.
2. 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.
3. 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.
4. 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 HOUSTON PUBLIC WORKS, STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEM, WATER LINES, STORM DRAINAGE, AND STREET PAVING AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING, REFERENCED ABOVE, AT NO ADDITIONAL COST.
5. 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.
6. 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.
7. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION.
8. CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
9. CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS AND RECORD AS-BUILT CONDITIONS DURING CONSTRUCTION. THESE REDLINE MARKED UP 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.
13. WATERLINE ITEMS AND QUANTITIES INCLUDE THE FOLLOWING: DIP, RESTRAINED JOINTS, WELDED JOINTS, THRUST BLOCKS, CASING, BENDS, FITTINGS, MANWAYS, PIPE WITHIN LIMITS OF OFFSET SECTION, PIPE WITHIN LIMITS OF POTENTIALLY PETROLEUM CONTAMINATED AREA (PPCA) OR WITHIN LIMITS OF FAULT HAZARD ZONE (FHZ).

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

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.

STREET & BRIDGE NOTES

1. HOUSTON PUBLIC WORKS "STANDARD CONSTRUCTION SPECIFICATIONS" AND "STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING" UNLESS OTHERWISE NOTED AND APPROVED ON THESE PLANS. THE DESIGN IS CONSISTENT WITH THE MINIMUM STANDARDS ESTABLISHED IN THE "INFRASTRUCTURE DESIGN MANUAL" REFERENCED AT: https://www.houstonpermittingcenter.org/media/2276/download
2. 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.
3. UTILITY CONTRACTOR SHALL PROVIDE TEMPORARY SILT BARRIER FENCE ON ALL NON-CURBED INLETS WHICH WILL REMAIN IN PLACE AFTER UNDERGROUND CONTRACT IS COMPLETE.
4. CONTRACTOR SHALL PROVIDE SILT BARRIER FENCE ON ALL STAGE 1 CURB INLETS.
5. 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.
6. 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.
7. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO SATISFACTION OF THE OWNING AUTHORITY.
8. 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.
9. CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG AREAS OF EXCAVATION.
10. CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND STATE OF TEXAS LAWS CONCERNING EXCAVATION, TRENCHING AND SHORING AS SPECIFIED IN CITY OF HOUSTON ORDINANCE #87-1457.
11. WHEEL CHAIR 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.
12. WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE HOUSTON PUBLIC WORKS "STANDARD CONSTRUCTION SPECIFICATIONS" AND "STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS. WATER LINES, STORM DRAINAGE AND STREET PAVING" UNLESS OTHERWISE NOTED AND APPROVED ON THESE PLANS. THE DESIGN SHOULD BE CONSISTENT WITH THE MINIMUM STANDARD ESTABLISHED IN THE DESIGN MANUAL FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORMS DRAINAGE AND STREET PAVING".
13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGES TO EXISTING WATER, WASTEWATER, STORM SEWER AND TRAFFIC SIGNAL CONDUITS, ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE HOUSTON PUBLIC WORKS "STANDARD CONSTRUCTION SPECIFICATIONS" WITH LATEST ADDENDA AND AMENDMENTS THERETO, AT NO COST TO THE CITY OF HOUSTON.
14. 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.
15. 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

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 LANE/SIDEWALK/BICYCLE FACILITY CLOSURE PERMITS FROM TRANSPORTATION & DRAINAGE OPERATIONS (MOBILITY PERMIT SECTION AT WWW.GIMS.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.

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.

WATERLINE NOTES

1. WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CITY OF HOUSTON INFRASTRUCTURE DESIGN MANUAL, STANDARD SPECIFICATION, AND CONSTRUCTION DETAILS.
2. ALL 4" THROUGH 12" WATER LINE TO BE AWWA C-900 PVC DR-18 BLUE PRESSURE RATED WATER MAIN WITH 2" AND SMALLER WATER SERVICE LINE TO BE CONTINUOUS TYPE K COPPER TUBING PER COH STANDARD SPECIFICATION SECTION 02503. ALL 4" THRU 54" DI PIPE WATER LINES SHALL BE AWWA C151 WITH INSIDE LINING WITH AWWA C104 AND DOUBLE WRAPPED WITH 8-MIL POLYETHYLENE SHEETS.
3. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AS NECESSARY TO PREVENT PIPE MOVEMENT. USE RESTRAINED JOINTS WHERE PREVENTING MOVEMENT OF 16" OR GREATER PIPE IS NECESSARY DUE TO THRUST.
4. ALL WATER LINES UNDER PROPOSED OR FUTURE PAVING AND TO A POINT OF ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED IN BANK SAND TO 12" OVER PIPE AND BACKFILLED WITH CEMENT STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE.
5. ALL WATER LINE AND SEWER LINE CROSSINGS SHALL BE CONSTRUCTED PER CITY OF HOUSTON AND TCEQ REGULATIONS.
6. ALL WATER VALVES SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C-500 AND SHALL BE OF THE RESILIENT SEAT TYPE.
7. ALL WATER LINES TO BE DISINFECTED IN CONFORMANCE WITH AWWA C-651 AND THE TEXAS STATE DEPARTMENT OF HEALTH. AT LEAST ONE BACTERIOLOGICAL SAMPLE SHALL BE COLLECTED FOR EVERY 1,000 LINEAR FEET OF WATER LINE AND SHALL BE REPEATED IF CONTAMINATION PERSISTS.
8. ALL BELOW GRADE VALVES SHALL BE GASKETED, HUB-END GATE VALVE WITH A CAST IRON BOX, EXCEPT WHERE FLANGES ARE CALLED OUT ON THE PLANS.
9. 4" THRU 12" FITTINGS SHALL BE CEMENT MORTAR LINED COMPACT DUCTILE IRON PRESSURE FITTINGS PER ANSI A21.53, OR PUSH ON FITTING PER ANSI 121.10 PRESSURE RATED AT 250 PSIG.
10. HYDROSTATIC TESTING: ALL WATER PIPE SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE LATEST CITY OF HOUSTON STANDARD CONSTRUCTION SPECIFICATIONS. TESTED FOR LEAKAGE IN ACCORDANCE WITH THE LATEST CITY OF HOUSTON STANDARD CONSTRUCTION SPECIFICATIONS. TESTS ARE TO BE PERFORMED ON THE ENTIRE FOOTAGE OF WATER PIPE LINE INCLUDED IN THE PROJECT.

WATERLINE NOTES (CON'T)

11. ALL WATER LINES TO HAVE 4' MINIMUM COVER TO FINISHED GRADE AND MINIMUM 12" CLEARANCE TO OTHER UTILITIES AT CROSSING UNLESS OTHERWISE NOTED ON PLANS. ALL WATER LINE INSTALLED OVER 8' DEEP SHALL UTILIZE RESTRAINED JOINT FITTINGS.
12. CONTRACTOR SHALL KEEP WATER PIPE CLEAN AND CAPPED (OR OTHERWISE EFFECTIVELY COVERED) OPEN PIPE ENDS TO EXCLUDE INSECTS, ANIMALS OR OTHER SOURCES OF CONTAMINATION FROM UNFINISHED PIPE LINES AT TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
13. ALL PROPOSED WATER LINE BENDS AND FITTINGS SHOULD BE RESTRAINED JOINTS.

SANITARY SEWERS CONSTRUCTION NOTES

1. ALL SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HOUSTON "STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, STREET PAVING, AND TRAFFIC" AND ALL CURRENT AMENDMENTS THERETO AND 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 SEWERAGE 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 2010 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 SANITARY SEWERS CROSSING WATER LINES WITH A CLEARANCE BETWEEN 12 INCHES AND 9 FEET SHALL HAVE A MINIMUM OF ONE 18' JOINT OF 150 PSI 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 (2002).
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 317.2 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 30 317.2 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'

    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.
16. SUBMIT CCTV OF ALL NEW AND REHABILITATED SANITARY SEWERS INCLUDING VIDEOS OF SANITARY SEWER LATERALS AND MANHOLES ACCORDING TO CITY OF HOUSTON DOCUMENT 02258.
17. CONTRACTOR SHALL BE AWARE THAT EXISTING SANITARY SEWER LEADS MAYBE IN CONFLICT OF PROPOSED STORM STORM SEWER PIPE IF THAT IS THE CASE, THE CONTRACTOR SHALL ADJUST THE EXISTING SERVICE LEAD PER COH DETAIL 02534-03, THE ADJUSTMENT SHALL BE INCIDENTAL TO PAY ITEM 02631, NO EXTRA PAY FOR THIS WORK.

NO.	DATE	REVISION	APP.

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

GENERAL NOTES
(1 OF 2)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 6 OF 275	

90% SUBMITTAL

STORM CONSTRUCTION NOTES

1. STORM SEWER SHALL BE REINFORCED CONCRETE PIPE (C-76, CLASS III), AND SHALL BE INSTALLED, BEDDED, AND BACKFILLED IN ACCORDANCE WITH THE CITY OF HOUSTON DRAWING NOS. 2317-02, 02317-3, 02317-05, 02317-06, AND 02317-07 (OCT. 2002) AS APPLICABLE UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

2. ALL STORM SEWER CONSTRUCTED IN SIDELOT EASEMENT SHALL BE R.C.P (C-76, CLASSIII) 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. STABLIZED 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 18-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 RELOCATED TO AVOID EXISTING CURB INLET STRUCTURES.

CENTERPOINT NOTES

CAUTION: UNDERGROUND GAS FACILITIES

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 PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713) 207-5463 OR (713) 945-8037 (7:00 A.M. TO 4:30 P.M.) 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) 659-2111 OR (713) 207-4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL FACILITIES

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 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 PERSON 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.

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.

ACTIVITIES ON/OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

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

WARNING: OVERHEAD ELECTRICAL FACILITIES

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 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 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.

AT&T TEXAS/SWBT FACILITIES NOTES

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 KEVIN RAY AT (713) 614-1983 OR E-MAIL HIM AT KR7896@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATING NEAR OUR AT&T TEXAS/SWBT FACILITIES.

PROJECT SPECIFIC NOTES

1. ALL FITTINGS ON 16-INCH AND LARGER PIPE SHALL BE RESTRAINED JOINT.

2. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING WATER METERS DURING CONSTRUCTION.

Texas 811

ONE CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
CALL 811 OR
(NEW STATEWIDE NUMBER OUTSIDE HOUSTON)
1-800-344-8377

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.

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SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

GENERAL NOTES
(2 OF 2)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 7 OF 275	

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NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 8:59 AM
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CONSTRUCTION NOTES
ONLY APPLICABLE IF CALLED FOR ON PLANS

1. REMOVE & REPLACE ADA RAMP, REFER TO COH DETAILS 02775-02 AND 02775-06. RAMP CONFIGURATION MAY DIFFER FROM STANDARD DETAIL BUT MUST MEET ADA & TAS STANDARDS.
2. FOR PAVEMENT REPAIR DETAILS – REFER TO COH DWG. NOS. 02902-01 & 02 AND 02951-01, 02 & 03
3. CONTRACTOR SHALL ENSURE THAT PROPOSED WATER FACILITIES MAINTAIN 2-FT OF HORIZONTAL CLEARANCE AND 2-FT OF VERTICAL CLEARANCE FROM CENTERPOINT ENERGY GAS FACILITIES.
4. RELOCATE UTILITY POLE (BY CENTERPOINT ENERGY).
5. BRACE AND SUPPORT UTILITY POLE DURING CONSTRUCTION. COORDINATE WITH CENTERPOINT ENERGY.
6. CUT, REMOVE AND PLUG EXISTING WATER LINE PIPE AND REMOVE AND DISPOSE OFF, IF THE MATERIAL IS ASBESTOS CONCRETE (AC) PIPE, DISPOSE OF OFF-SITE IN AN APPROVED LOCATION.
7. RELOCATE LIGHT POLE (BY CENTERPOINT ENERGY).
8. BRACE AND SUPPORT LIGHT POLE DURING CONSTRUCTION. COORDINATE WITH CENTERPOINT ENERGY.
9. CONTRACTOR SHALL CONTACT CENTERPOINT ENERGY TO COORDINATE THE RELOCATION AND/OR SUPPORT (IF NEEDED) OF BURIED STREET LIGHT CONDUITS/LINES.
10. CONTRACTOR SHALL CONTACT UTILITY COMPANY TO COORDINATE THE RELOCATION AND/OR SUPPORT (IF NEEDED) OF CONFLICTING UTILITIES PRIOR TO CONSTRUCTION.
11. BRACE AND SUPPORT SIGNAL POLE DURING CONSTRUCTION. COORDINATE WITH CITY OF HOUSTON.
12. REMOVE & SALVAGE EXISTING FIRE HYDRANT.
13. EXISTING FIRE HYDRANT TO REMAIN IN SERVICE.
14. MAINTAIN MIN 4' HORIZONTAL CLEARANCE BETWEEN PROPOSED WATER LINE AND STORM LINES/STRUCTURES.
15. MIN 4' HORIZONTAL CLEARANCE NOT MAINTAINED DUE TO OTHER UTILITIES. PLEASE SEE PROJECT VARIANCE SHEET 8.
16. MAINTAIN MIN 9' HORIZONTAL CLEARANCE BETWEEN PROPOSED WATER LINE AND SANITARY LINES/ STRUCTURES.
17. PROVIDE ONE (1) FULL DIP SECTION (18-FT MIN) OF WATERLINE CENTERED ON SANITARY SEWER CROSSING WITH RESTRAINED JOINTS.
18. PROVIDE ONE (1) FULL SECTION (18-FT MIN) OF WATERLINE CENTERED ON SANITARY SEWER CROSSING WITH RESTRAINED JOINTS.
19. CONTRACTOR SHALL LOCATE EXISTING COMMERCIAL WATER CONNECTION (POTABLE AND/OR FIRE) AND RECONNECT TO PROPOSED 4" WATER LINE.
20. CONTRACTOR SHALL LOCATE EXISTING COMMERCIAL WATER CONNECTION (POTABLE AND/OR FIRE) AND RECONNECT TO PROPOSED 6" WATER LINE.
21. CONTRACTOR SHALL LOCATE EXISTING COMMERCIAL WATER CONNECTION (POTABLE AND/OR FIRE) AND RECONNECT TO PROPOSED 8" WATER LINE.
22. CONTRACTOR TO NOTIFY C. OF H. DRINKING WATER OPERATIONS PRIOR TO ANY EXCAVATION AND PREPARE A LARGE DIAMETER WATER LINE EMERGENCY ACTION PLAN (E.A.P.)
23. PROVIDE ONE (1) FULL SECTION (18-FT MIN) OF DIP WATER LINE. PROVIDE RESTRAINT JOINTS ON WATER LINE.

Variance Table

No.	IDM Section	Variance	Reason
1	6.2.04.B	Place proposed waterline under the street/pavement.	Due to the existing infrastructire, narrow width of the ROW and the narrow distance between the back of the curb and the property line, we are requesting permission to place portions of the proposed water line under the street/pavement. The other alternatives are to place the proposed water line closer than 5' from the property line and/or obtain water line easements adjacent to the property line/ROW.
2	7.2.01.C	WL Placed with less than 4' horizontal clearance	Due to other utilities and narrow ROW we are requesting permission to place proposed water line closer than 4' horizontally from STM structures at some locations.

NO. | DATE | REVISION | APP.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

KEY NOTES &
PROJECT VARIANCE TABLE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 8 OF 275	

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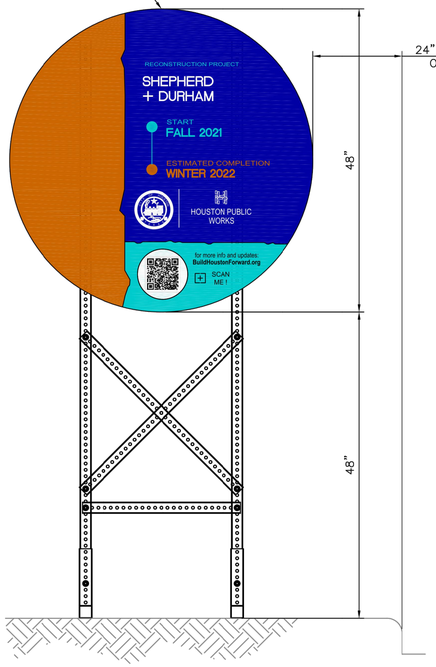
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\KEY NOTES.dwg

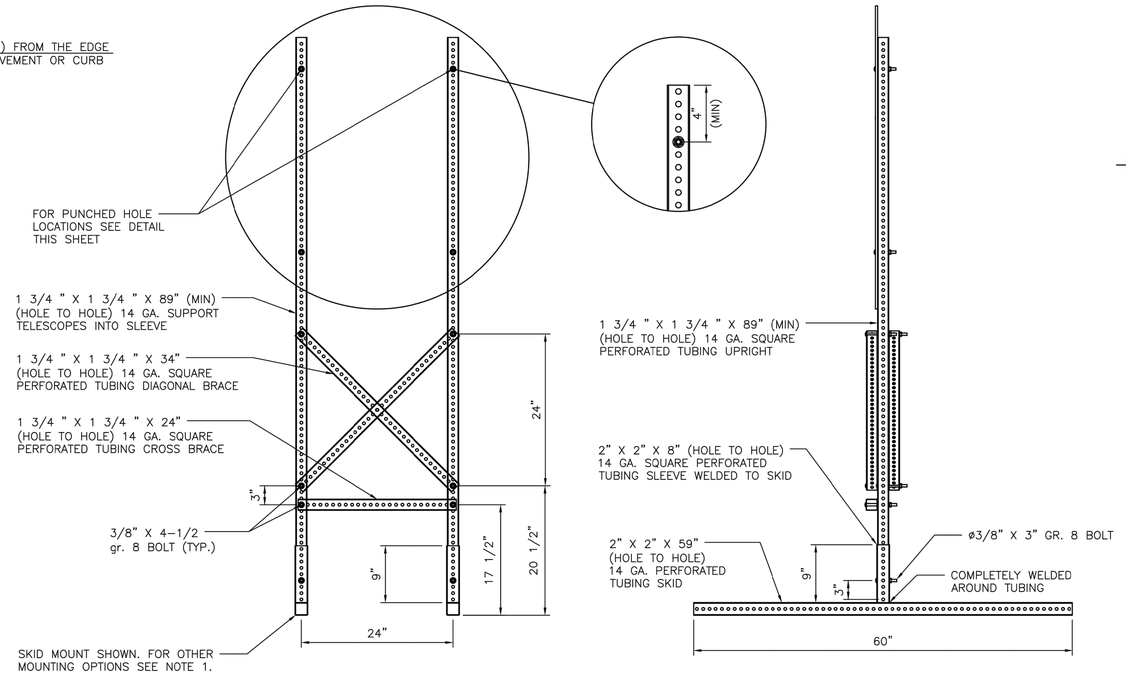
DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6

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.



FRONT VIEW

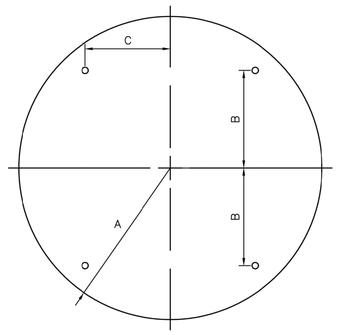
PROJECT SIGN – 48"



FRONT VIEW

SIDE VIEW

SKID MOUNTED SUPPORTS FOR 48" PROJECT SIGN



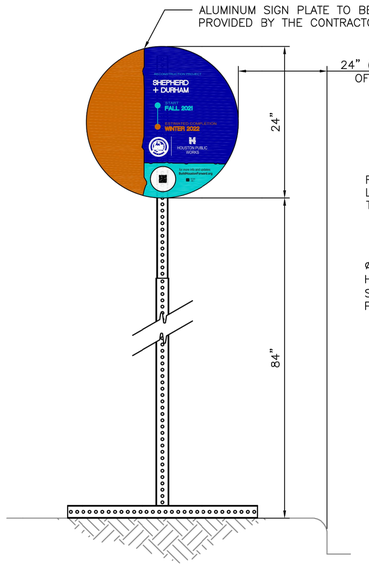
CIRCLE

A	B	C	T
24"	15"	12"	0.080"

48" SIGN PLATE HOLE DETAIL

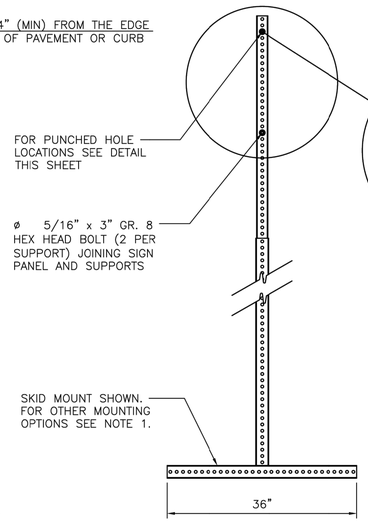
NOTES:

1. ALLOWABLE POST INSTALLATION METHODS ARE: CONCRETE FOOTING, SURFACE MOUNTING, SKID MOUNTING AND PILE DRIVEN POSTS.
2. FOR POST INSTALLATION WITH CONCRETE FOOTING, REFER TO DETAIL 01554–01.
3. FOR SURFACE MOUNTED POST INSTALLATION, REFER TO DETAIL 01554–02.
4. FOR SKID MOUNTING REQUIREMENTS REFER TO SPECIFICATION 01582.
5. PILE DRIVEN POSTS MUST BE DRIVEN TO A MINIMUM DEPTH OF 4–FEET INTO EXISTING GROUND.
6. LAYOUT, TEXT SIZE, AND OVERALL DESIGN OF THE SIGN WILL BE THE RESPONSIBILITY OF THE BUILD HOUSTON COORDINATOR.
7. ALL SIGN POSTS, SIGN TUBING, AND SIGN FASTENERS SHALL BE GALVANIZED STEEL PER SPECIFICATION 01582.

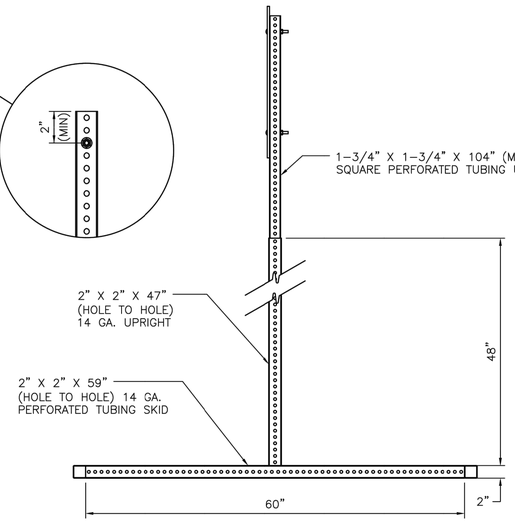


FRONT VIEW

PROJECT SIGN – 24"

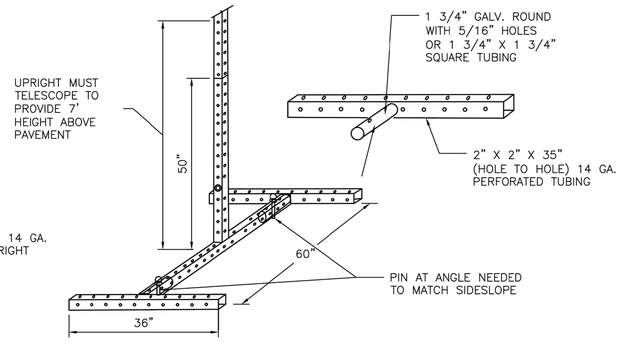


FRONT VIEW

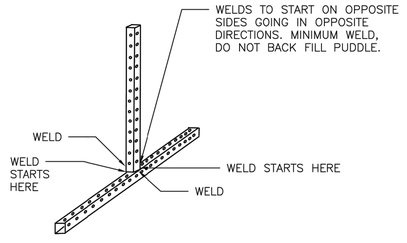


SIDE VIEW

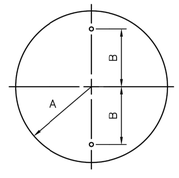
SKID MOUNTED SUPPORTS FOR 24" PROJECT SIGN



ISO VIEW



ISO VIEW



A	B	C
12"	8"	0.080"

24" SIGN PLATE HOLE DETAIL

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukul Kanwar 9EF8B0C641F5478...	DocuSigned by: Carol Haddock A83C410B7293453...
CITY ENGINEER	DIRECTOR OF HOUSTON PUBLIC WORKS
EFF DATE: NOV–27–2023	DWG NO: 01582–01
WOOLPERT ARCHITECTURE | ENGINEERING | ENVIRONMENTAL 11750 Katy Freeway, Suite 1260 Houston, TX 77079 800.414.1045	THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES. NATHAN A. WILSON, P.E. TX P.E. NO. 136610 DATE: 08/15/2025 90% SUBMITTAL
SURVEYED BY: WGC FB NO. 10038100	

CITY OF HOUSTON

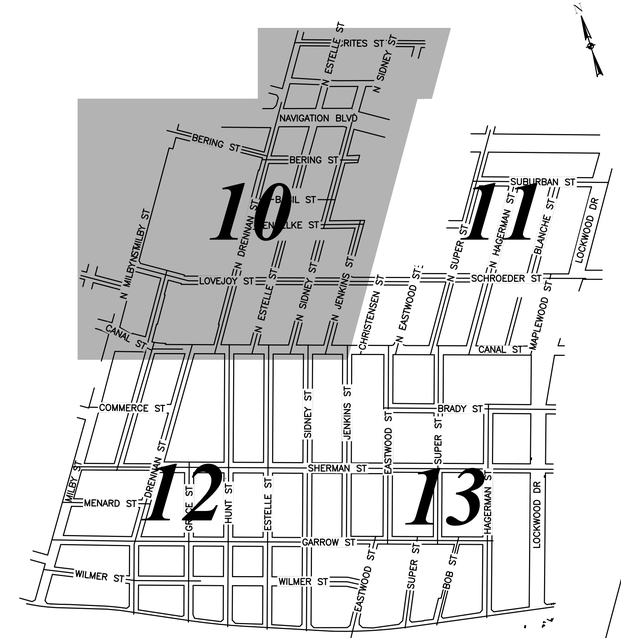
HOUSTON PUBLIC WORKS STANDARD

SECONDWARD WATERLINE REPLACEMENT

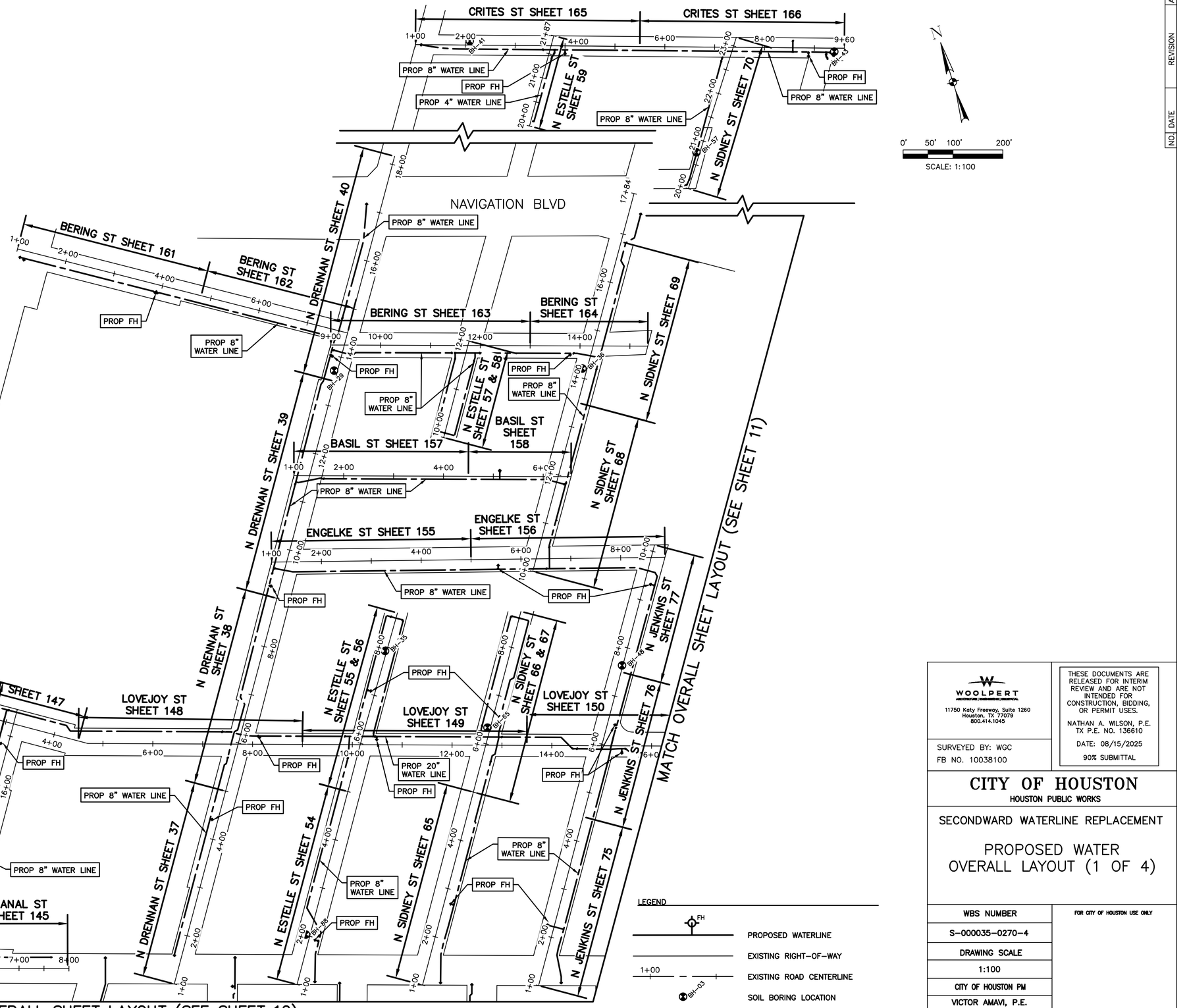
CONSTRUCTION SIGN BUILD HOUSTON FORWARD

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NOT TO SCALE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 9 OF 275	

90% SUBMITTAL



KEY MAP
SCALE: 1:500



0' 50' 100' 200'
SCALE: 1:100

LEGEND

- PROPOSED WATERLINE
- EXISTING RIGHT-OF-WAY
- EXISTING ROAD CENTERLINE
- SOIL BORING LOCATION

NO.	DATE	REVISION	APP.

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TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

PROPOSED WATER OVERALL LAYOUT (1 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1:100	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 10 OF 275	

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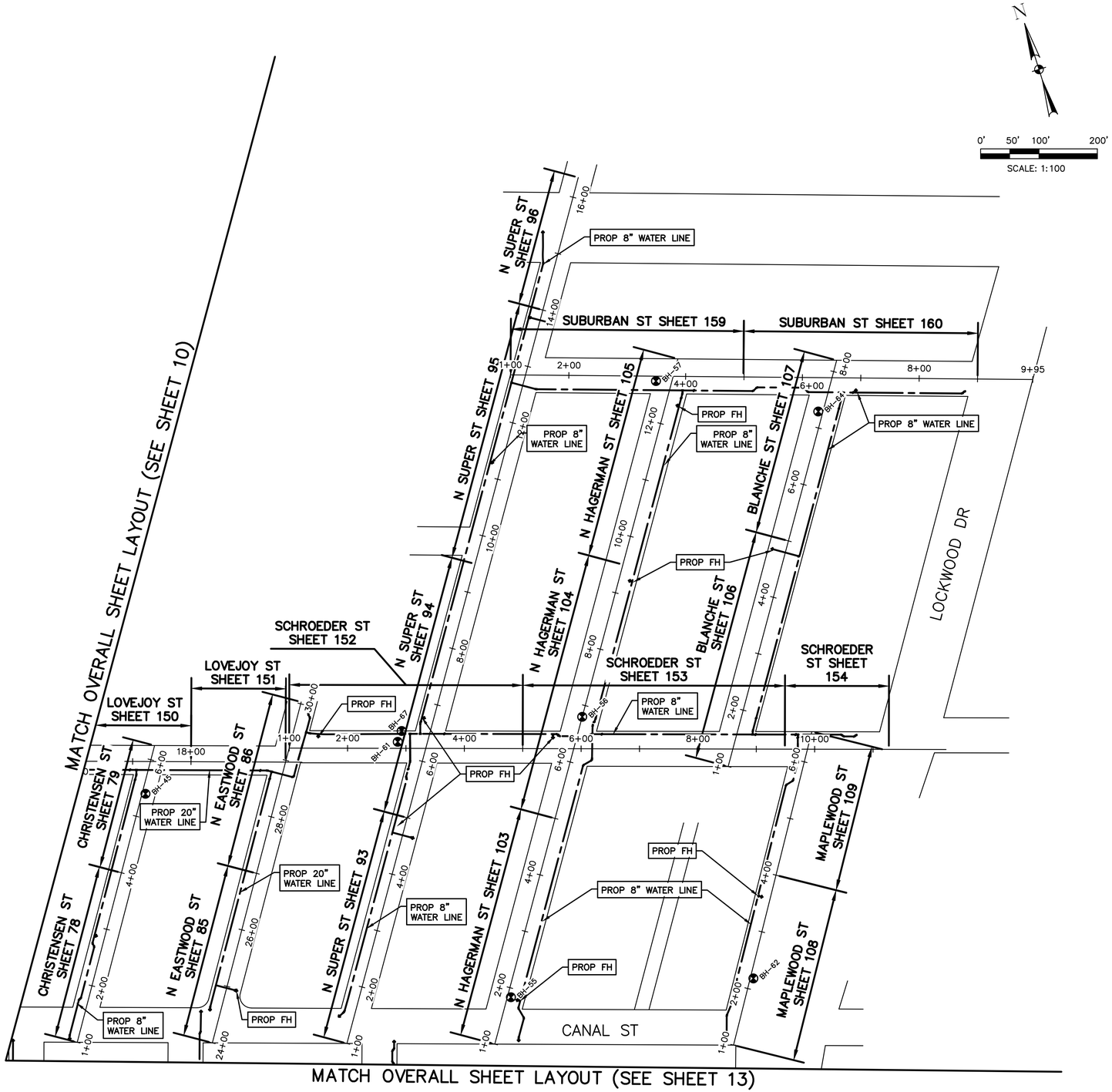
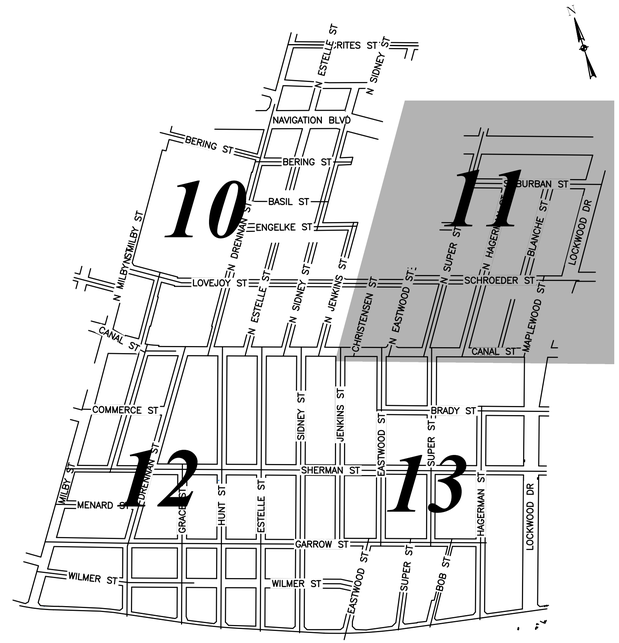
FILE PATH: O:\2019\395062\Drawings\SHEETS\010 - OVERALL LAYOUT.dwg





KEY MAP
SCALE: 1:500

LEGEND

- PROPOSED WATERLINE
- EXISTING RIGHT-OF-WAY
- EXISTING ROAD CENTERLINE
- SOIL BORING LOCATION

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TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

PROPOSED WATER
OVERALL LAYOUT (2 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 11 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 9:02 AM
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FILE PATH: O:\2019\395062\Drawings\SHEETS\010 - OVERALL LAYOUT.dwg

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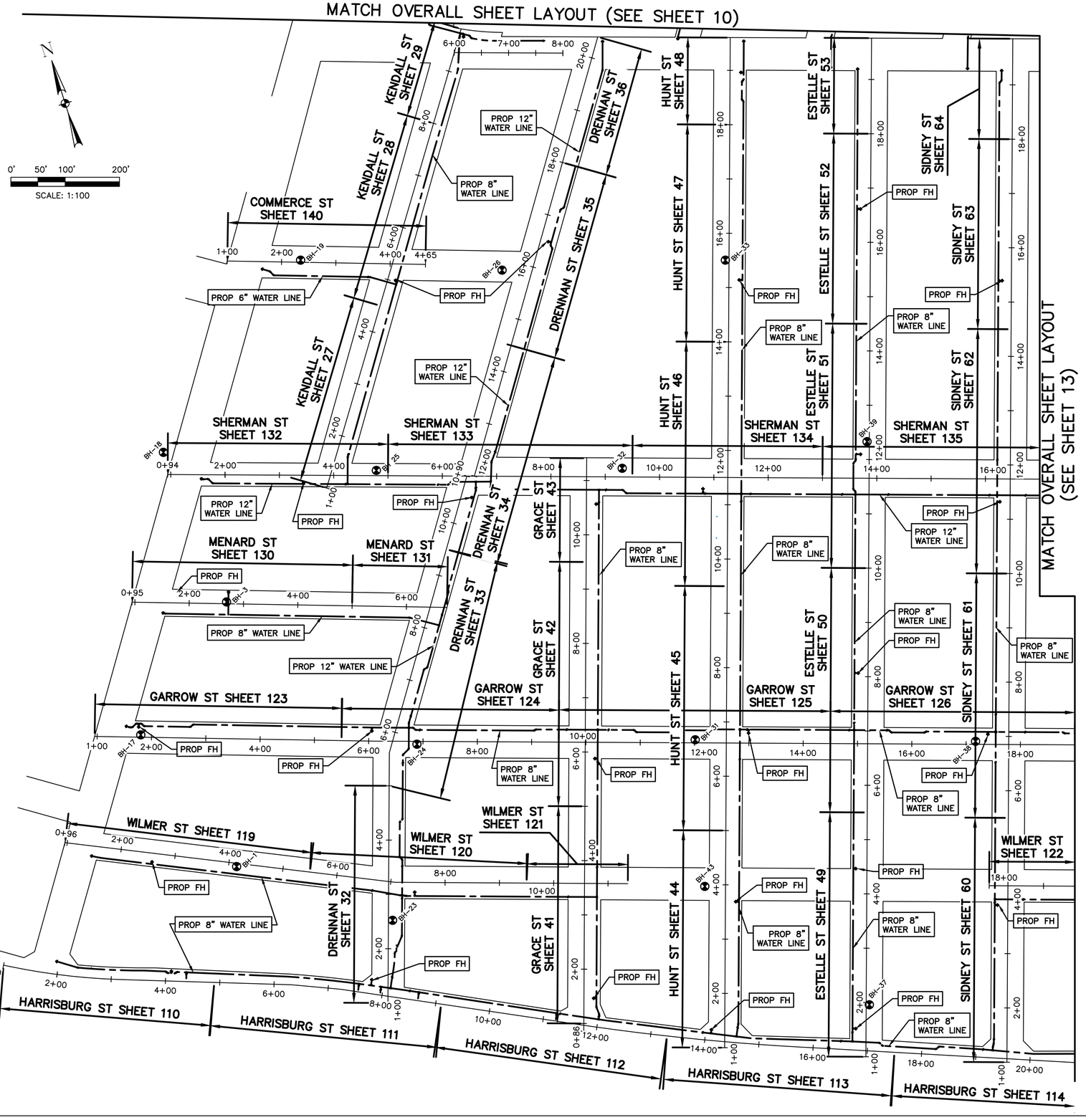

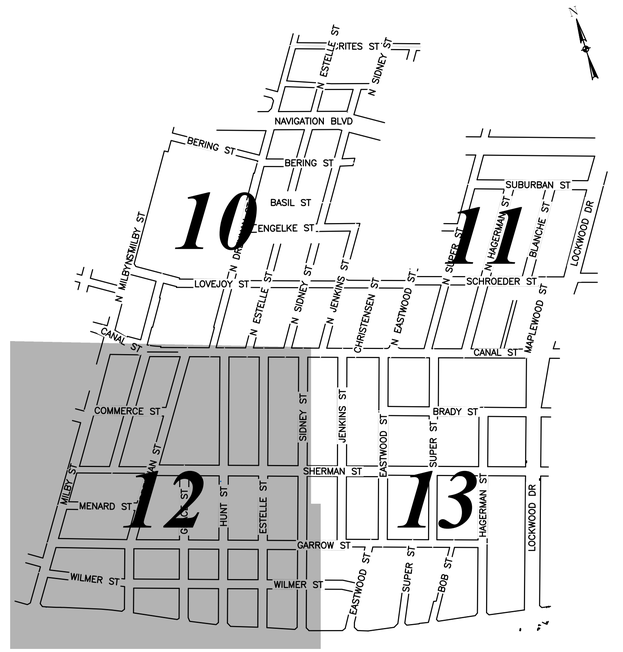

KEY MAP
SCALE: 1:500

LEGEND

- PROPOSED WATERLINE
- EXISTING RIGHT-OF-WAY
- EXISTING ROAD CENTERLINE
- SOIL BORING LOCATION

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TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

PROPOSED WATER OVERALL LAYOUT (3 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 12 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 9:03 AM
PLOT STYLE: COH.ctb
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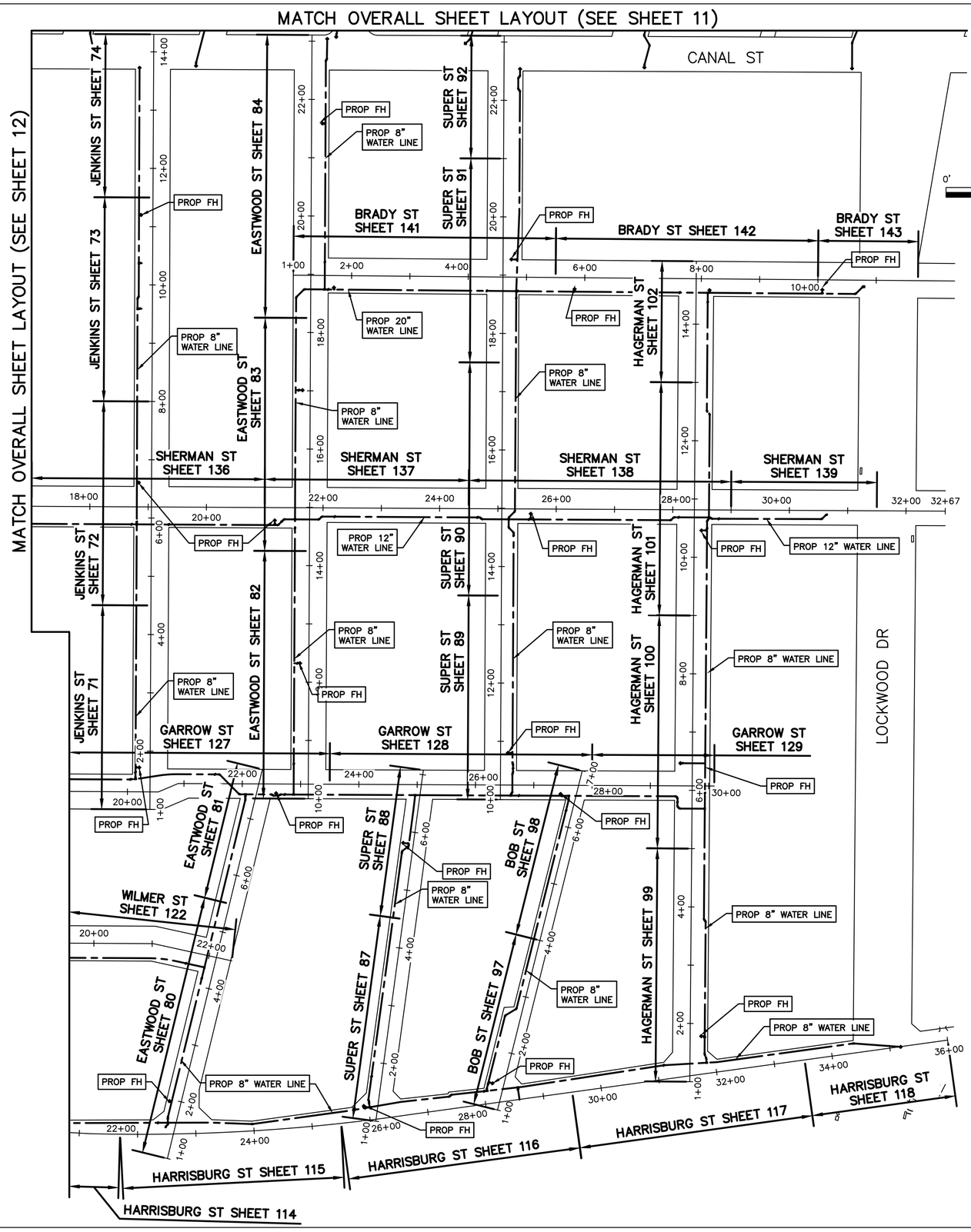

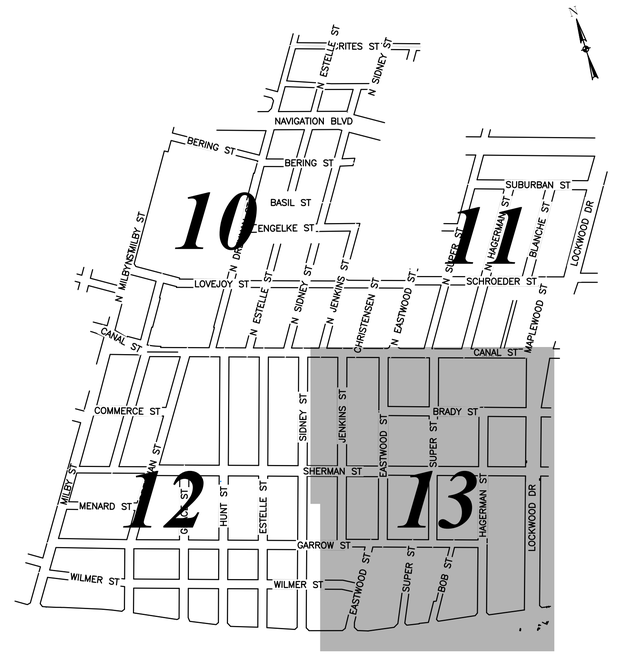

LEGEND

- PROPOSED WATERLINE
- EXISTING RIGHT-OF-WAY
- EXISTING ROAD CENTERLINE
- SOIL BORING LOCATION

WOOLPERT
ARCHITECTURE | ENGINEERING | INFORMATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
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SURVEYED BY: WGC
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

PROPOSED WATER OVERALL LAYOUT (4 OF 4)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 13 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 9:04 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\010 - OVERALL LAYOUT.dwg

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BENCHMARK:

CITY OF HOUSTON MARKER NUMBER 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET AND NAVIGATION BOULEVARD.
ELEV.=37.97' (NAVD 1988, 2001 ADJUSTMENT, GEOID 2018)

T.B.M. 1: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHEAST CORNER OF GARROW STREET AND MILBY STREET.
STA. 1+42.47, 32.9' RT (GARROW STREET BASELINE)
ELEV.=40.94'

T.B.M. 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHEAST CORNER OF GARROW STREET AND GRACE STREET.
STA. 10+16.64, 20.6' RT (GARROW STREET BASELINE)
ELEV.=40.31'

T.B.M. 5: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHEAST CORNER OF SHERMAN STREET AND MILBY STREET.
STA. 1+45.44, 22.7' RT (SHERMAN STREET BASELINE)
ELEV.=40.70'

T.B.M. 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF SHERMAN STREET AND HUNT STREET.
STA. 11+07.12 23.1' RT (SHERMAN STREET BASELINE)
ELEV.=39.66'

SCALE: 1"=100'
KEY MAP NO. 494 P,S&T
0' 100' 200' 300'

BASELINE POINT NO.	GRID COORDINATES		MATERIAL SET	SURVEY BASELINE STATION
	Y-COORD.	X-COORD.		
1	13,837,404.77	3,130,339.08	SET "X" MARK	1+00
2	13,837,160.22	3,130,882.47	SET MAG NAIL	6+95.95
3	13,837,155.30	3,130,893.40	SET MAG NAIL	7+7.94
4	13,837,049.22	3,131,225.64	SET MAG NAIL	10+56.74
5	13,836,812.13	3,131,968.24	SET MAG NAIL	18+34.52
8	13,837,575.44	3,130,450.20	SET "X" MARK	1+00
9	13,837,415.38	3,130,932.94	SET MAG NAIL	6+8.64
10	13,837,404.65	3,130,966.57	SET MAG NAIL	6+43.94
11	13,837,296.90	3,131,304.54	SET MAG NAIL	9+98.71
12	13,837,217.99	3,131,552.04	SET MAG NAIL	12+58.51
13	13,837,138.96	3,131,799.91	SET MAG NAIL	15+18.71
14	13,837,060.05	3,132,047.41	SET MAG NAIL	17+78.51
24	13,837,790.68	3,130,590.34	SET "X" MARK	1+00
25	13,837,619.62	3,131,106.35	SET MAG NAIL	6+43.68
26	13,837,995.32	3,130,723.58	SET "X" MARK	1+00
27	13,837,906.07	3,131,003.53	SET MAG NAIL	3+93.86
28	13,837,829.73	3,131,242.97	SET MAG NAIL	6+45.20
29	13,837,825.52	3,131,256.15	SET MAG NAIL	6+59.05
30	13,837,762.78	3,131,452.95	SET MAG NAIL	8+65.63
31	13,837,683.80	3,131,700.68	SET MAG NAIL	11+25.67
32	13,837,604.77	3,131,948.56	SET MAG NAIL	13+85.87
33	13,837,525.83	3,132,196.13	SET MAG NAIL	16+45.76
95	13,837,224.84	3,130,160.30	SET MAG NAIL	1+00
96	13,837,133.02	3,130,364.38	SET MAG NAIL	3+24.15
97	13,837,031.87	3,130,656.09	SET MAG NAIL	6+32.94
98	13,836,997.10	3,130,739.32	SET MAG NAIL	7+23.14
99	13,836,958.98	3,130,818.26	SET MAG NAIL	8+10.81
100	13,836,824.54	3,131,096.65	SET MAG NAIL	11+20
101	13,836,800.26	3,131,146.33	SET MAG NAIL	11+75.30
102	13,836,693.96	3,131,384.82	SET MAG NAIL	14+36.47
103	13,836,627.68	3,131,555.76	SET MAG NAIL	16+45.29
104	13,836,600.45	3,131,628.07	SET MAG NAIL	16+97.17
105	13,836,508.81	3,131,871.39	SET MAG NAIL	19+57.16

CURVE TABLE					
CURVE	RADIUS	DELTA	CHORD	CHORD BEARING	ARC LENGTH
C1	1,178.50	10°53'52"	223.82	S65°46'29"E	224.15
C2	4,500.00	6°21'51"	499.59	S66°47'30"E	499.85

T.B.M. NO.	GRID COORDINATES	
	Y-COORD.	X-COORD.
1	13,837,530.99	3,130,479.84
2	13,837,271.97	3,131,315.06
5	13,837,960.05	3,130,759.67
6	13,837,667.57	3,131,675.68

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS REGISTERED RAYMOND A. RAHAMAN 4354 PROFESSIONAL LAND SURVEYOR

12-14-2022

NO.	DATE	REVISION	APP.

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 1 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=100'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 14 OF 275	

FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM1.dwg PLOT STYLE: WGC.ctb

BENCHMARK:

CITY OF HOUSTON MARKER NUMBER 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET AND NAVIGATION BOULEVARD.
ELEV.=37.97' (NAVD 1988, 2001 ADJUSTMENT, GEOID 2018)

T.B.M. 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW STREET IN FRONT OF ADDRESS 4308.
STA. 19+93.37, 19.1' RT (GARROW STREET BASELINE)
ELEV.=39.11'

T.B.M. 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF GARROW STREET AND HAGERMAN STREET.
STA. 29+51.19, 23.0' RT (GARROW STREET BASELINE)
ELEV.=38.52'

T.B.M. 7: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN STREET APPROXIMATELY 40' WEST OF SHERMAN STREET AND JENKINS STREET.
STA. 18+43.20, 26.2' LT (SHERMAN STREET BASELINE)
ELEV.=39.30'

T.B.M. 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN STREET APPROXIMATELY 100' WEST OF LOCKWOOD DRIVE.
STA. 30+34.34, 27.7' LT (SHERMAN STREET BASELINE)
ELEV.=39.97'

CURVE TABLE					
CURVE	RADIUS	DELTA	CHORD	CHORD BEARING	ARC LENGTH
C3	3,200.00	9°54'04"	552.29	S76°03'26"E	552.98

T.B.M. NO.	GRID COORDINATES	
	Y-COORD.	X-COORD.
3	13,836,957.23	3,132,310.59
4	13,836,697.41	3,133,158.99
7	13,837,490.93	3,132,391.86
8	13,837,130.61	3,133,527.07

BASELINE POINT NO.	GRID COORDINATES		MATERIAL SET	SURVEY BASELINE STATION
	Y-COORD.	X-COORD.		
6	13,836,730.84	3,132,222.83	SET MAG NAIL	21+1.80
7	13,836,675.79	3,132,319.24	SET MAG NAIL	22+12.83
15	13,836,981.02	3,132,295.29	SET MAG NAIL	20+38.71
16	13,836,976.69	3,132,308.88	SET MAG NAIL	20+52.98
17	13,836,980.30	3,132,345.70	SET MAG NAIL	21+89.98
18	13,836,938.36	3,132,477.56	SET MAG NAIL	22+28.37
19	13,836,912.65	3,132,558.38	SET MAG NAIL	23+13.18
20	13,836,853.83	3,132,743.29	SET MAG NAIL	25+7.24
21	13,836,812.74	3,132,872.46	SET MAG NAIL	26+42.81
22	13,836,772.07	3,133,000.29	SET MAG NAIL	27+76.97
23	13,836,713.03	3,133,185.89	SET MAG NAIL	29+71.75
34	13,837,446.90	3,132,443.70	SET MAG NAIL	19+5.63
35	13,837,364.46	3,132,702.28	SET MAG NAIL	21+77.07
36	13,837,264.33	3,133,016.33	SET MAG NAIL	25+6.72
37	13,837,163.99	3,133,331.03	SET MAG NAIL	28+37.07
38	13,837,068.95	3,133,629.14	SET "X" MARK	31+50
106	13,836,451.91	3,132,022.46	SET MAG NAIL	21+18.61
107	13,836,408.79	3,132,158.24	SET MAG NAIL	22+61.10
108	13,836,329.08	3,132,497.56	SET MAG NAIL	26+9.87
109	13,836,318.85	3,132,558.42	SET MAG NAIL	26+71.59
110	13,836,293.80	3,132,708.27	SET MAG NAIL	28+23.53
111	13,836,239.44	3,133,033.46	SET MAG NAIL	31+57.27
112	13,836,165.80	3,133,474.03	SET MAG NAIL	36+00

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS — REGISTERED — RAYMOND A. RAHAMAN — 4354 — PROFESSIONAL LAND SURVEYOR

12-14-2022

SCALE: 1"=100'
KEY MAP NO. 494 P,S&T
0' 100' 200' 300'

NO.	DATE	REVISION	APP.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 2 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=100'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 15 OF 275	

FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM1.dwg PLOT STYLE: WGC.ctb

BENCHMARK:

CITY OF HOUSTON MARKER NUMBER 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET AND NAVIGATION BOULEVARD.
ELEV.=37.97' (NAVD 1988, 2001 ADJUSTMENT, GEOID 2018)

T.B.M. 9: SET 60D NAIL IN POWER POLE LOCATED AT THE NORTHEAST CORNER OF LOVEJOY STREET AND MILBY STREET.
STA. 1+05.66, 46.3' LT (LOVEJOY STREET BASELINE)
ELEV.=42.92'

T.B.M. 10: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF LOVEJOY STREET AND NORTH ESTELLE STREET.
STA. 9+94.83, 19.7' RT (LOVEJOY STREET BASELINE)
ELEV.=40.84'

T.B.M. NO.	GRID COORDINATES	
	Y-COORD.	X-COORD.
9	13,839,163.61	3,131,472.20
10	13,838,761.84	3,132,309.36

SCALE: 1"=100'
KEY MAP NO. 494 P,S&T
0' 100' 200' 300'

BASELINE POINT NO.	GRID COORDINATES		MATERIAL SET	SURVEY BASELINE STATION
	Y-COORD.	X-COORD.		
39	13,838,339.51	3,130,940.31	SET "X" MARK	1+00
40	13,838,243.73	3,131,228.81	SET MAG NAIL	4+4.02
45	13,838,815.48	3,131,203.90	SET MAG NAIL	1+00
46	13,838,601.45	3,131,420.03	SET MAG NAIL	4+4.21
47	13,838,495.88	3,131,692.59	SET "X" MARK	20+00
48	13,838,427.76	3,131,836.71	SET "X" MARK	1+00
49	13,838,398.03	3,131,928.60	SET "X" MARK	19+00
50	13,838,353.24	3,132,071.22	SET 5/8" IR	1+00
51	13,838,352.00	3,132,187.00	SET "X" MARK	19+50
52	13,838,277.03	3,132,311.03	SET "X" MARK	1+00
53	13,838,264.79	3,132,432.09	SET "X" MARK	19+50
54	13,838,206.58	3,132,532.74	SET 5/8" IR	1+00
62	13,839,184.56	3,131,149.40	SET MAG NAIL	1+00
63	13,839,021.01	3,131,409.75	SET MAG NAIL	4+7+50
64	13,839,145.28	3,131,487.81	SET MAG NAIL	0+82.97
65	13,839,021.50	3,131,684.84	SET MAG NAIL	3+15.68
66	13,838,939.51	3,131,815.35	SET MAG NAIL	4+69.82
67	13,838,848.29	3,132,102.44	SET MAG NAIL	7+71.09
68	13,838,774.17	3,132,335.66	SET MAG NAIL	10+15.83
69	13,838,697.97	3,132,575.46	SET MAG NAIL	12+67.47
70	13,838,627.55	3,132,797.07	SET MAG NAIL	15+0.03
78	13,839,167.80	3,132,304.34	SET MAG NAIL	1+30.27
79	13,839,024.27	3,132,783.46	SET MAG NAIL	6+30.48
80	13,838,958.03	3,133,004.59	SET MAG NAIL	8+61.34
115	13,838,573.16	3,131,448.60	SET MAG NAIL	4+44.42
116	13,839,318.97	3,132,399.87	SET MAG NAIL	1+31.58
117	13,839,168.46	3,132,874.94	SET MAG NAIL	6+29.98
122	13,838,580.92	3,131,453.78	SET MAG NAIL	6+00
123	13,838,520.36	3,131,644.36	SET MAG NAIL	8+00

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.99989315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS · LICENSED · RAYMOND A. RAHAMAN · 4354 · PROFESSIONAL LAND SURVEYOR

12-14-2022

NO.	DATE	REVISION	APP.

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 3 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=100'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 16 OF 275	

FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM1.dwg PLOT STYLE: WGC.ctb

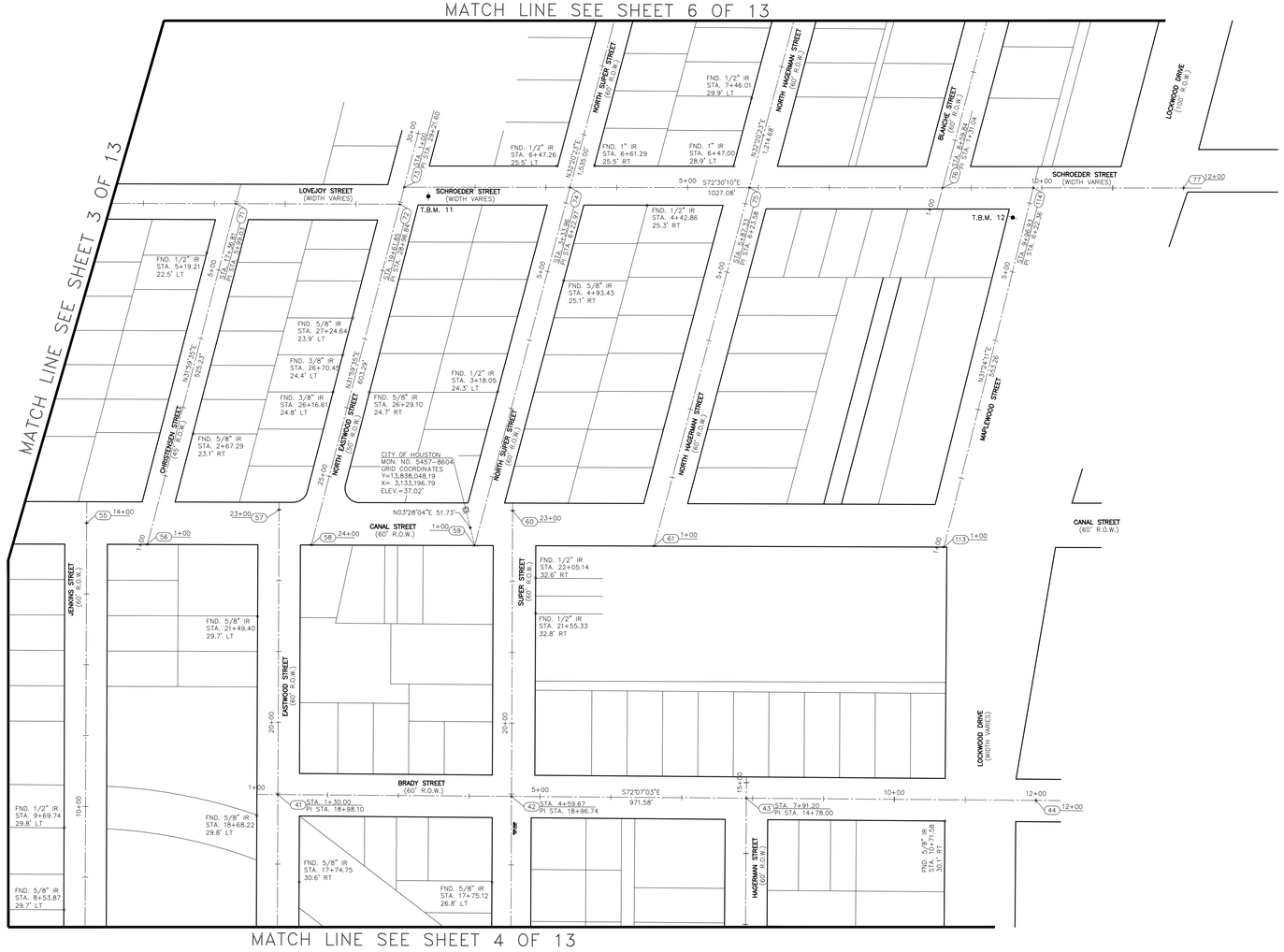
BENCHMARK:

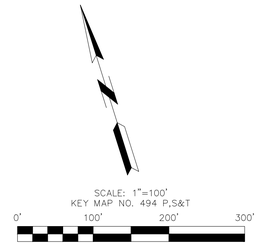
CITY OF HOUSTON MARKER NUMBER 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET AND NAVIGATION BOULEVARD.
ELEV.=37.97' (NAVD 1988, 2001 ADJUSTMENT, GEOID 2018)

T.B.M. 11: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHEAST CORNER OF SCHROEDER STREET AND NORTH EASTWOOD STREET.
STA. 1+33.99, 42.7' RT (SCHROEDER STREET BASELINE)
ELEV.=39.86'

T.B.M. 12: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF SCHROEDER STREET AND MAPLEWOOD STREET.
STA. 9+58.90, 41.9' RT (SCHROEDER STREET BASELINE)
ELEV.=39.02'

T.B.M. NO.	GRID COORDINATES	
	Y-COORD.	X-COORD.
11	13,838,486.32	3,133,278.50
12	13,838,210.63	3,134,056.42





BASELINE POINT NO.	GRID COORDINATES		MATERIAL SET	SURVEY BASELINE STATION
	Y-COORD.	X-COORD.		
41	13,837,744.48	3,132,823.33	SET MAG NAIL	1+30
42	13,837,643.26	3,133,137.04	SET MAG NAIL	4+59.67
43	13,837,541.47	3,133,452.52	SET MAG NAIL	7+91.20
44	13,837,415.95	3,133,841.52	SET MAG NAIL	12+00
55	13,838,190.97	3,132,680.74	SET "X" MARK	14+00
56	13,838,136.45	3,132,753.43	SET "X" MARK	1+00
57	13,838,127.38	3,132,945.29	SET "X" MARK	23+00
58	13,838,066.37	3,132,973.96	SET 60D NAIL	24+00
59	13,837,996.56	3,133,193.66	SET 5/8" IR	1+00
60	13,838,027.45	3,133,259.43	SET 60D NAIL	23+00
61	13,837,919.88	3,133,434.96	SET "X" MARK	1+00
71	13,838,557.78	3,133,016.63	SET MAG NAIL	17+36.81
72	13,838,487.70	3,133,237.16	SET MAG NAIL	19+61.85
73	13,838,508.70	3,133,250.28	SET MAG NAIL	1+00
74	13,838,438.36	3,133,473.39	SET MAG NAIL	3+33.96
75	13,838,362.20	3,133,715.01	SET MAG NAIL	5+87.33
76	13,838,280.27	3,133,974.88	SET MAG NAIL	8+59.84
113	13,837,795.96	3,133,824.92	SET MAG NAIL	1+00
114	13,838,241.75	3,134,097.07	SET MAG NAIL	9+96.93

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SURVEYOR'S CERTIFICATION:

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RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS REGISTERED RAYMOND A. RAHAMAN 4354 PROFESSIONAL LAND SURVEYOR

12-14-2022

NO.	DATE	REVISION	APP.

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 4 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=100'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 17 OF 275	

PLOT STYLE: WGC.ctb

FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM1.dwg

BENCHMARK:

CITY OF HOUSTON MARKER NUMBER 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET AND NAVIGATION BOULEVARD.
ELEV.=37.97' (NAVD 1988, 2001 ADJUSTMENT, GEOID 2018)

T.B.M. 13: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF BERING STREET APPROXIMATELY 100' EAST OF MILBY STREET.
STA. 2+16.85, 13.0' RT (BERING STREET BASELINE)
ELEV.=42.11'

T.B.M. 14: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF BERING STREET AND NORTH DRENNAN STREET.
STA. 7+62.73, 20.9' RT (BERING STREET BASELINE)
ELEV.=42.98'

T.B.M. 15: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF BERING STREET AND NORTH SIDNEY STREET.
STA. 13+93.81, 22.6' RT (BERING STREET BASELINE)
ELEV.=42.20'

T.B.M. 18: SET 60D NAIL IN POWER POLE LOCATED AT CRITES STREET AND NORTH DRENNAN STREET IN FRONT OF ADDRESS 541 NORTH DRENNAN.
STA. 1+00.92, 18.1' RT (CRITES STREET BASELINE)
ELEV.=41.78'

T.B.M. 19: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF CRITES STREET AND NORTH JENKINS STREET.
STA. 8+94.33, 14.0' RT (CRITES STREET BASELINE)
ELEV.=39.06'

BASELINE POINT NO.	GRID COORDINATES		MATERIAL SET	SURVEY BASELINE STATION
	Y-COORD.	X-COORD.		
81	13,839,927.59	3,131,976.84	SET MAG NAIL	1+00
82	13,839,548.05	3,132,544.62	SET MAG NAIL	9+27.50
83	13,839,473.21	3,132,780.70	SET MAG NAIL	11+75.19
84	13,839,397.30	3,133,020.14	SET MAG NAIL	14+26.40
85	13,839,864.72	3,132,744.73	SET MAG NAIL	18+00
86	13,840,228.87	3,132,955.11	SET MAG NAIL	0+99.66
87	13,840,145.49	3,133,213.69	SET MAG NAIL	3+82.76
88	13,840,033.49	3,133,561.04	SET MAG NAIL	7+55.05
89	13,839,983.49	3,133,716.10	SET MAG NAIL	9+00
118	13,839,569.24	3,132,558.01	SET MAG NAIL	7+82.84
120	13,840,004.96	3,133,124.28	SET MAG NAIL	20+00
121	13,839,790.03	3,133,390.75	SET MAG NAIL	20+00

T.B.M. NO.	GRID COORDINATES	
	Y-COORD.	X-COORD.
13	13,839,855.29	3,132,069.14
14	13,839,562.20	3,132,529.66
15	13,839,385.70	3,132,981.93
18	13,840,211.85	3,132,949.26
19	13,839,964.49	3,133,701.49

SCALE: 1"=100'
KEY MAP NO. 494 P,S&T
0' 100' 200' 300'

NO.	DATE	REVISION	APP.

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SURVEYOR'S CERTIFICATION:

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RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS REGISTERED RAYMOND A. RAHAMAN 4354 PROFESSIONAL LAND SURVEYOR

12-14-2022

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 5 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=100'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 18 OF 275	

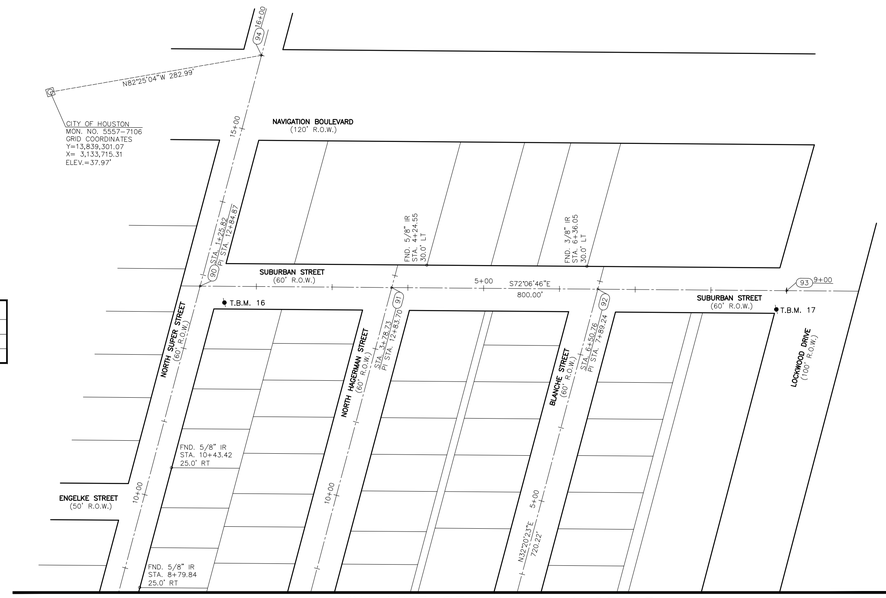
FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM1.dwg PLOT STYLE: WGC.ctb

BENCHMARK:

CITY OF HOUSTON MARKER NUMBER 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET AND NAVIGATION BOULEVARD.
ELEV.=37.97' (NAVD 1988, 2001 ADJUSTMENT, GEOID 2018)

T.B.M. 16: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHEAST CORNER OF SUBURBAN STREET AND NORTH SUPER STREET.
STA. 1+58.04, 21.5' RT (SUBURBAN STREET BASELINE)
ELEV.=38.97'

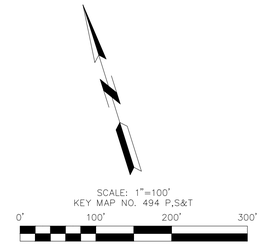
T.B.M. 17: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHWEST CORNER OF SUBURBAN STREET AND LOCKWOOD DRIVE.
STA. 8+86.58, 24.9' RT (SUBURBAN STREET BASELINE)
ELEV.=38.48'



MATCH LINE SEE SHEET 4 OF 13

T.B.M. NO.	GRID COORDINATES	
	Y-COORD.	X-COORD.
16	13,838,967.26	3,133,851.15
17	13,838,740.34	3,134,543.38

BASELINE POINT NO.	GRID COORDINATES		MATERIAL SET	SURVEY BASELINE STATION
	Y-COORD.	X-COORD.		
90	13,838,997.54	3,133,827.43	SET MAG NAIL	1+25.852
91	13,838,919.86	3,134,068.09	SET MAG NAIL	3+78.73
92	13,838,836.32	3,134,326.94	SET MAG NAIL	6+50.76
93	13,838,759.77	3,134,564.11	SET MAG NAIL	9+00
94	13,839,263.75	3,133,995.98	SET MAG NAIL	16+00



NO.	DATE	REVISION	APP.

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.99989031S.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SURVEYOR'S CERTIFICATION:

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FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

WOOLPERT
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Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

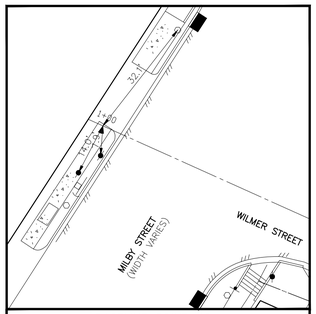
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

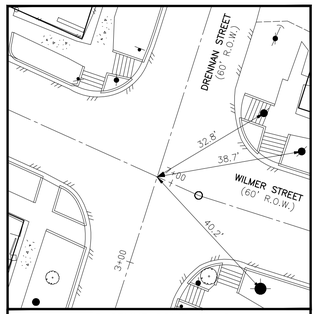
SURVEY CONTROL MAP
SHEET 6 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=100'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 19 OF 275	

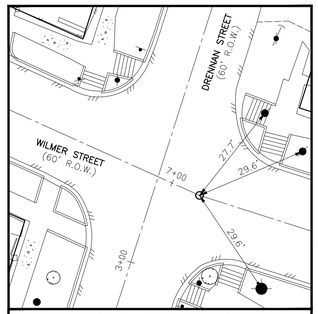
FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM1.dwg PLOT STYLE: WGC.ctb



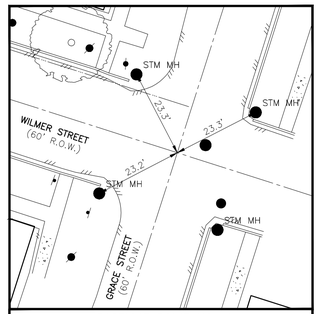
BASELINE POINT NO. 1
STA. 1+00
"SET "X" MARK"



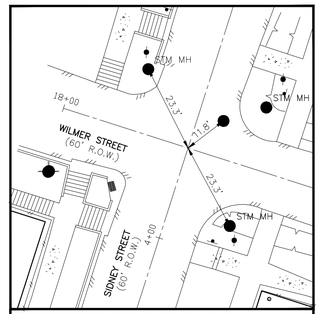
BASELINE POINT NO. 2
STA. 6+95.95
"SET MAG NAIL"



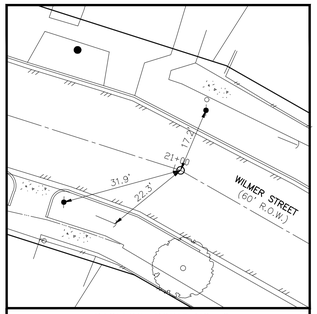
BASELINE POINT NO. 3
STA. 7+7.94
"SET MAG NAIL"



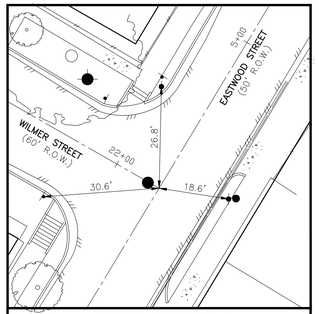
BASELINE POINT NO. 4
STA. 10+56.74
"SET MAG NAIL"



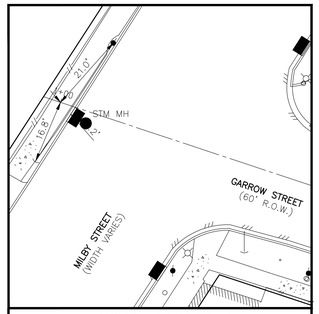
BASELINE POINT NO. 5
STA. 18+34.52
"SET MAG NAIL"



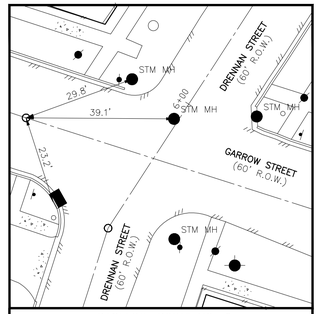
BASELINE POINT NO. 6
STA. 21+1.80
"SET MAG NAIL"



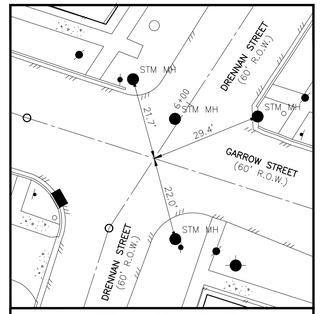
BASELINE POINT NO. 7
STA. 22+12.83
"SET MAG NAIL"



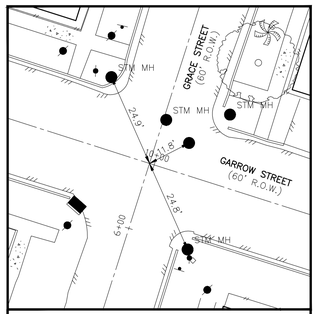
BASELINE POINT NO. 8
STA. 1+00
"SET "X" MARK"



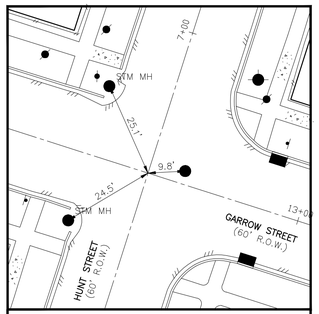
BASELINE POINT NO. 9
STA. 6+8.64
"SET MAG NAIL"



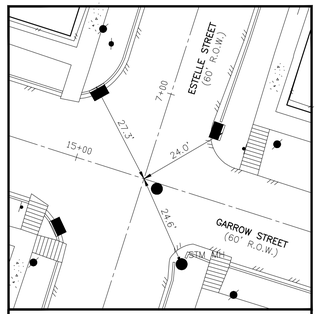
BASELINE POINT NO. 10
STA. 6+43.94
"SET MAG NAIL"



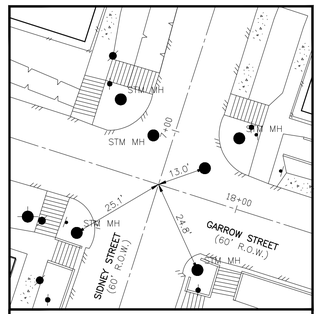
BASELINE POINT NO. 11
STA. 9+98.71
"SET MAG NAIL"



BASELINE POINT NO. 12
STA. 12+58.51
"SET MAG NAIL"



BASELINE POINT NO. 13
STA. 15+18.71
"SET MAG NAIL"



BASELINE POINT NO. 14
STA. 17+78.51
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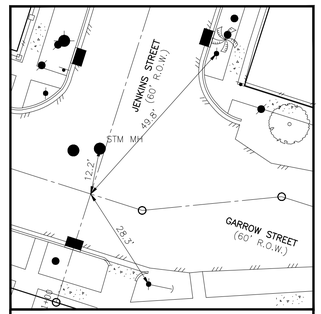

BASELINE POINT NO. 15
STA. 20+38.71
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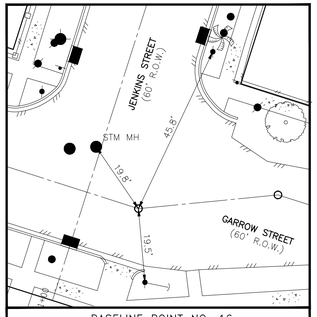
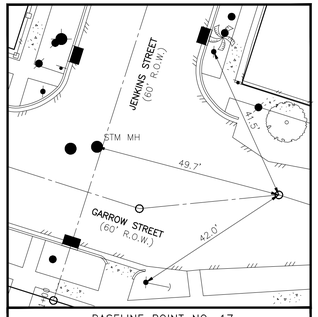
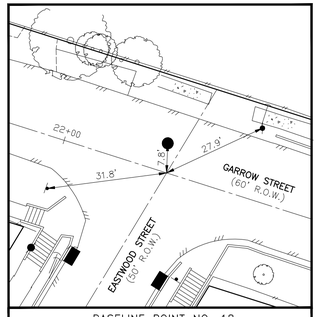


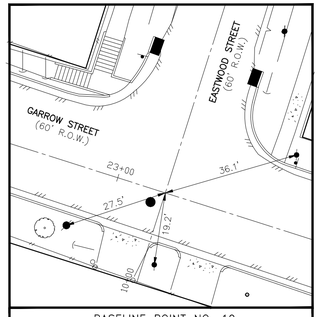
BASELINE POINT NO. 16
STA. 20+52.98
"SET MAG NAIL"



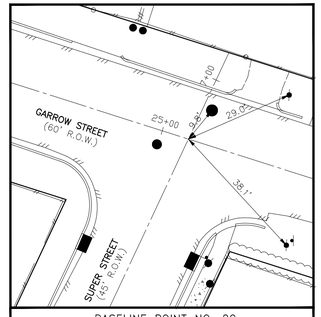
BASELINE POINT NO. 17
STA. 21+89.98
"SET MAG NAIL"



BASELINE POINT NO. 18
STA. 22+28.37
"SET MAG NAIL"



BASELINE POINT NO. 19
STA. 23+13.18
"SET MAG NAIL"



BASELINE POINT NO. 20
STA. 25+7.24
"SET MAG NAIL"

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SCALE: 1"=20'
KEY MAP NO. 494 P,S&T

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

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SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 7 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=20'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 20 OF 275	

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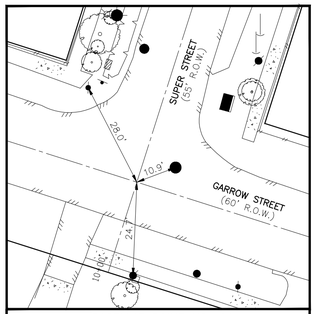
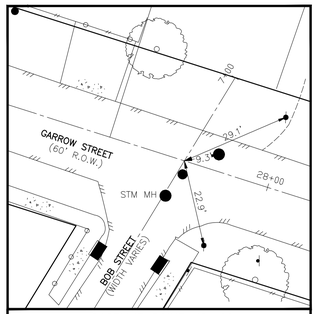
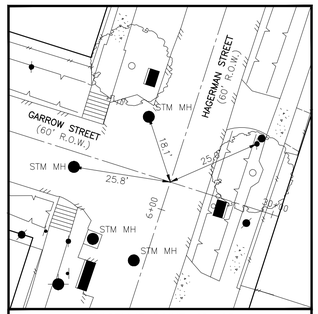


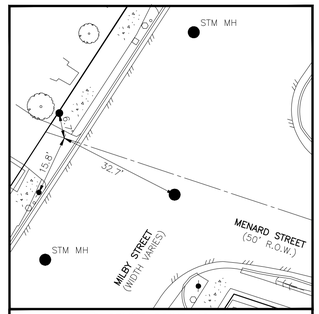
BASELINE POINT NO. 21
STA. 26+42.81
"SET MAG NAIL"



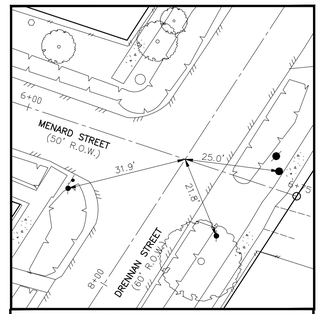
BASELINE POINT NO. 22
STA. 27+76.97
"SET MAG NAIL"



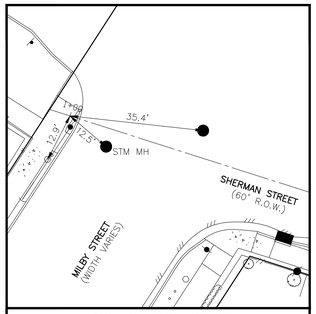
BASELINE POINT NO. 23
STA. 29+71.75
"SET MAG NAIL"



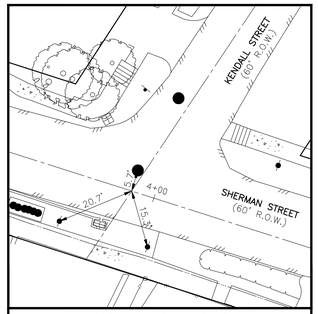
BASELINE POINT NO. 24
STA. 1+00
"SET "X" MARK"



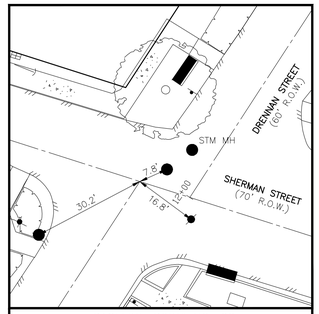
BASELINE POINT NO. 25
STA. 6+43.68
"SET MAG NAIL"



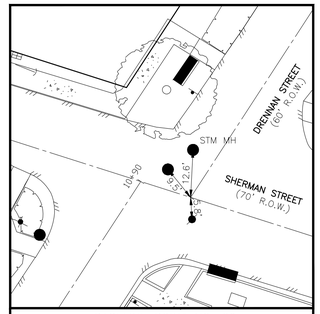
BASELINE POINT NO. 26
STA. 1+00
"SET "X" MARK"



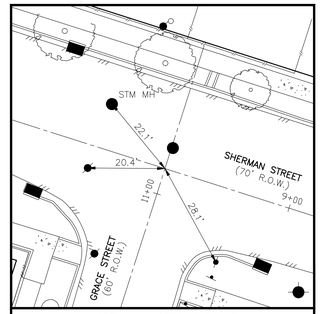
BASELINE POINT NO. 27
STA. 3+93.86
"SET MAG NAIL"



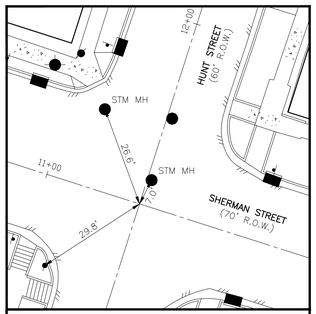
BASELINE POINT NO. 28
STA. 6+45.20
"SET MAG NAIL"



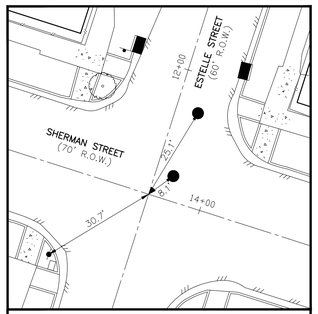
BASELINE POINT NO. 29
STA. 6+59.05
"SET MAG NAIL"



BASELINE POINT NO. 30
STA. 8+65.63
"SET MAG NAIL"



BASELINE POINT NO. 31
STA. 11+25.67
"SET MAG NAIL"



BASELINE POINT NO. 32
STA. 13+85.87
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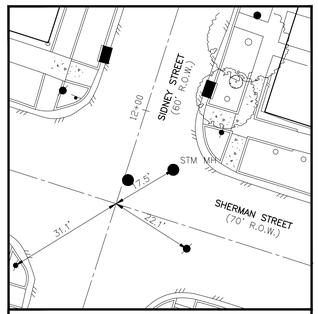
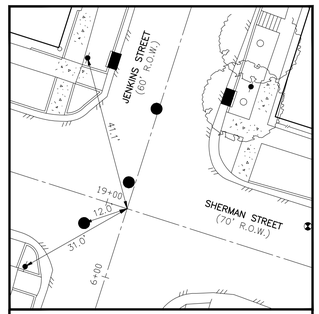
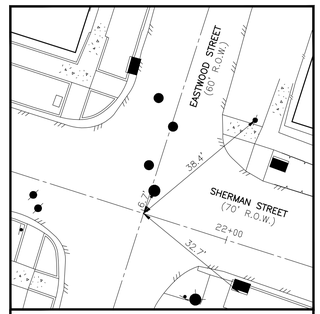


BASELINE POINT NO. 33
STA. 16+45.76
"SET MAG NAIL"



BASELINE POINT NO. 34
STA. 19+5.63
"SET MAG NAIL"



BASELINE POINT NO. 35
STA. 21+77.07
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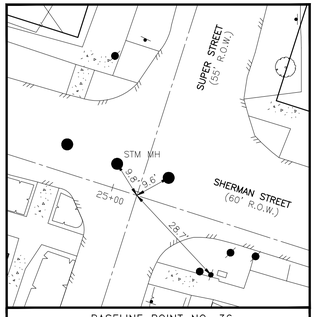
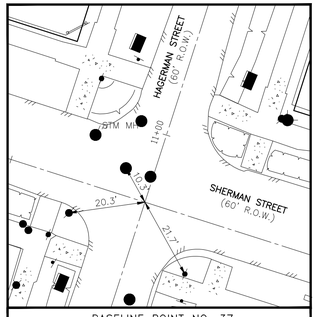
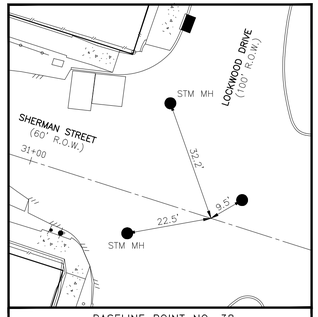


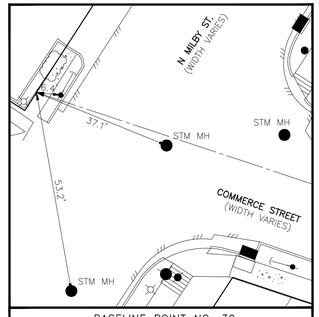
BASELINE POINT NO. 36
STA. 25+6.72
"SET MAG NAIL"



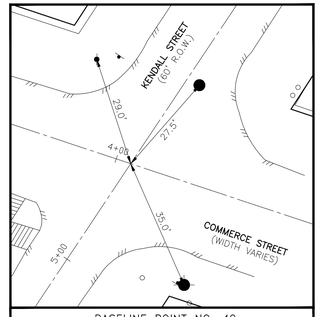
BASELINE POINT NO. 37
STA. 28+37.07
"SET MAG NAIL"



BASELINE POINT NO. 38
STA. 31+50
"SET "X" MARK"



BASELINE POINT NO. 39
STA. 1+00
"SET "X" MARK"



BASELINE POINT NO. 40
STA. 4+4.02
"SET MAG NAIL"

NOTES:

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3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SCALE: 1"=20'
KEY MAP NO. 494 P,S&T

SURVEYOR'S CERTIFICATION:

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RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

WOOLPERT
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Houston, TX 77079
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SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 8 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=20'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 21 OF 275	

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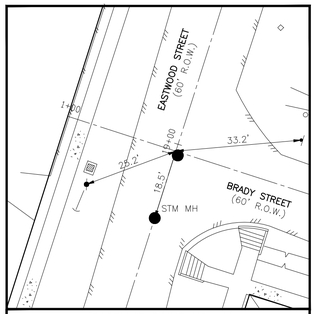
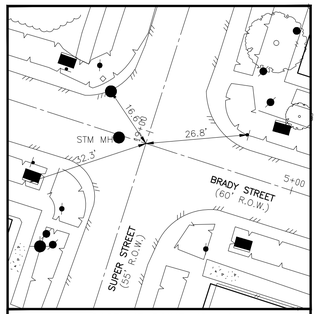


BASELINE POINT NO. 41
STA. 1+30.00
"SET MAG NAIL"



BASELINE POINT NO. 42
STA. 4+59.67
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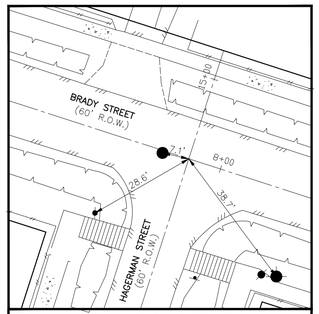

BASELINE POINT NO. 43
STA. 7+91.20
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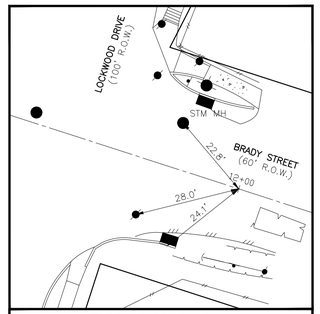
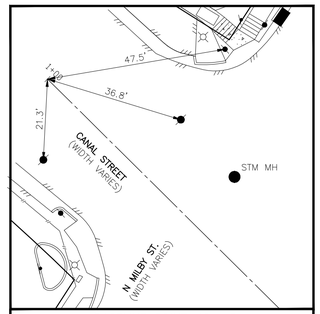
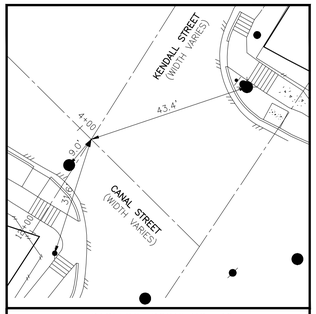


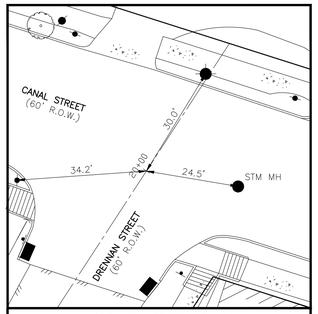
BASELINE POINT NO. 44
STA. 10+72.00
"SET MAG NAIL"



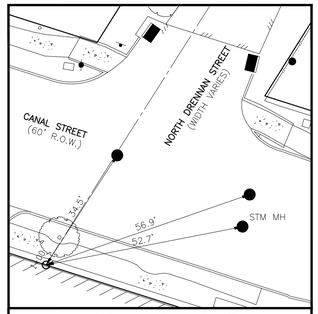
BASELINE POINT NO. 45
STA. 1+00
"SET MAG NAIL"



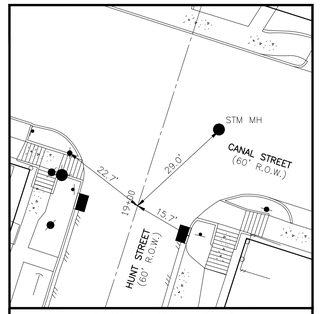
BASELINE POINT NO. 46
STA. 4+4.21
"SET MAG NAIL"



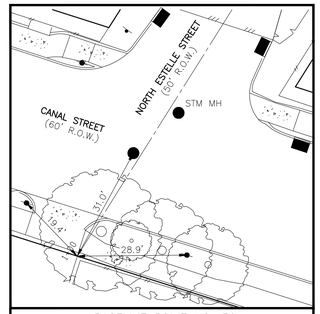
BASELINE POINT NO. 47
STA. 20+00
"SET "X" MARK"



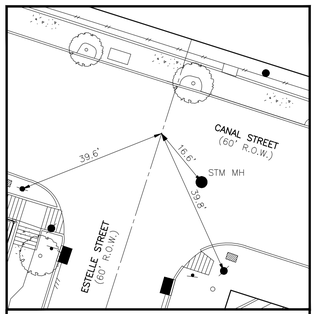
BASELINE POINT NO. 48
STA. 1+00
"SET "X" MARK"



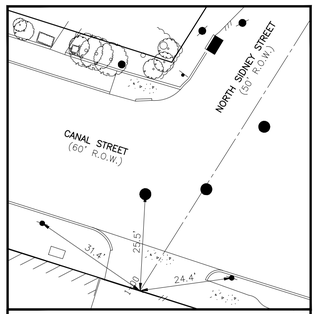
BASELINE POINT NO. 49
STA. 19+00
"SET "X" MARK"



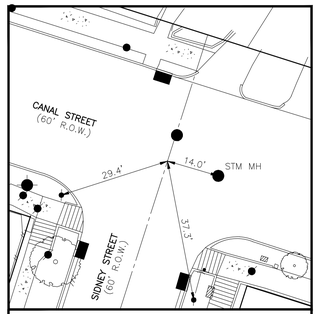
BASELINE POINT NO. 50
STA. 1+00
"SET 5/8" IR"



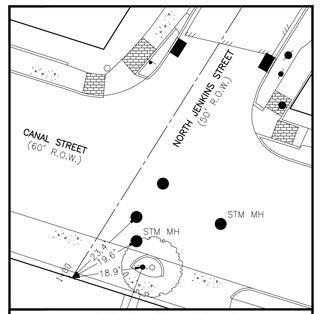
BASELINE POINT NO. 51
STA. 19+50
"SET "X" MARK"



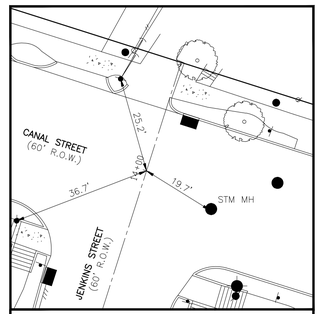
BASELINE POINT NO. 52
STA. 1+00
"SET "X" MARK"



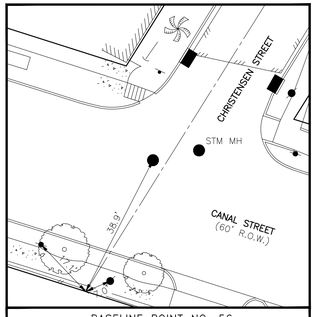
BASELINE POINT NO. 53
STA. 19+50
"SET "X" MARK"



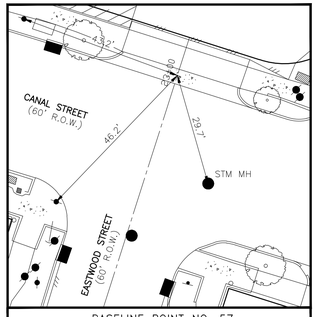
BASELINE POINT NO. 54
STA. 1+00
"SET 5/8" IR"



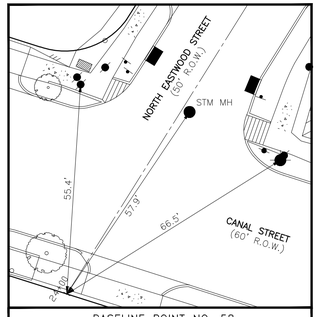
BASELINE POINT NO. 55
STA. 14+00
"SET "X" MARK"



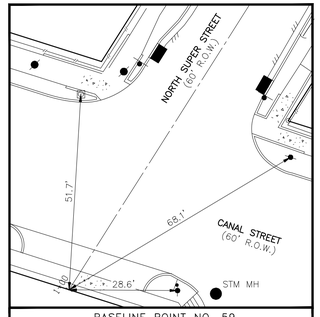
BASELINE POINT NO. 56
STA. 1+00
"SET "X" MARK"



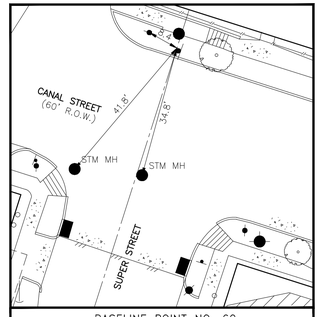
BASELINE POINT NO. 57
STA. 23+00
"SET "X" MARK"



BASELINE POINT NO. 58
STA. 24+00
"SET 60D NAIL"



BASELINE POINT NO. 59
STA. 1+00
"SET 5/8" IR"



BASELINE POINT NO. 60
STA. 23+00
"SET 60D NAIL"

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SCALE: 1"=20'
KEY MAP NO. 494 P,S&T

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

WOOLPERT
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Houston, TX 77079
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SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

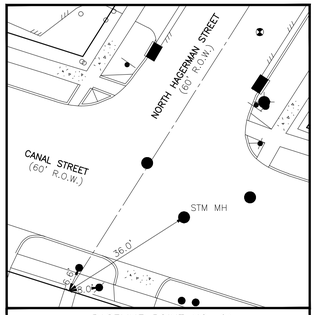
SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 9 OF 13

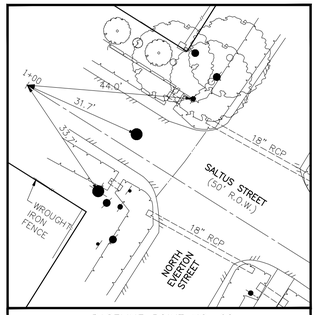
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=20'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 22 OF 275	

PLOT STYLE: WGC.ctb

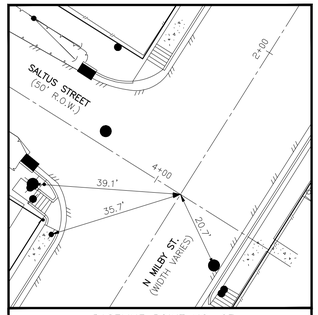
FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM7.dwg



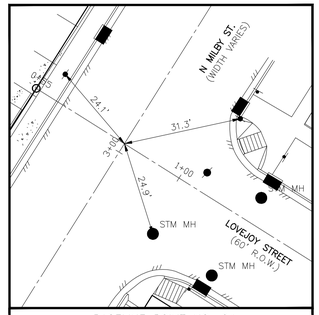
BASELINE POINT NO. 61
STA. 1+00
"SET "X" MARK"



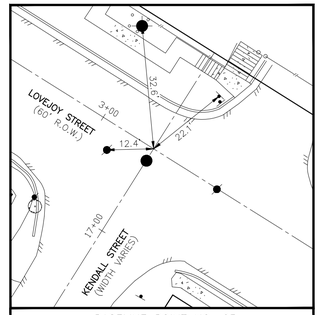
BASELINE POINT NO. 62
STA. 1+00
"SET MAG NAIL"



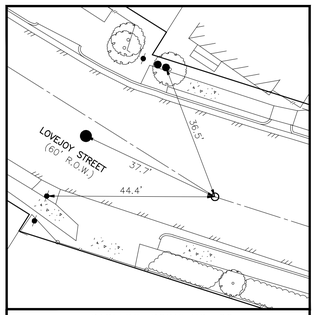
BASELINE POINT NO. 63
STA. 4+7.50
"SET MAG NAIL"



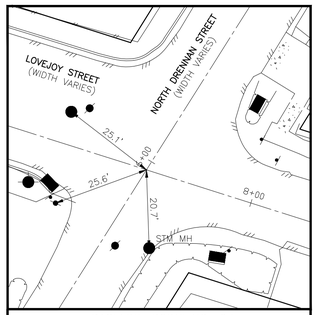
BASELINE POINT NO. 64
STA. 0+82.97
"SET MAG NAIL"



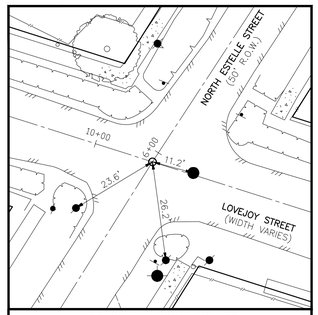
BASELINE POINT NO. 65
STA. 3+15.68
"SET MAG NAIL"



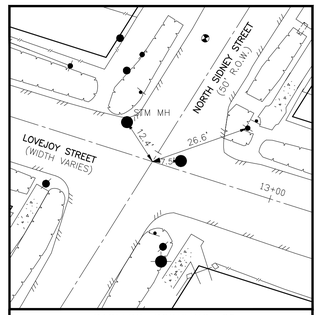
BASELINE POINT NO. 66
STA. 4+69.82
"SET MAG NAIL"



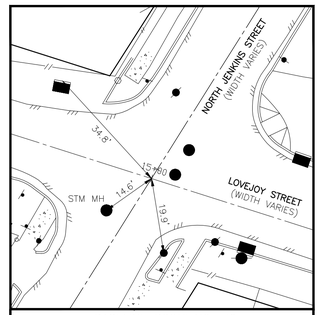
BASELINE POINT NO. 67
STA. 7+71.09
"SET MAG NAIL"



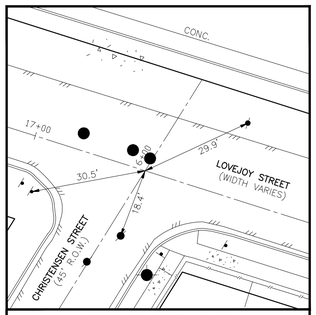
8BASELINE POINT NO. 68
STA. 10+15.83
"SET MAG NAIL"



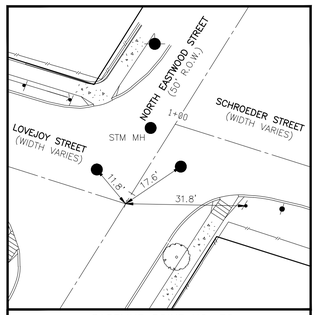
BASELINE POINT NO. 69
STA. 12+67.47
"SET MAG NAIL"



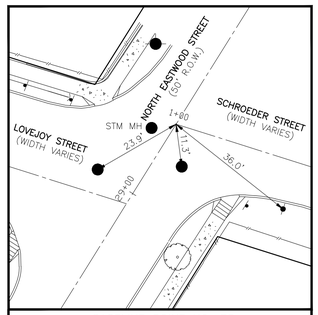
BASELINE POINT NO. 70
STA. 15+0.03
"SET MAG NAIL"



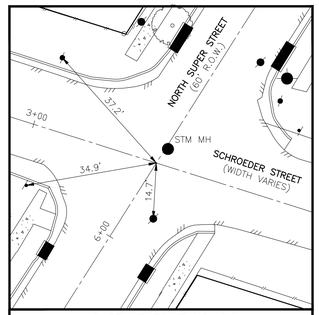
BASELINE POINT NO. 71
STA. 17+36.81
"SET MAG NAIL"



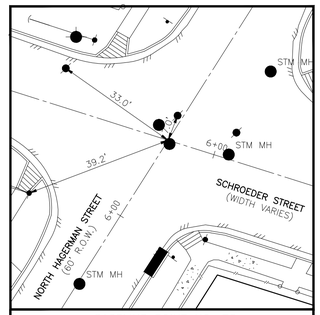
BASELINE POINT NO. 72
STA. 19+61.85
"SET "X" MARK"



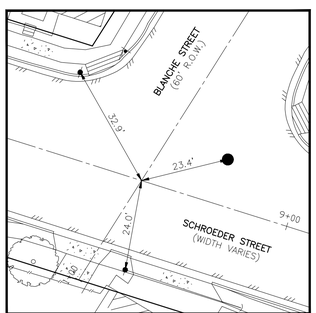
BASELINE POINT NO. 73
STA. 1+00
"SET "X" MARK"



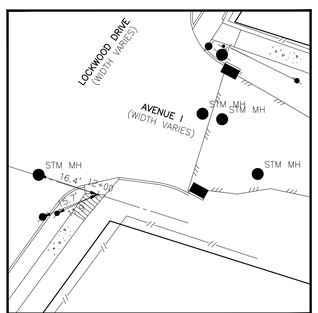
BASELINE POINT NO. 74
STA. 3+33.96
"SET MAG NAIL"



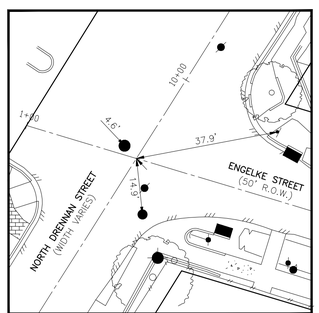
BASELINE POINT NO. 75
STA. 5+87.33
"SET MAG NAIL"



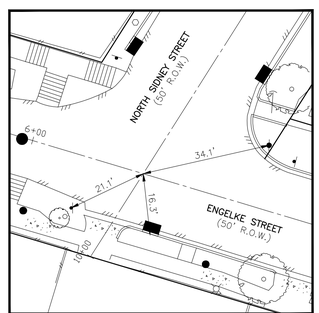
BASELINE POINT NO. 76
STA. 8+59.84
"SET MAG NAIL"



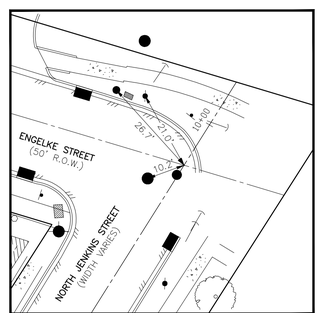
BASELINE POINT NO. 77
STA. 12+00
"SET "X" MARK"



BASELINE POINT NO. 78
STA. 1+30.27
"SET MAG NAIL"



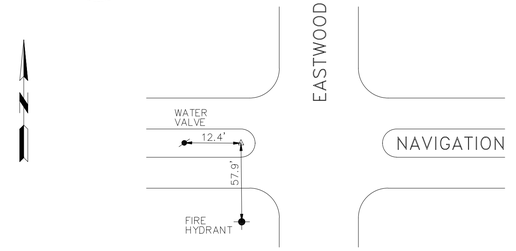
BASELINE POINT NO. 79
STA. 6+30.48
"SET MAG NAIL"



BASELINE POINT NO. 80
STA. 8+61.34
"SET MAG NAIL"

CITY OF HOUSTON

CITY SURVEY 5557-7106
SITE CONTROL MONUMENT



SCALE: 1"=20'
KEY MAP NO. 494 P,S&T

Project WBS# S-000035-0270-4
Texas Coordinate System of 1983,
South Central Zone, U. S. Survey Feet
X= 3,133,715.31
Y= 13,839,301.07

Lat.= 29°45'07.50634"N
Long.= 095°19'37.78589"W

Keymap Page: 494P
Orthometric Elevation = 37.97'
Ellipsoid Height = -15.737
Geoid: GEOID '18
Datum Source & Adjustment: NAD '83 (2011)

Reference Frame Used: EPOCH 2010
Vertical Adjustment Used: NAVD '88 (CORS '96)
General Location: IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD AND NAVIGATION
Date Set: 01-25-08 Type of Mark: 4A
3 Nearest project control points (bearings and distances stated below):

NOTE:
1. Bearings are grid bearings.
2. Scale Factor (S.F. 0.999890315)
3. Surface = Grid / S.F.

Western Group Consultants

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

5-12-2021

Western Group Consultants
11111 Katy Freeway
Suite 520
Houston, TX 77079
(713) 465-6655

UPDATED: 5-12-21

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

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Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

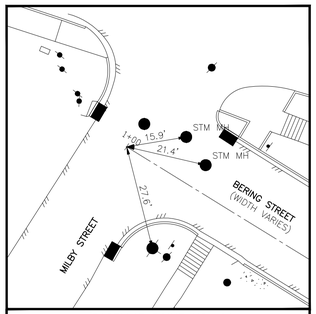
SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 10 OF 13

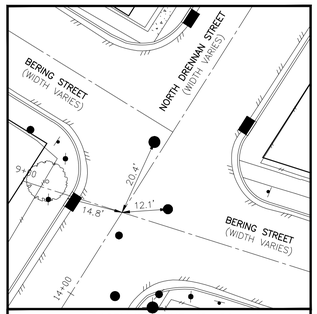
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=20'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 23 OF 275	

PLOT STYLE: WGC.ctb

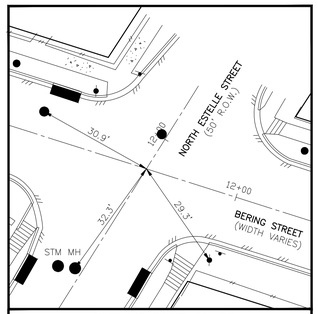
FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM7.dwg



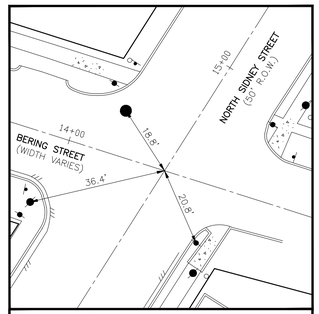
BASELINE POINT NO. 81
STA. 1+00
"SET MAG NAIL"



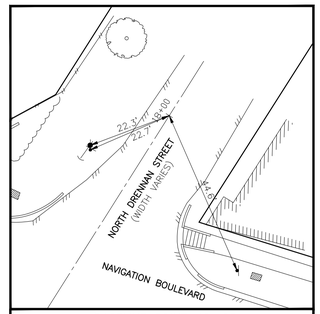
BASELINE POINT NO. 82
STA. 9+27.50
"SET MAG NAIL"



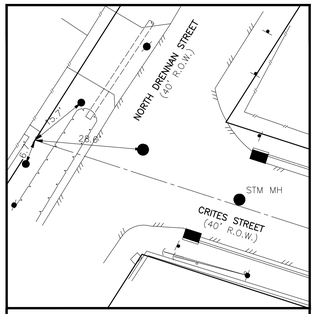
BASELINE POINT NO. 83
STA. 11+75.19
"SET MAG NAIL"



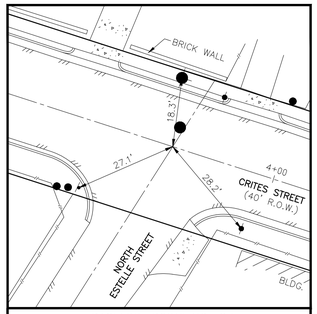
BASELINE POINT NO. 84
STA. 14+26.40
"SET MAG NAIL"



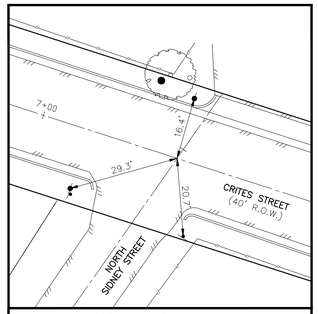
BASELINE POINT NO. 85
STA. 18+00
"SET MAG NAIL"



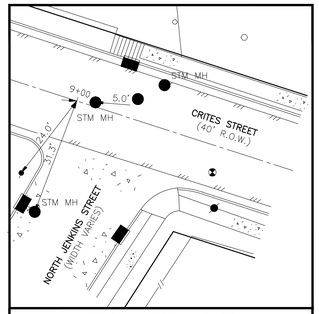
BASELINE POINT NO. 86
STA. 0+99.66
"SET MAG NAIL"



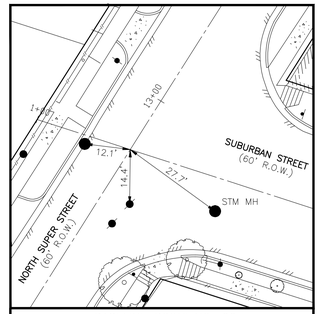
BASELINE POINT NO. 87
STA. 3+82.76
"SET MAG NAIL"



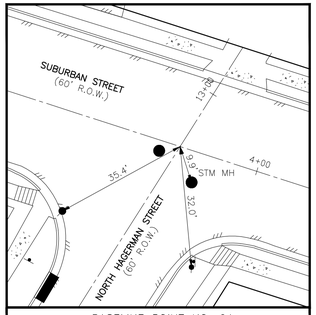
BASELINE POINT NO. 88
STA. 7+55.05
"SET MAG NAIL"



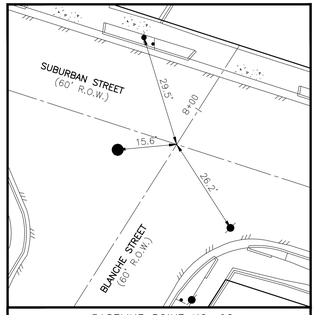
BASELINE POINT NO. 89
STA. 9+00
"SET MAG NAIL"



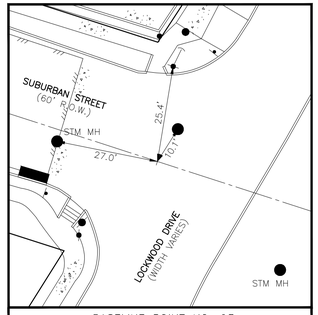
BASELINE POINT NO. 90
STA. 1+25.82
"SET MAG NAIL"



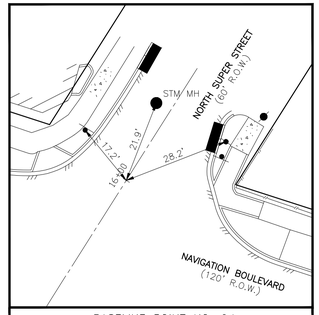
BASELINE POINT NO. 91
STA. 3+78.73
"SET MAG NAIL"



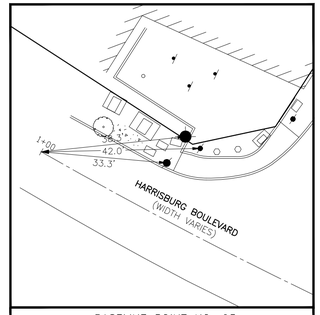
BASELINE POINT NO. 92
STA. 6+50.76
"SET MAG NAIL"



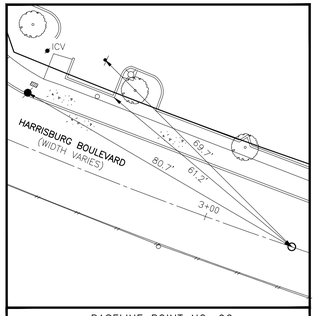
BASELINE POINT NO. 93
STA. 9+00
"SET "X" MARK"



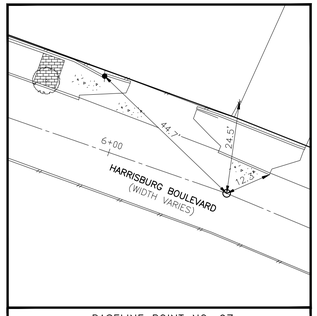
BASELINE POINT NO. 94
STA. 16+00
"SET MAG NAIL"



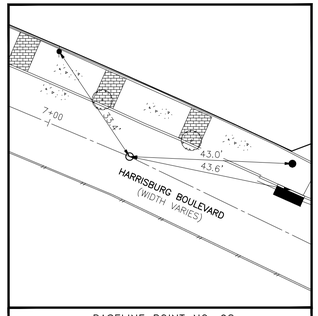
BASELINE POINT NO. 95
STA. 1+00
"SET "X" MARK"



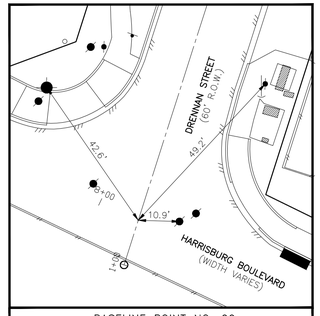
BASELINE POINT NO. 96
STA. 3+24.15
"SET "X" MARK"



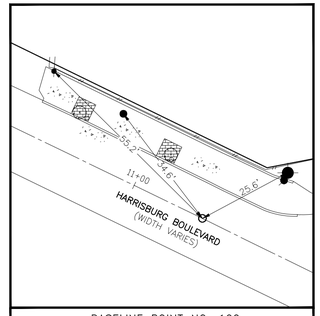
BASELINE POINT NO. 97
STA. 6+32.94
"SET "X" MARK"



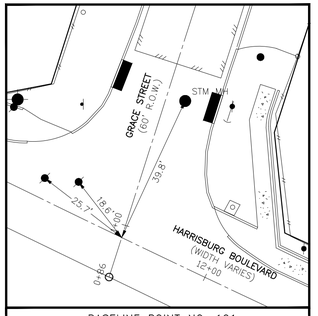
BASELINE POINT NO. 98
STA. 7+23.14
"SET "X" MARK"



BASELINE POINT NO. 99
STA. 8+10.81
"SET "X" MARK"



BASELINE POINT NO. 100
STA. 11+20
"SET "X" MARK"



BASELINE POINT NO. 101
STA. 11+75.30
"SET "X" MARK"

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SCALE: 1"=20'
KEY MAP NO. 494 P,S&T

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

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SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 11 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=20'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 24 OF 275	

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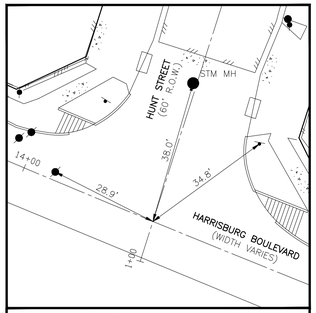
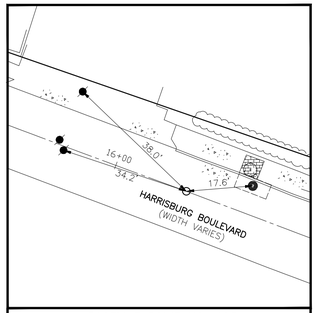
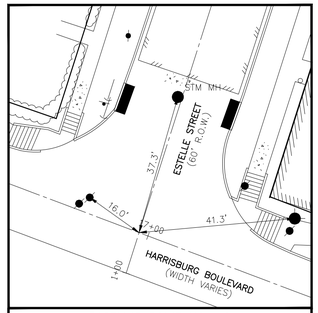
PLOT STYLE: WGC.ctb



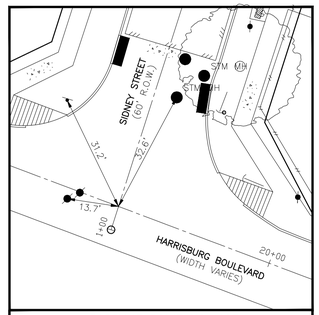
BASELINE POINT NO. 102
STA. 14+36.47
"SET "X" MARK"



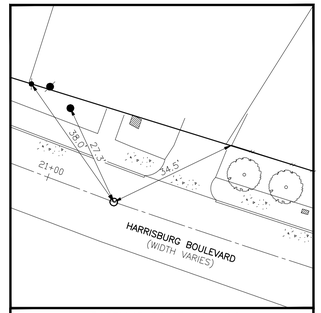
BASELINE POINT NO. 103
STA. 16+45.29
"SET "X" MARK"



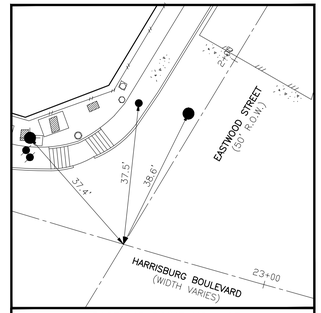
BASELINE POINT NO. 104
STA. 16+97.17
"SET "X" MARK"



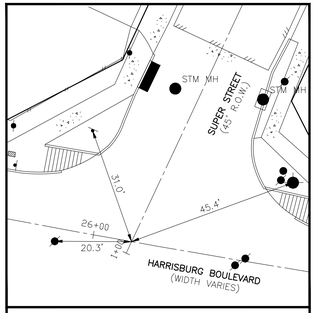
BASELINE POINT NO. 105
STA. 19+57.16
"SET "X" MARK"



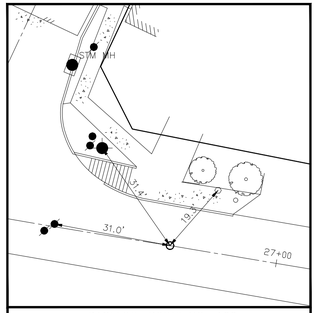
BASELINE POINT NO. 106
STA. 21+18.61
"SET "X" MARK"



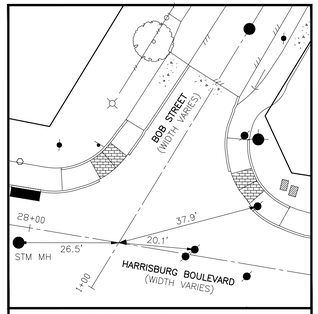
BASELINE POINT NO. 107
STA. 22+61.10
"SET "X" MARK"



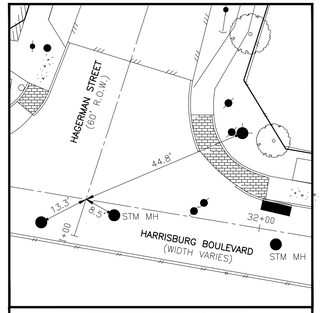
BASELINE POINT NO. 108
STA. 26+9.87
"SET "X" MARK"



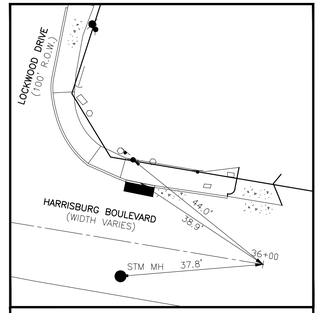
BASELINE POINT NO. 109
STA. 26+71.59
"SET "X" MARK"



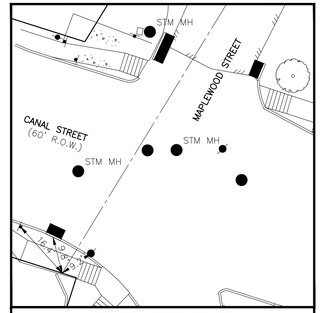
BASELINE POINT NO. 110
STA. 28+23.53
"SET "X" MARK"



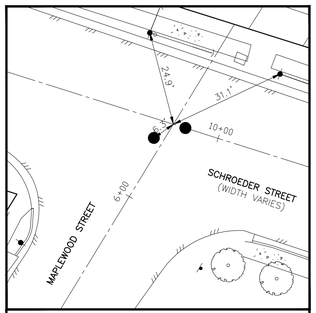
BASELINE POINT NO. 111
STA. 31+57.27
"SET "X" MARK"



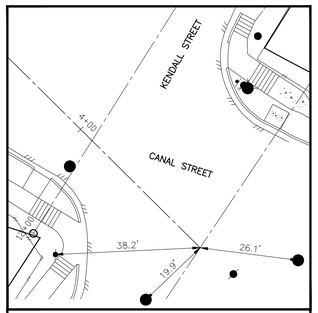
BASELINE POINT NO. 112
STA. 36+00
"SET "X" MARK"



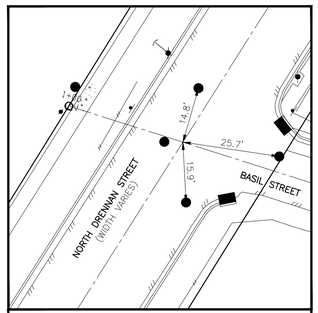
BASELINE POINT NO. 113
STA. 1+00
"SET "X" MARK"



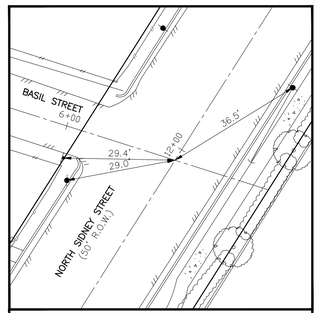
BASELINE POINT NO. 114
STA. 9+96.93
"SET MAG NAIL"



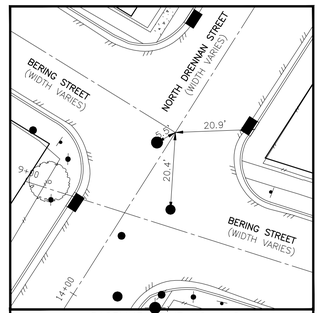
BASELINE POINT NO. 115
STA. 4+44.42
"SET MAG NAIL"



BASELINE POINT NO. 116
STA. 1+31.58
"SET MAG NAIL"



BASELINE POINT NO. 117
STA. 6+29.98
"SET MAG NAIL"



BASELINE POINT NO. 118
STA. 7+82.84
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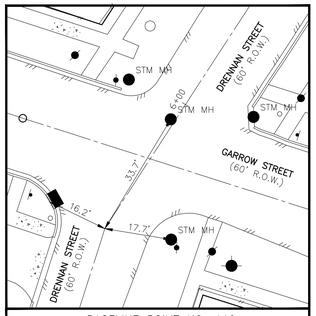
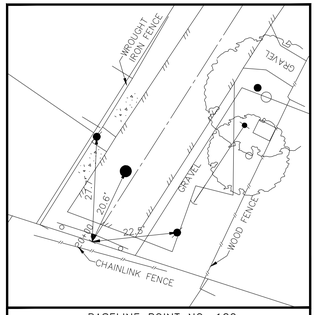
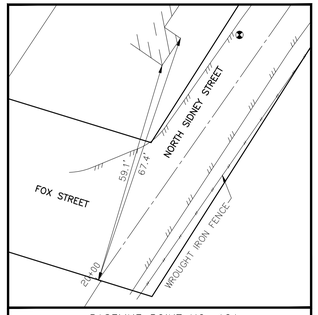


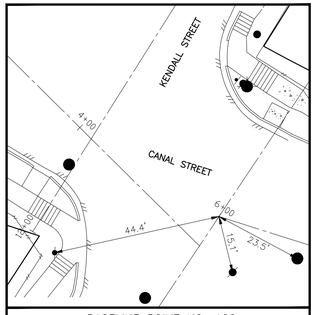
BASELINE POINT NO. 119
STA. 5+60.96
"SET MAG NAIL"



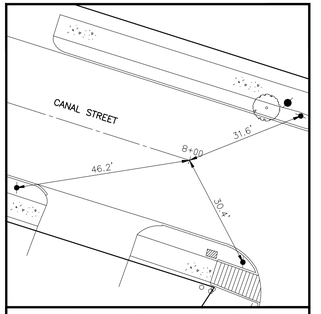
BASELINE POINT NO. 120
STA. 20+00
"SET 5/8" IR"



BASELINE POINT NO. 121
STA. 20+00
"SET MAG NAIL"



BASELINE POINT NO. 122
STA. 6+00
"SET MAG NAIL"



BASELINE POINT NO. 123
STA. 8+00
"SET MAG NAIL"

SURVEYOR'S CERTIFICATION:

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RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

WOOLPERT
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Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

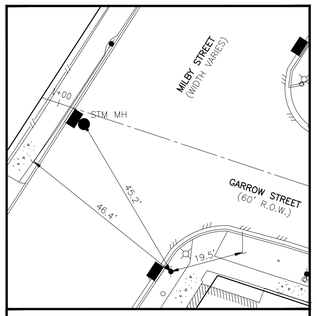
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

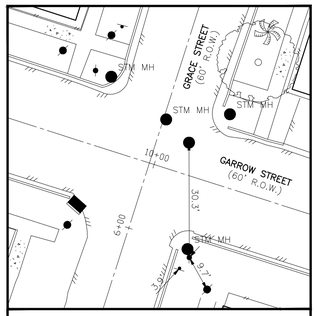
SURVEY CONTROL MAP
SHEET 12 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=20'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 25 OF 275	

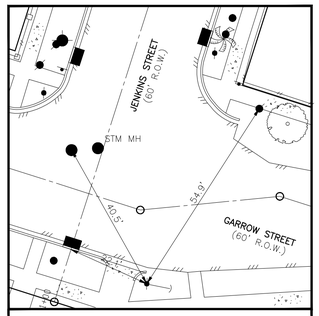
FILE PATH: Z:\Civiltech\City Of Houston Waterline Replacement Project 2021\Second Ward Area\Survey Control Maps\Second Ward Area SCM7.dwg PLOT STYLE: WGC.ctb



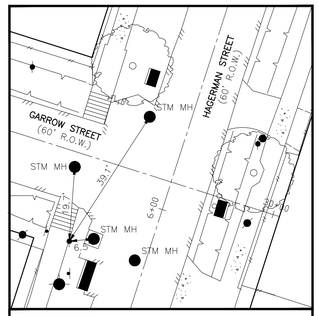
T.B.M. 1



T.B.M. 2



T.B.M. 3



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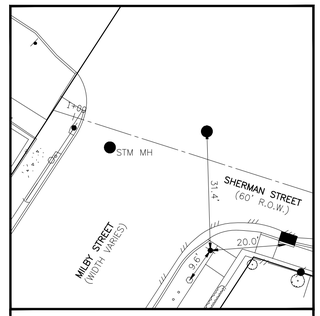
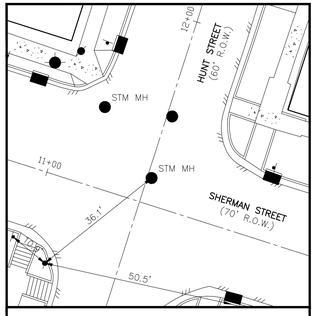


T.B.M. 5

NOTES:

1) THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE GRID COORDINATES (NAD83).
2) COORDINATES FOR THE BASELINE ARE GRID VALUES, SCALE FACTOR = 0.999890315.
3) ALL DISTANCES SHOWN ARE SURFACE VALUES.

SCALE: 1"=20'
KEY MAP NO. 494 P,S&T



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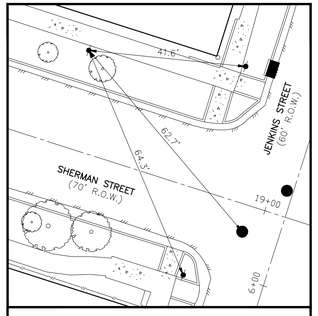

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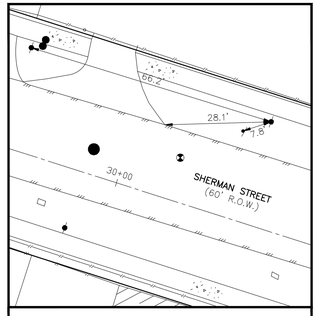

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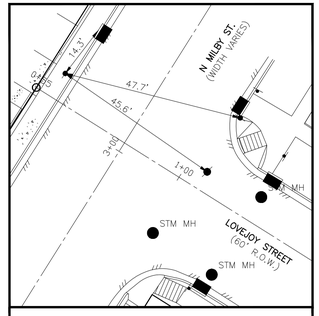

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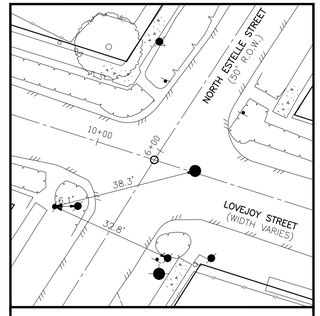

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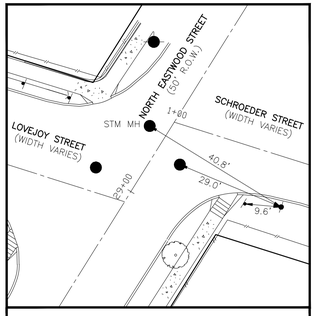

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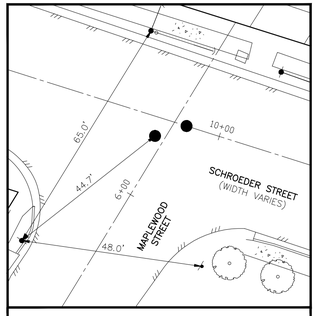

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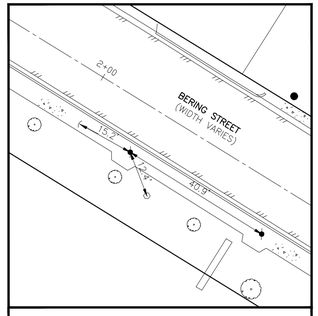

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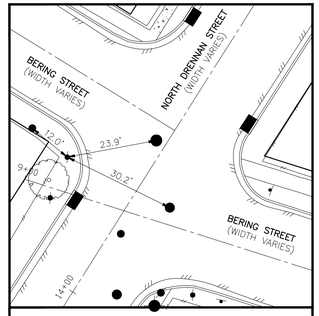

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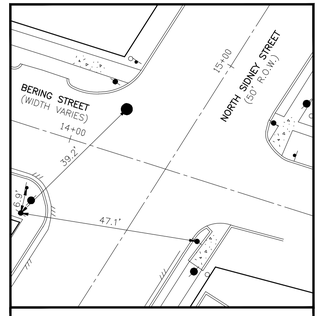

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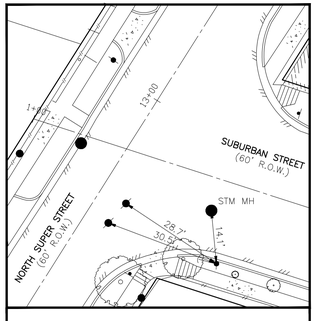

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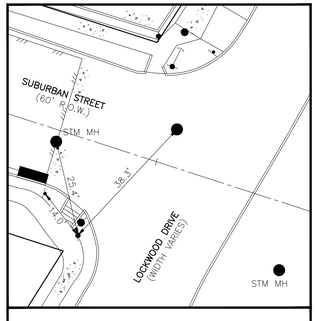

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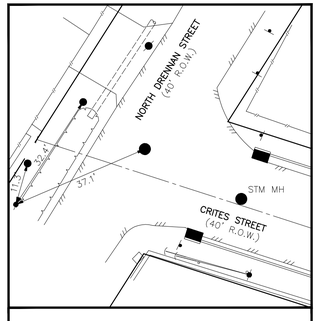

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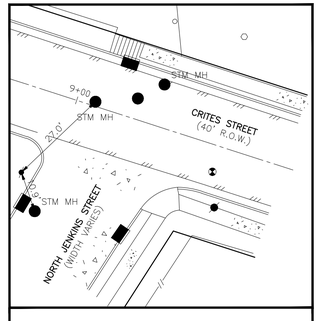

T.B.M. 19

SURVEYOR'S CERTIFICATION:

I, RAYMOND A. RAHAMAN HEREBY CERTIFY THAT THIS SURVEY CONTROL MAP CORRECTLY REPRESENTS THE FACTS FOUND AS A RESULT OF AN ACTUAL SURVEY CONDUCTED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2021.

RAYMOND A. RAHAMAN R.P.L.S. NO. 4354
FIRM CERTIFICATE OF REGISTRATION NO. 10038100

STATE OF TEXAS
REGISTERED
RAYMOND A. RAHAMAN
4354
PROFESSIONAL
LAND SURVEYOR

12-14-2022

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO.

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECOND WARD WATERLINE REPLACEMENT

SURVEY CONTROL MAP
SHEET 13 OF 13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
SCALE: 1"=20'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 26 OF 275	

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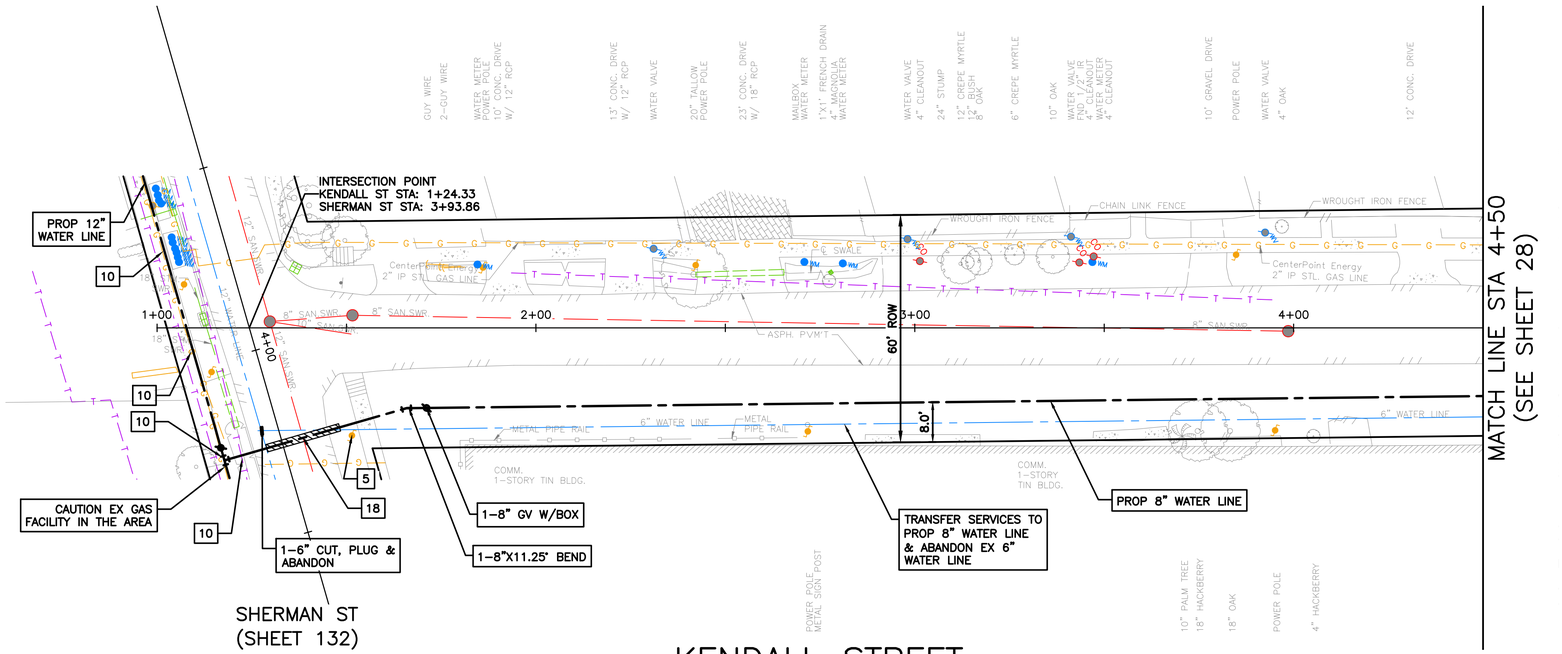
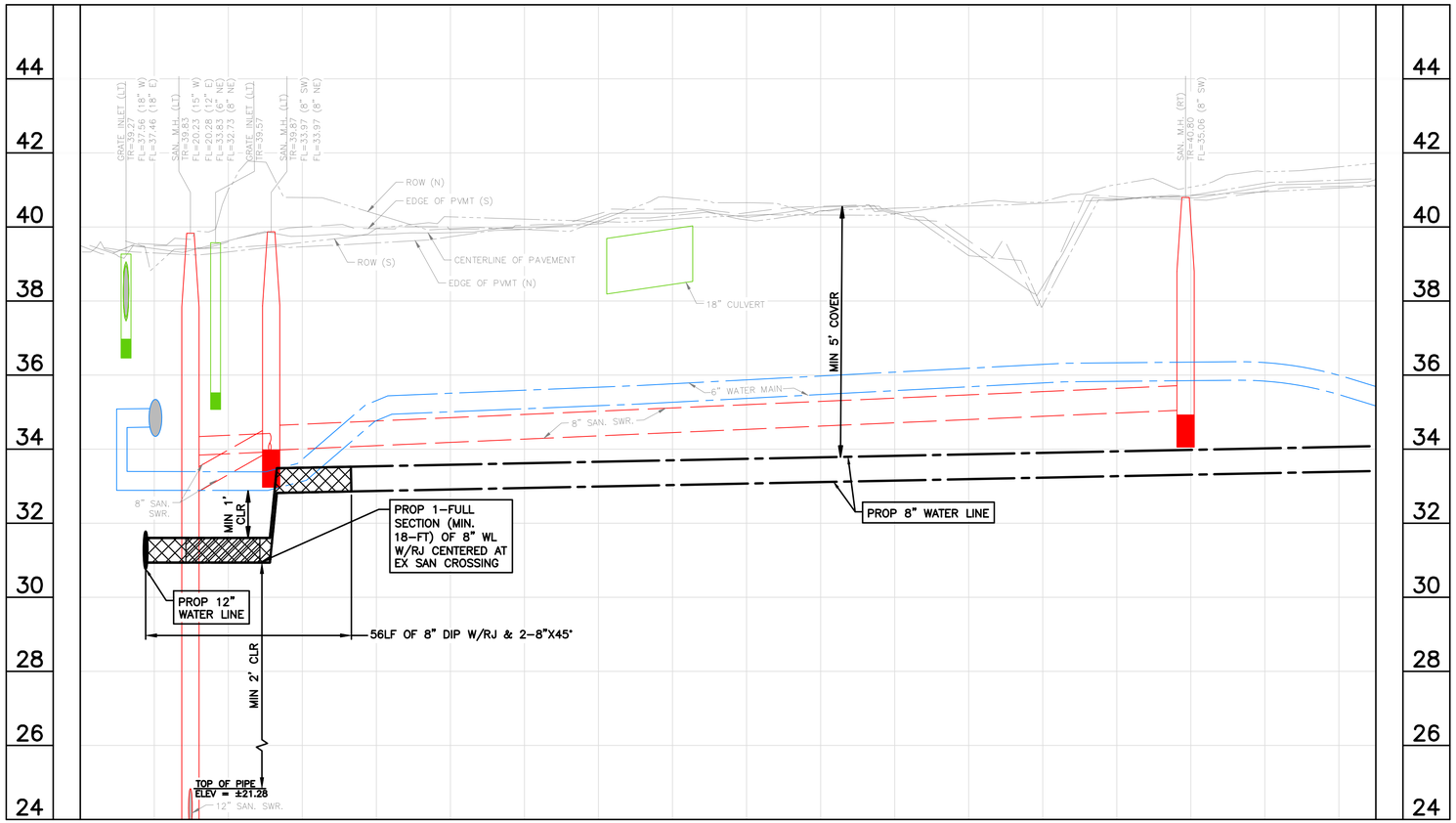
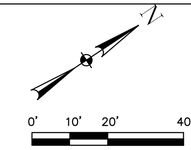
PLOT STYLE: WGC.ctb



KENDALL STREET





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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DISCRIPTION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 5: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SHERMAN ST. & MILBY ST. STA. 14+45.44, 22.7' RT (SHERMAN ST. BASELINE) ELEV.=40.70'

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)

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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

KENDALL ST
PLAN & PROFILE
1+00 TO 4+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 27 OF 275	

APP. | REVISION | NO. | DATE

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FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-KENDALL STREET.dwg

90% SUBMITTAL

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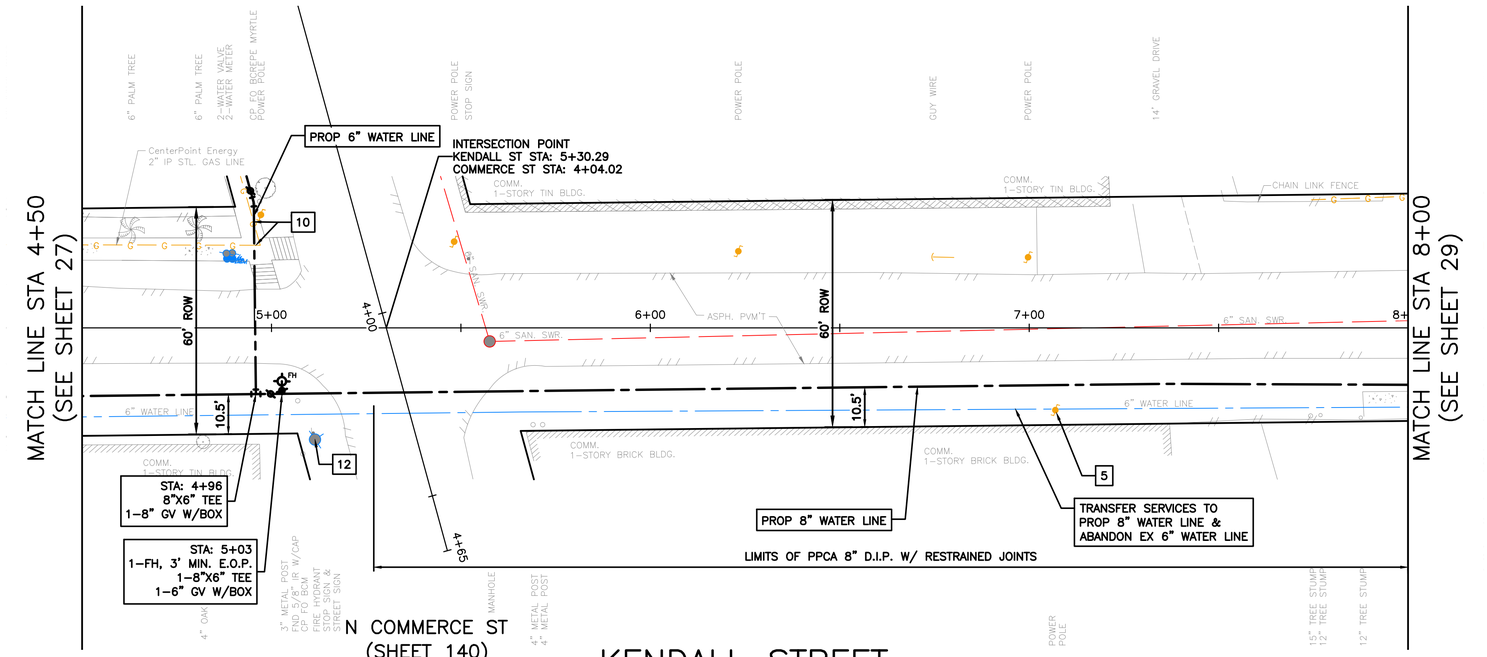

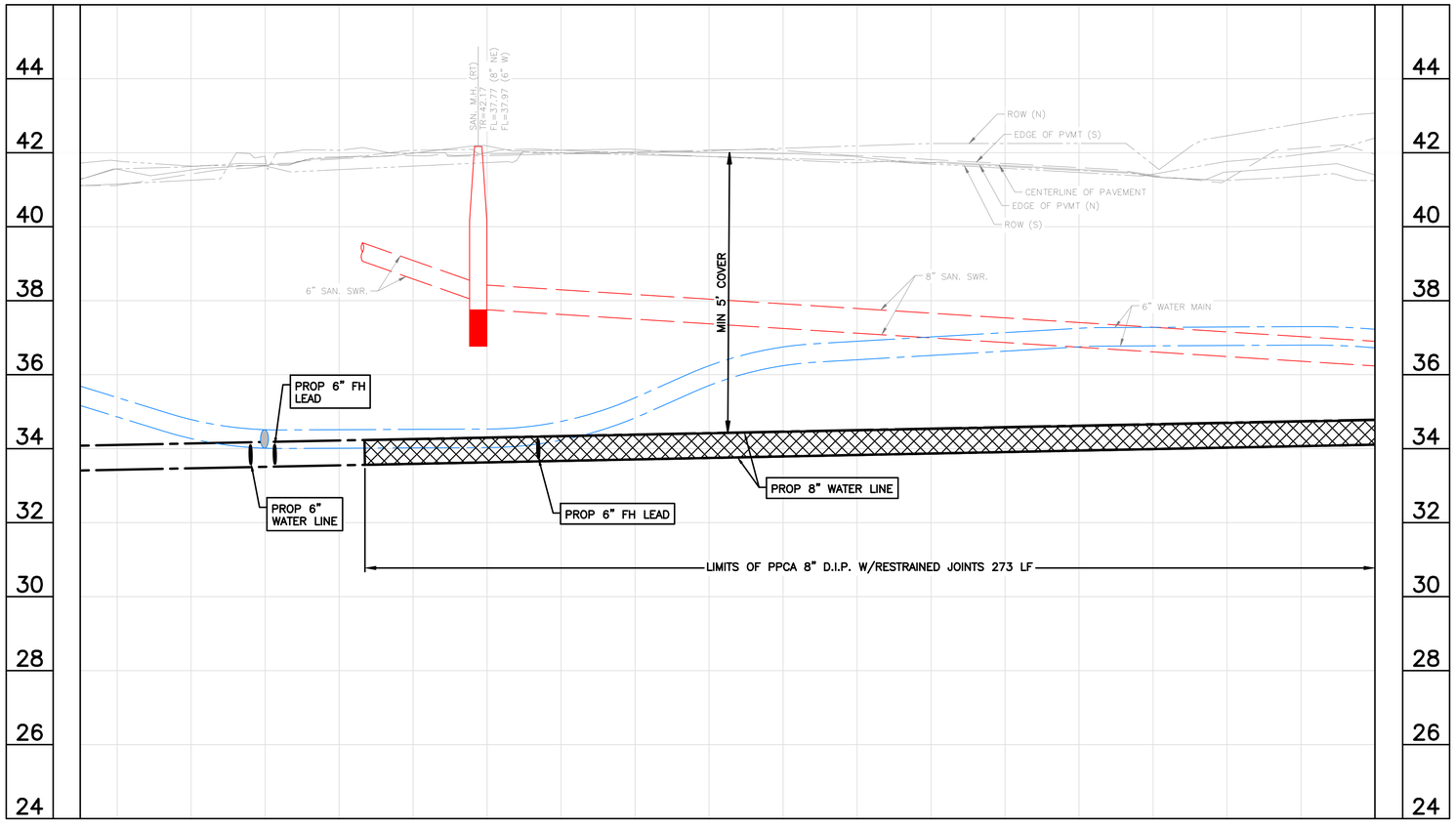

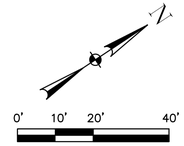

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Approved for AT&T underground conduit facilities only. Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

KENDALL ST
PLAN & PROFILE
4+50 TO 8+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 28 OF 275	

APP. | REVISION | NO. | DATE

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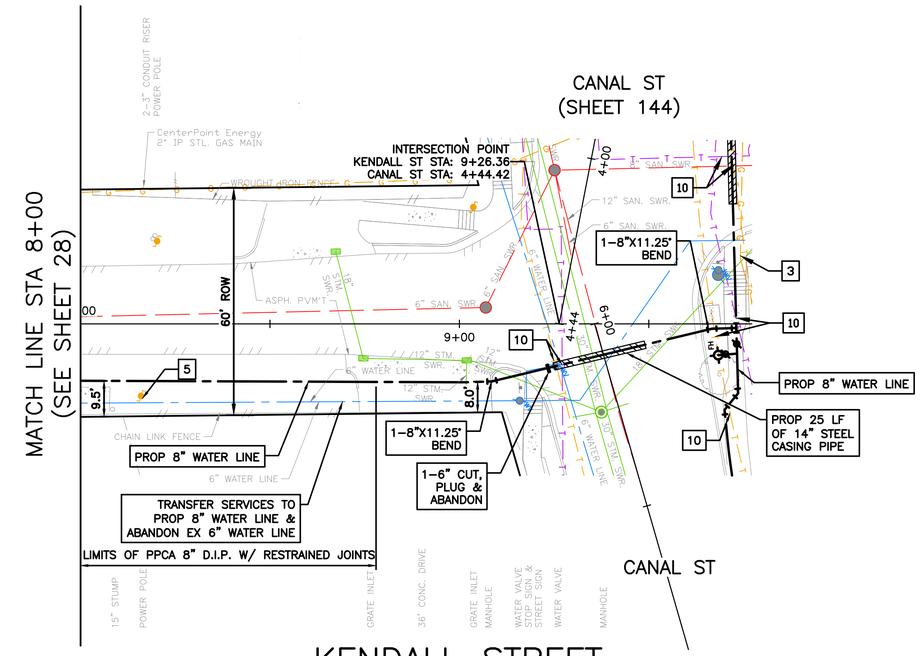
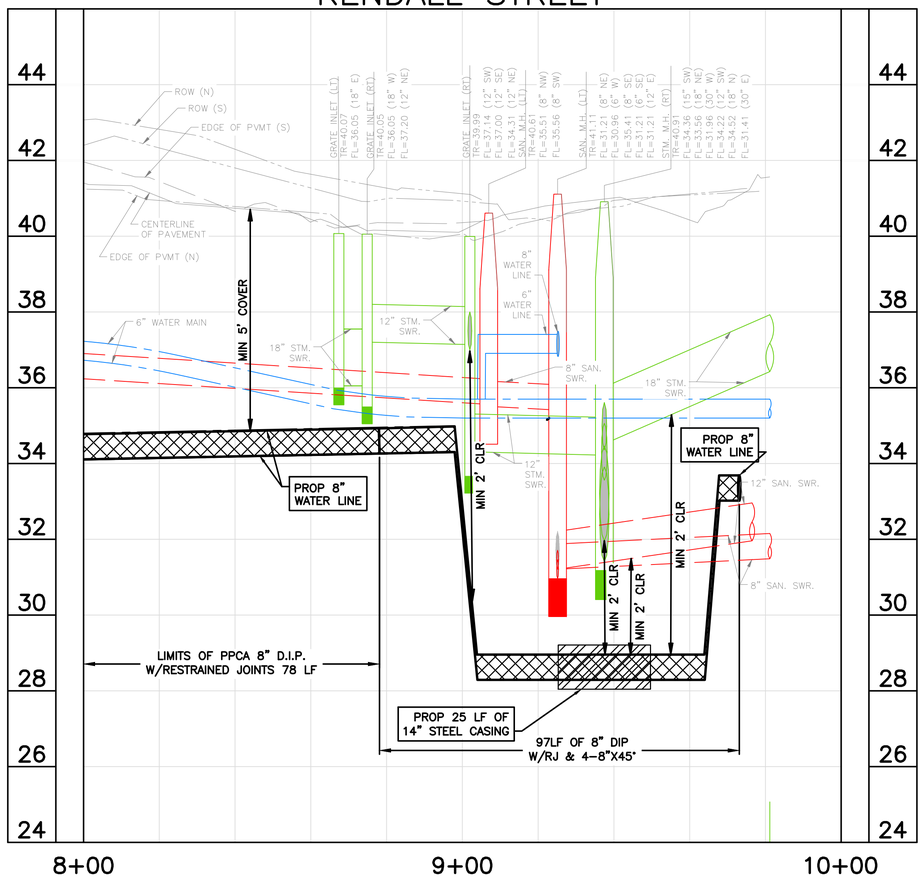
90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1" = 20'

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

KENDALL ST
PLAN & PROFILE
8+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 29 OF 275	

NO.	DATE	REVISION	APP.

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90% SUBMITTAL

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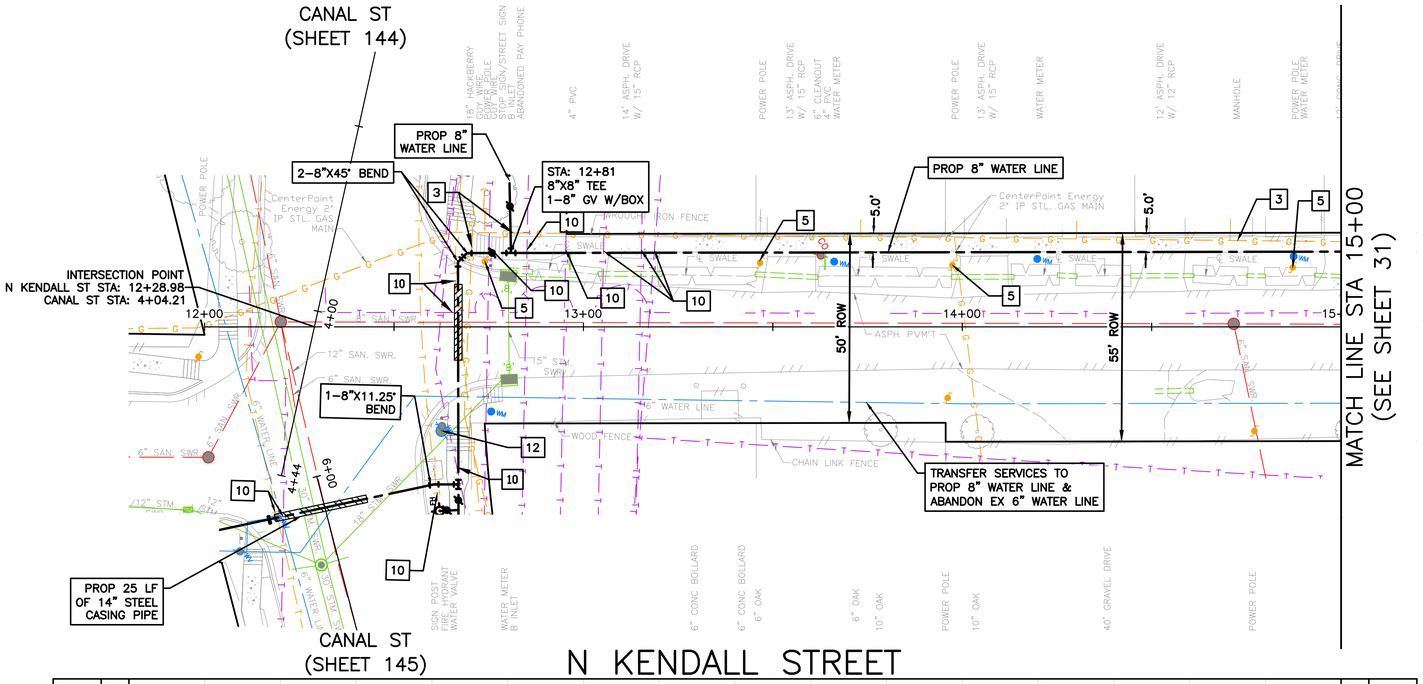

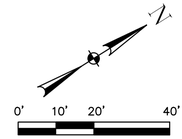

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ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 9: SET 60D NAIL IN POWER POLE LOCATED AT THE NE CORNER OF LOVEJOY ST. & MILBY ST.
STA. 1+05.66, 46.3' LT (LOVEJOY ST. BASELINE)
ELEV.=42.92'

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

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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

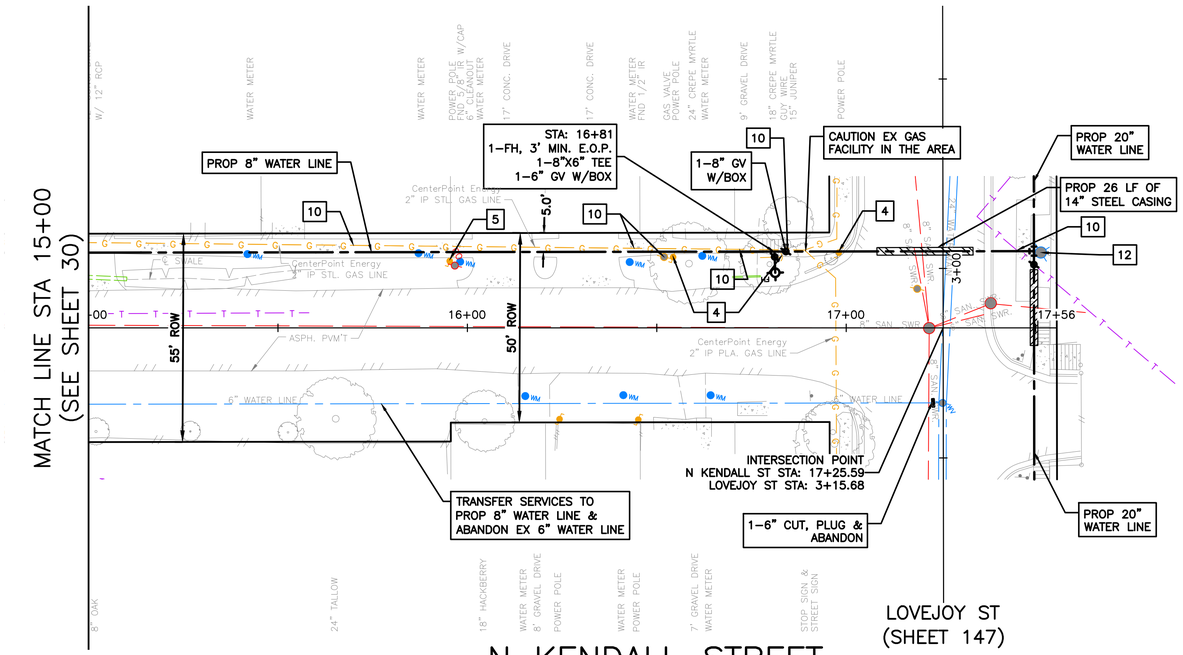
SECONDWARD WATERLINE REPLACEMENT

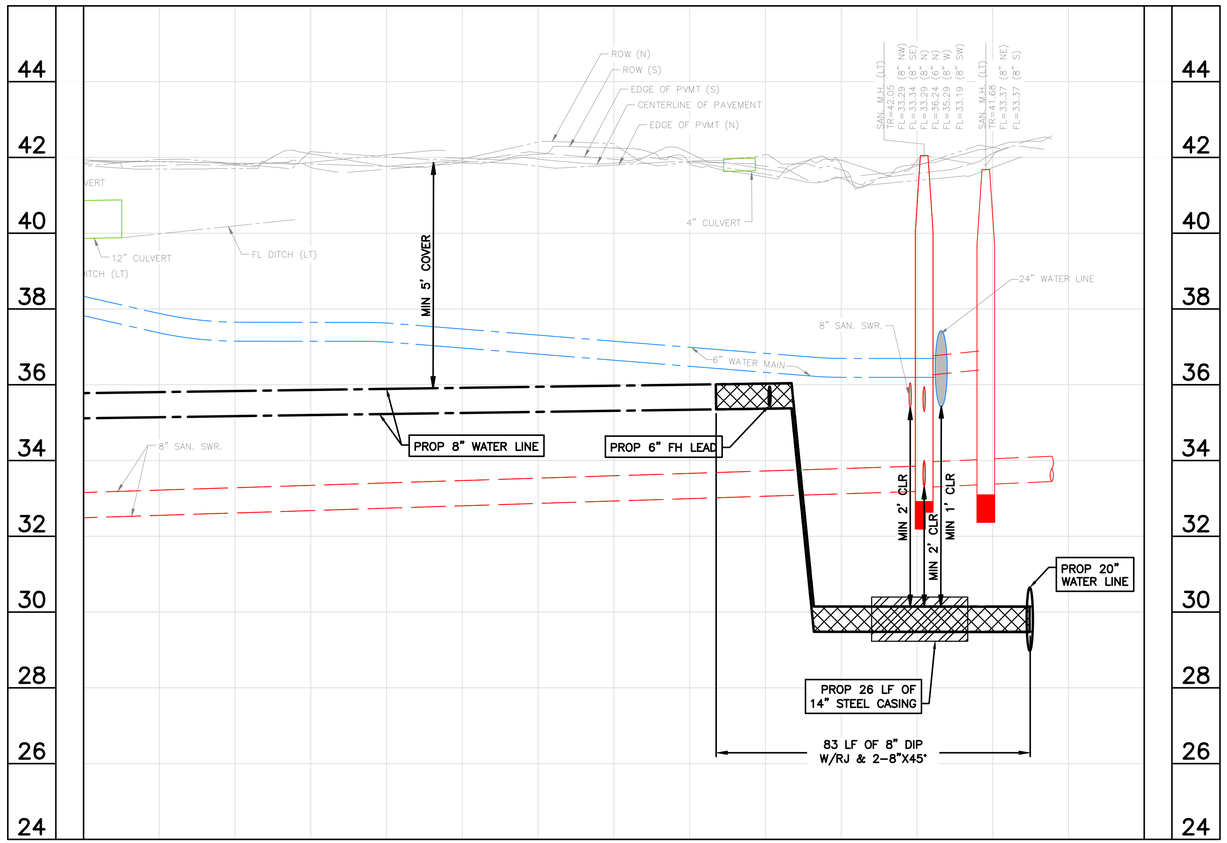
N KENDALL ST
PLAN & PROFILE
12+00 TO 15+00

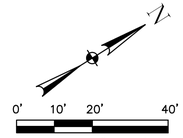
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 30 OF 275	

APP. | REVISION | NO. | DATE

90% SUBMITTAL







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N KENDALL ST
PLAN & PROFILE
15+00 TO END

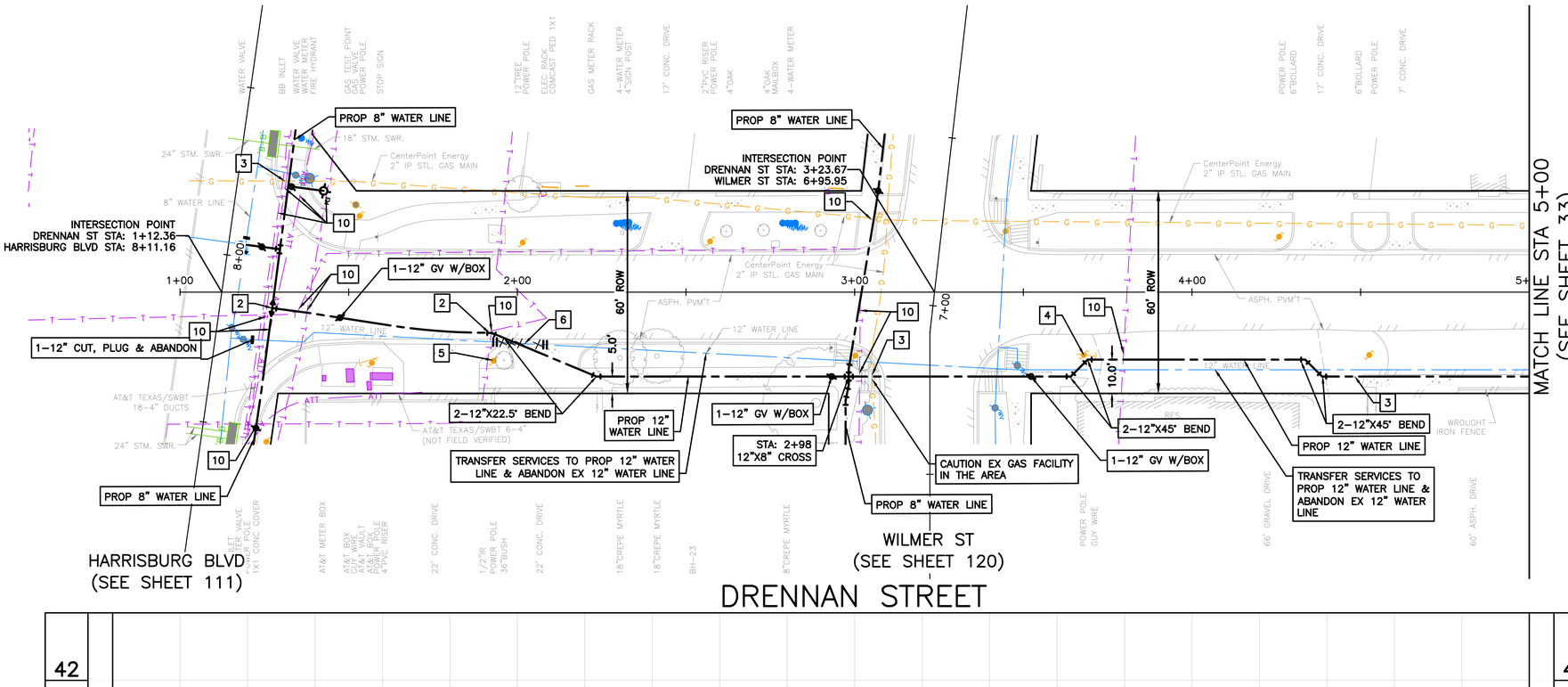
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 31 OF 275	

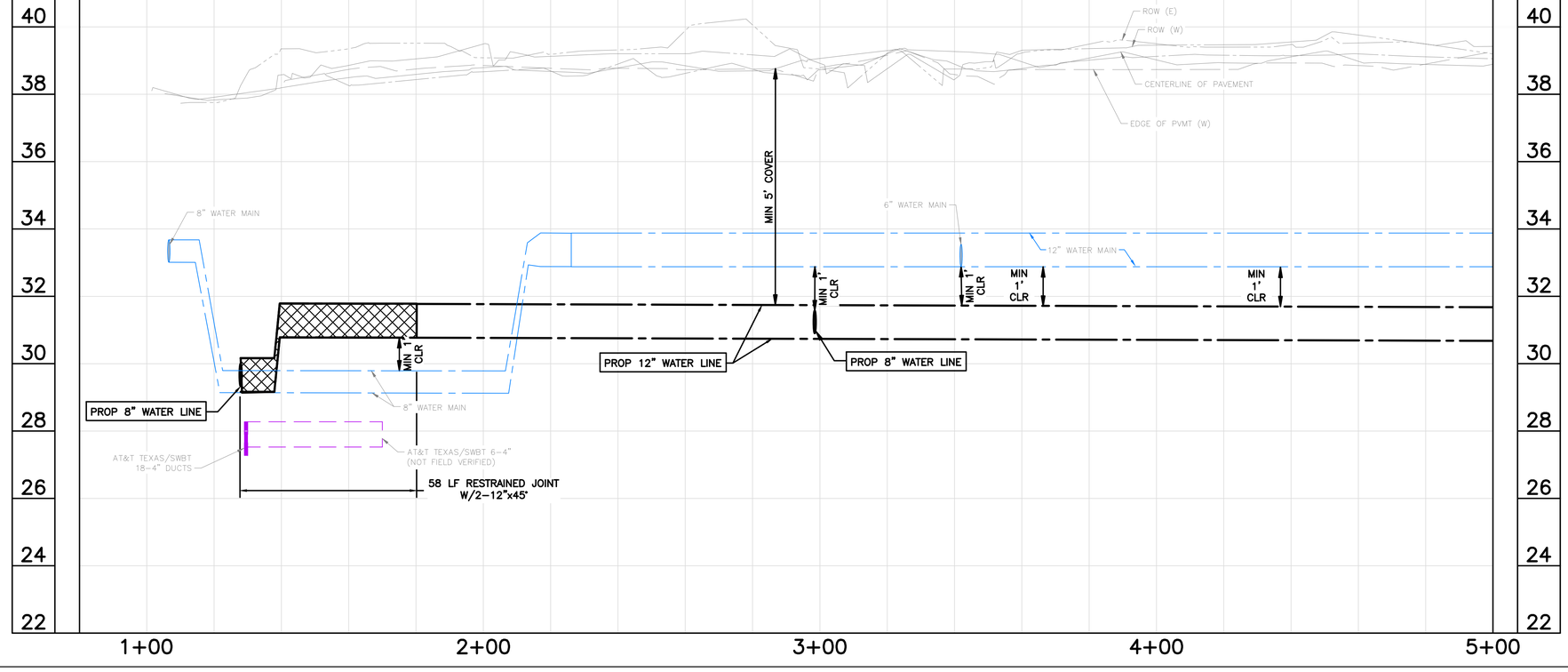
APP. | REVISION | NO. | DATE

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 9:27 AM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-KENDALL STREET.dwg

90% SUBMITTAL





SCALE: 1"=20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. & GRACE ST.
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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WOOLPERT
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

DRENNAN ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 32 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:28 AM
PLOT STYLE: COH.ctb
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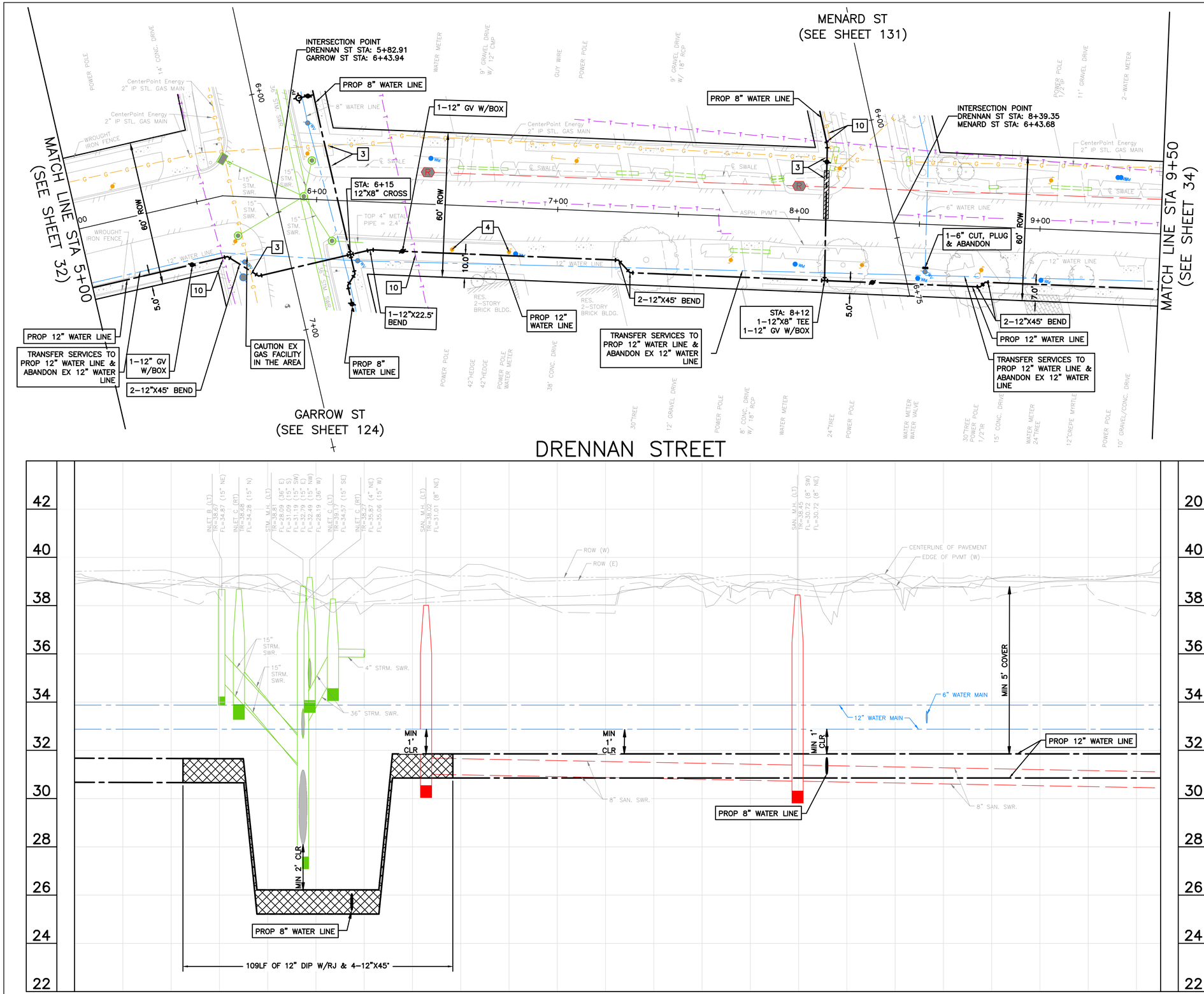

0' 10' 20' 40'

SCALE: 1"=20'

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FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

DRENNAN ST
PLAN & PROFILE
5+00 TO 9+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 33 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:29 AM
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FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-DRENNAN STREET.dwg

PLOTTED: 8/15/2025 9:30 AM
PLOT STYLE: COH.ctb
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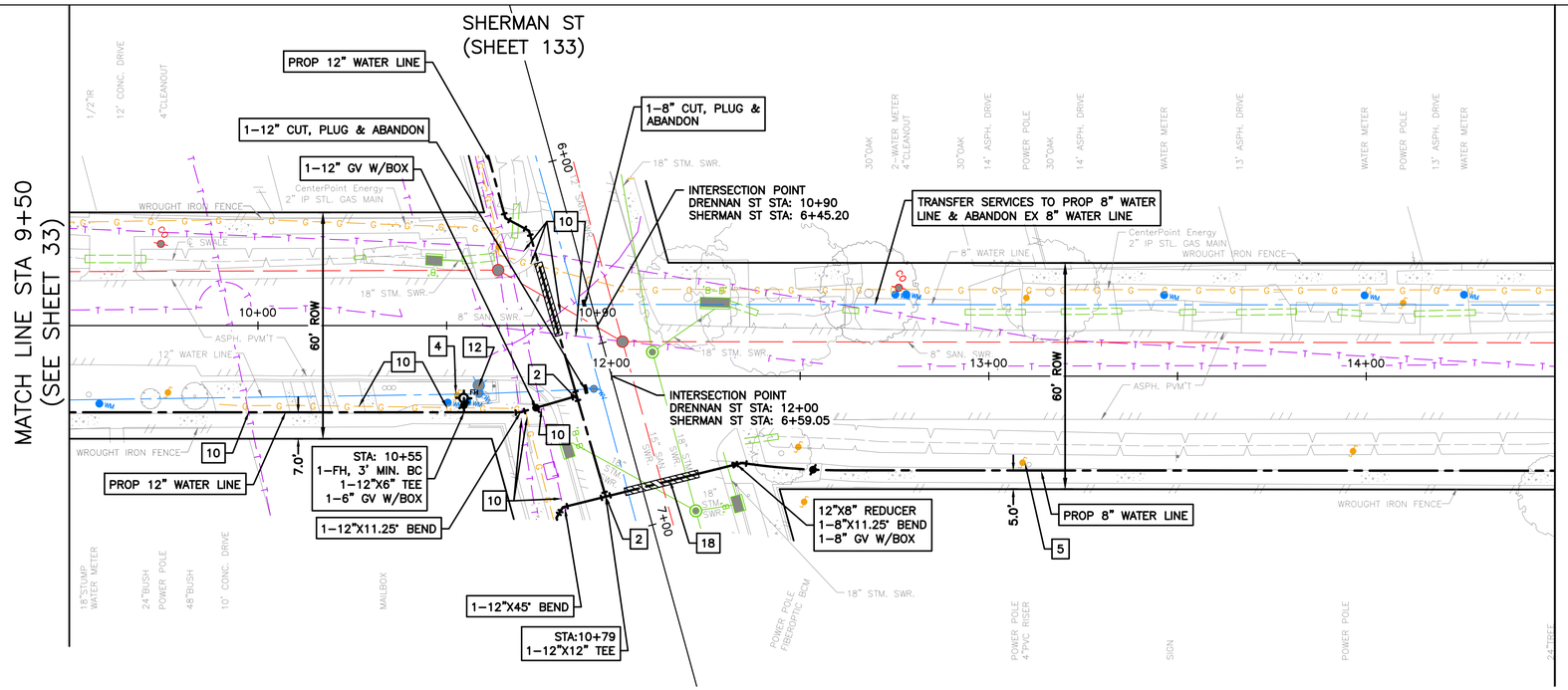
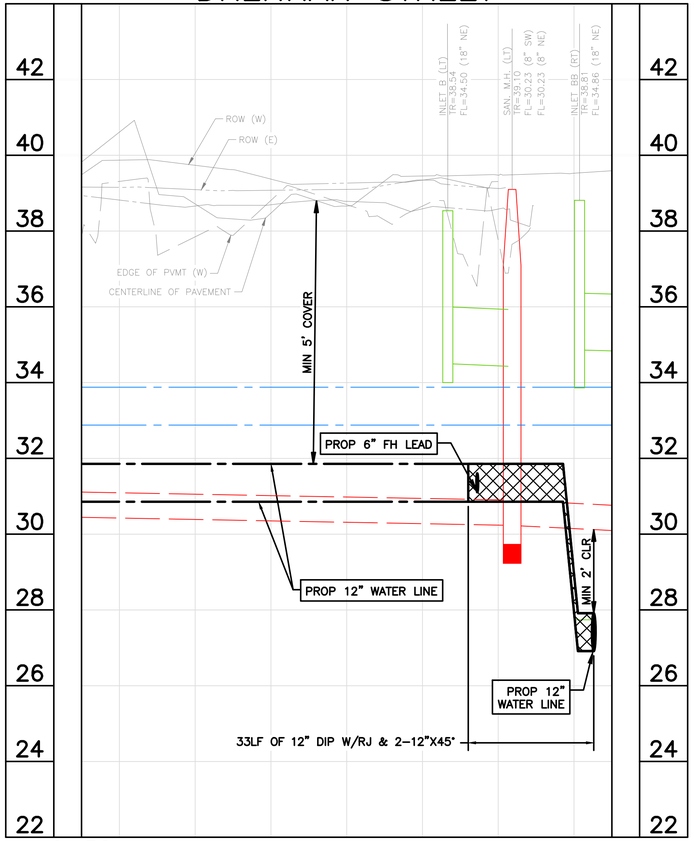
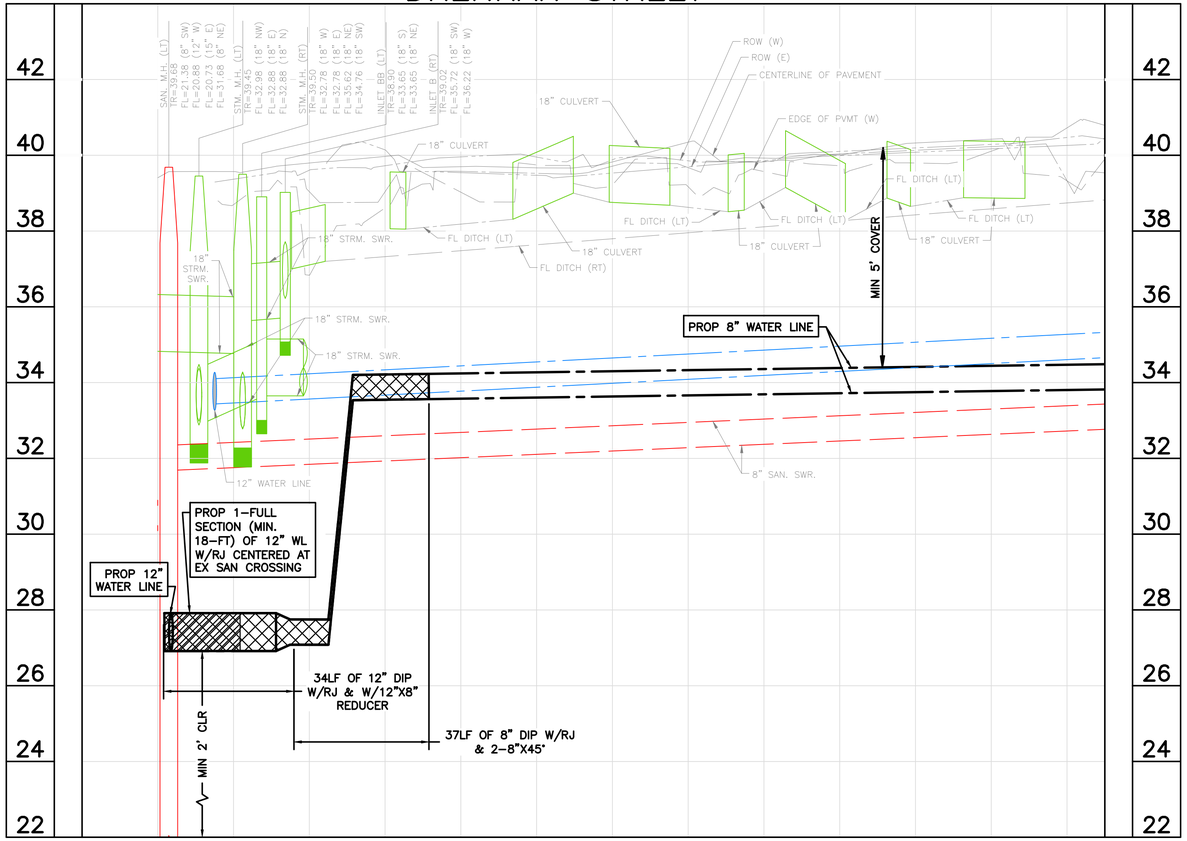
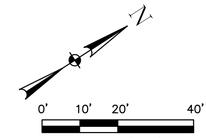


DRENNAN STREET



DRENNAN STREET





APP. | REVISION | NO. | DATE

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TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST.
STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE)
ELEV.=39.66

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FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

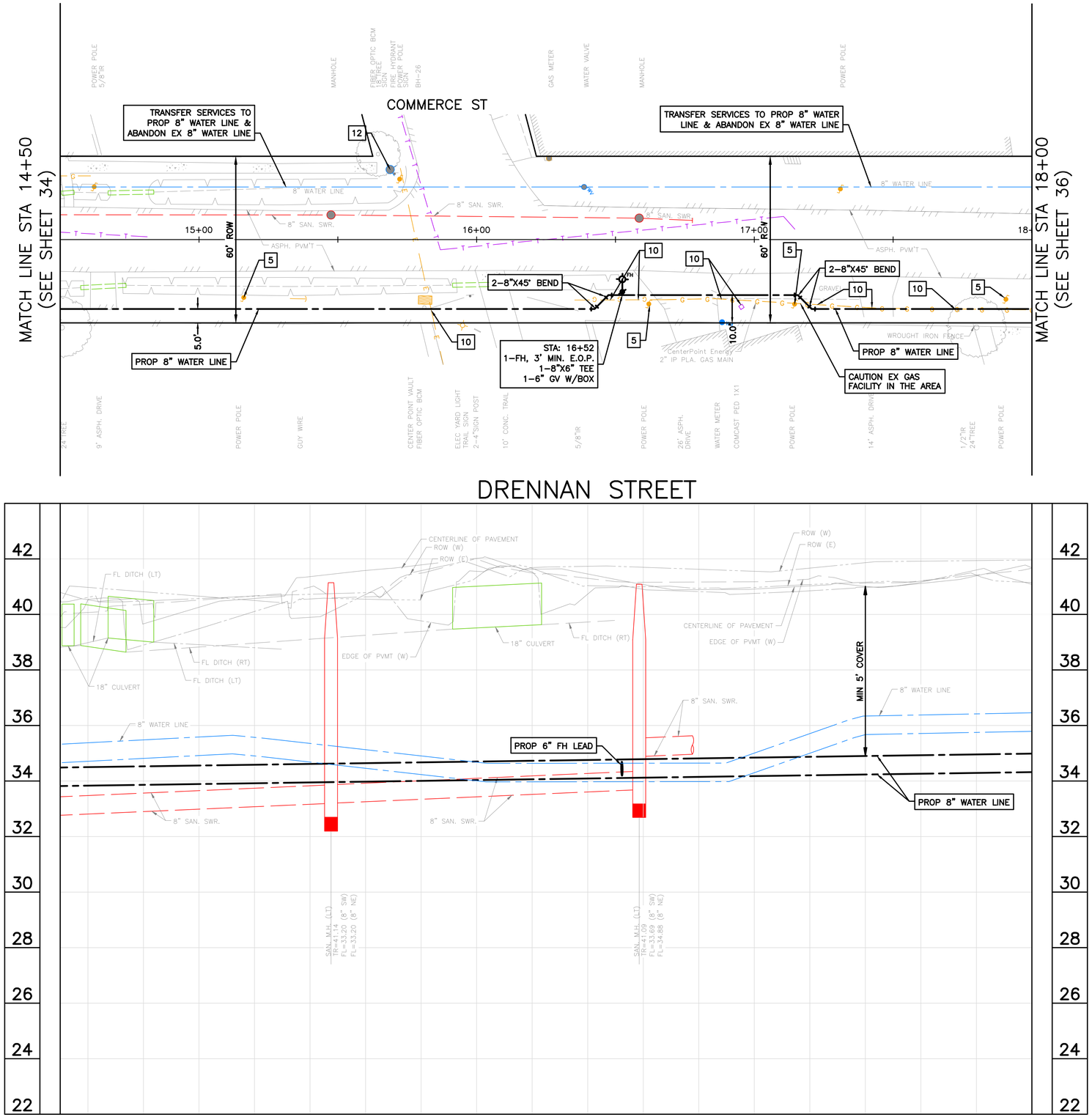
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

DRENNAN ST
PLAN & PROFILE
9+50 TO 14+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 34 OF 275	

90% SUBMITTAL



SCALE: 1"=20'

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DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

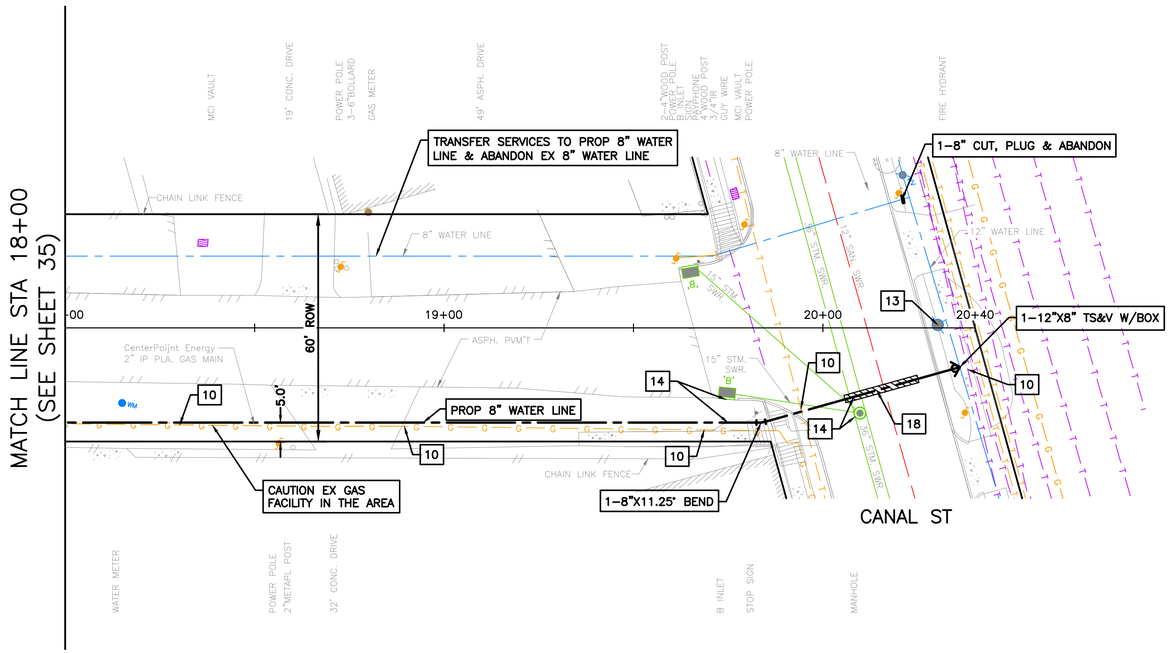
DRENNAN ST
PLAN & PROFILE
14+50 TO 18+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 35 OF 275	

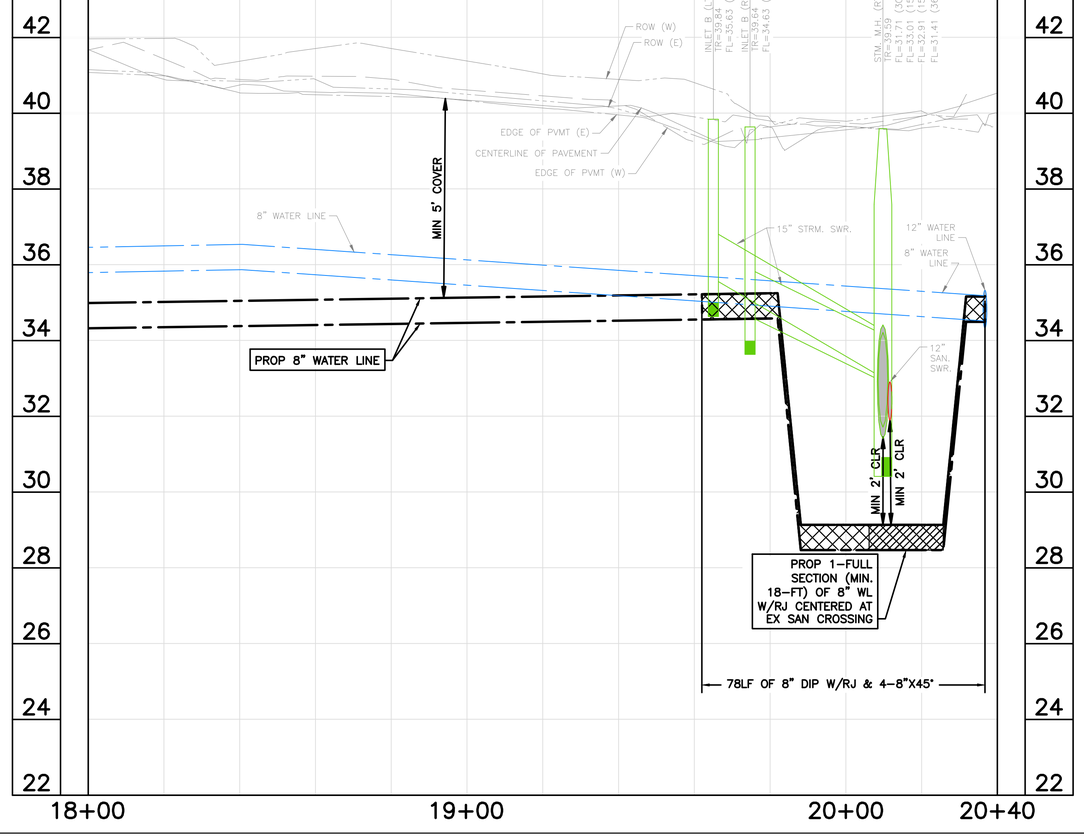
APP. | REVISION | NO. | DATE

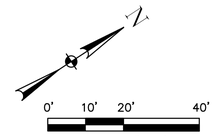
PLOTTED: 8/15/2025 9:30 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-DRENNAN STREET.dwg

90% SUBMITTAL



DRENNAN STREET





NOTES:
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2) PROPOSED WATER LINES SHALL BE INSTALLED BY MEANS OF TRENCHLESS CONSTRUCTION METHOD EXCEPT WHERE NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF PITS IN THE FIELD SUBJECT TO THE CITY ENGINEER'S APPROVAL.
3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
5) PROPOSED WATER LINES LESS THAN 16-INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3-FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20-INCH WITH A MINIMUM COVER OF 4-FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST.
STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE)
ELEV.=39.66

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

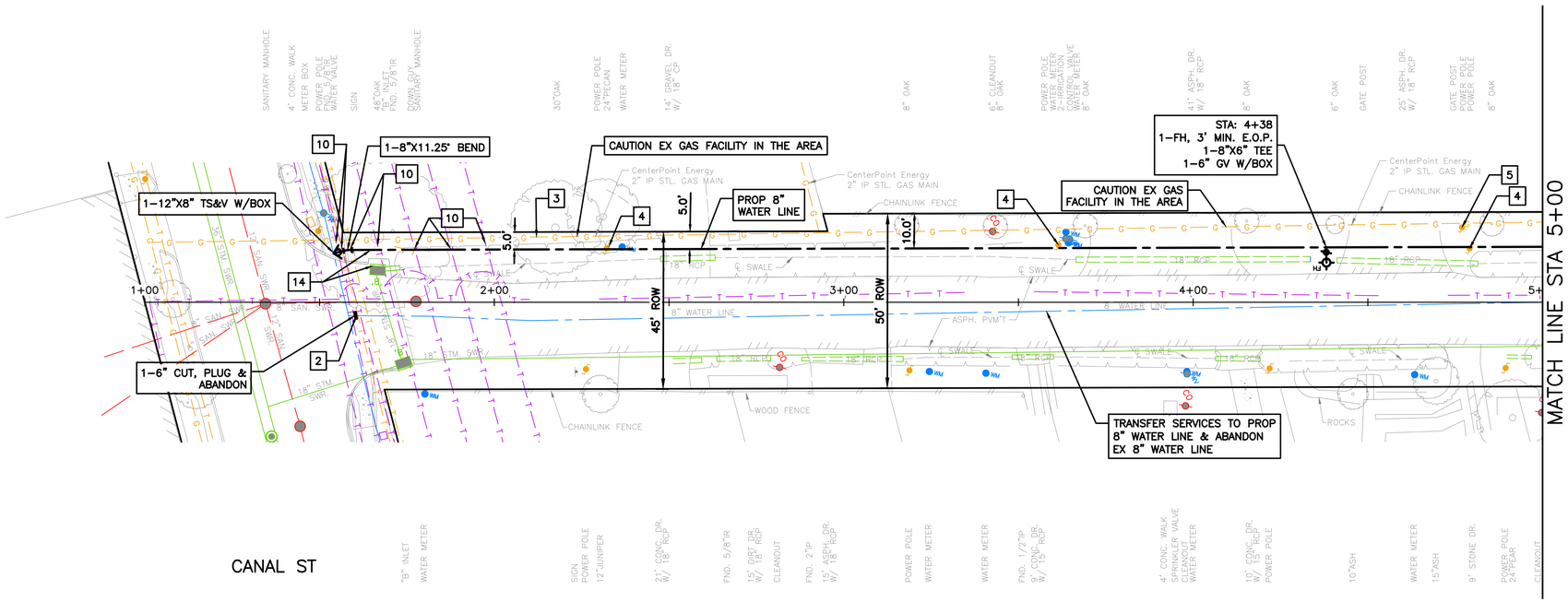
SECONDWARD WATERLINE REPLACEMENT

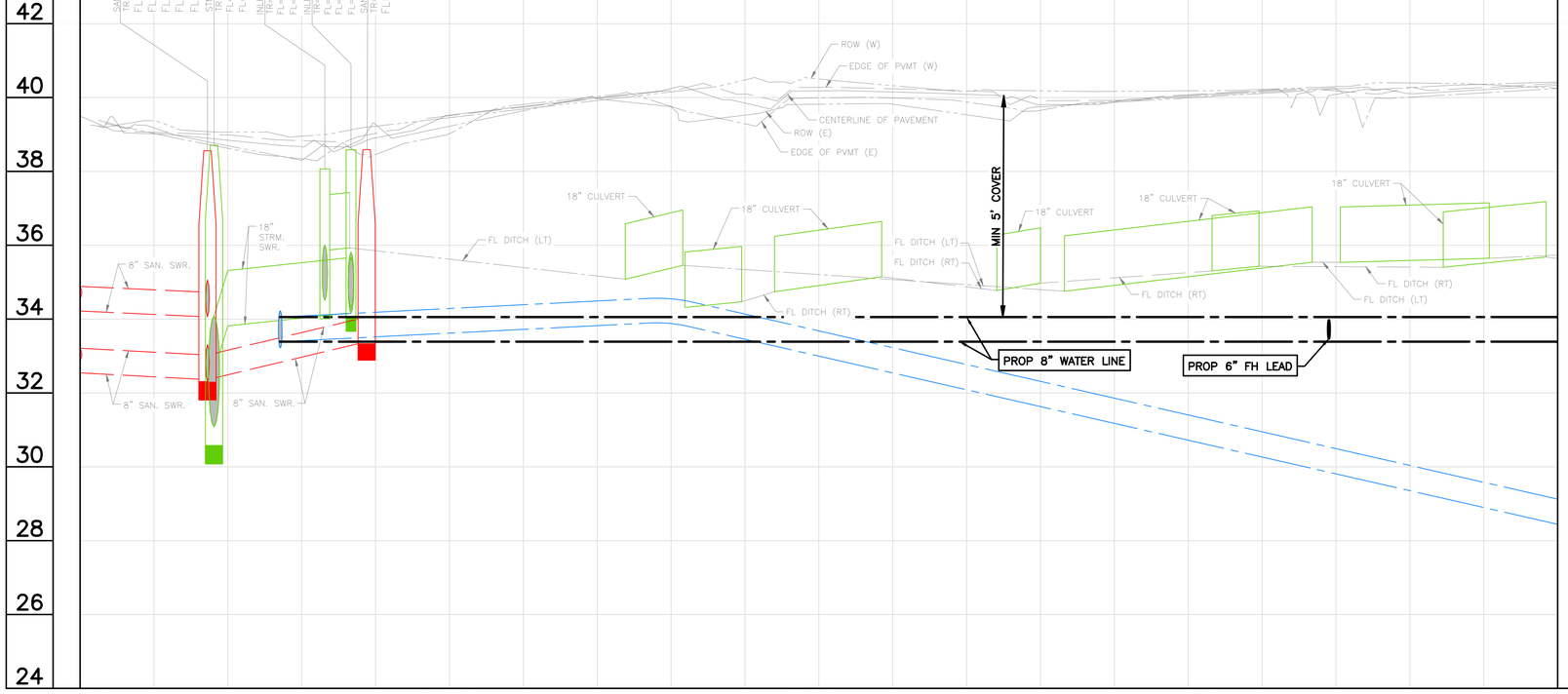
DRENNAN ST
PLAN & PROFILE
18+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 36 OF 275	

90% SUBMITTAL

PLOTTED: 8/15/2025 9:31 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-DRENNAN STREET.dwg





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 10: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF LOVEJOY ST. & N. ESTELLE ST.
STA. 9494.83, 19.7' RT (LOVEJOY ST. BASELINE)
ELEV.=40.84'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

Date

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

WOOLPERT
ARCHITECTURE | ENGINEERING | ESSENTIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.
NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N DRENNAN ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 37 OF 275	

APP. | REVISION | NO. | DATE

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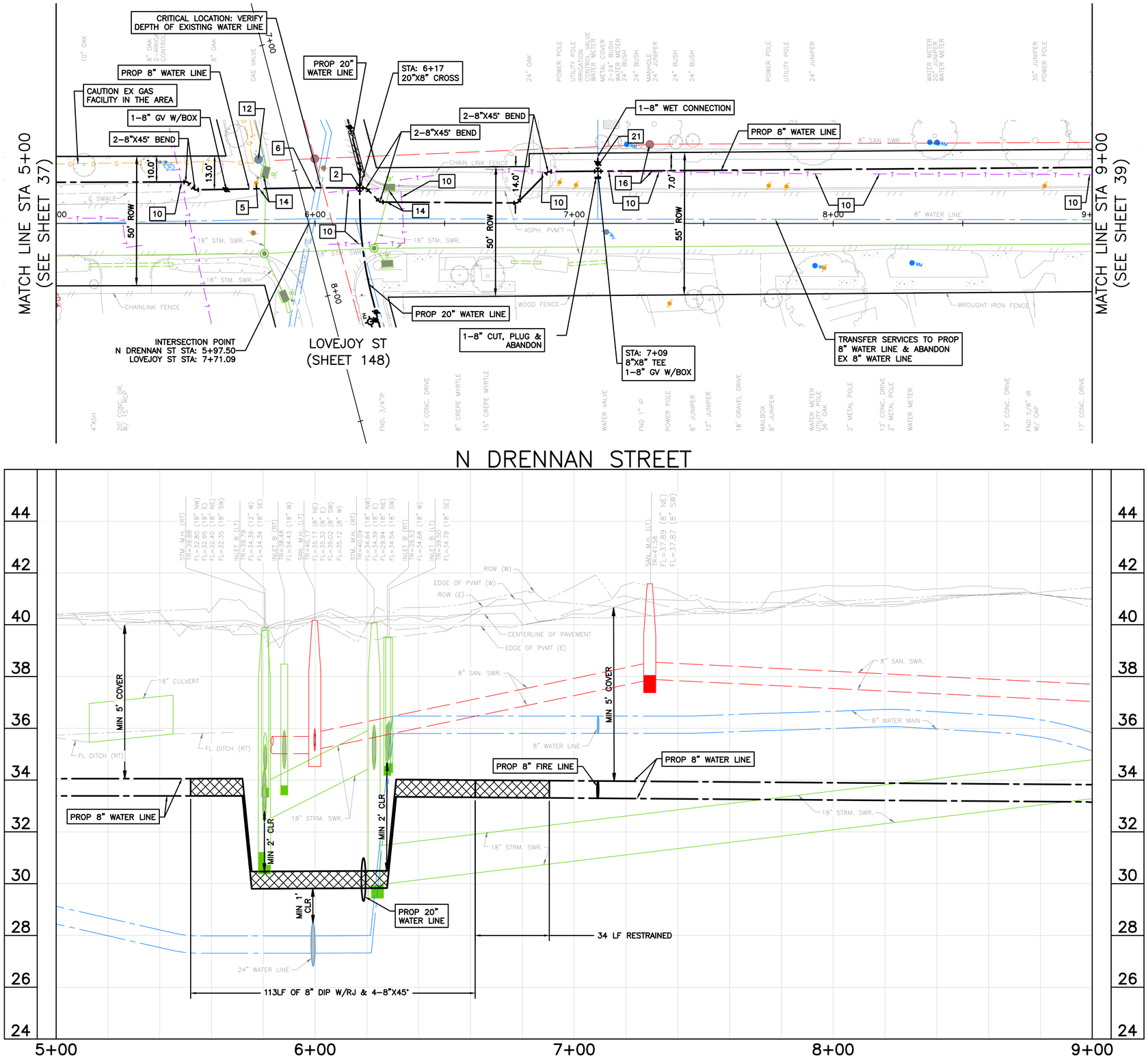
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N DRENNAN STREET.dwg

90% SUBMITTAL



0' 10' 20' 40'

SCALE: 1" = 20'

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VERIFICATION OF PRIVATE UTILITY LINES

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Signature valid for six months.

Date

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Signature valid for six months.

Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N DRENNAN ST
PLAN & PROFILE
5+00 TO 9+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 38 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:33 AM
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90% SUBMITTAL

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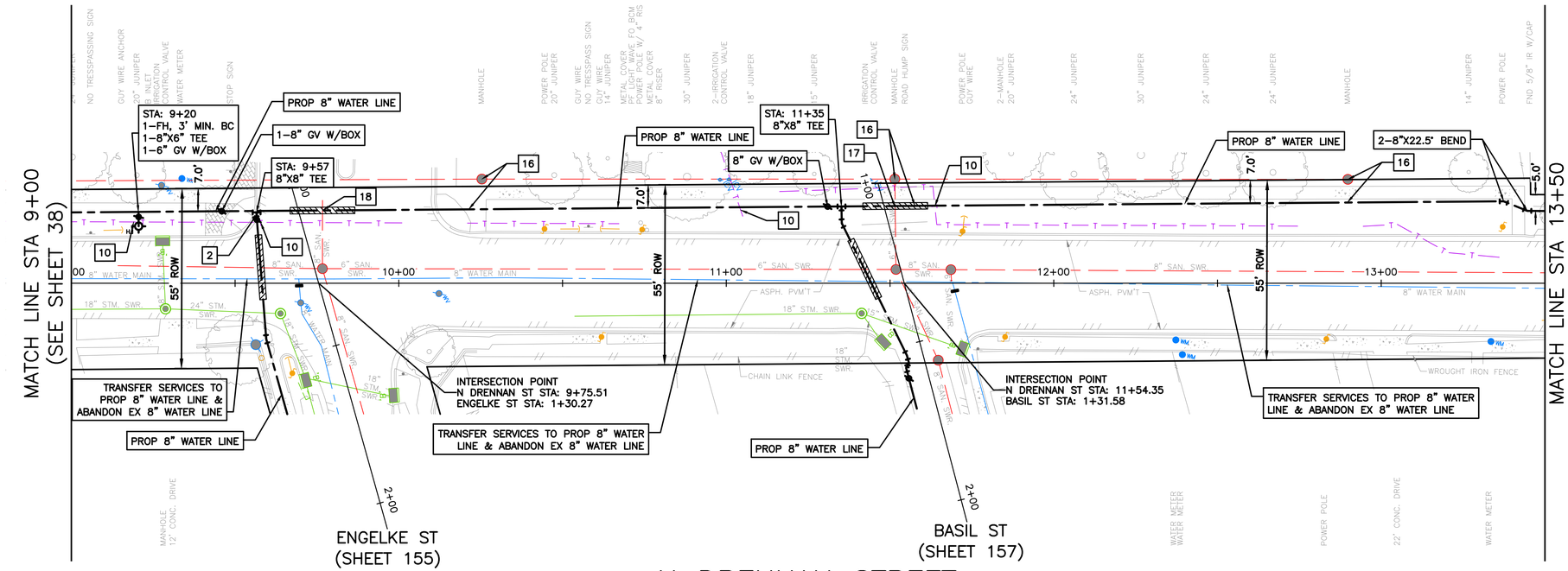

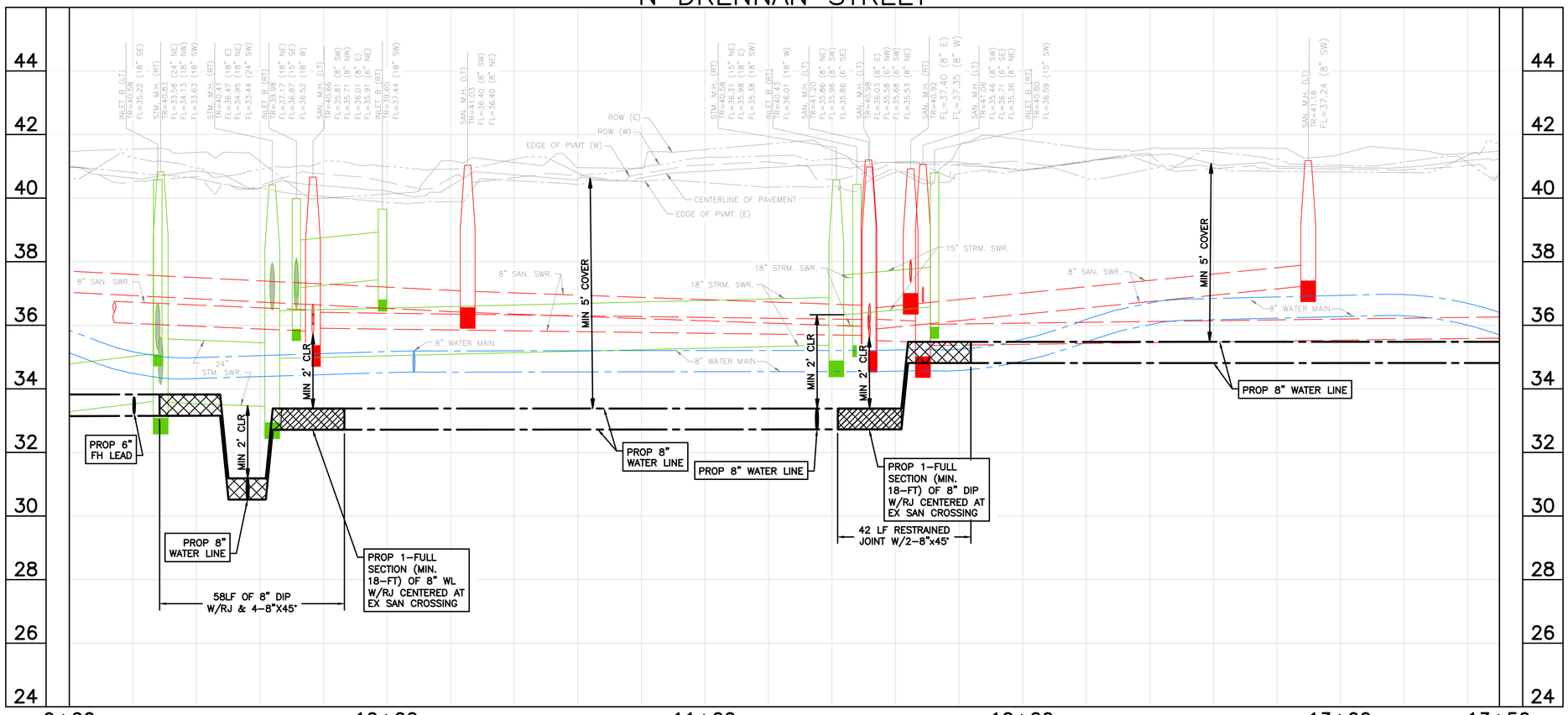

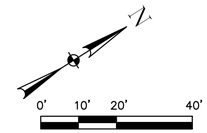

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 14: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF BERING ST. & N. DRENNAN ST.
STA. 7+62.73, 23.5' RT (BEARING ST. BASELINE)
ELEV.= 42.98'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Date

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Signature valid for six months.

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

WOOLPERT
ARCHITECTURE | ENGINEERING | INFRASTRUCTURE
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

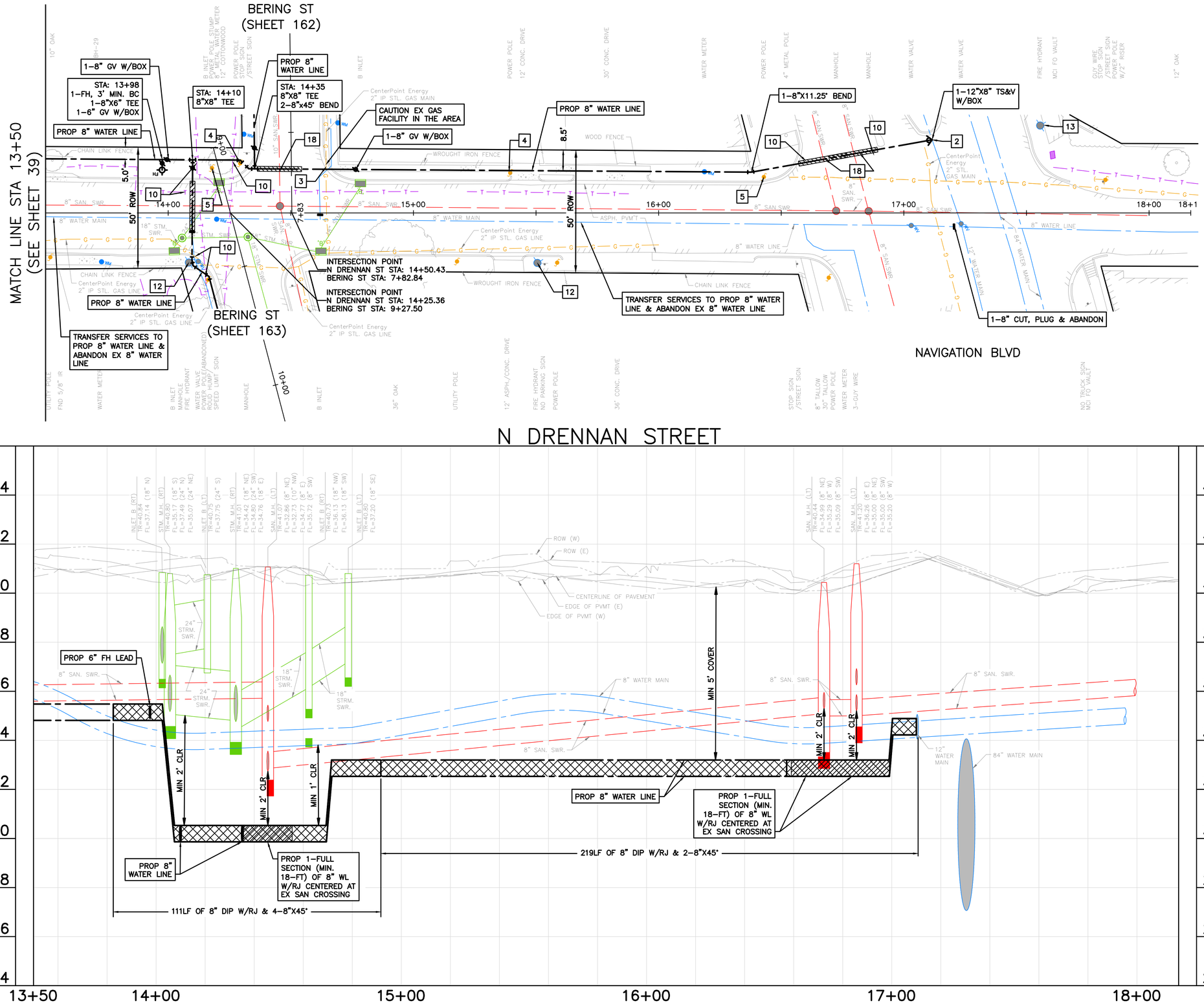
N DRENNAN ST
PLAN & PROFILE
9+00 TO 13+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 39 OF 275	

APP. | REVISION | NO. | DATE

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N DRENNAN STREET.dwg

90% SUBMITTAL



0' 10' 20' 40'

SCALE: 1" = 20'

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DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N DRENNAN ST
PLAN & PROFILE
13+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 40 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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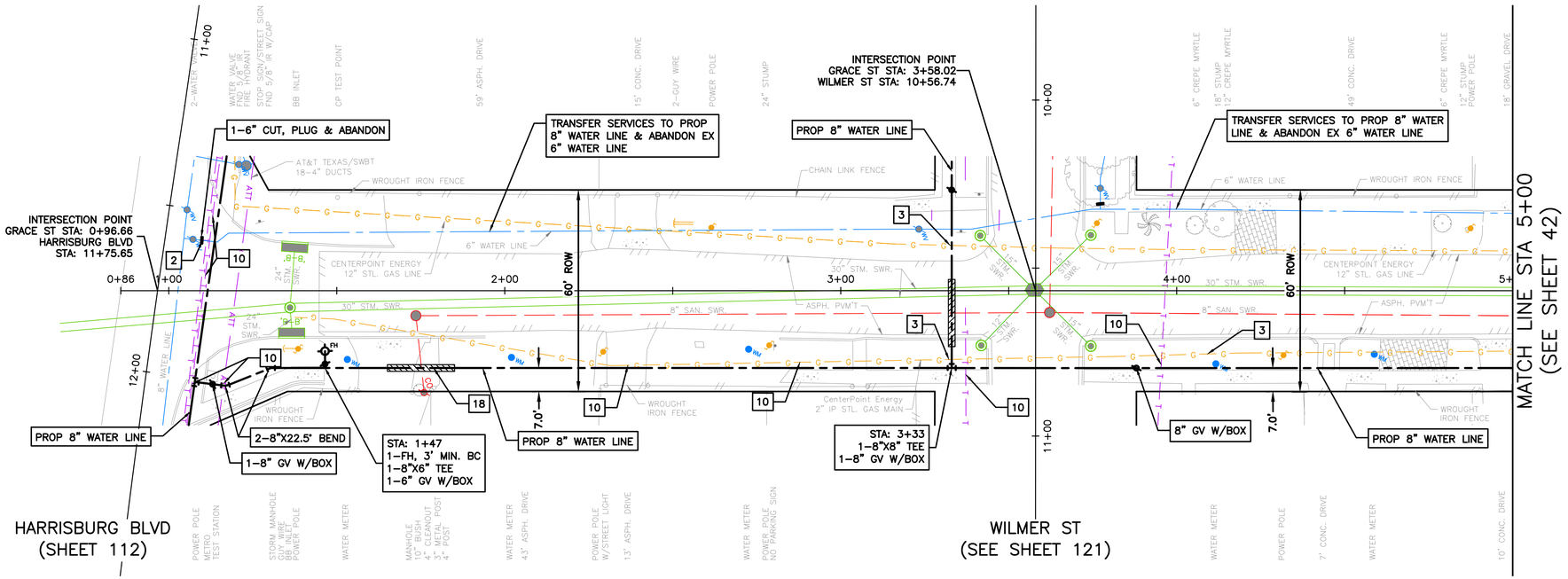
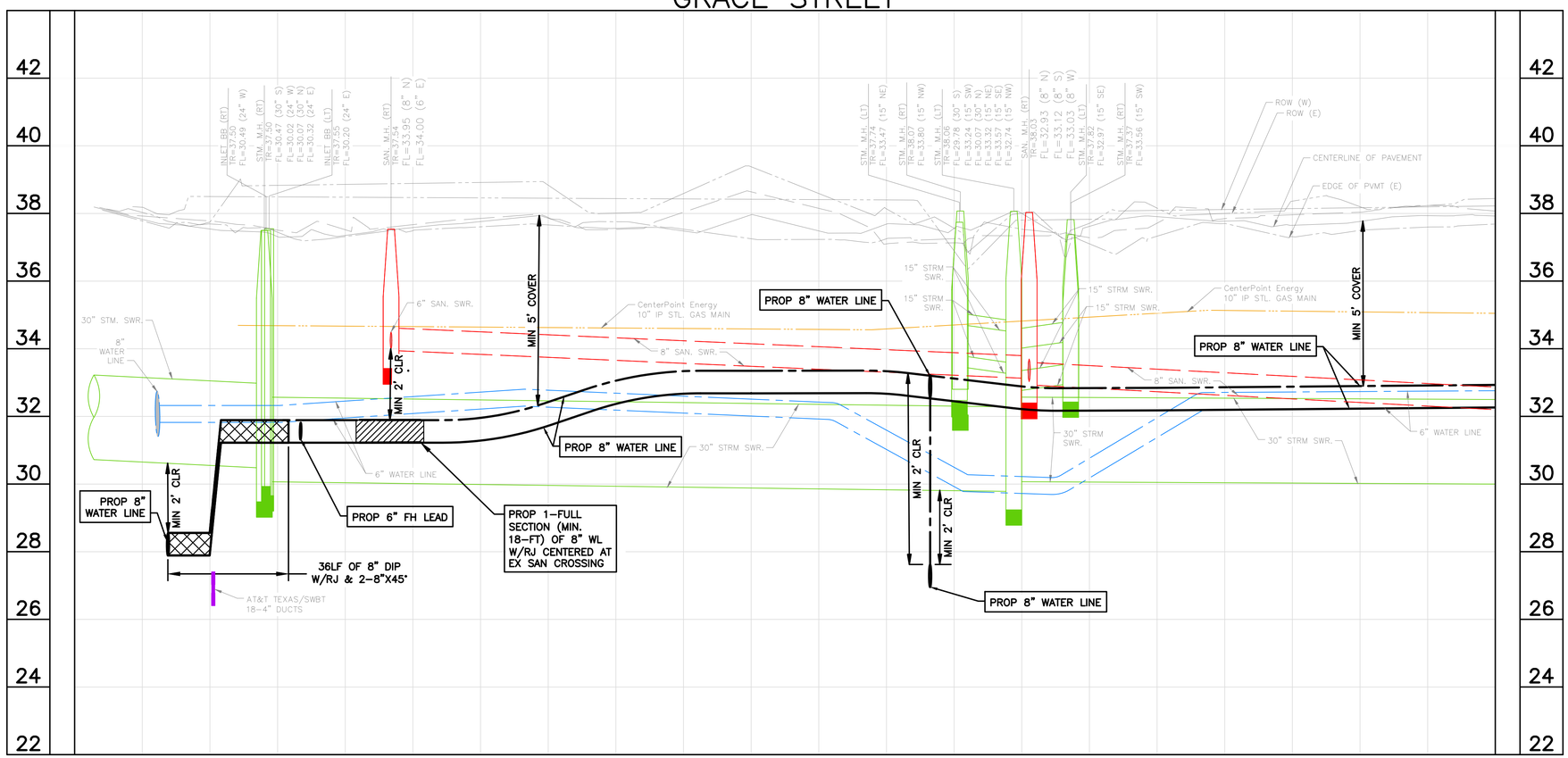
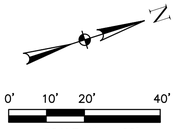


GRACE STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. & GRACE ST.
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'

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

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

GRACE ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 41 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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PLOT STYLE: COH.ctb
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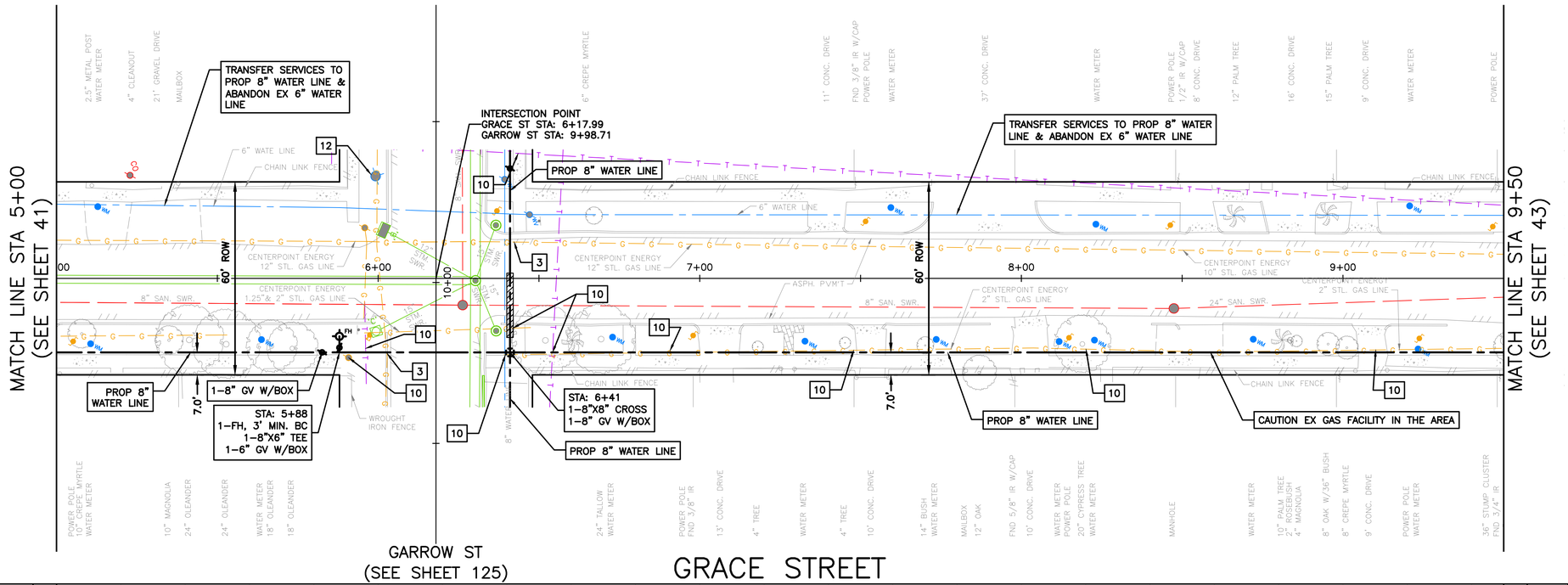

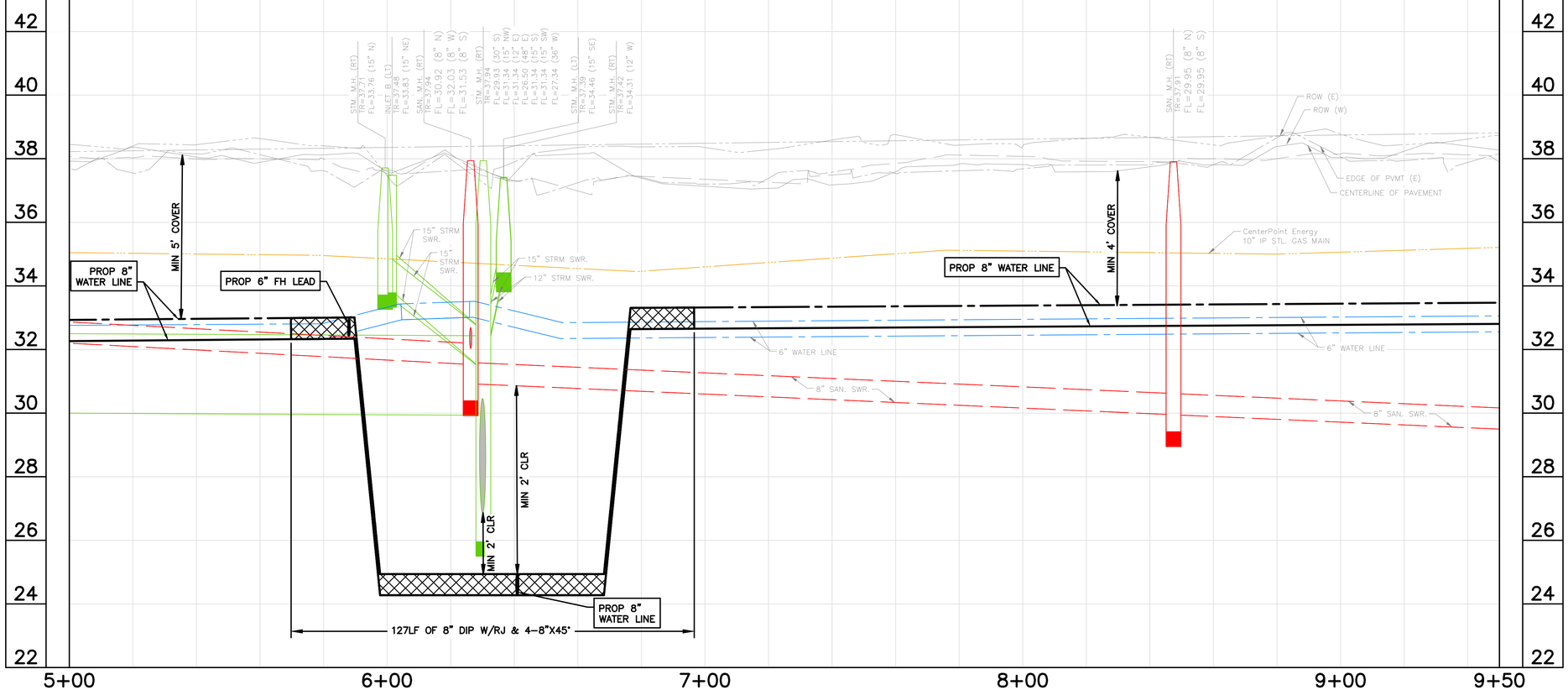

0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. & GRACE ST.
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | INNOVATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

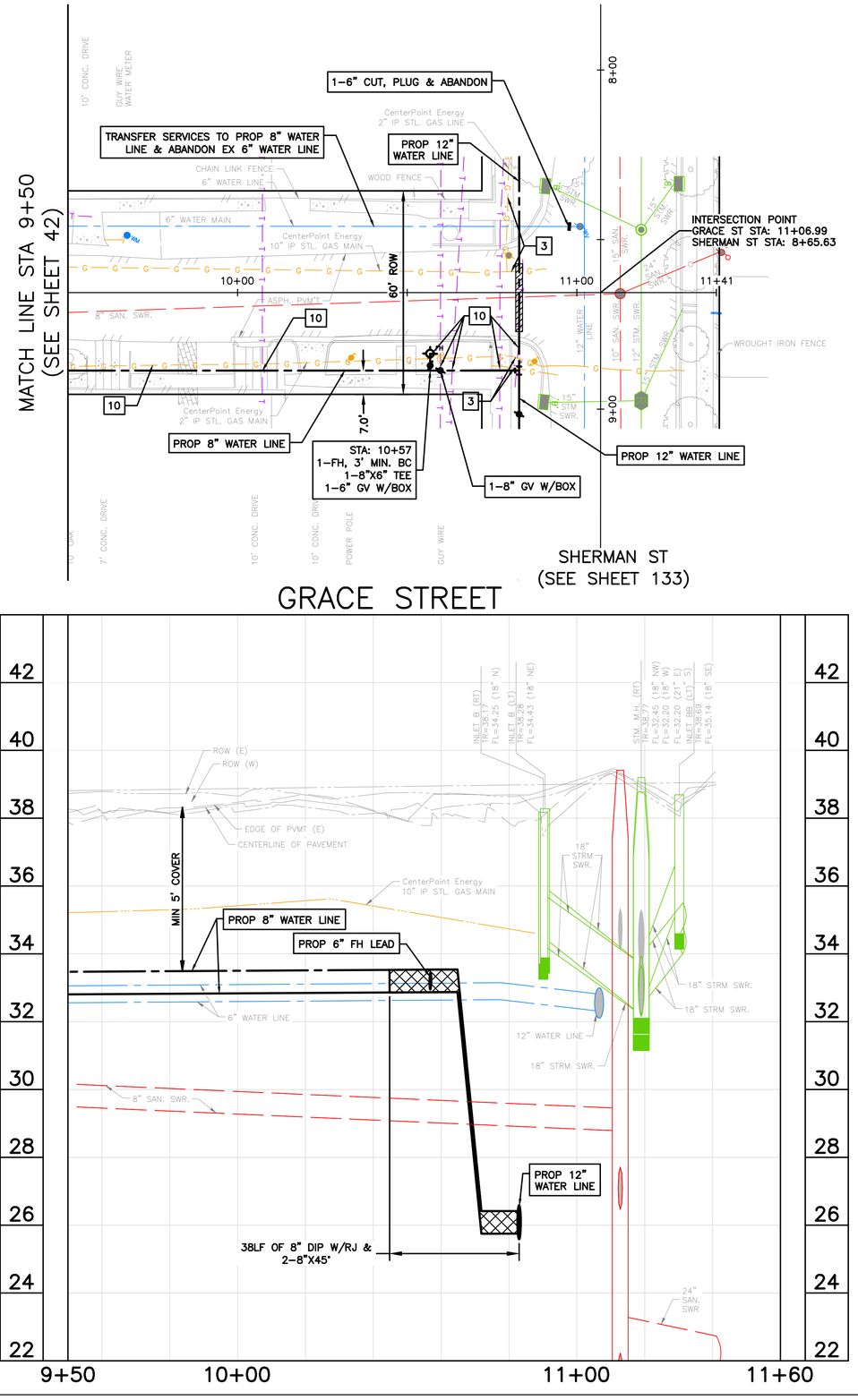
GRACE ST
PLAN & PROFILE
5+00 TO 9+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 42 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:37 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-GRACE STREET.dwg



0' 10' 20' 40'

SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST.
STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE)
ELEV.=39.66

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

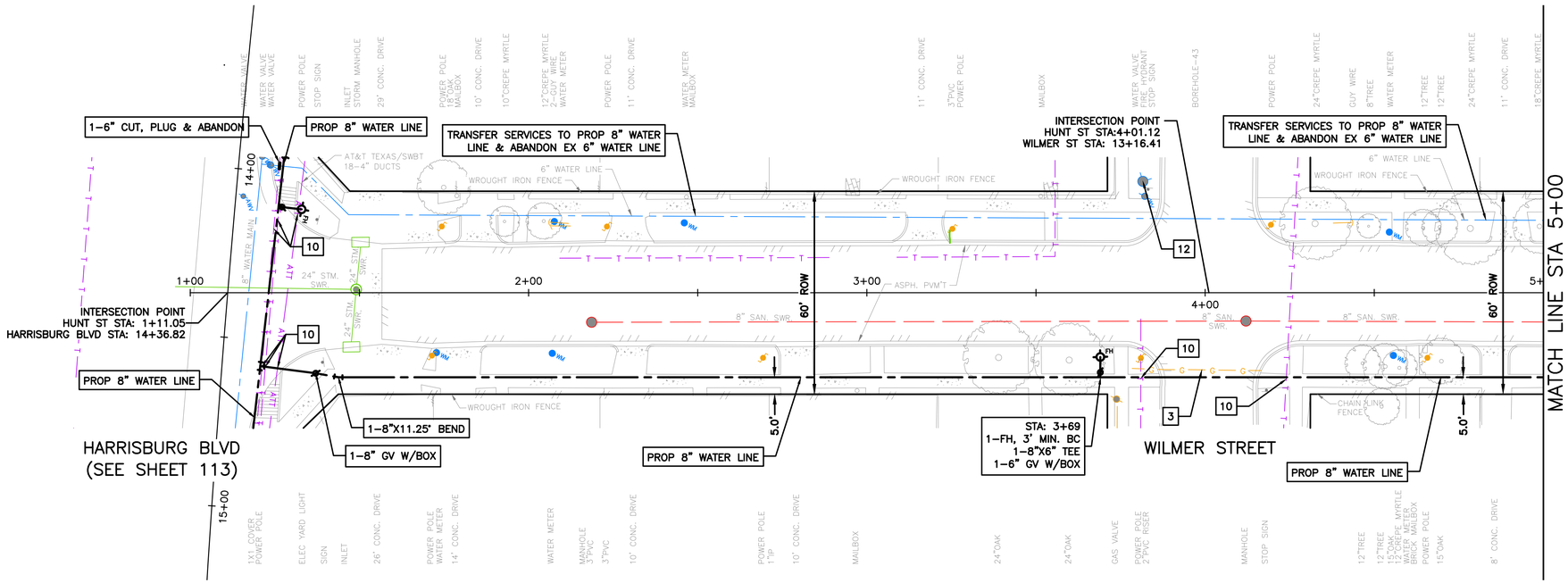
GRACE ST
PLAN & PROFILE
9+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 43 OF 275	

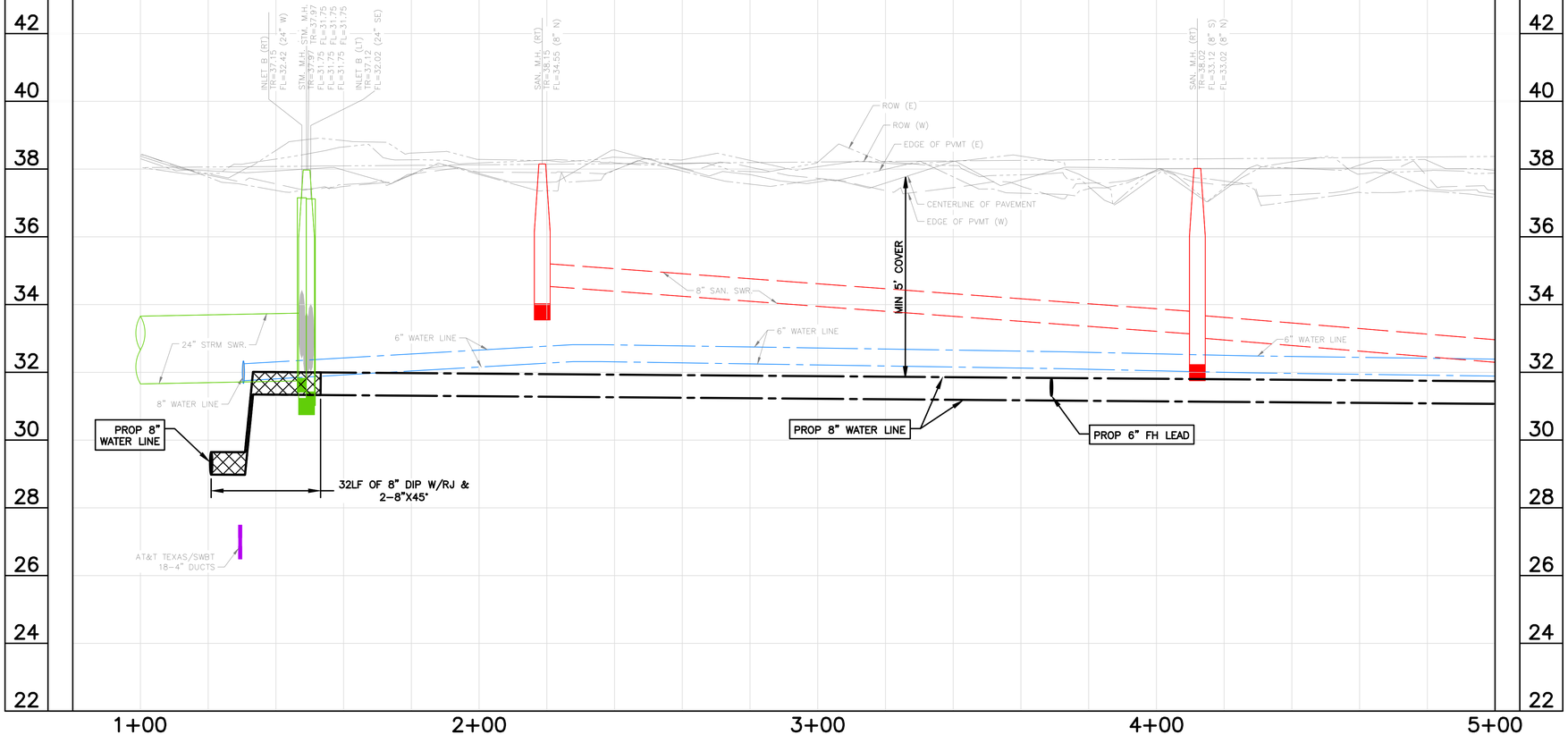
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:38 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-GRACE STREET.dwg

90% SUBMITTAL



HUNT STREET



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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST.
STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE)
ELEV.=39.66

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

APP. | REVISION | NO. | DATE

NOTICE:
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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

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | INFRASTRUCTURE
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

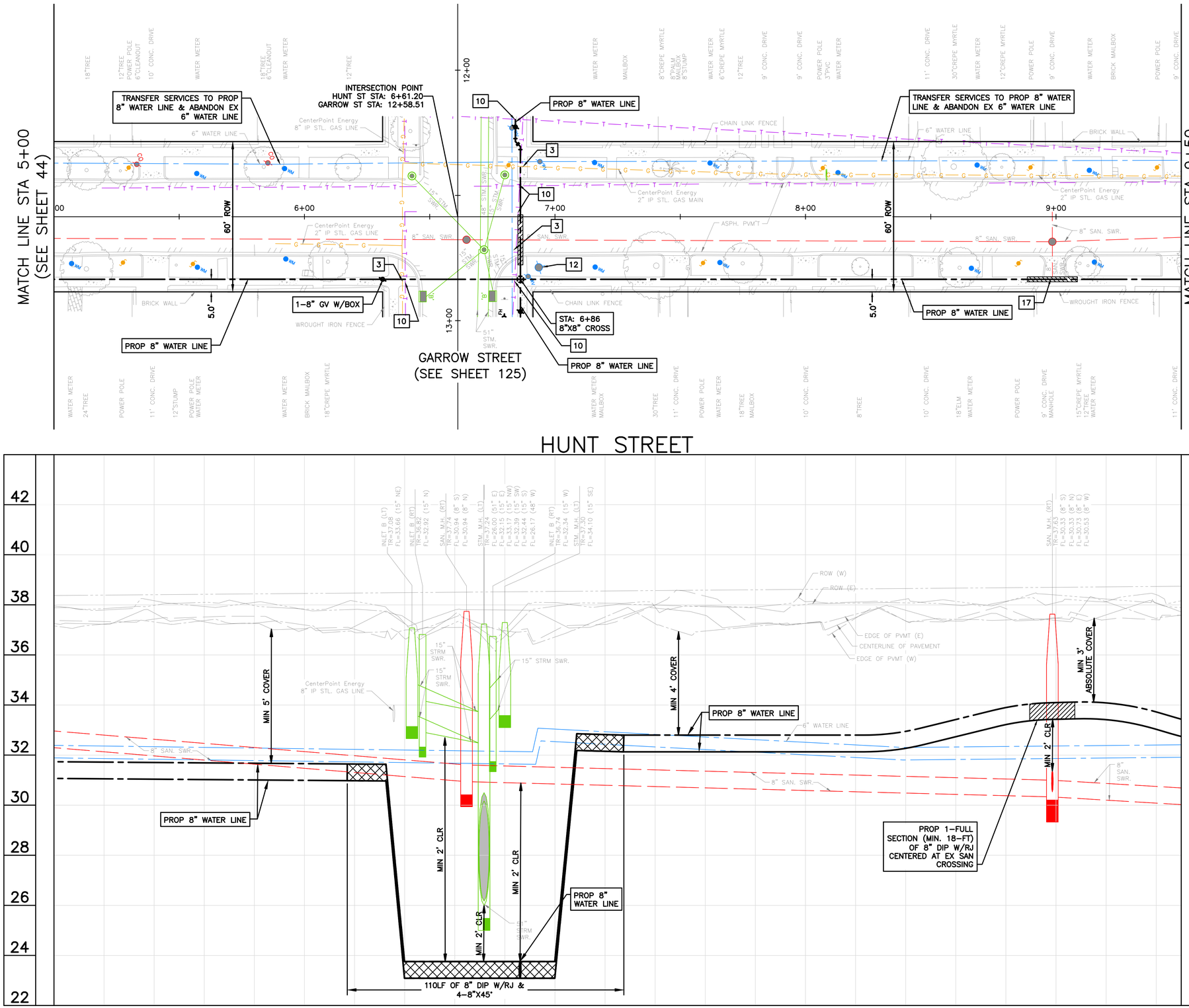
SECONDWARD WATERLINE REPLACEMENT

HUNT ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 44 OF 275	

90% SUBMITTAL

PLOTTED: 8/15/2025 9:39 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–HUNT STREET.dwg



0' 10' 20' 40'

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ARCHITECTURE | ENGINEERING | INFORMATION
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800.414.1045

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FB NO. 10038100

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HUNT ST
PLAN & PROFILE
5+00 TO 9+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 45 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:40 AM
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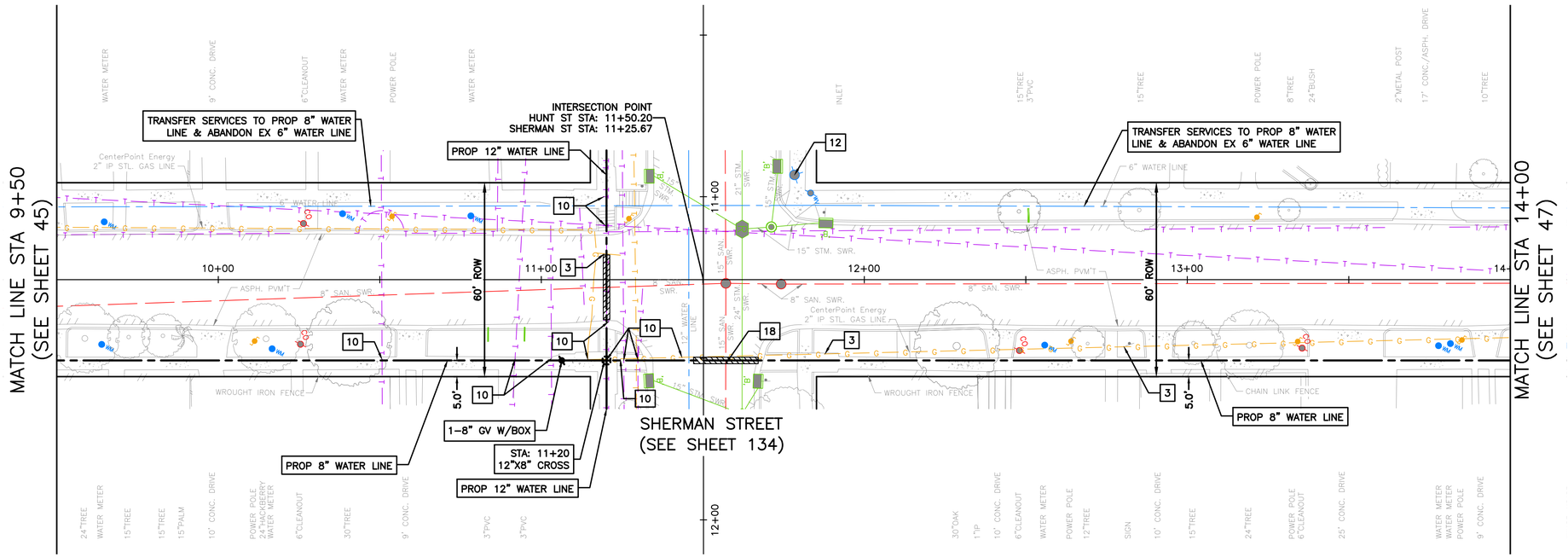
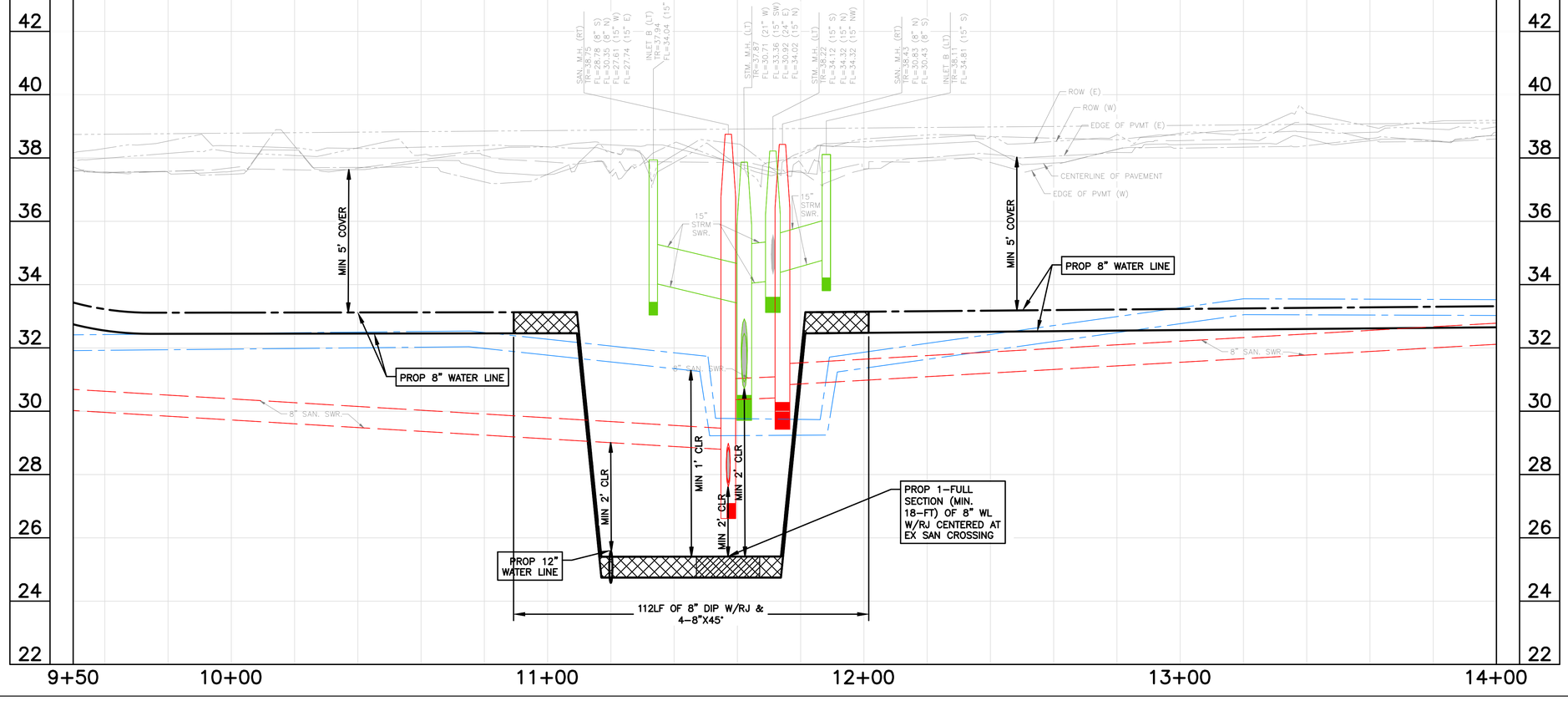
90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1" = 20'

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NATHAN A. WILSON, P.E.
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DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HUNT ST
PLAN & PROFILE
9+50 TO 14+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 46 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:40 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HUNT STREET.dwg

90% SUBMITTAL

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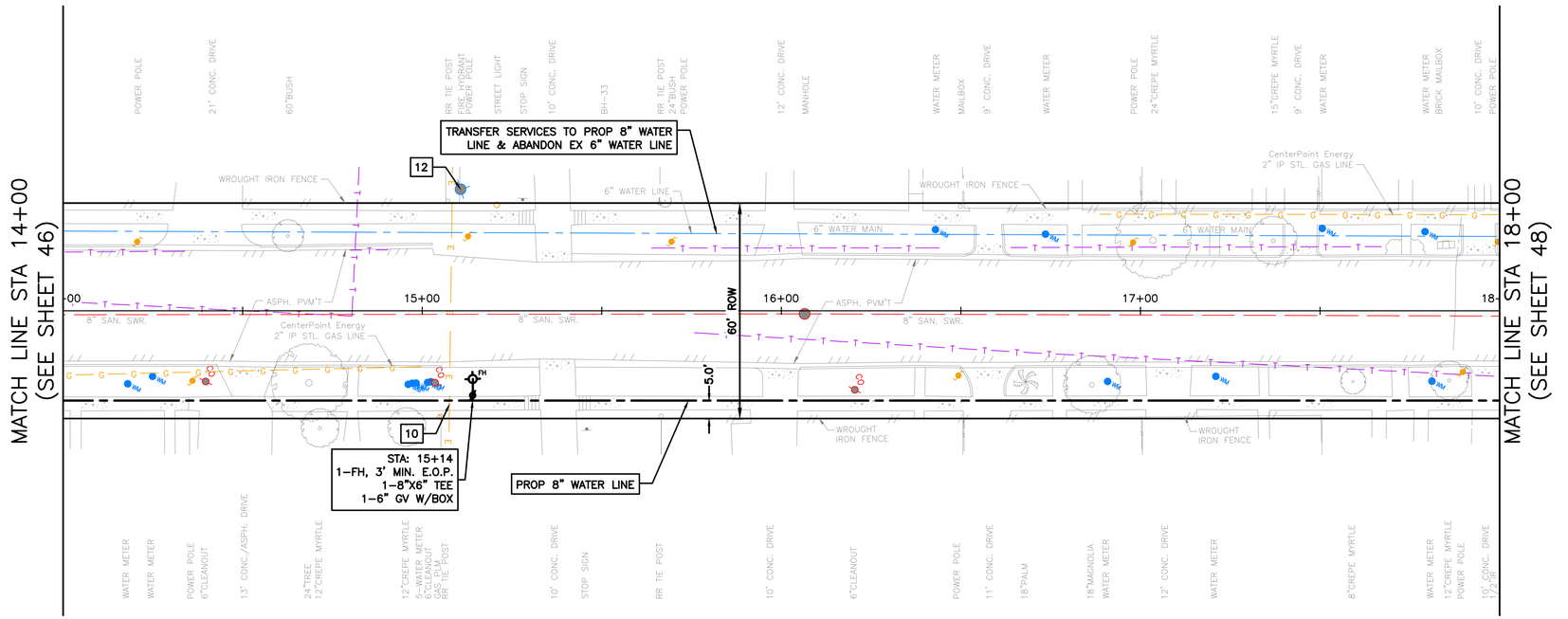
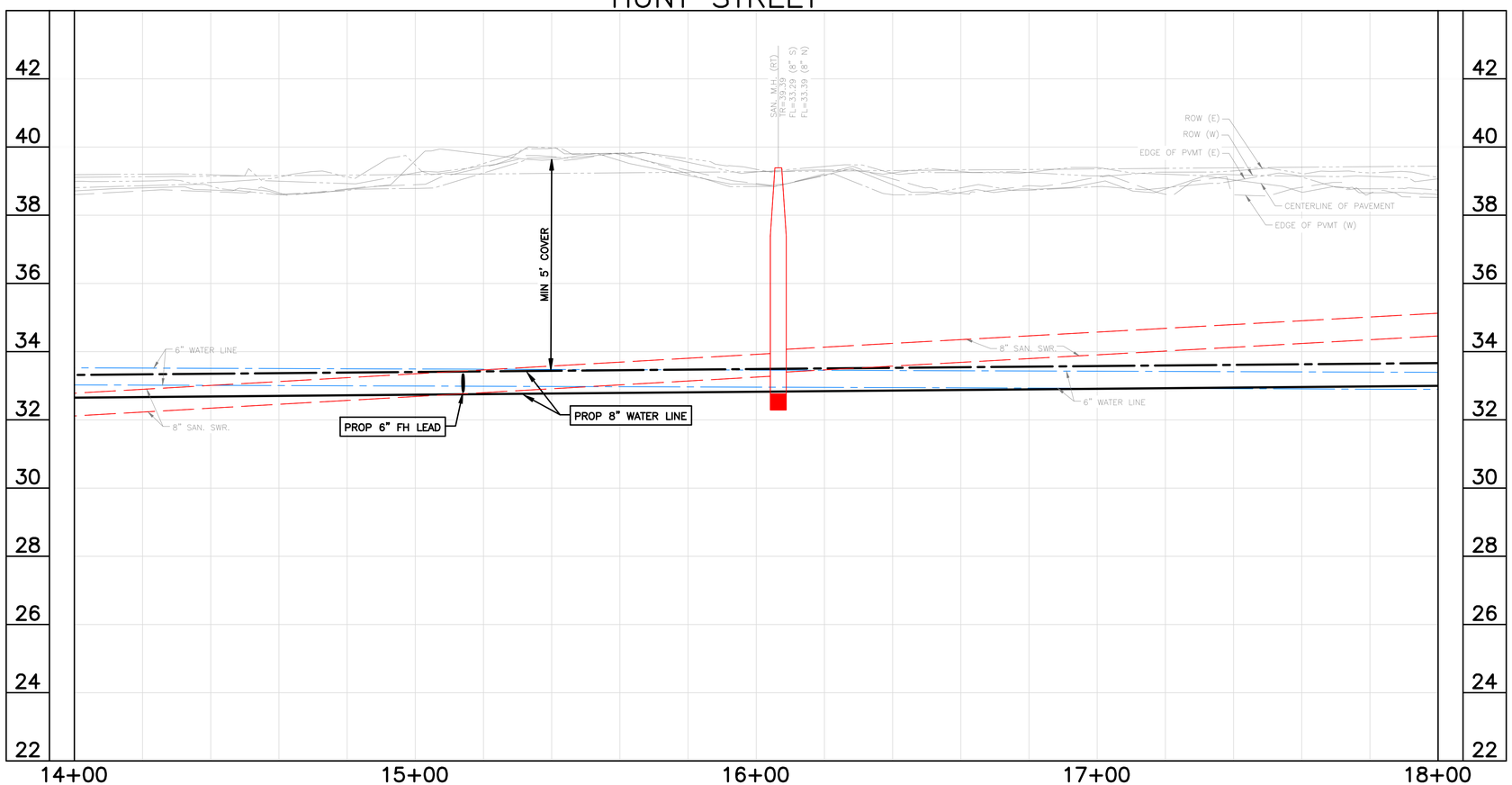
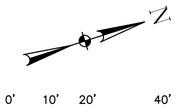
PLOT STYLE: COH.ctb



HUNT STREET





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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

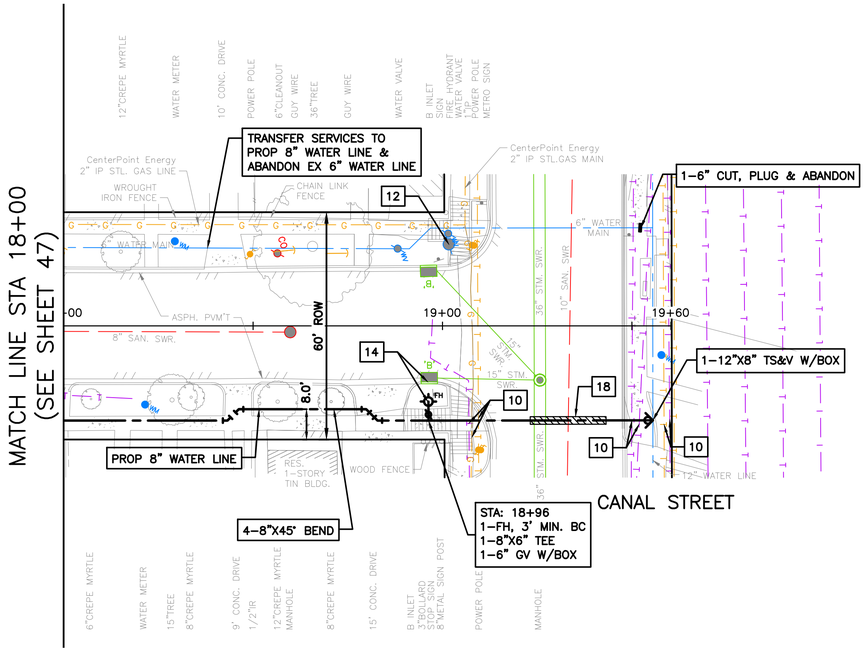
HUNT ST
PLAN & PROFILE
14+00 TO 18+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 47 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HUNT STREET.dwg



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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST. STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE) ELEV.=39.66

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Date

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

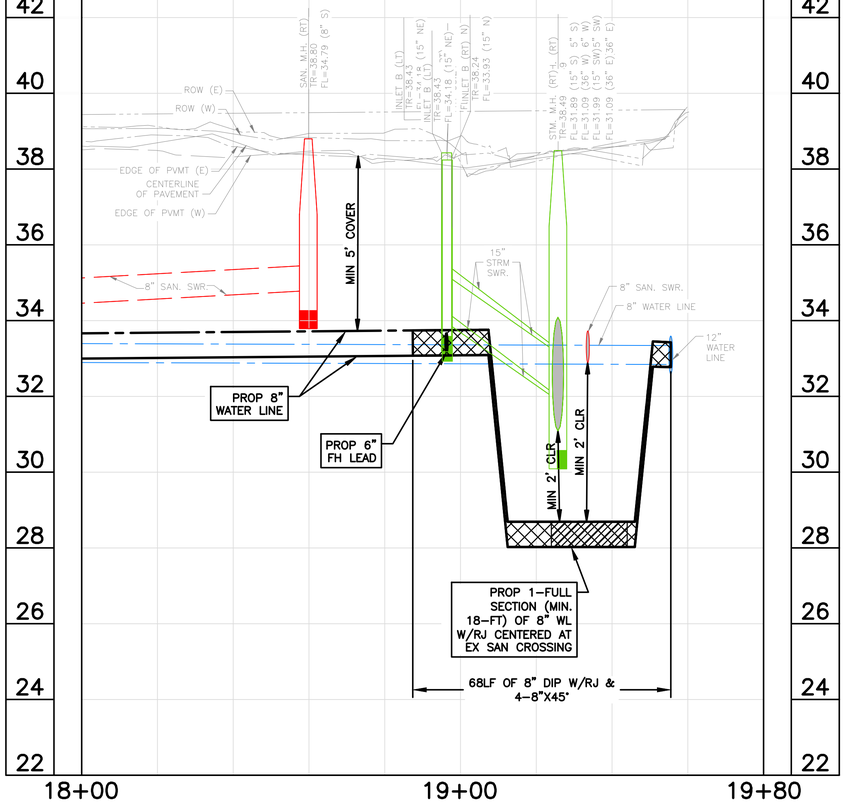
SECONDWARD WATERLINE REPLACEMENT

HUNT ST
PLAN & PROFILE
18+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 48 OF 275	

90% SUBMITTAL

HUNT STREET



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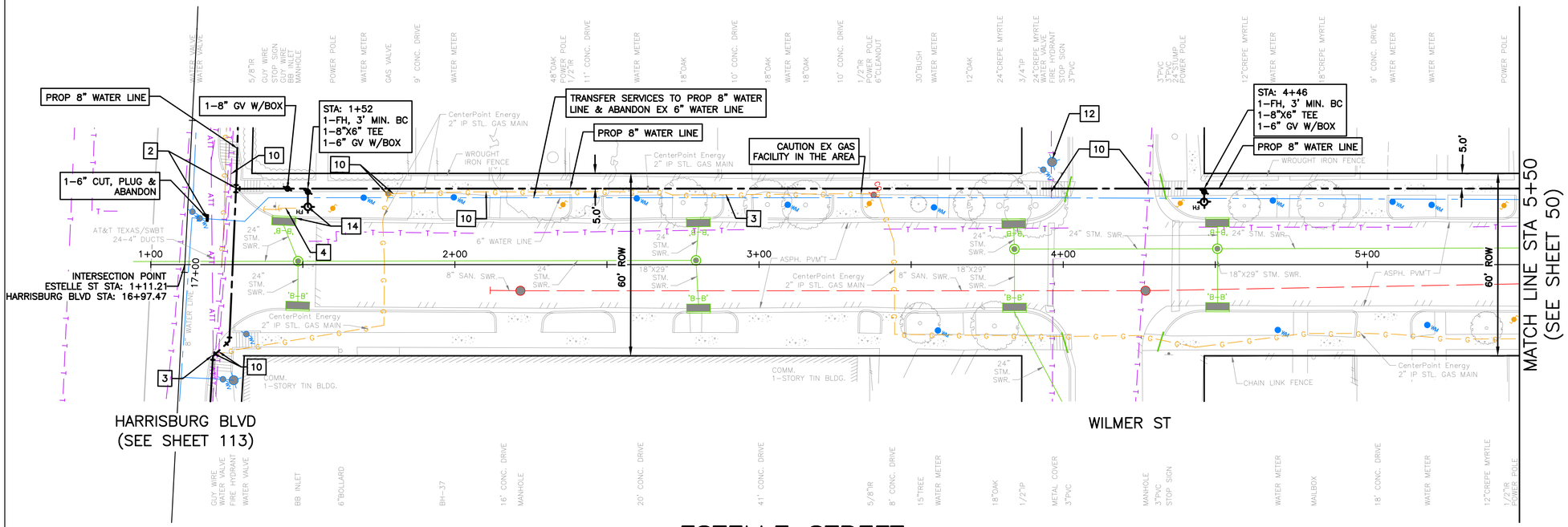
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HUNT STREET.dwg

NO.	DATE	REVISION	APP.



0' 10' 20' 40'

SCALE: 1" = 30'

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

ESTELLE ST
PLAN & PROFILE
1+00 TO 5+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 49 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:43 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-ESTELLE STREET.dwg

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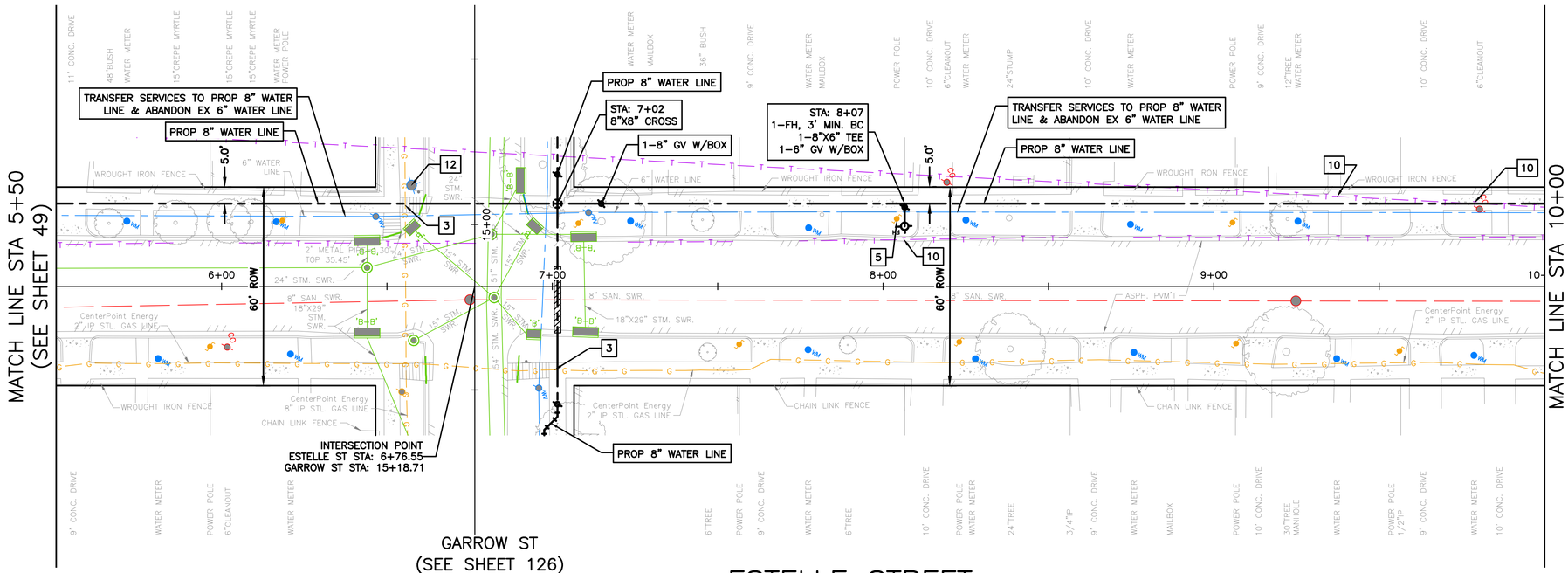

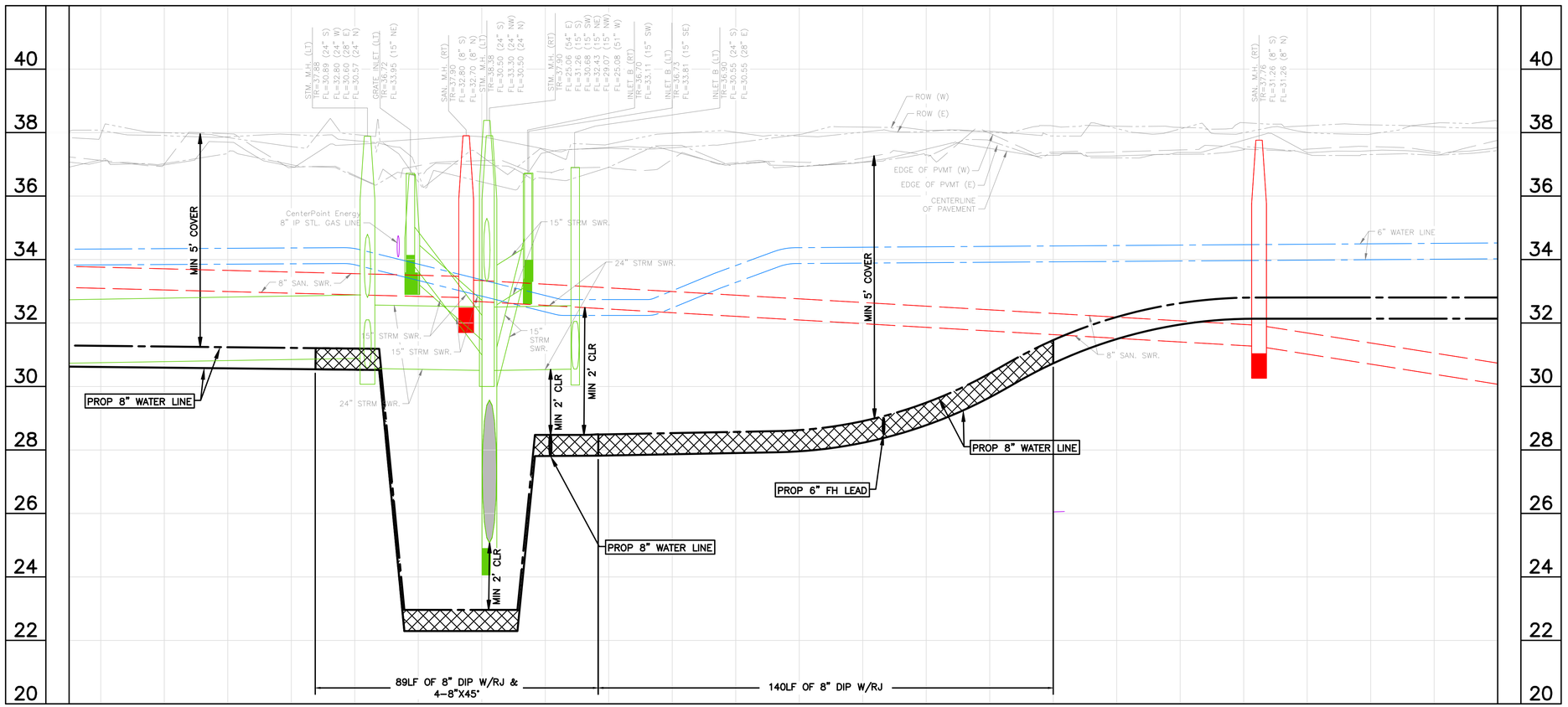

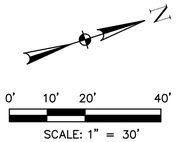

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

ESTELLE ST
PLAN & PROFILE
5+50 TO 10+00

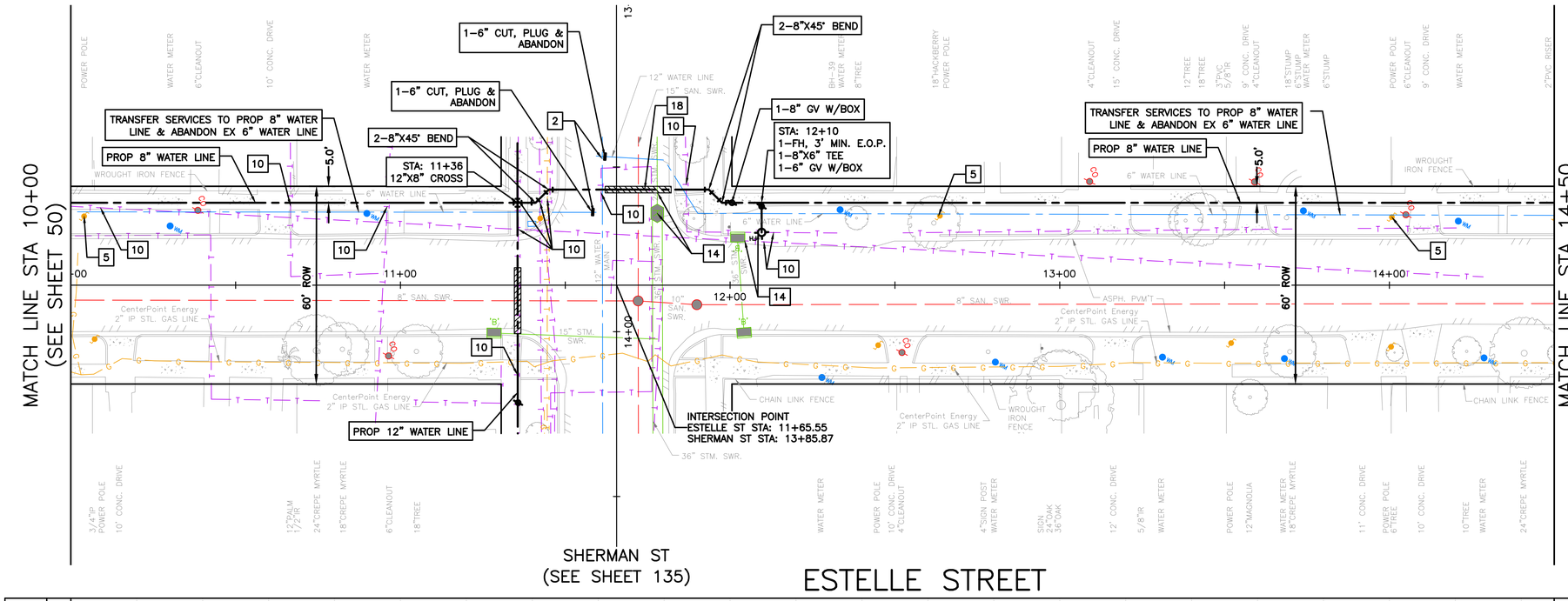
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 50 OF 275	

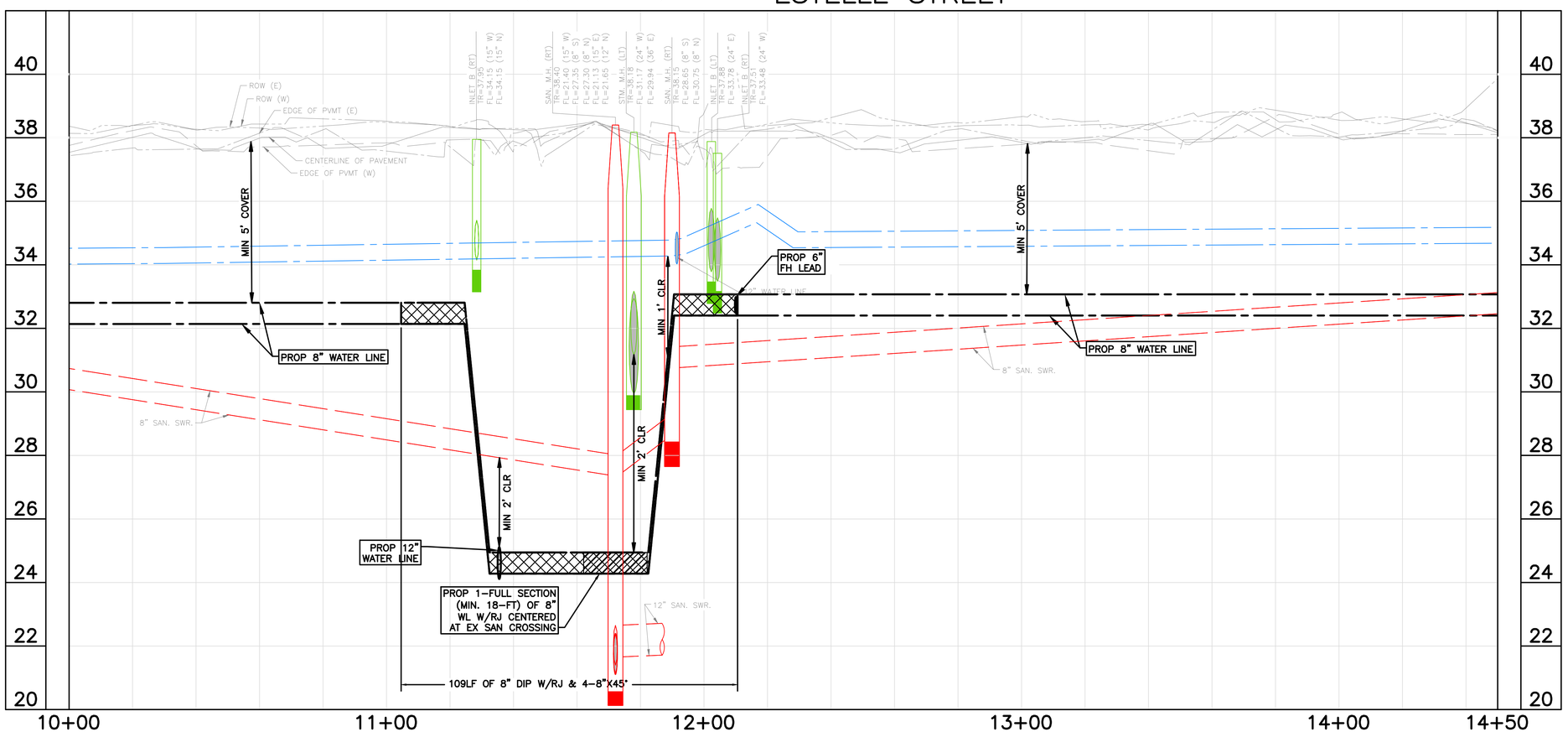
APP. | REVISION | NO. | DATE

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-ESTELLE STREET.dwg

90% SUBMITTAL

PLOTTED: 8/15/2025 9:44 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-ESTELLE STREET.dwg





0' 10' 20' 40'

SCALE: 1" = 30'

NO.	DATE	REVISION	APP.

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WOOLPERT
ARCHITECTURE | ENGINEERING | ESSENTIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

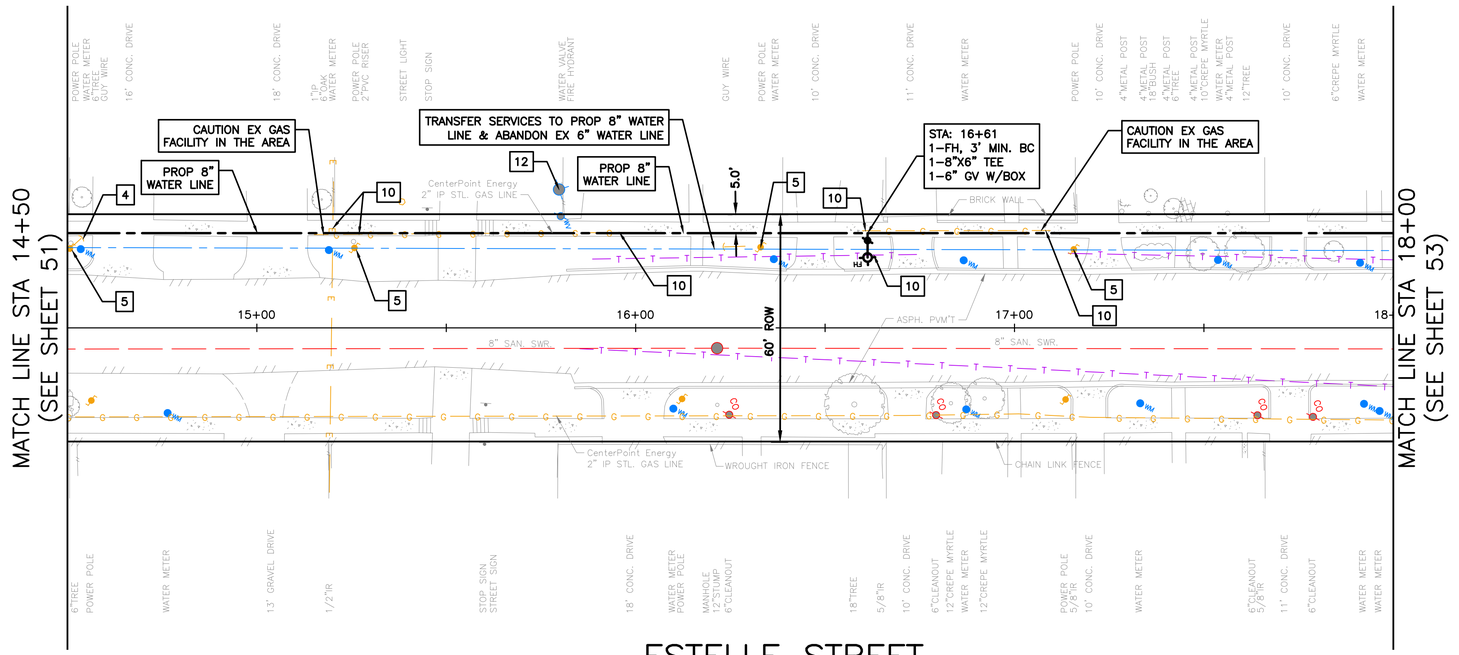
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

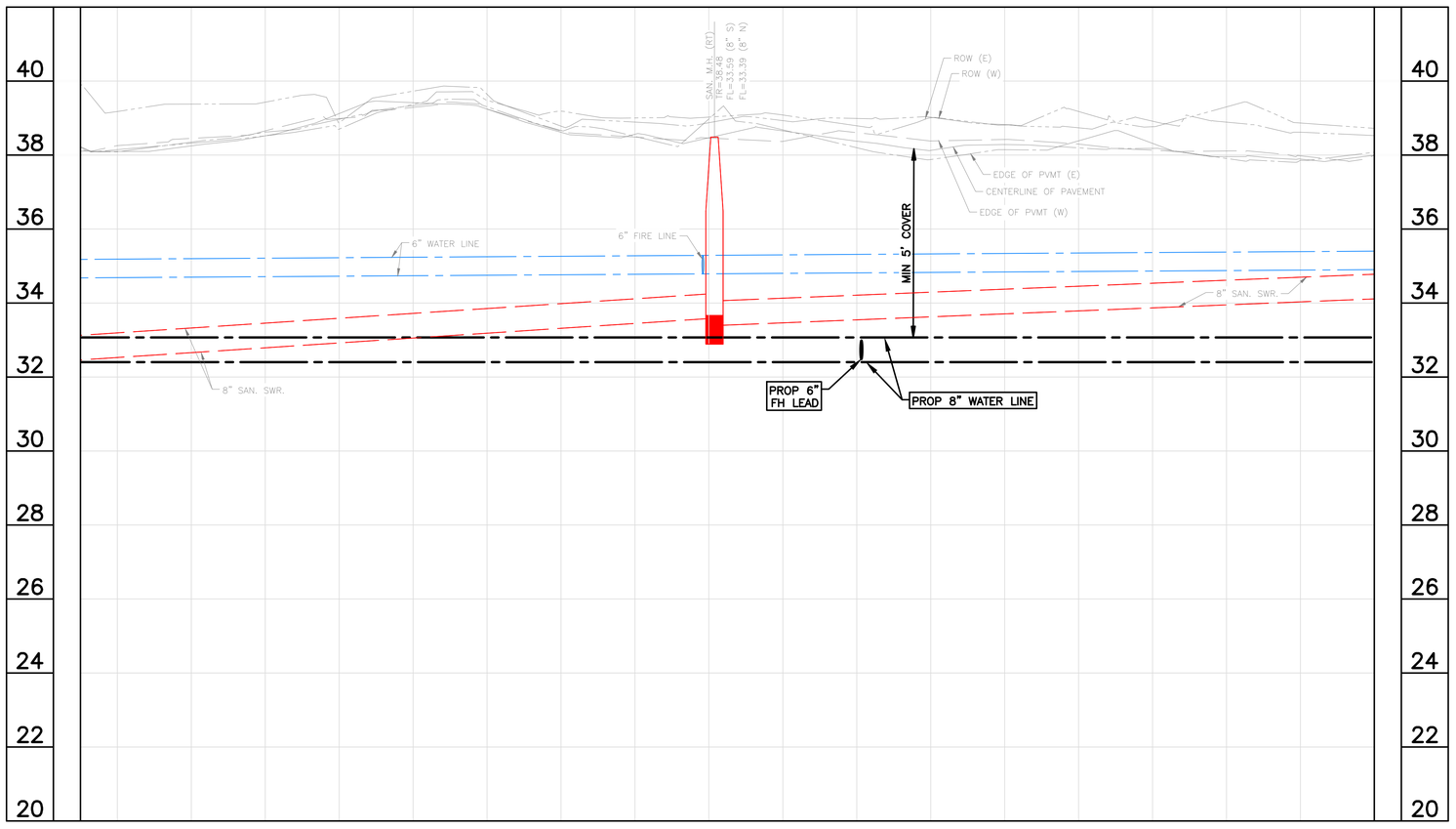
ESTELLE ST
PLAN & PROFILE
10+00 TO 14+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 51 OF 275	

90% SUBMITTAL



ESTELLE STREET



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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

ESTELLE ST
PLAN & PROFILE
14+50 TO 18+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 52 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:44 AM
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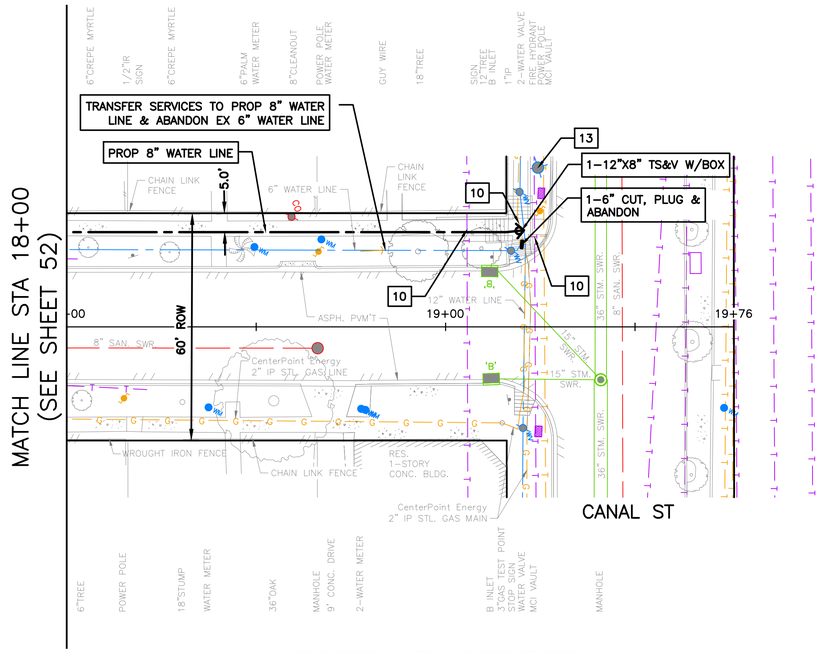
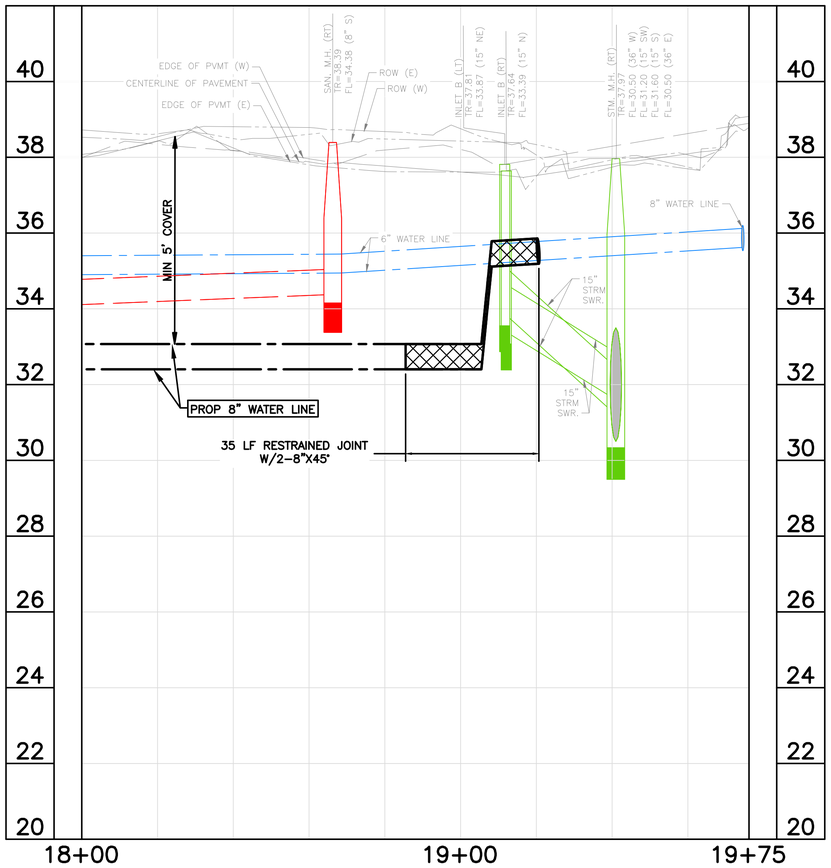
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-ESTELLE STREET.dwg

90% SUBMITTAL



ESTELLE STREET



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CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 53 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:45 AM
PLOT STYLE: COH.ctb
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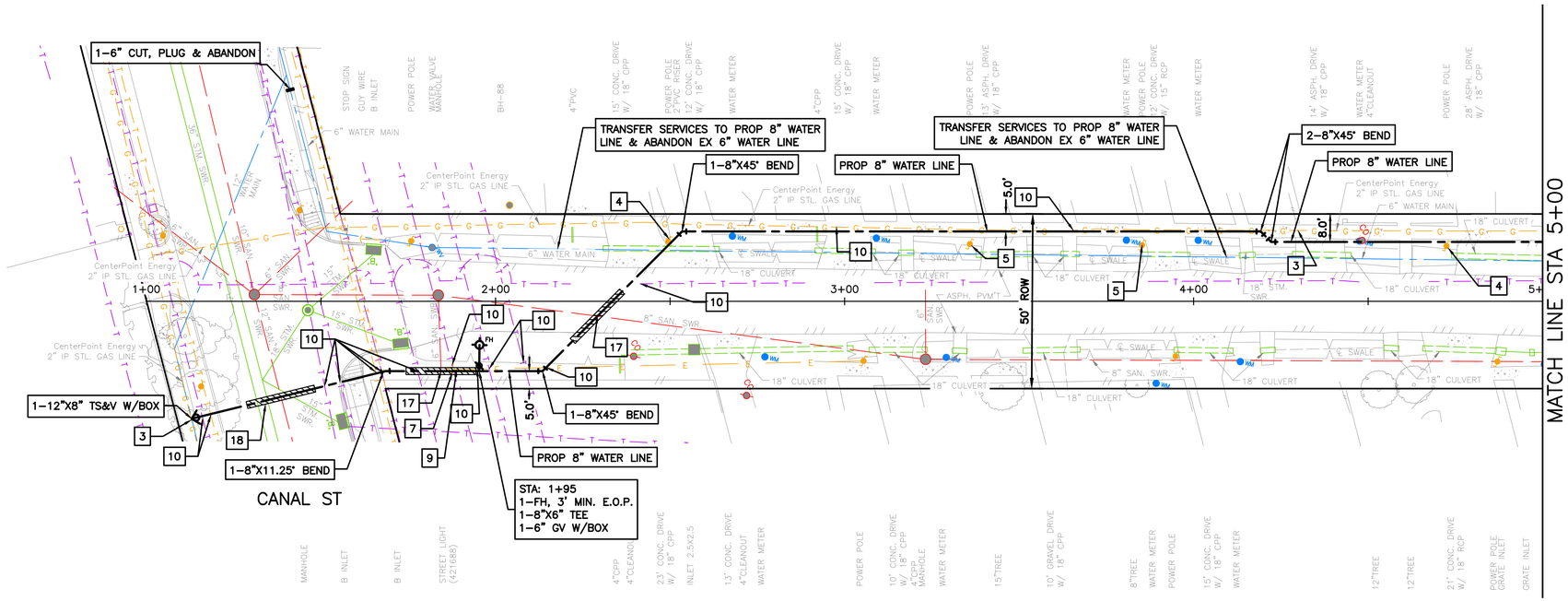
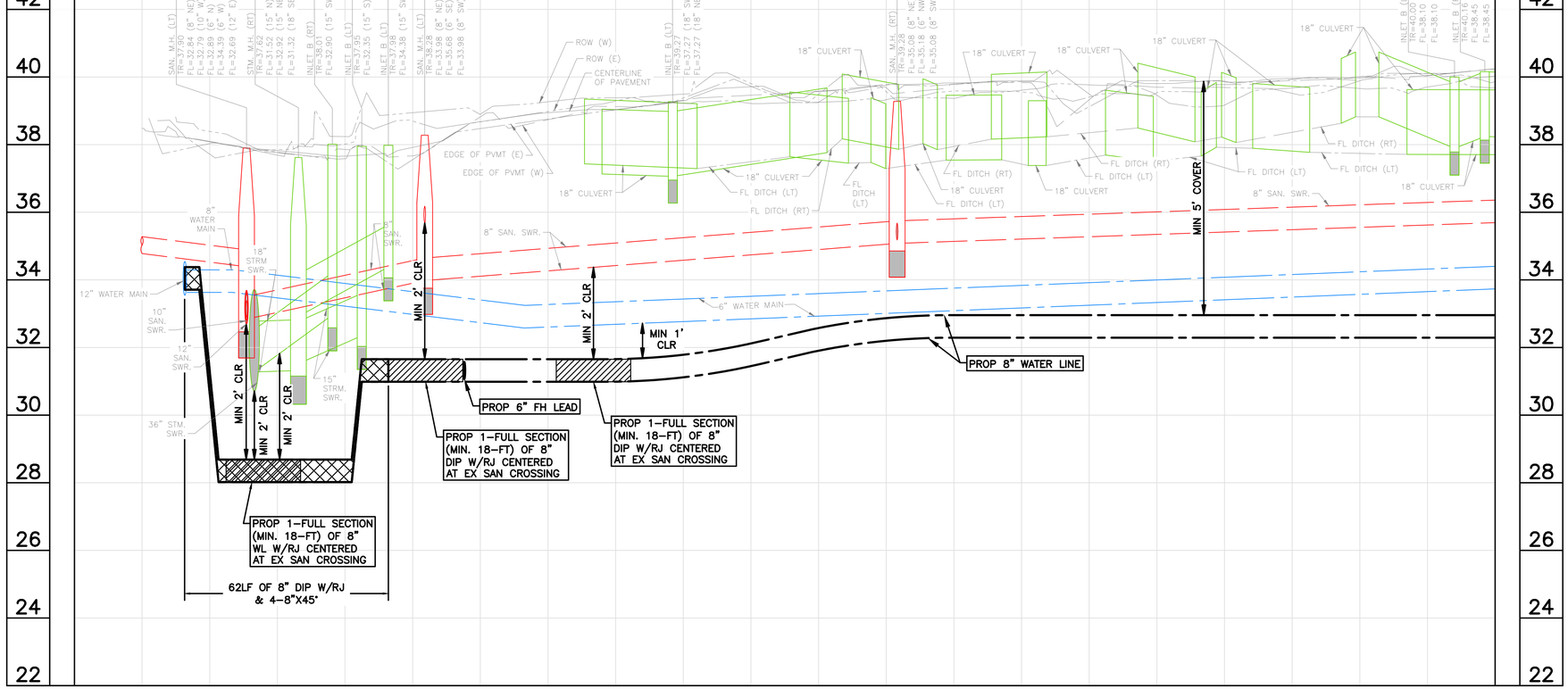
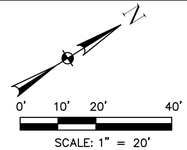
90% SUBMITTAL



N ESTELLE STREET





APP. | REVISION | NO. | DATE

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

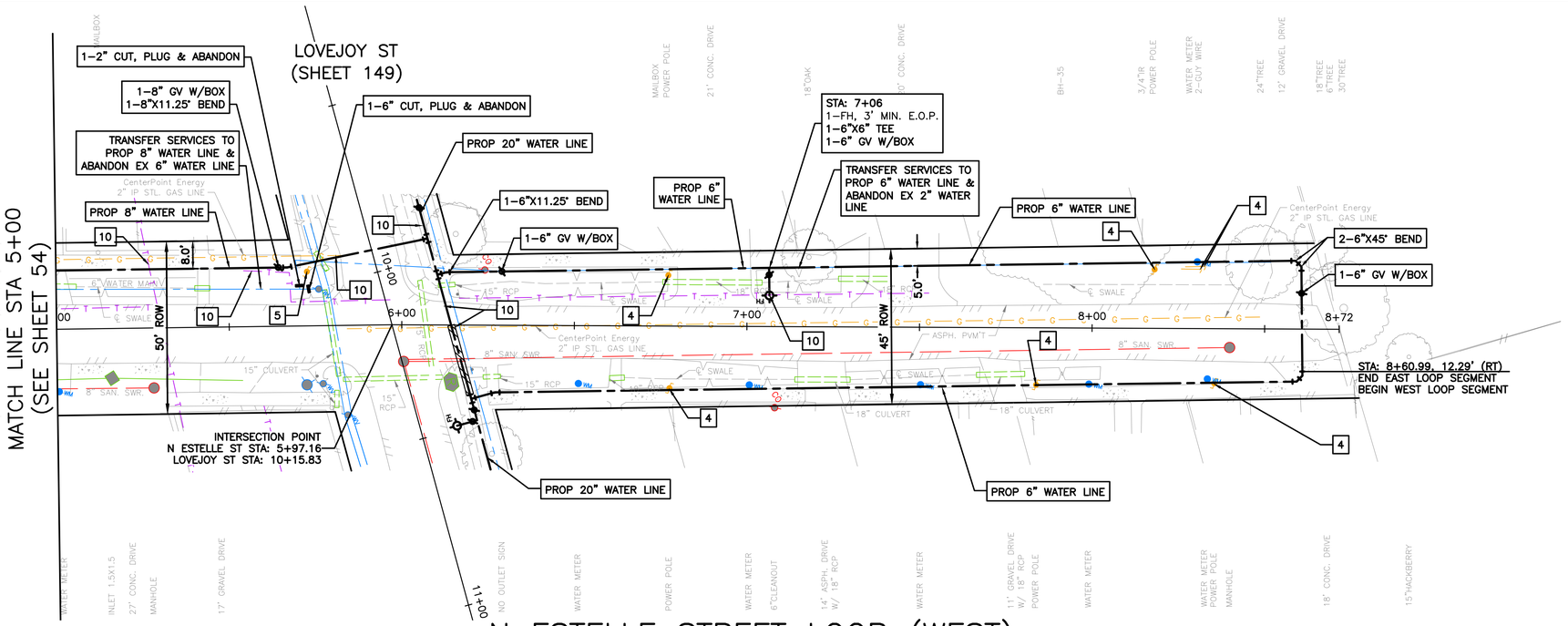
SECONDWARD WATERLINE REPLACEMENT

N ESTELLE ST
PLAN & PROFILE
1+00 TO 5+00

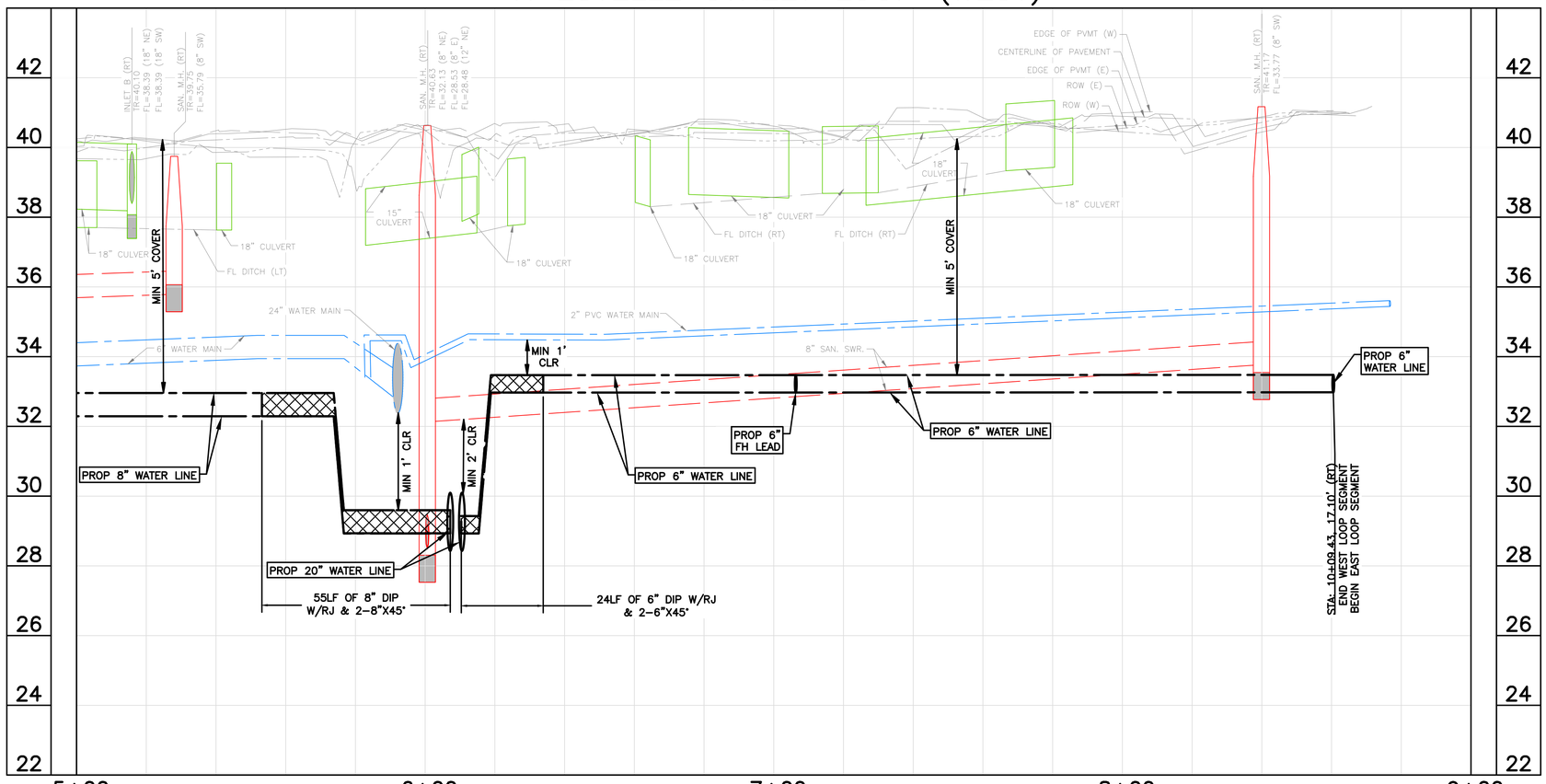
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 54 OF 275	

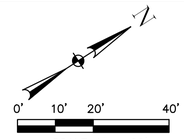
90% SUBMITTAL

PLOTTED: 8/15/2025 9:46 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N ESTELLE STREET.dwg



N ESTELLE STREET LOOP (WEST)





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SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

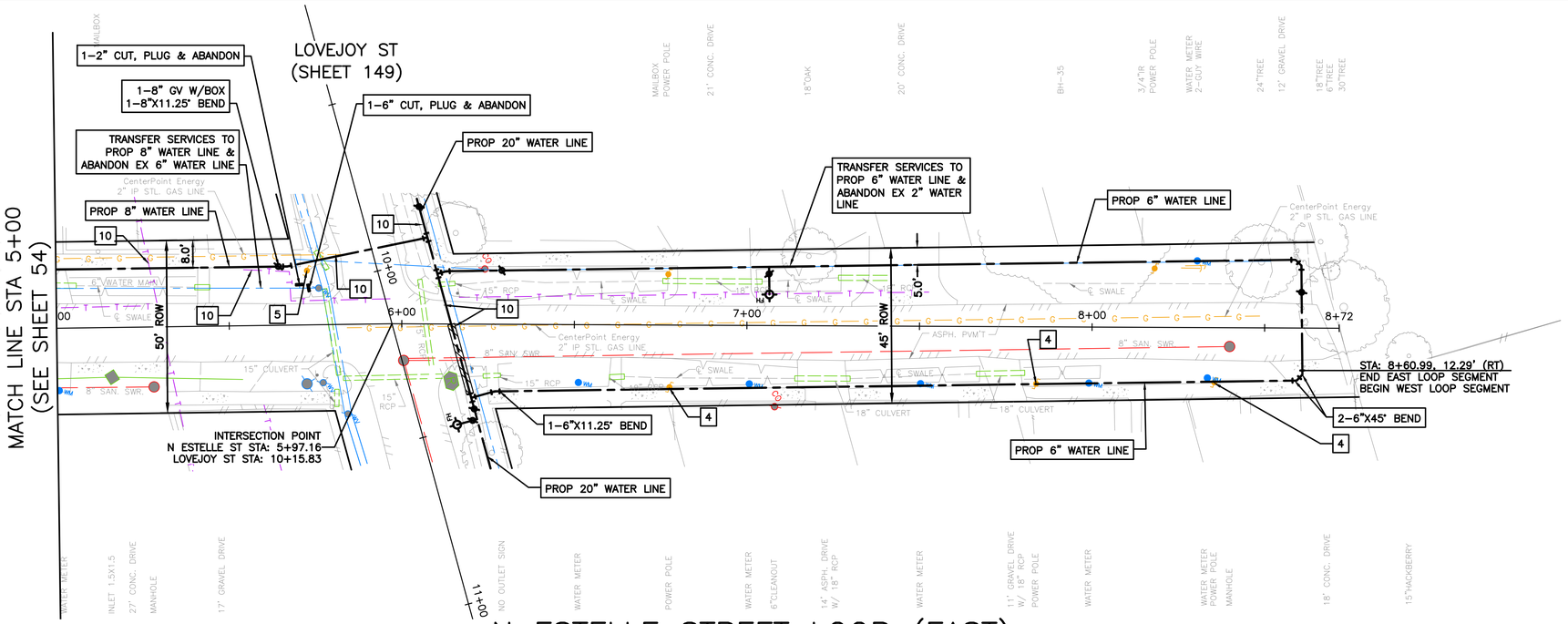
N ESTELLE ST
PLAN & PROFILE
5+00 TO 8+72 (WEST)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 55 OF 275	

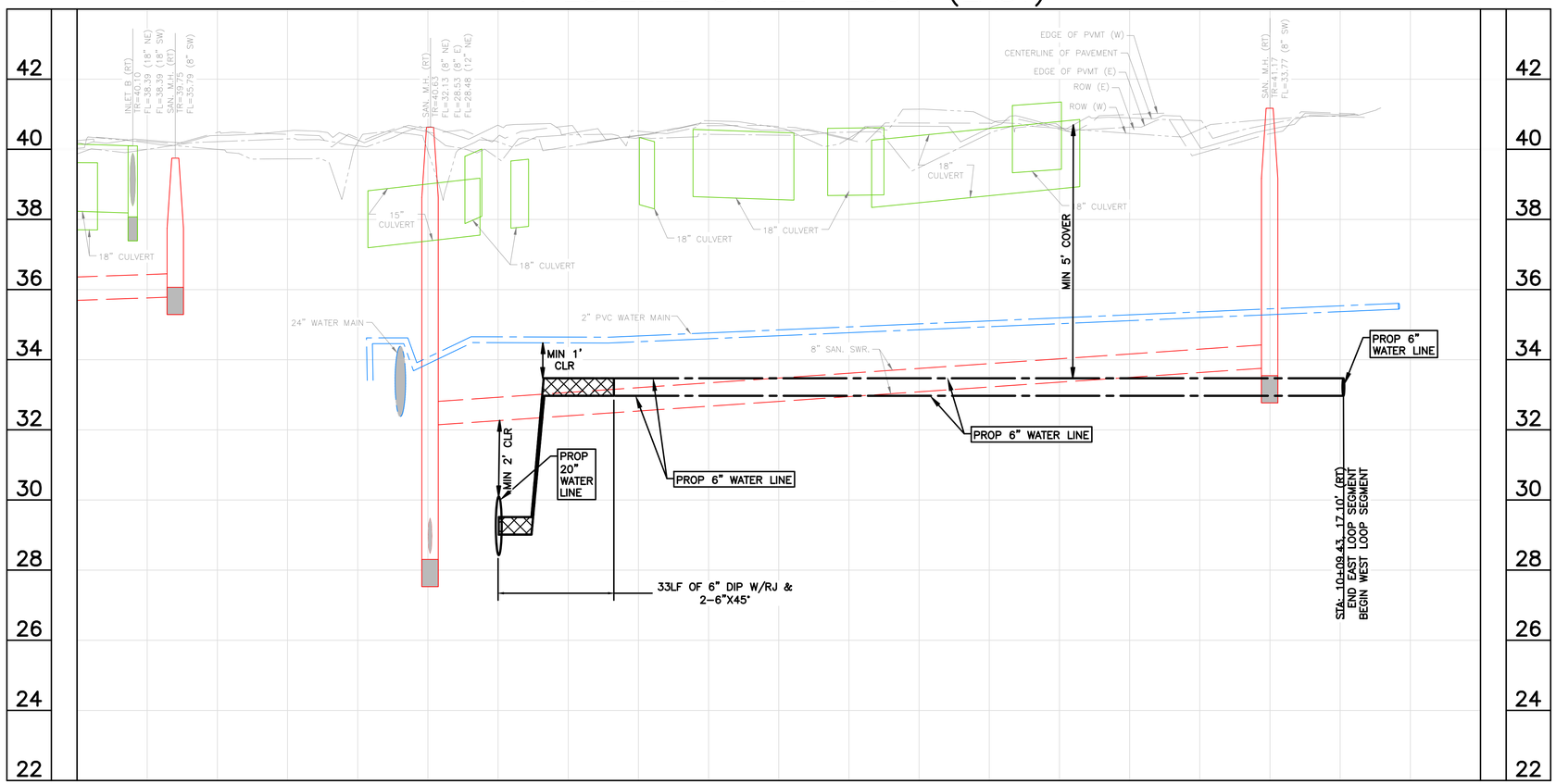
90% SUBMITTAL

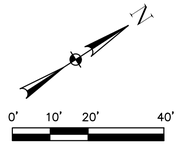
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:47 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N ESTELLE STREET.dwg



N ESTELLE STREET LOOP (EAST)





SCALE: 1" = 20'

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N ESTELLE ST
PLAN & PROFILE
5+00 TO 8+72 (EAST)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 56 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:47 AM
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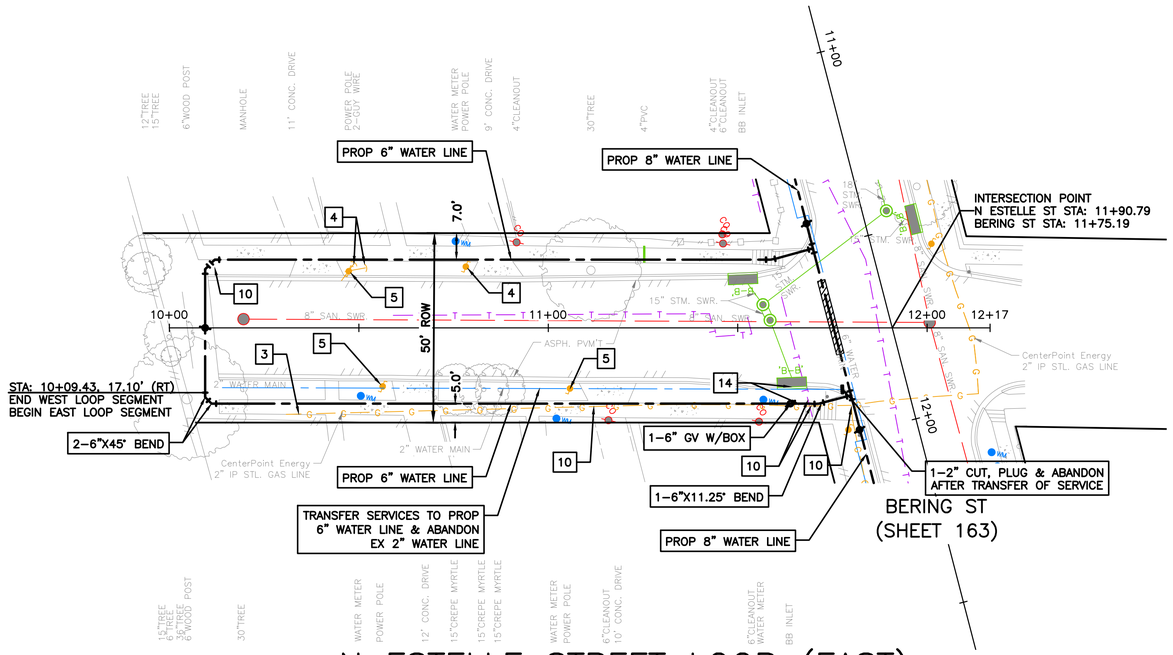
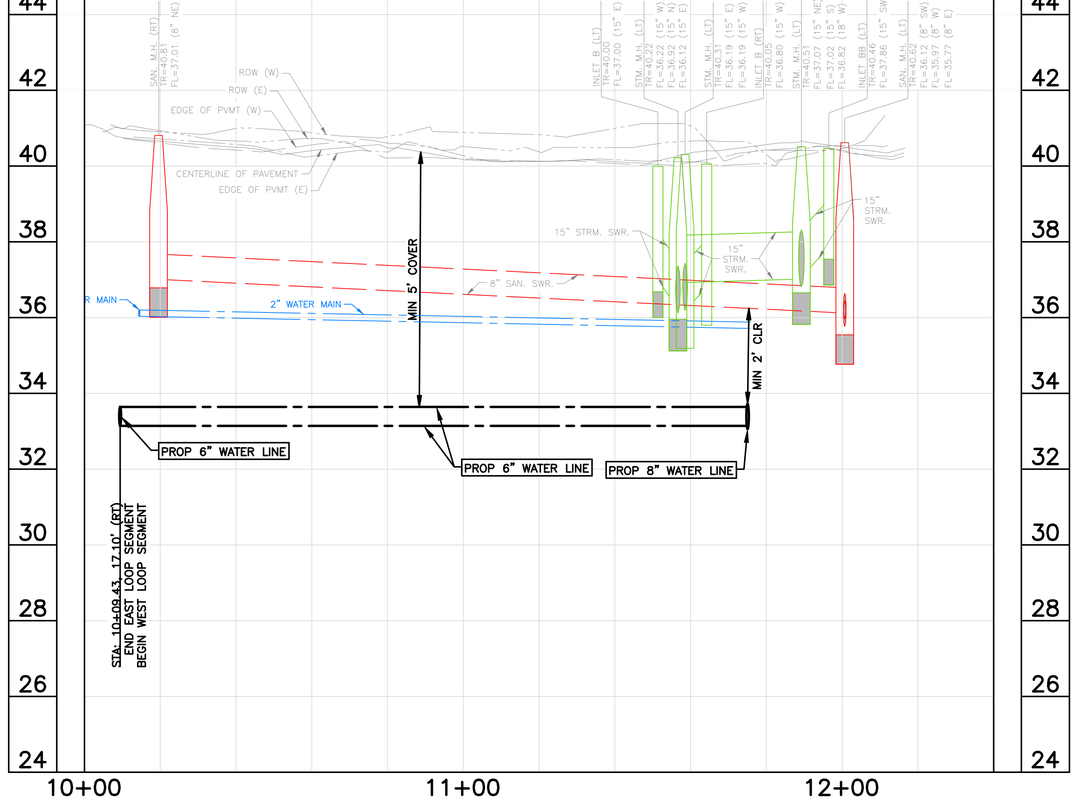
90% SUBMITTAL



N ESTELLE STREET LOOP (EAST)



SCALE: 1" = 20'

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N ESTELLE ST
PLAN & PROFILE
10+00 TO 12+17 (EAST)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 57 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:48 AM
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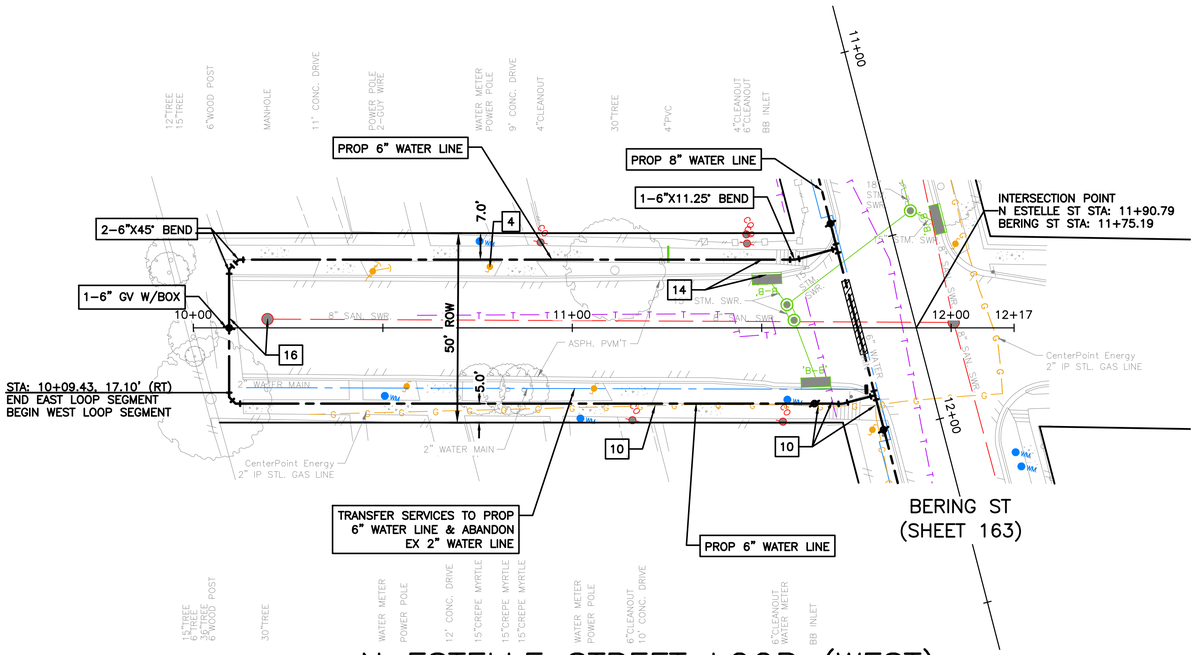
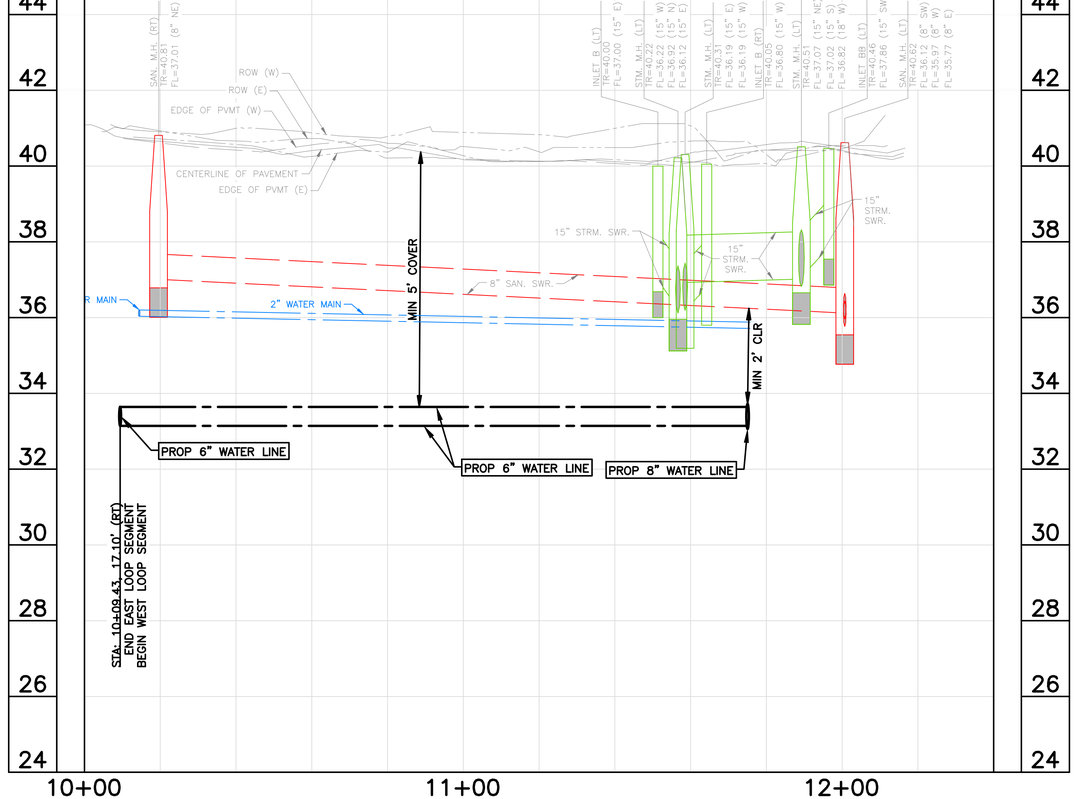
90% SUBMITTAL



N ESTELLE STREET LOOP (WEST)



0' 10' 20' 40'

SCALE: 1" = 20'

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N ESTELLE ST
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10+00 TO 12+17 (WEST)

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DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 58 OF 275	

APP. | REVISION | NO. | DATE

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PLOT STYLE: COH.ctb
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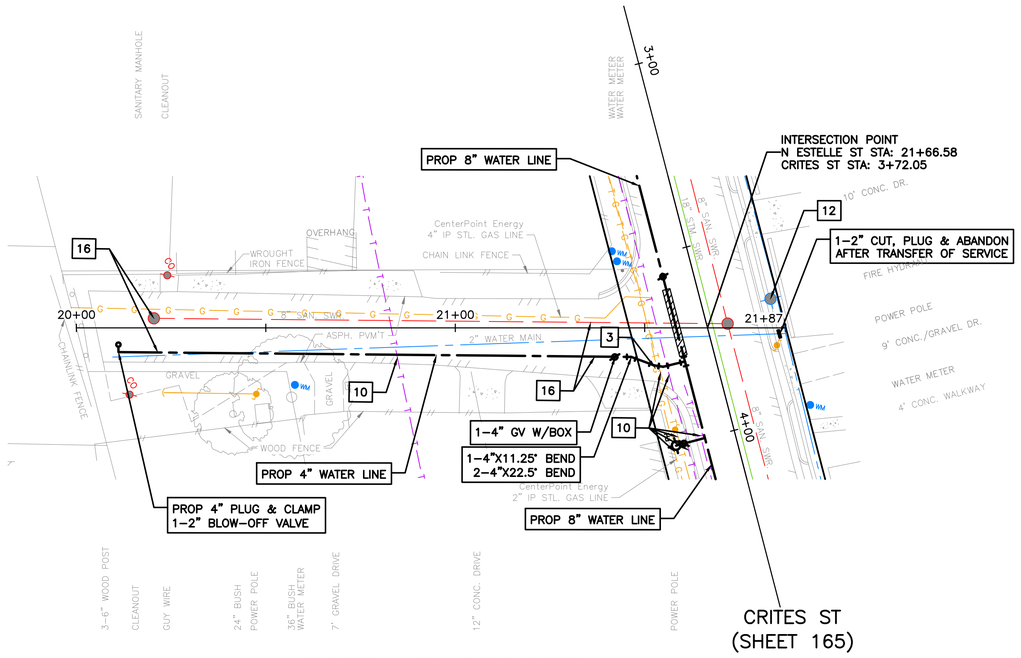
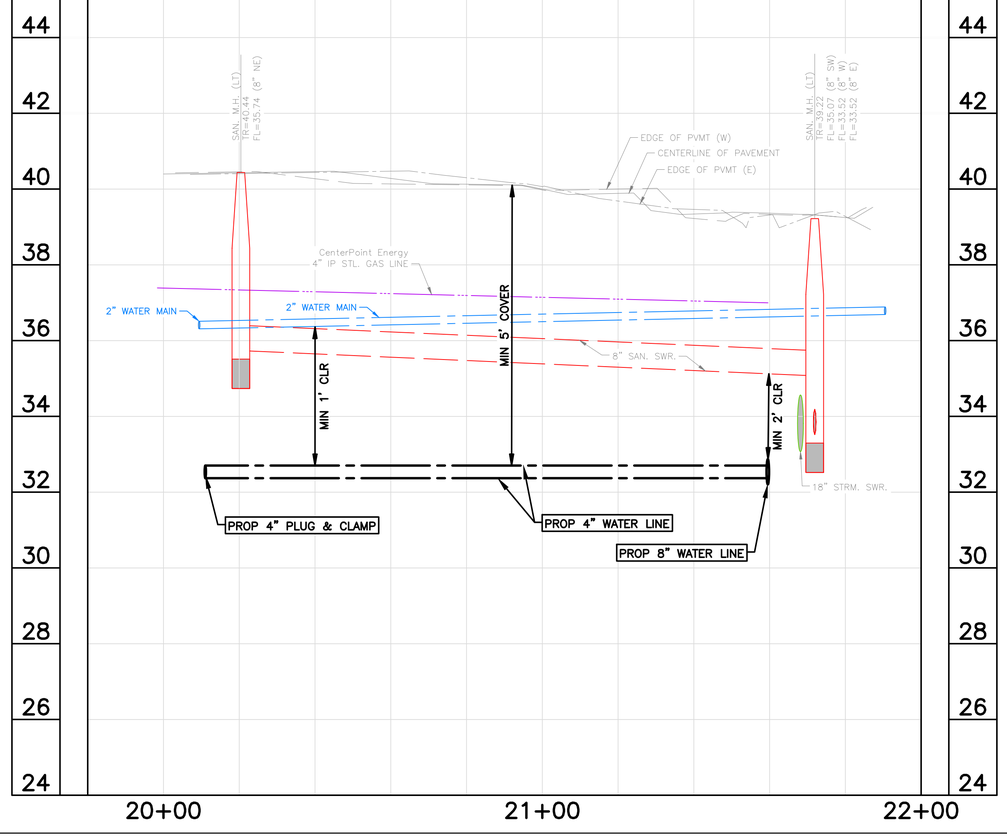
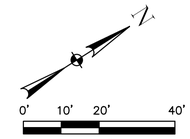
90% SUBMITTAL



N ESTELLE STREET





SCALE: 1" = 20'

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ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 18: SET 60D NAIL IN POWER POLE LOCATED AT CRITES ST. & N. DRENNAN ST. IN FRONT OF ADDRESS 541 N. DRENNAN.
STA. 1+00.92, 18.1' RT (CRITES ST. BASELINE)
ELEV.=41.78'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

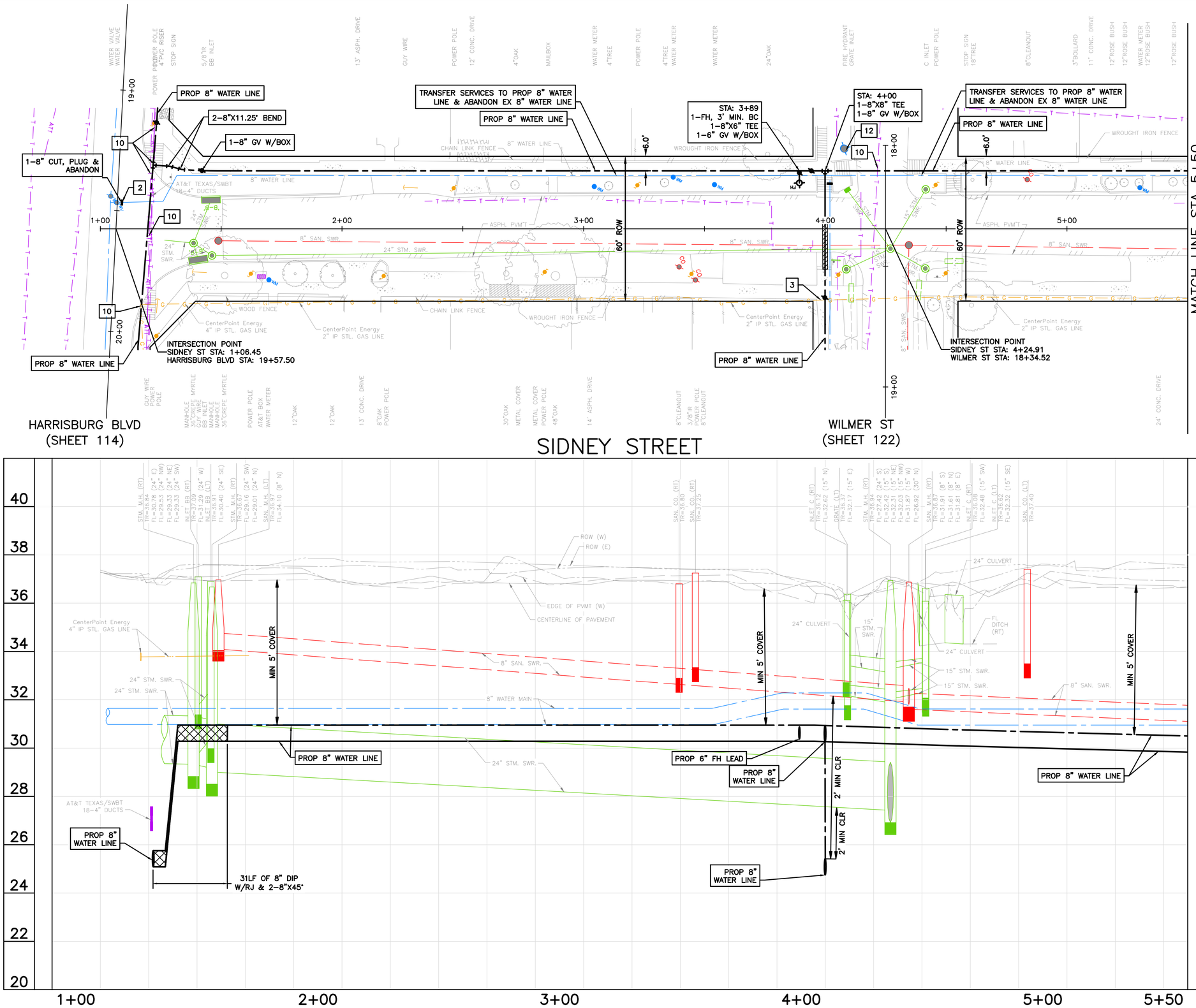
N ESTELLE ST
PLAN & PROFILE
20+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 59 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:49 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N ESTELLE STREET.dwg

90% SUBMITTAL



0' 10' 20' 40'

SCALE: 1"=20'

NOTES:

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TBM 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW ST. IN FRONT OF ADDRESS 450B. STA. 19+93.37, 19.1' RT (GARROW ST. BASELINE) ELEV.=39.11'

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DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

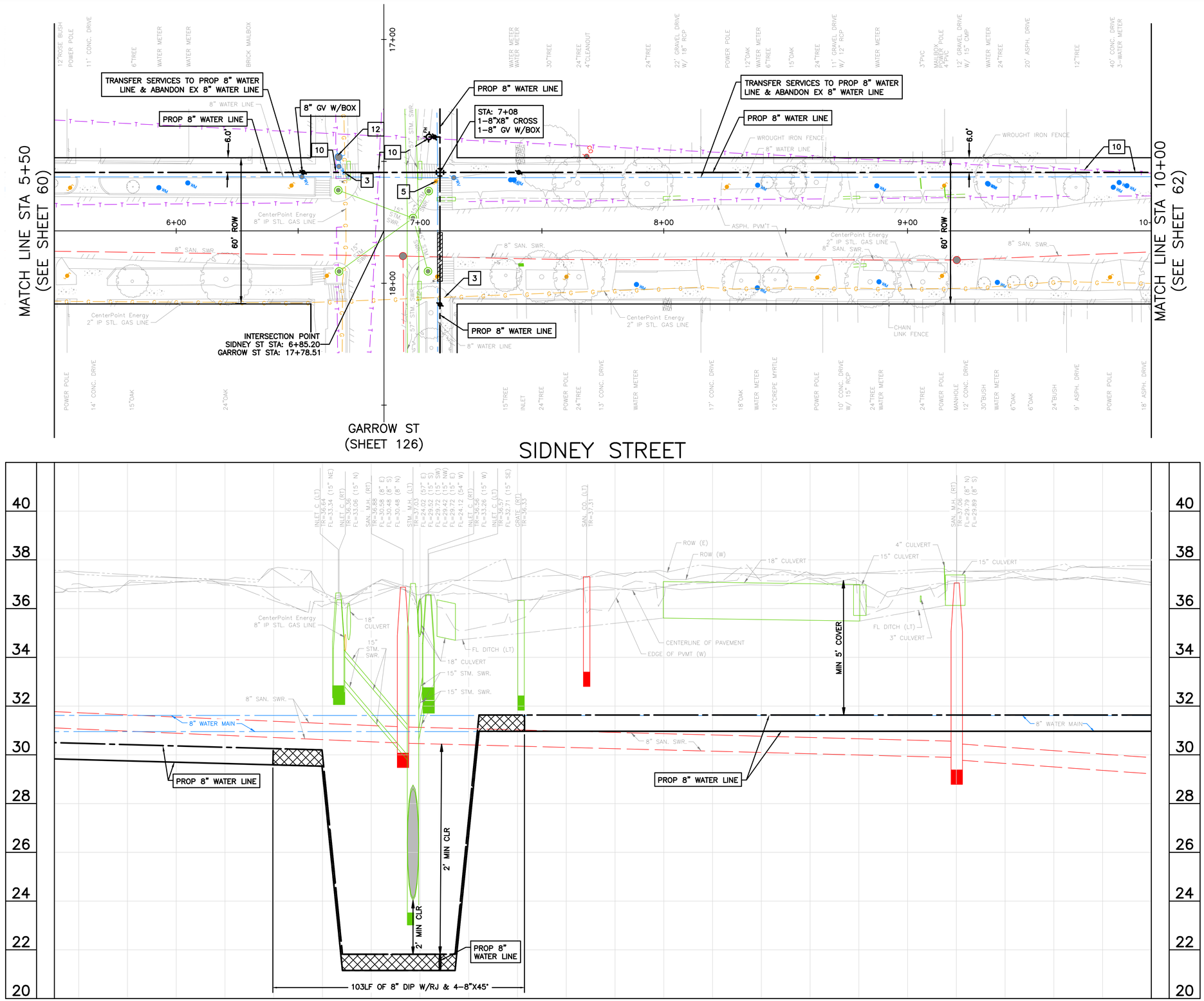
SIDNEY ST
PLAN & PROFILE
1+00 TO 5+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 60 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:50 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SIDNEY STREET.dwg



0' 10' 20' 40'

SCALE: 1"=20'

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SIDNEY ST
PLAN & PROFILE
5+50 TO 10+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 61 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:51 AM
PLOT STYLE: COH.ctb
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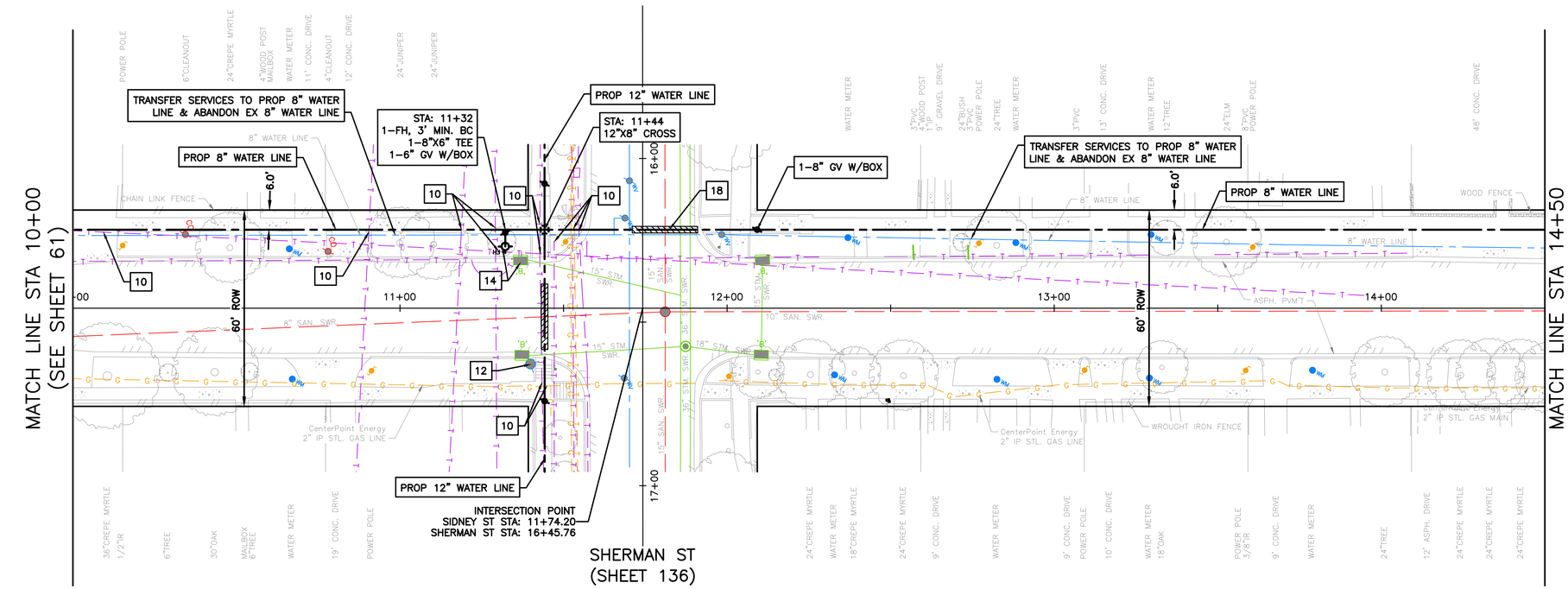

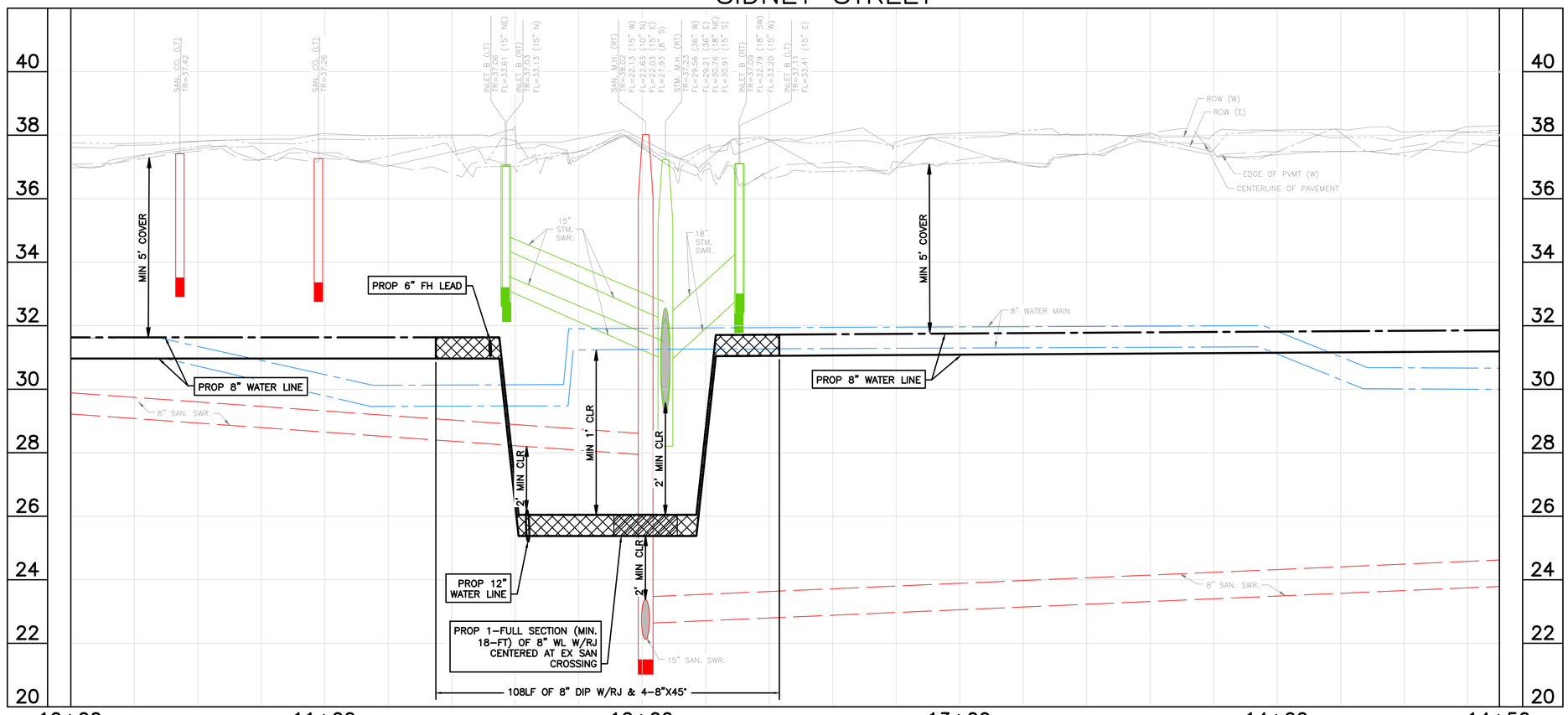

0' 10' 20' 40'

SCALE: 1"=20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST. STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE) ELEV.=39.66

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SIDNEY ST
PLAN & PROFILE
10+00 TO 14+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 62 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:51 AM
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FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SIDNEY STREET.dwg

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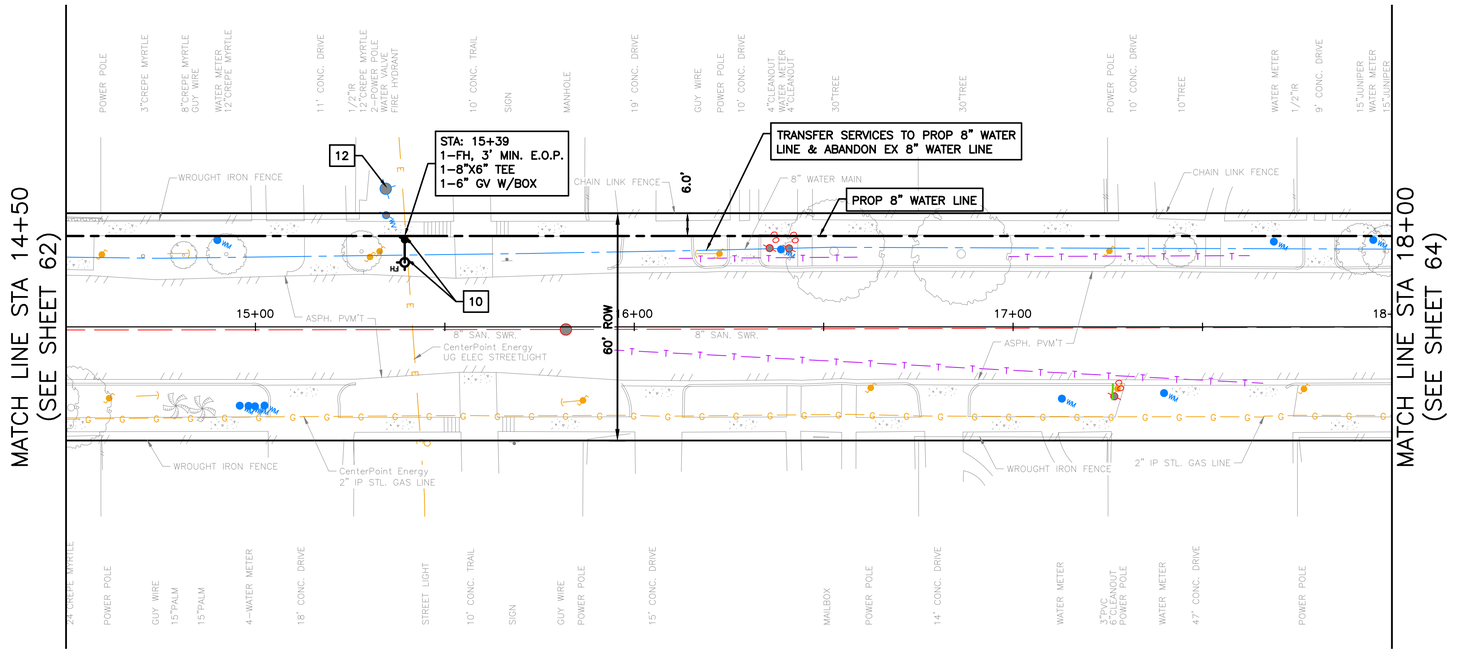
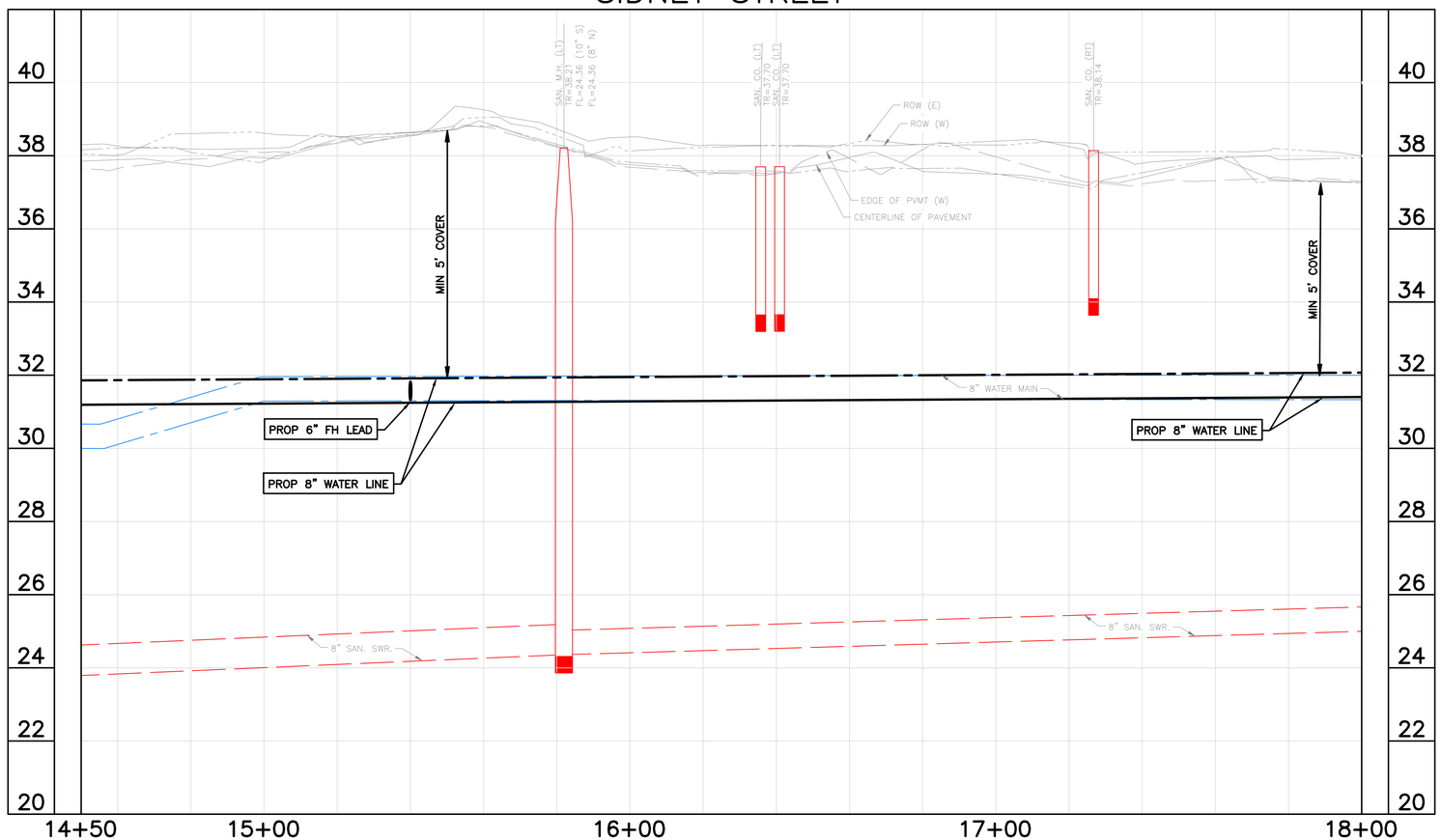


SIDNEY STREET



0' 10' 20' 40'

SCALE: 1"=20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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NATHAN A. WILSON, P.E.
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DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

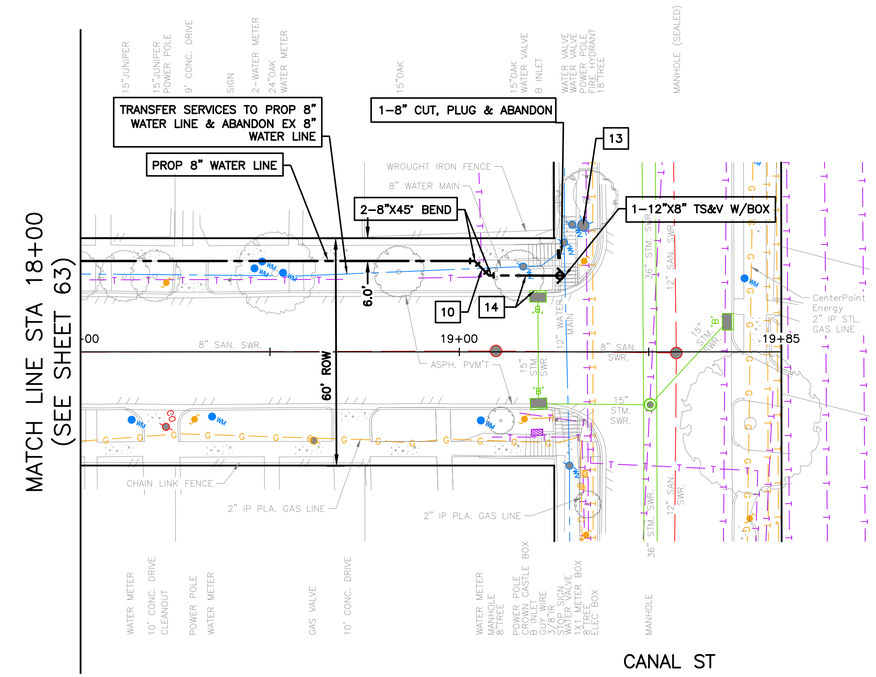
SECONDWARD WATERLINE REPLACEMENT

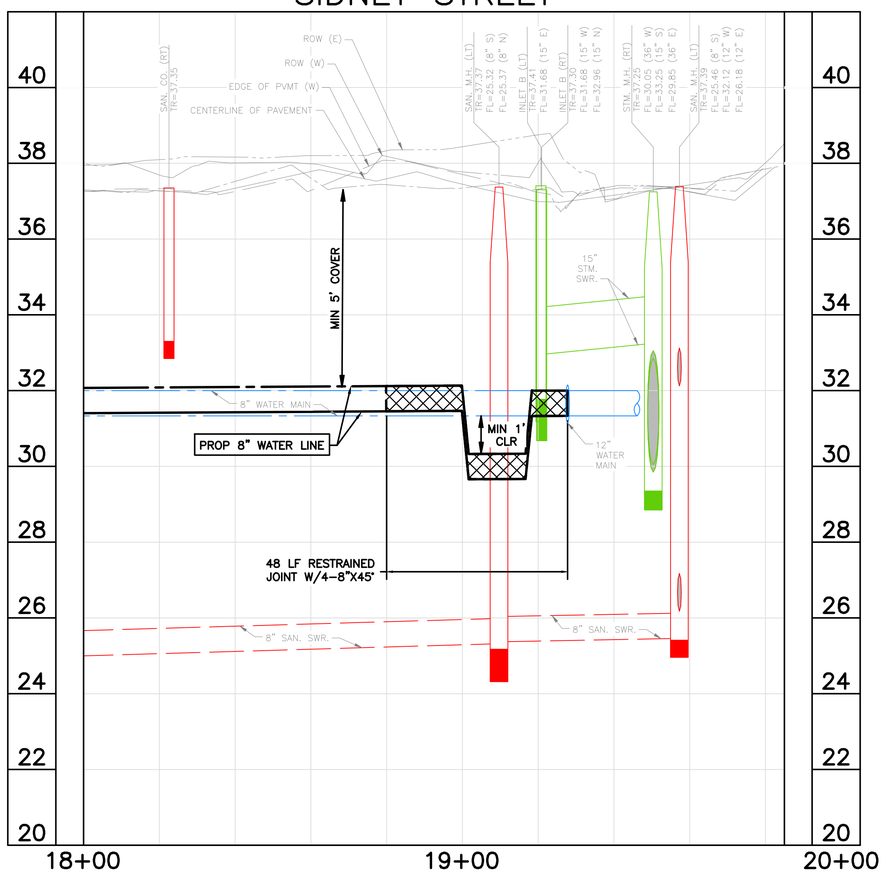
SIDNEY ST
PLAN & PROFILE
14+50 TO 18+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 63 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1"=20'

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SIDNEY ST
PLAN & PROFILE
18+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 64 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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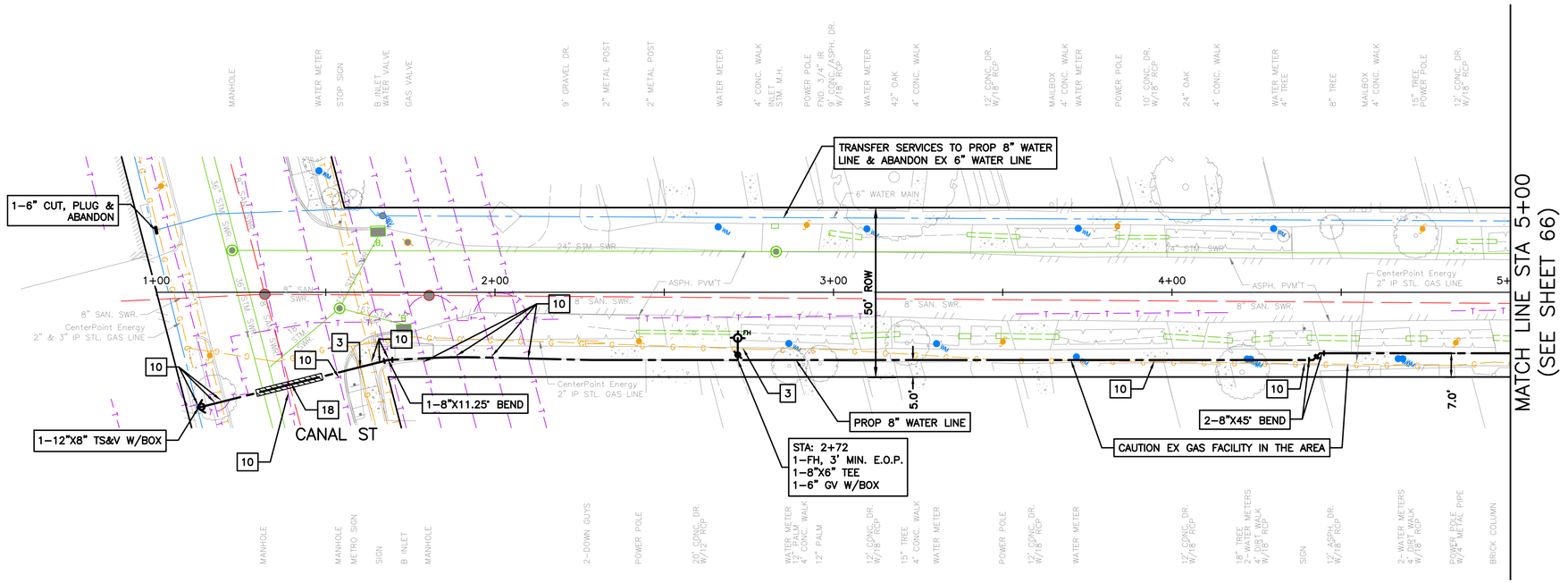
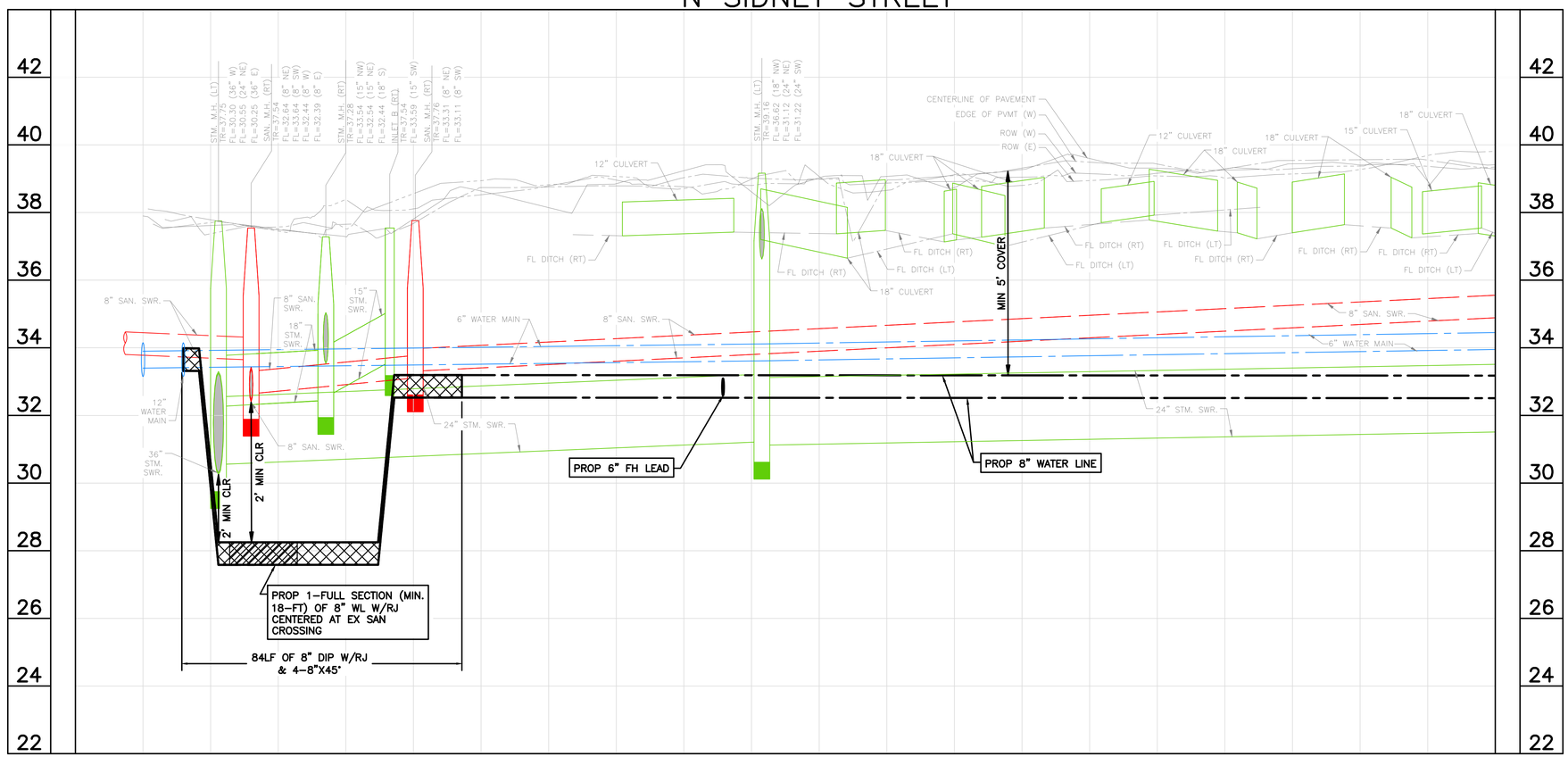
PLOTTED: 8/15/2025 9:54 AM

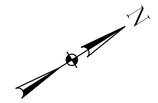
PLOT STYLE: COH.ctb

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N SIDNEY STREET.dwg



N SIDNEY STREET





0' 10' 20' 40'

SCALE: 1" = 20'

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5) PROPOSED WATER LINES LESS THAN 16-INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3-FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20-INCH WITH A MINIMUM COVER OF 4-FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 10: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF LOVEJOY ST. & N. ESTELLE ST. STA. 9494.83, 19.7' RT (LOVEJOY ST. BASELINE) ELEV.=40.84'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

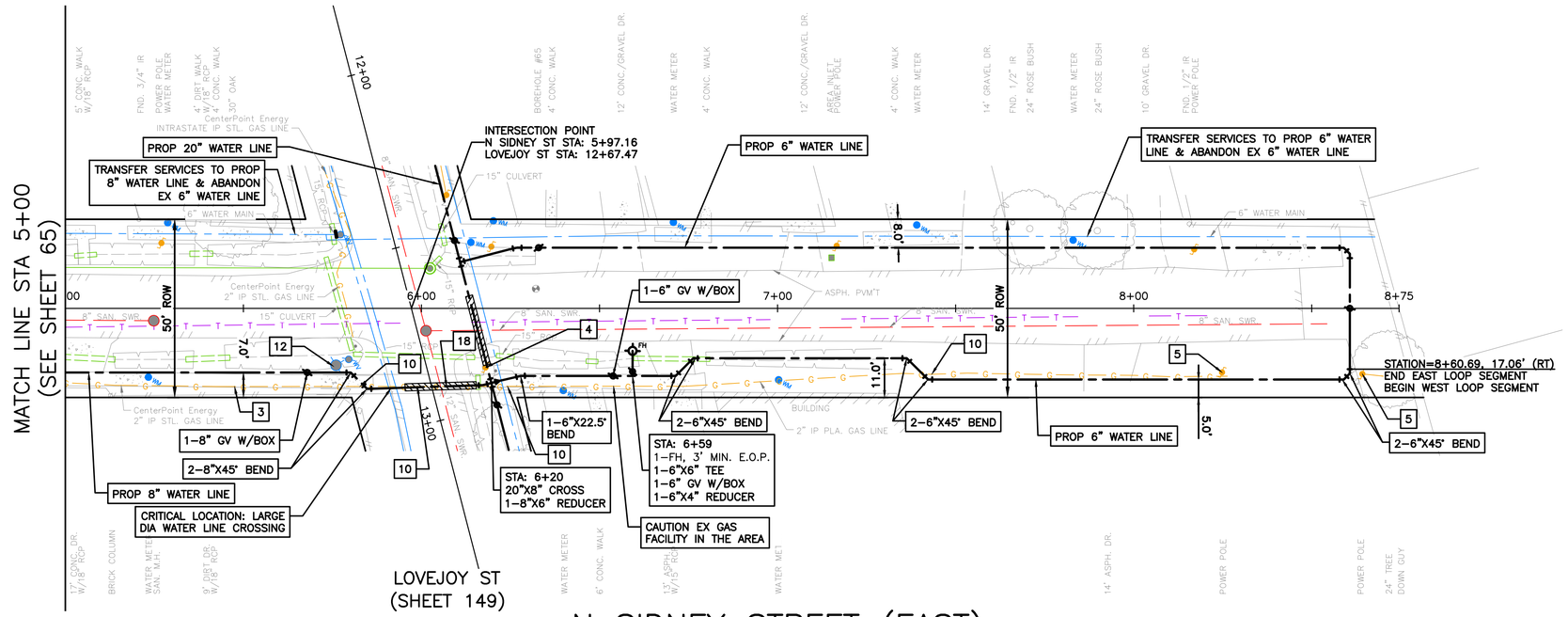
SECONDWARD WATERLINE REPLACEMENT

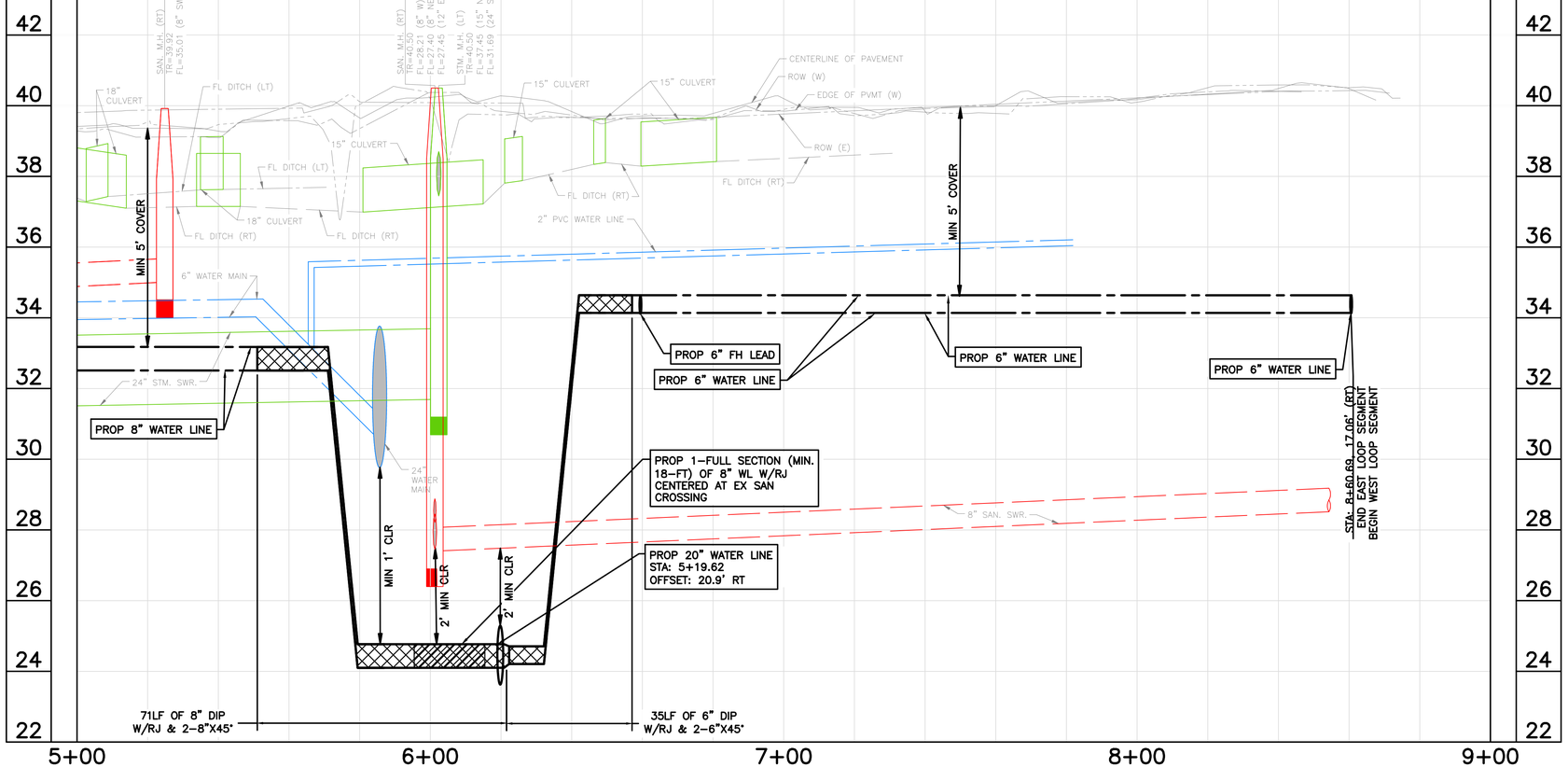
N SIDNEY ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 65 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 10: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF LOVEJOY ST. & N. ESTELLE ST.
STA. 9494.83, 19.7' RT (LOVEJOY ST. BASELINE)
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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | INFORMATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

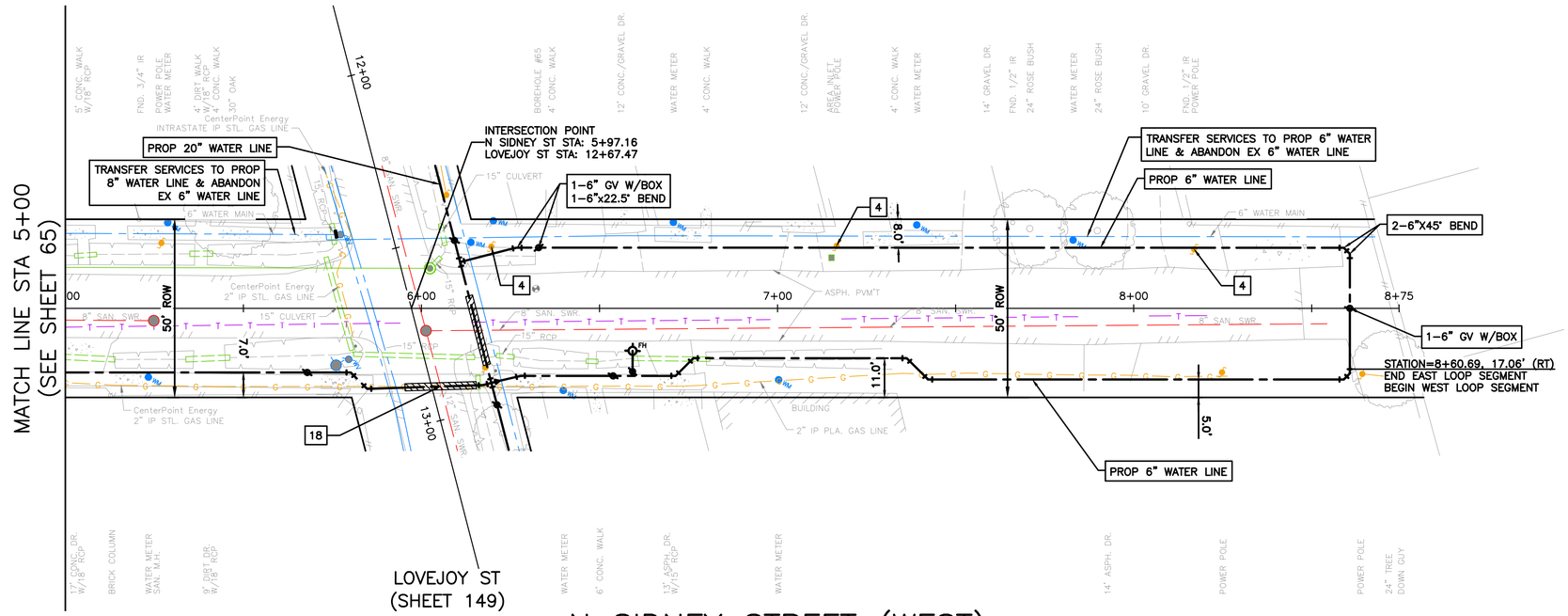
SECONDWARD WATERLINE REPLACEMENT

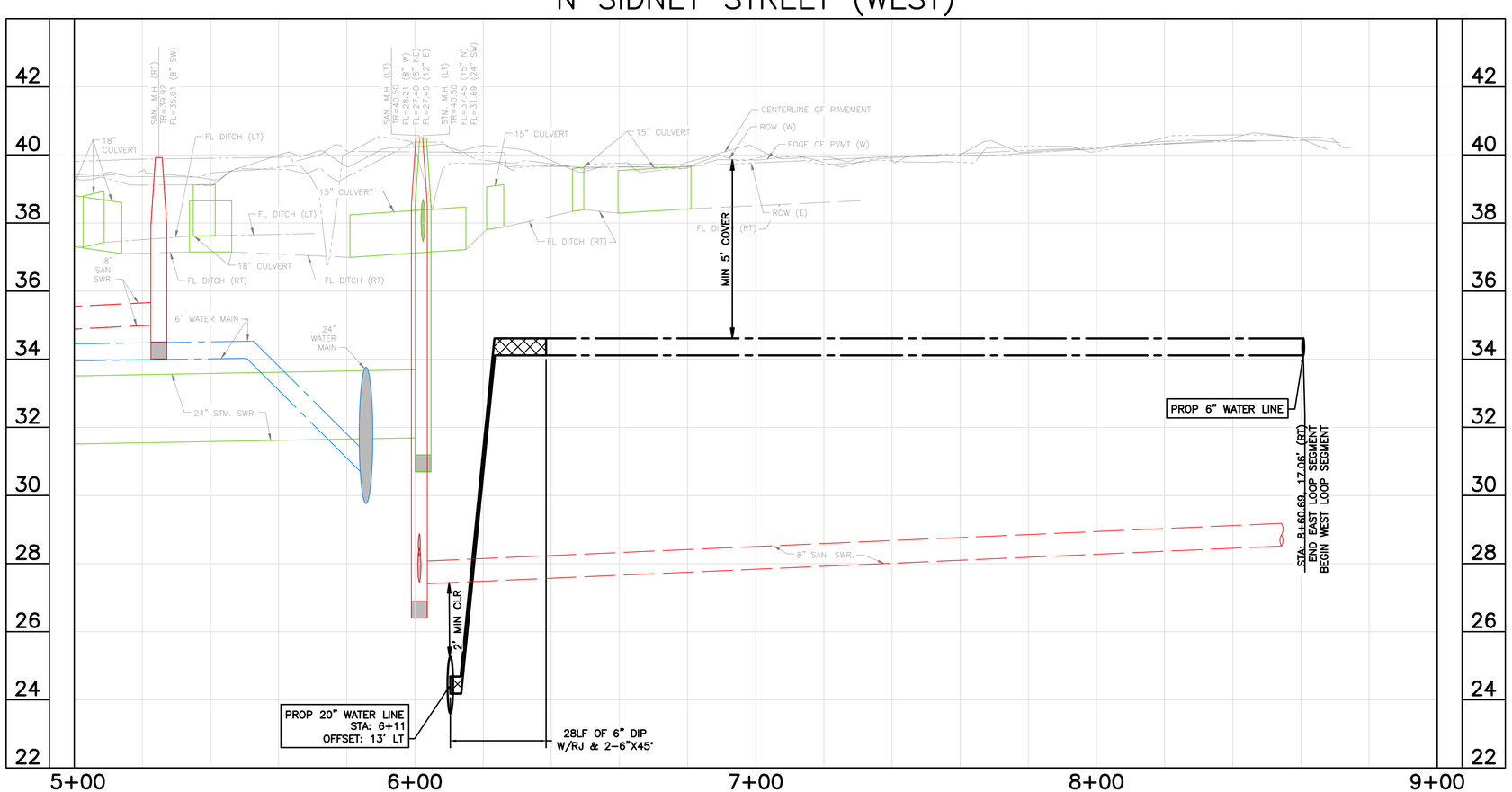
N SIDNEY ST
PLAN & PROFILE
5+00 TO 8+75 (EAST)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 66 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 9:54 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N SIDNEY STREET.dwg





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

Date

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Date

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

WOOLPERT
ARCHITECTURE | ENGINEERING | INFORMATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N SIDNEY ST
PLAN & PROFILE
5+00 TO 8+75 (WEST)

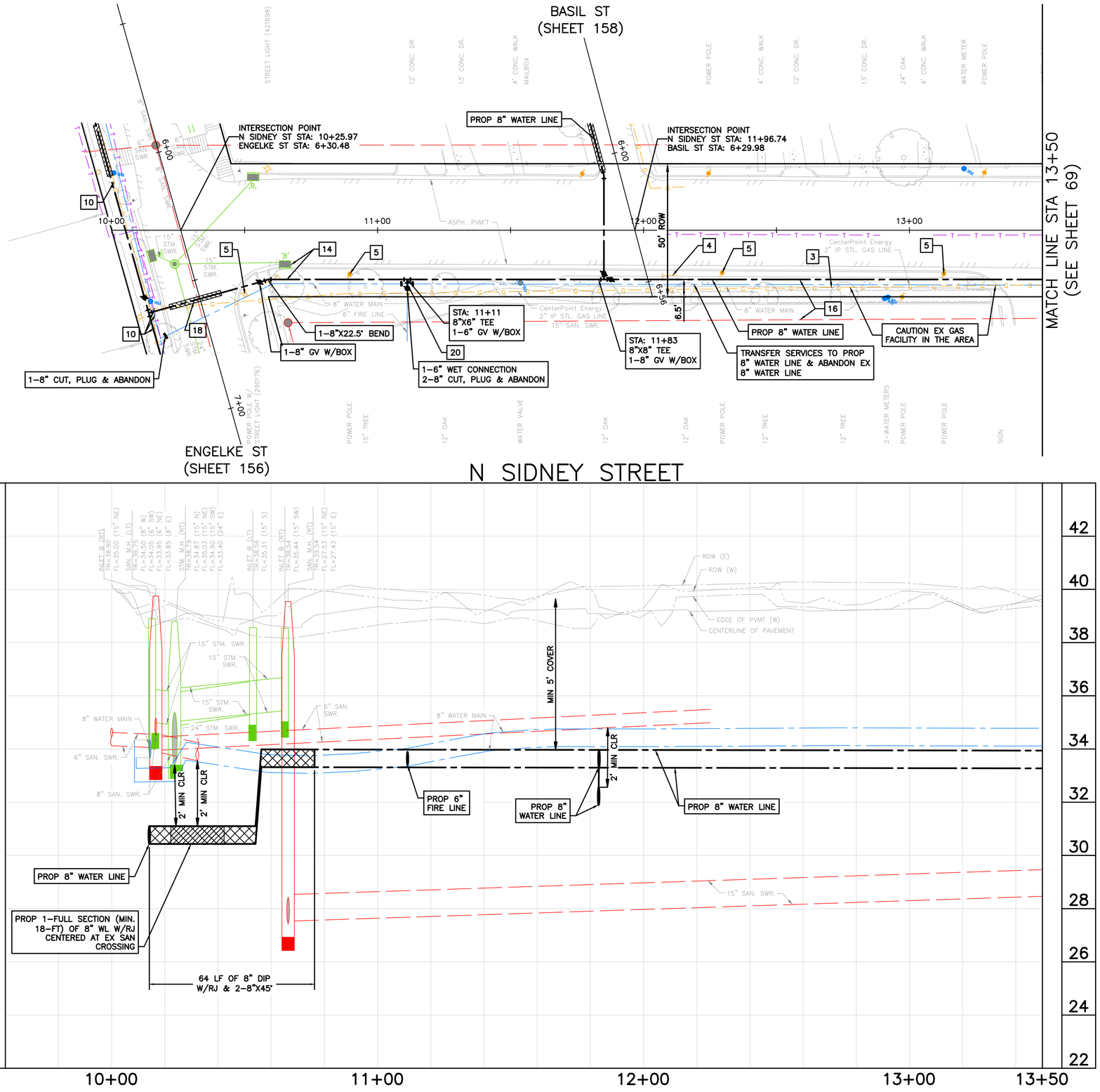
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 67 OF 275	

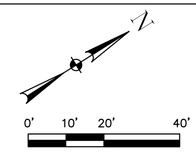
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:55 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N SIDNEY STREET.dwg

90% SUBMITTAL

PLOTTED: 8/15/2025 9:56 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N SIDNEY STREET.dwg





SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 15: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF BERING ST. & N. SIDNEY ST.
STA. 13+93.81, 22.6' RT (BEARING ST. BASELINE)
ELEV.=42.20'

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

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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

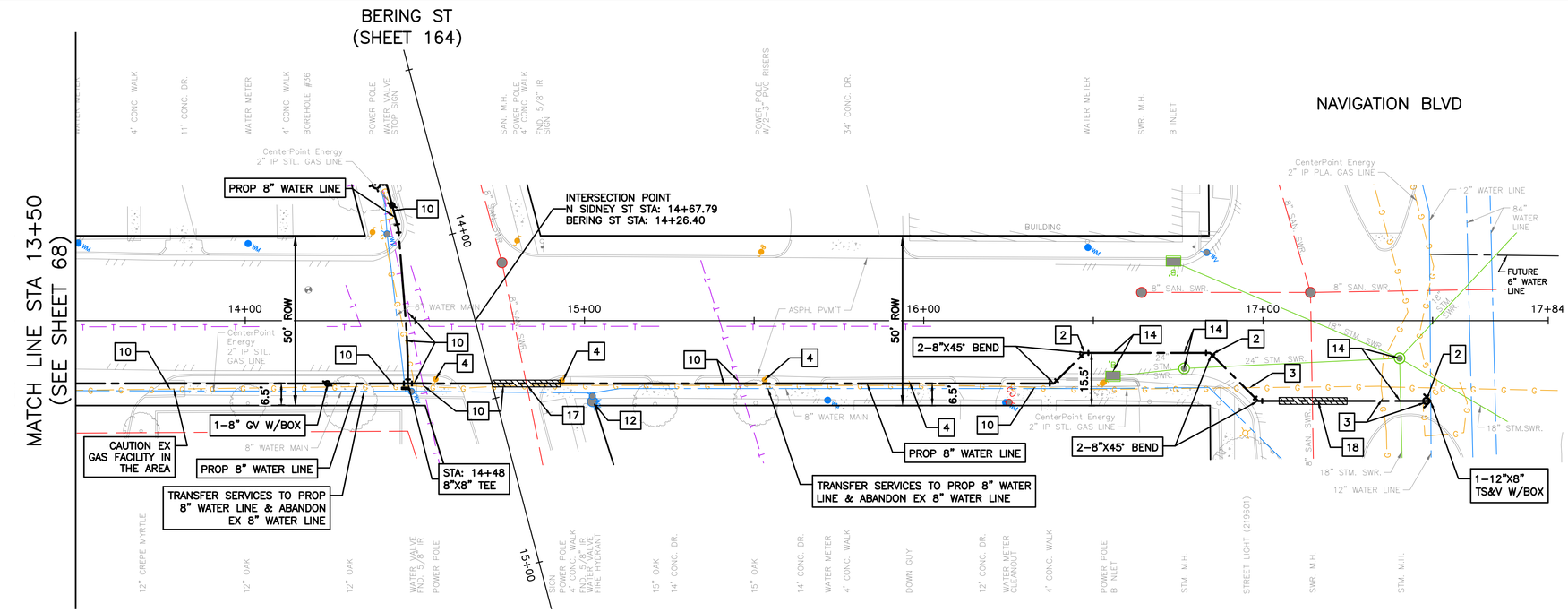
SECONDWARD WATERLINE REPLACEMENT

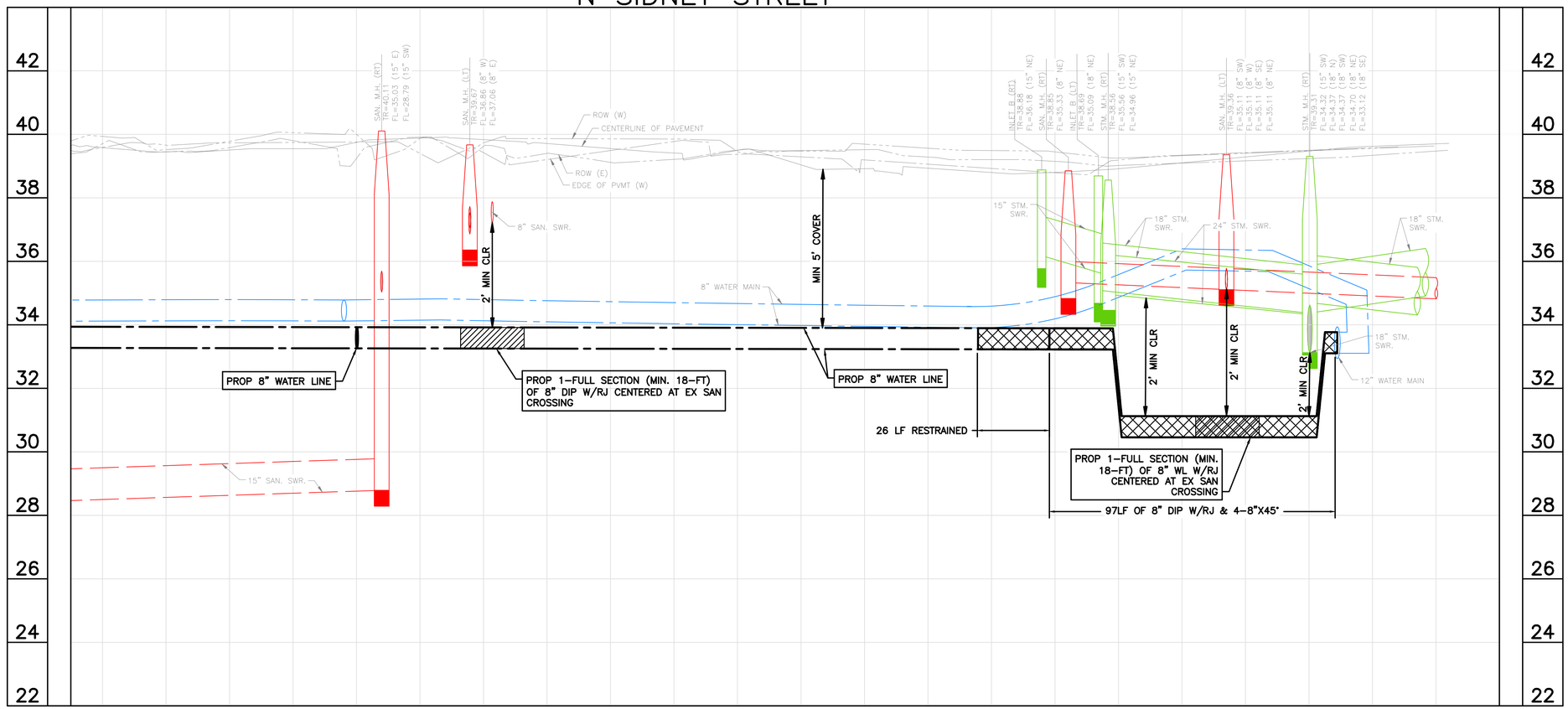
N SIDNEY ST
PLAN & PROFILE
10+00 TO 13+50

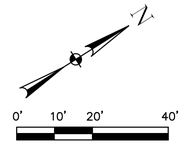
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 68 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

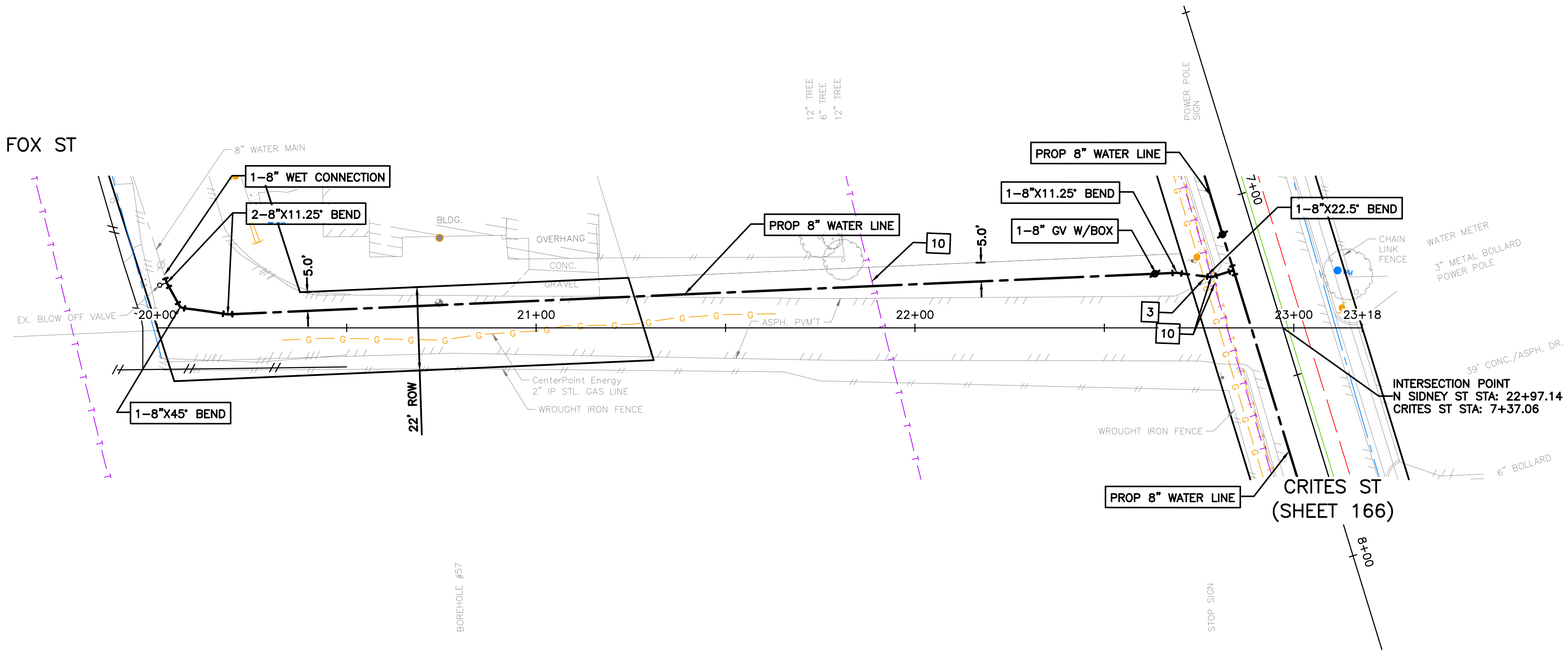
N SIDNEY ST
PLAN & PROFILE
13+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 69 OF 275	

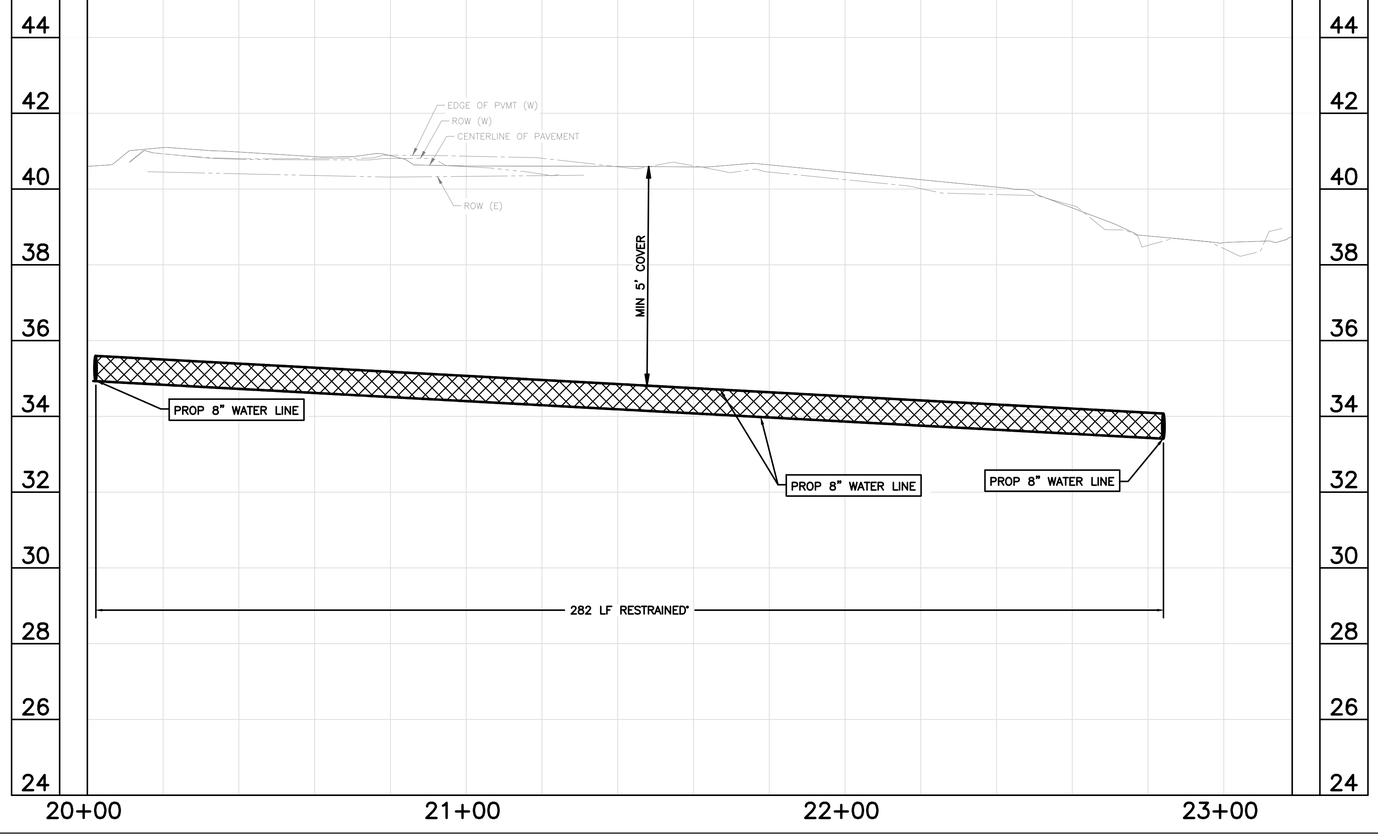
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:56 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N SIDNEY STREET.dwg

90% SUBMITTAL



N SIDNEY STREET



0' 10' 20' 40'

SCALE: 1" = 20'

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TBM 19: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF CRITES ST. & N. JENKINS. ST. STA. 8+94.33, 14.0' RT (CRITES ST. BASELINE) ELEV.=39.06'

NOTICE:
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

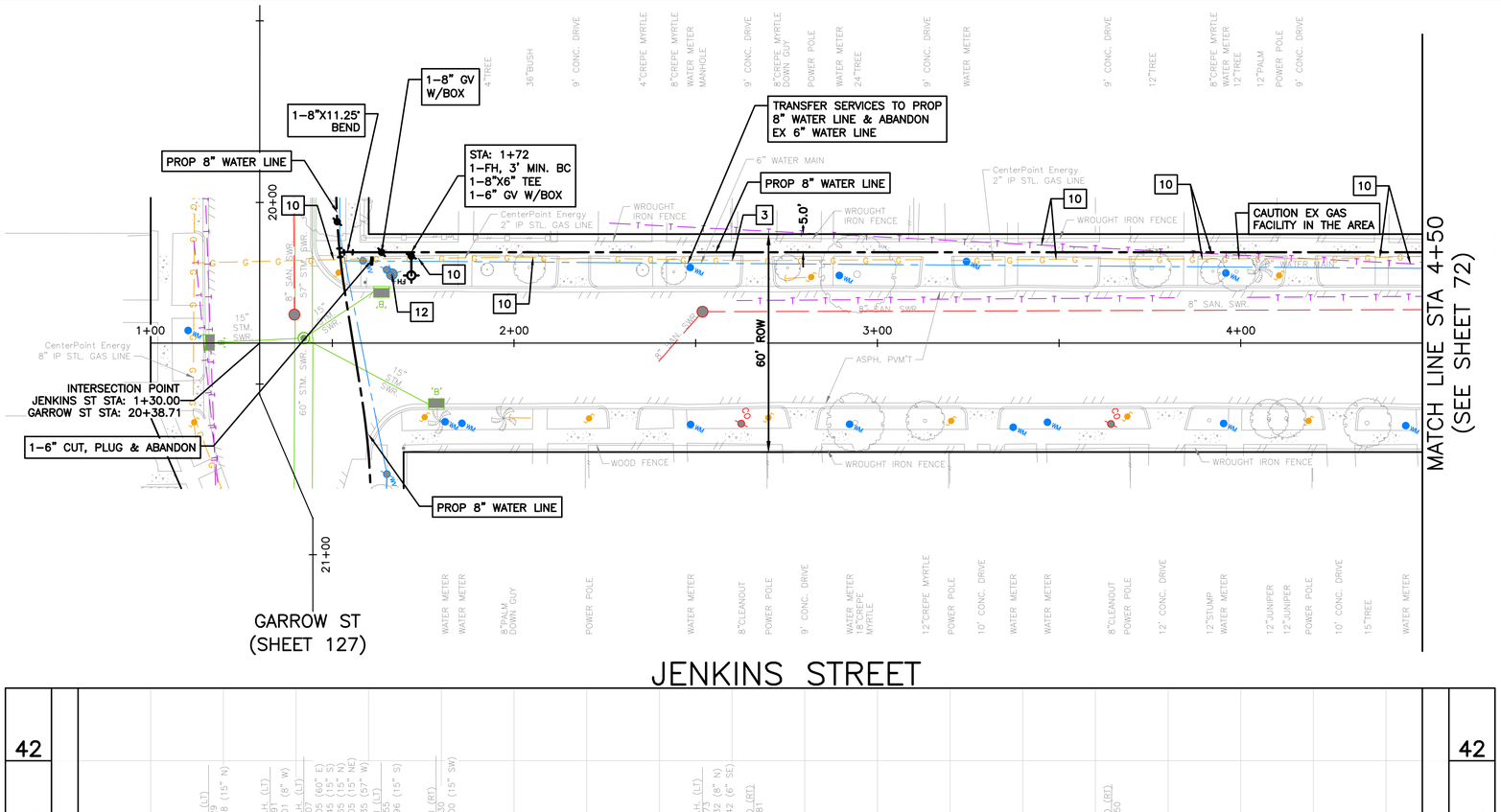
N SIDNEY ST
PLAN & PROFILE
20+00 TO 23+18

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 70 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 9:57 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N SIDNEY STREET.dwg

90% SUBMITTAL



0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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5) PROPOSED WATER LINES LESS THAN 16–INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3–FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20–INCH WITH A MINIMUM COVER OF 4–FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW ST. IN FRONT OF ADDRESS 450B. STA. 19+93.37, 19.1' RT (GARROW ST. BASELINE) ELEV.=39.11'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

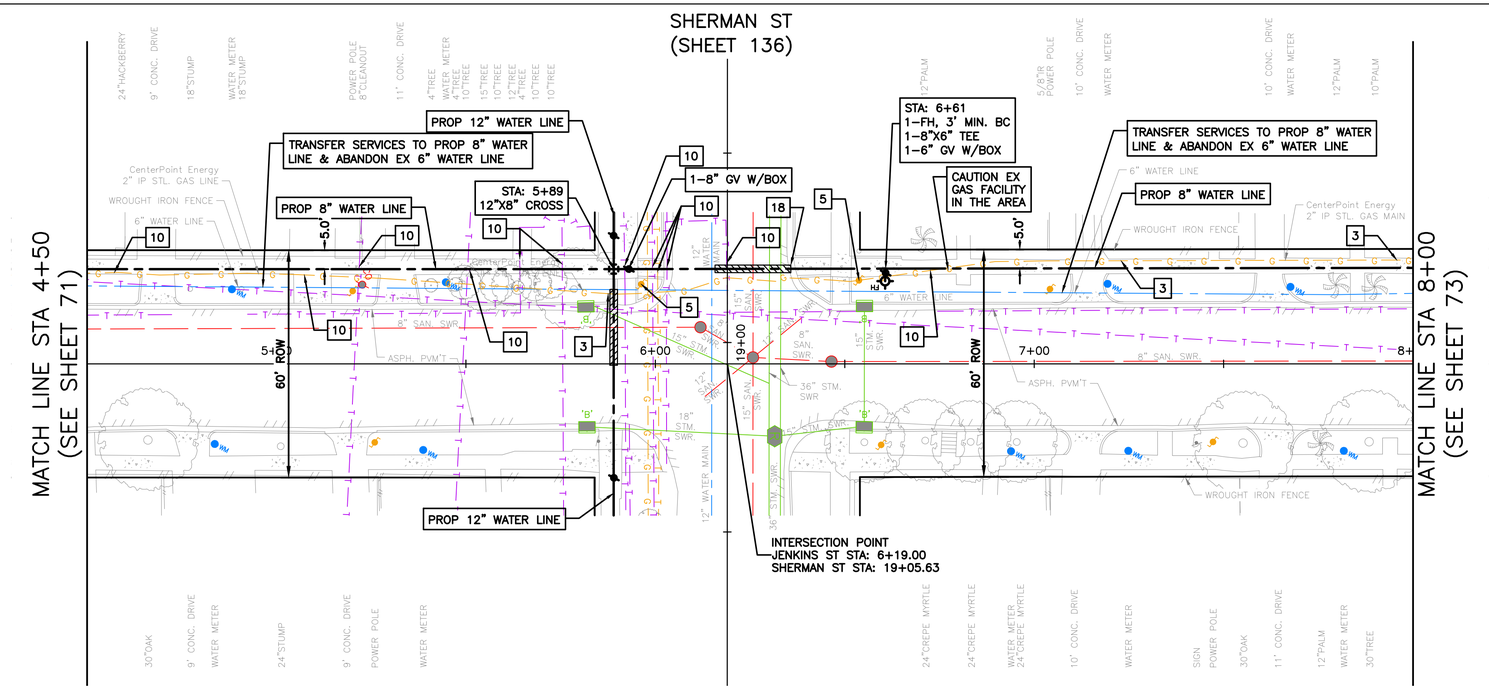
JENKINS ST
PLAN & PROFILE
1+00 TO 4+50

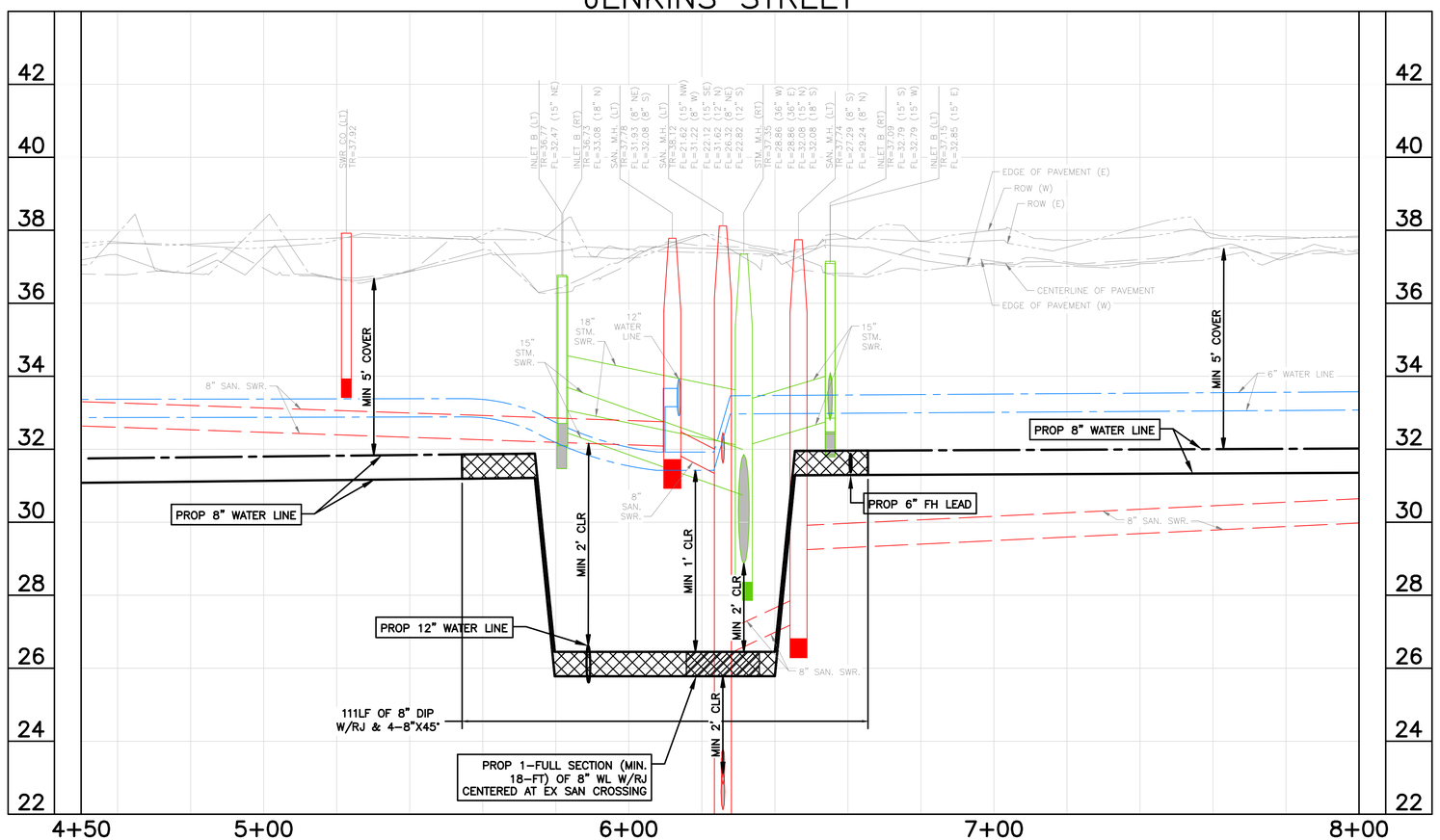
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 71 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 10:15 AM
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–JENKINS STREET.dwg





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 7: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 40' WEST OF SHERMAN ST. & JENKINS ST.
STA. 18+43.20, 26.2' LT (SHERMAN ST. BASELINE)
ELEV.=39.30'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

Date

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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | INNOVATION
11750 Katy Freeway, Suite 1260
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

JENKINS ST
PLAN & PROFILE
4+50 TO 8+00

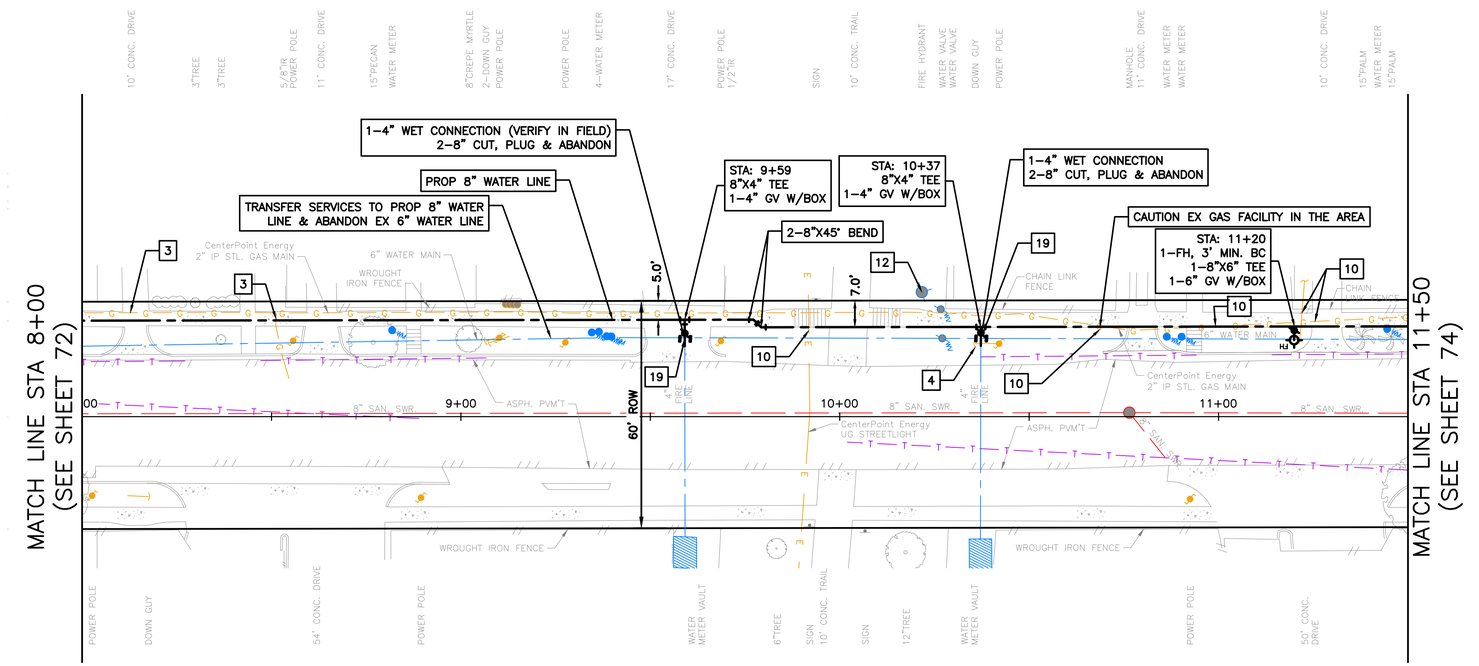
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 72 OF 275	

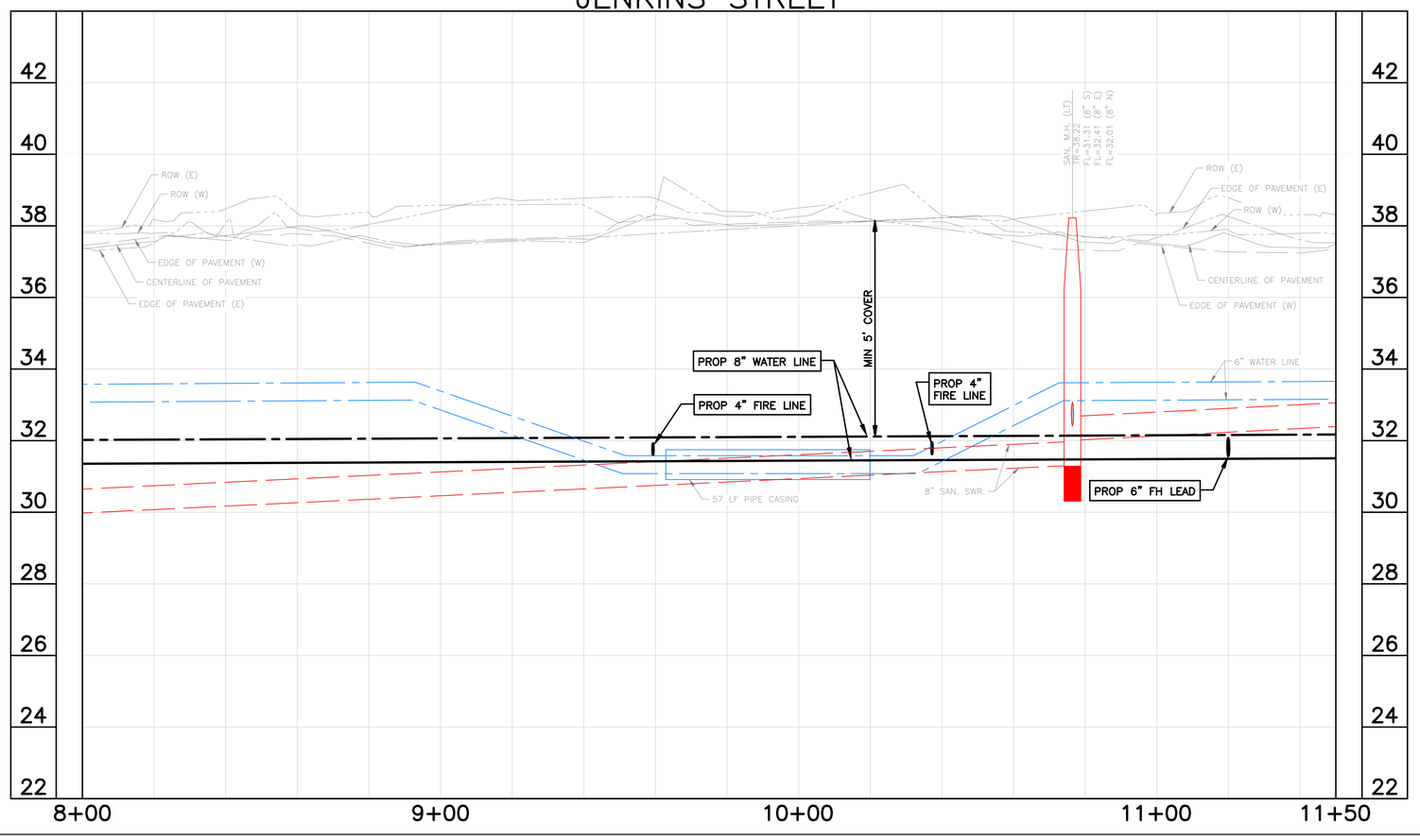
90% SUBMITTAL

NO.	DATE	REVISION	APP.

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 10:15 AM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-JENKINS STREET.dwg





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 7: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 40' WEST OF SHERMAN ST. & JENKINS ST.
STA. 18+43.20, 26.2' LT (SHERMAN ST. BASELINE)
ELEV.=39.30'

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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

Date

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Date

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

JENKINS ST
PLAN & PROFILE
8+00 TO 11+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 73 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 10:16 AM

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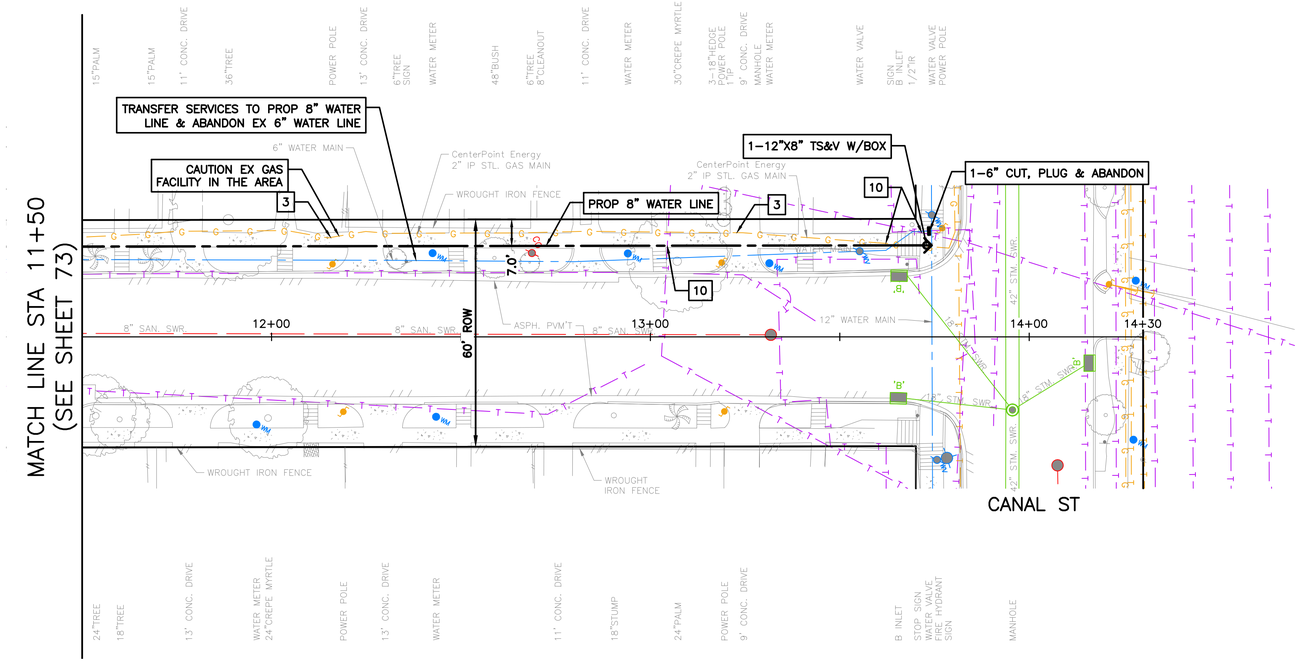

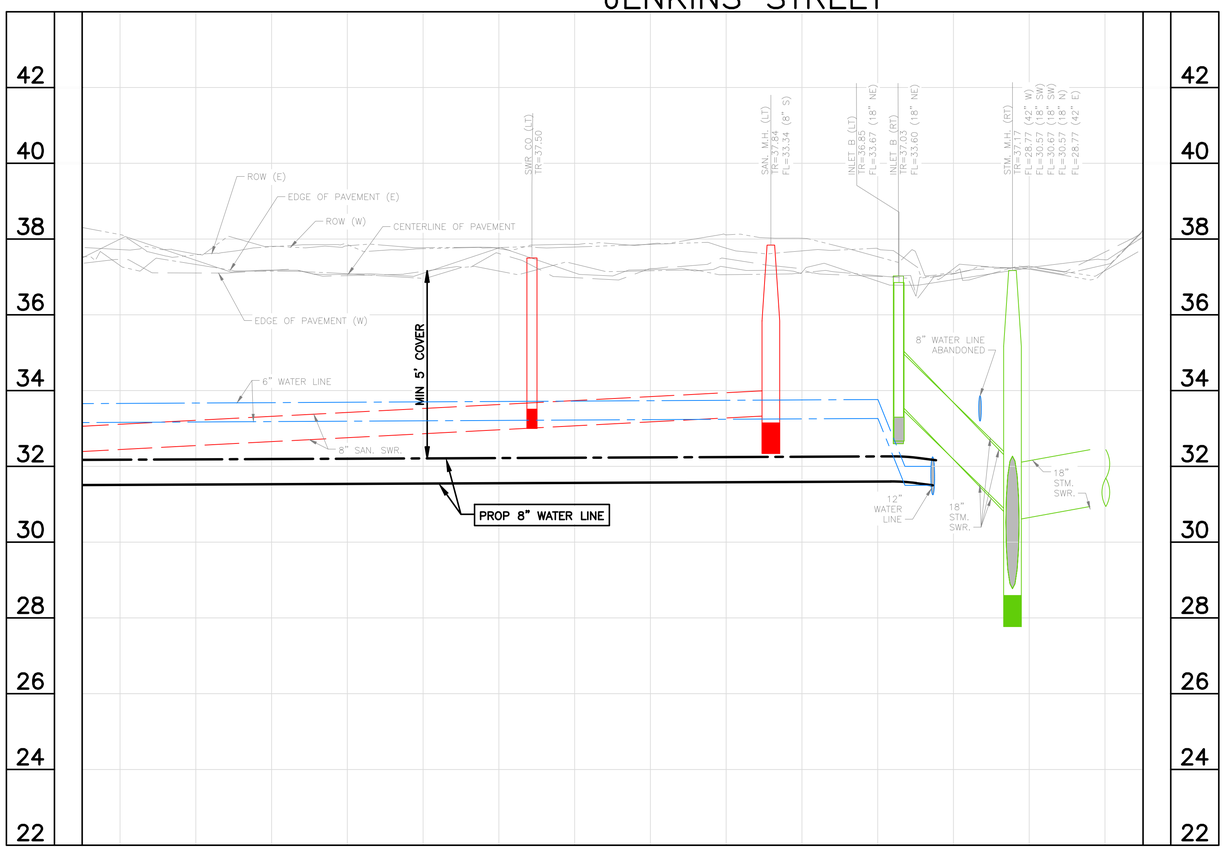

0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 7: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 40' WEST OF SHERMAN ST. & JENKINS ST.
STA. 18+43.20, 26.2' LT (SHERMAN ST. BASELINE)
ELEV.=39.30'

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VERIFICATION OF PRIVATE UTILITY LINES

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

JENKINS ST
PLAN & PROFILE
11+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 74 OF 275	

APP. | REVISION | NO. | DATE

90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 10:17 AM

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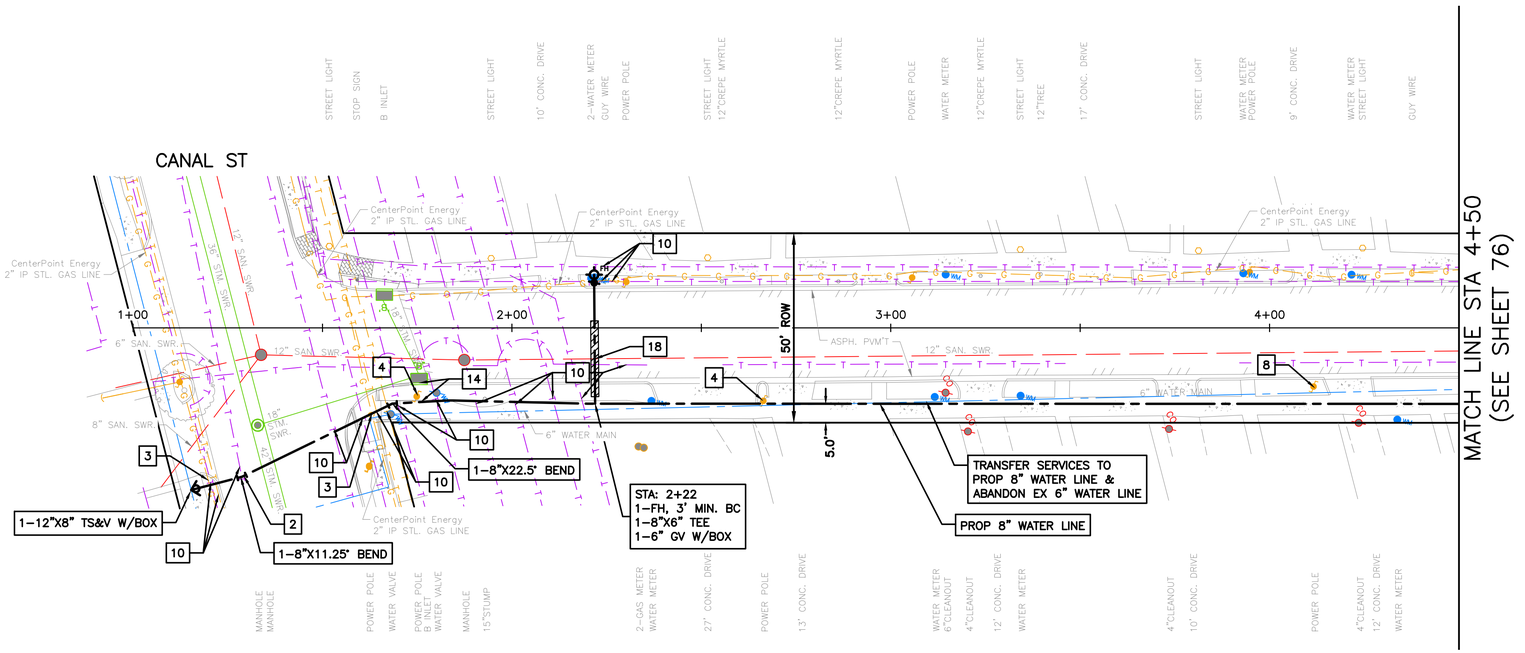
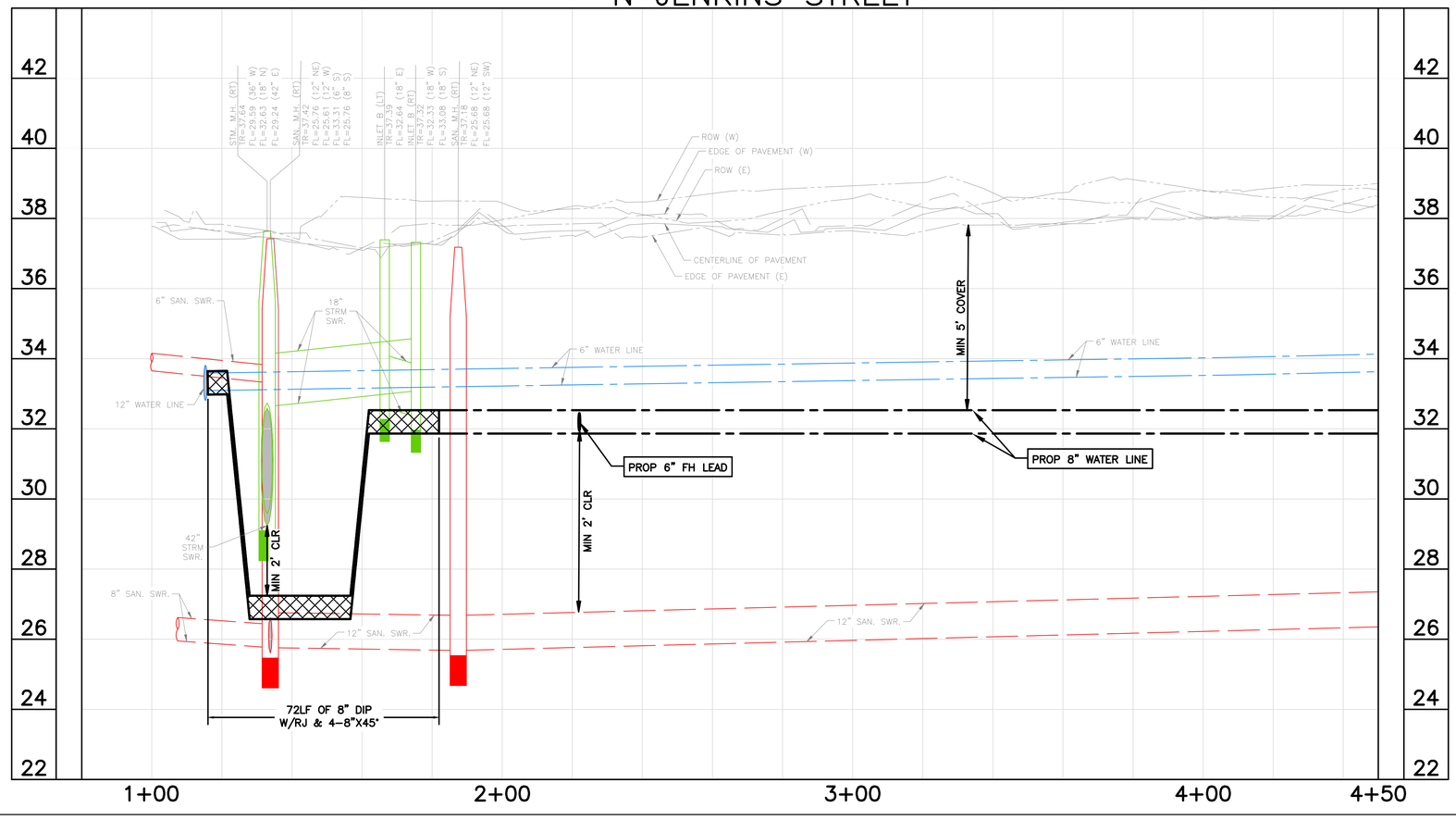
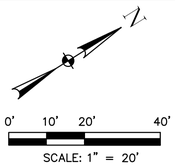


N JENKINS STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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Date

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Date

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

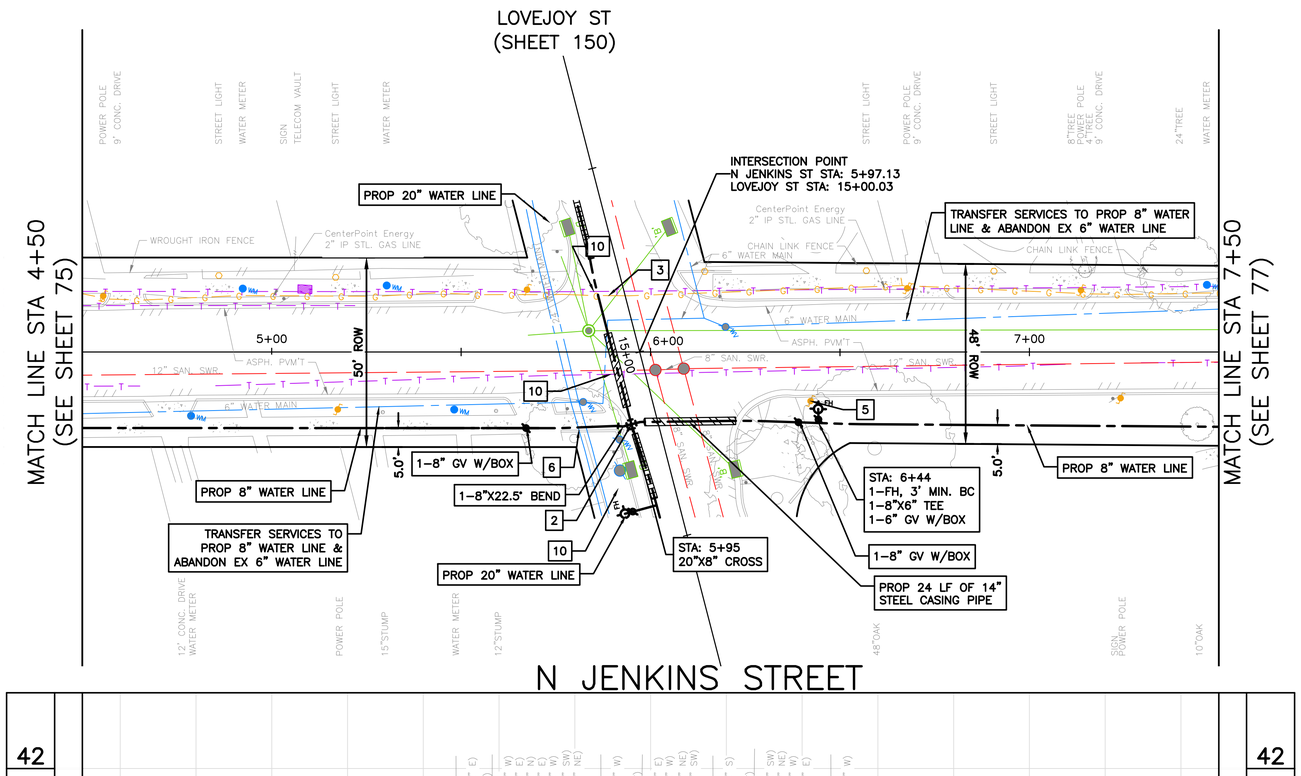
N JENKINS ST
PLAN & PROFILE
1+00 TO 4+50

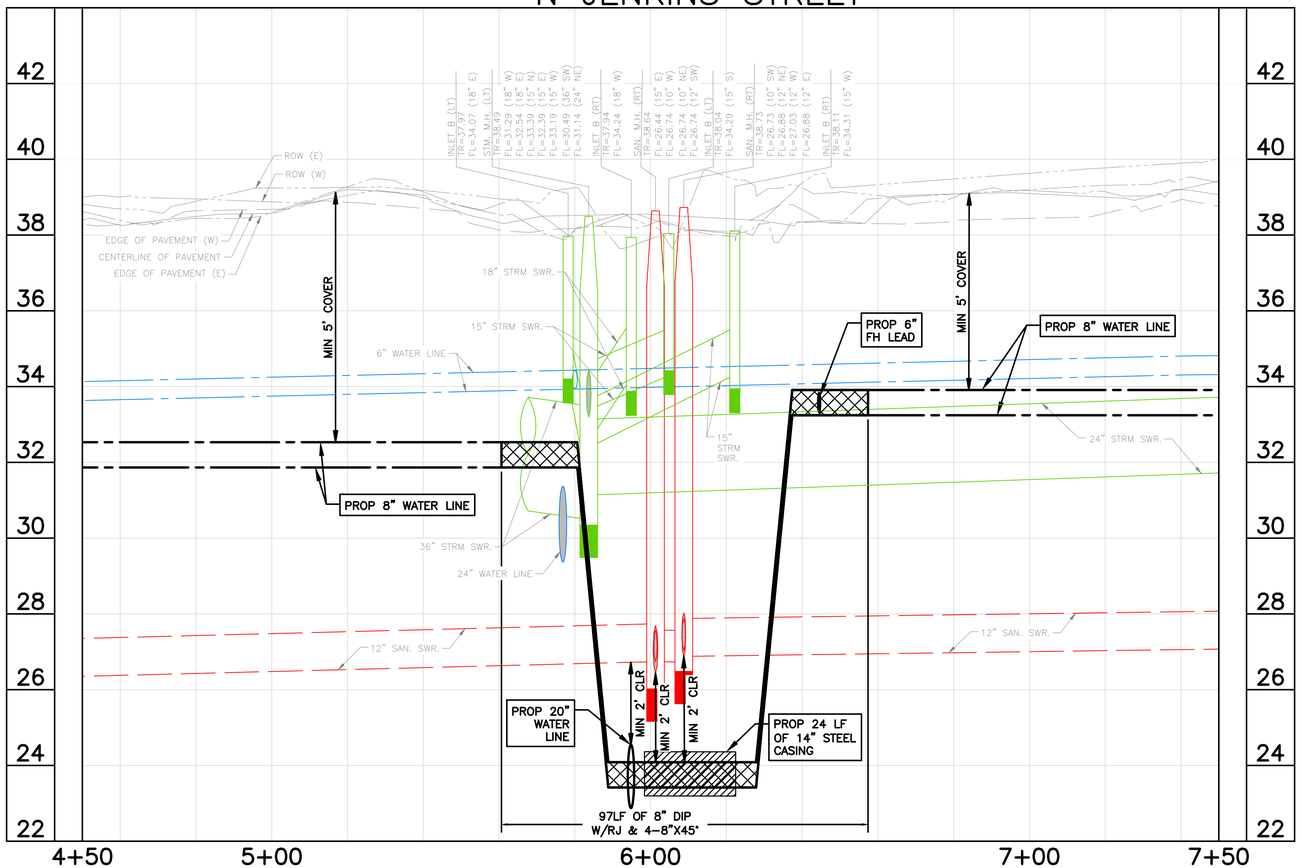
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 75 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:18 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N JENKINS STREET.dwg

90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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TBM 11: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SCHROEDER ST. & N. EASTWOOD ST. STA, 1+33.99, 42.7' RT (SCHROEDER ST. BASELINE) ELEV.=39.86'

NOTICE:
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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N JENKINS ST
PLAN & PROFILE
4+50 TO 7+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 76 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:18 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N JENKINS STREET.dwg

90% SUBMITTAL

PLOTTED: 8/15/2025 10:19 AM
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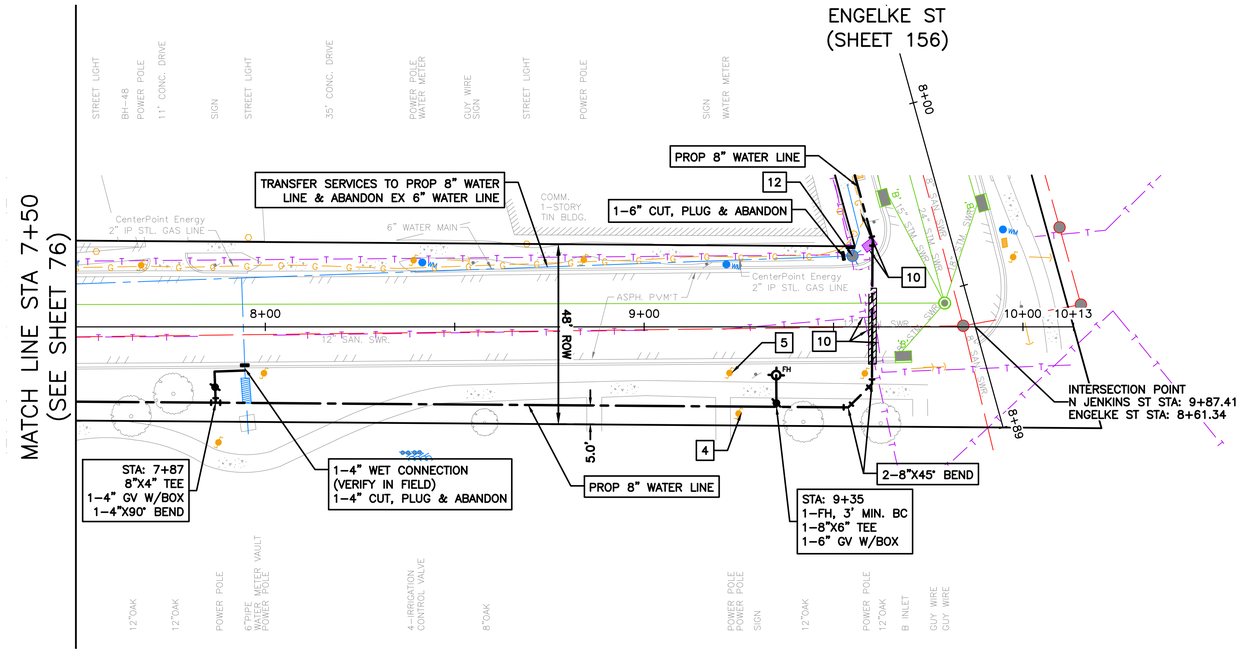
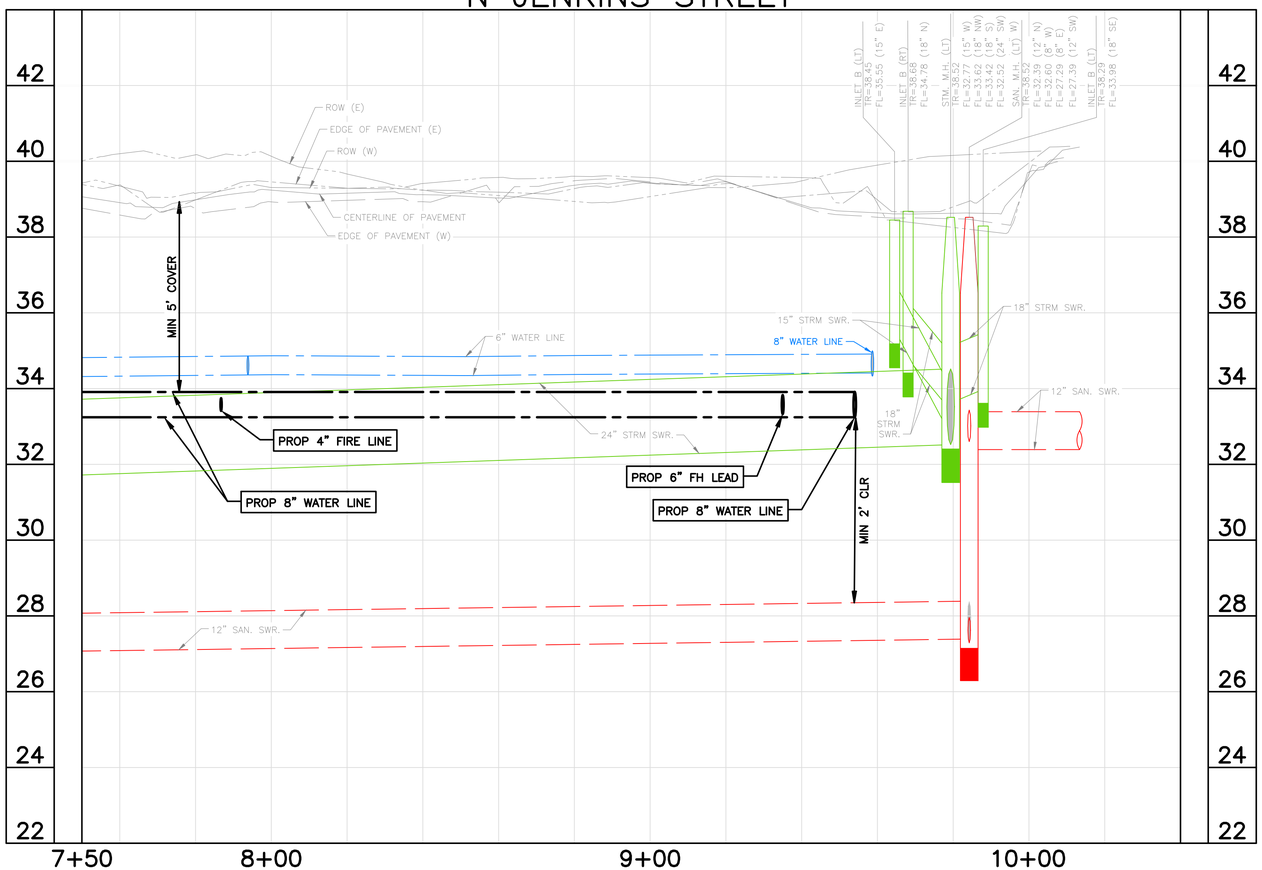


N JENKINS STREET



0' 10' 20' 40'

SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 11: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SCHROEDER ST. & N. EASTWOOD ST. STA, 1+33.99, 42.7' RT (SCHROEDER ST. BASELINE) ELEV.=39.86'

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

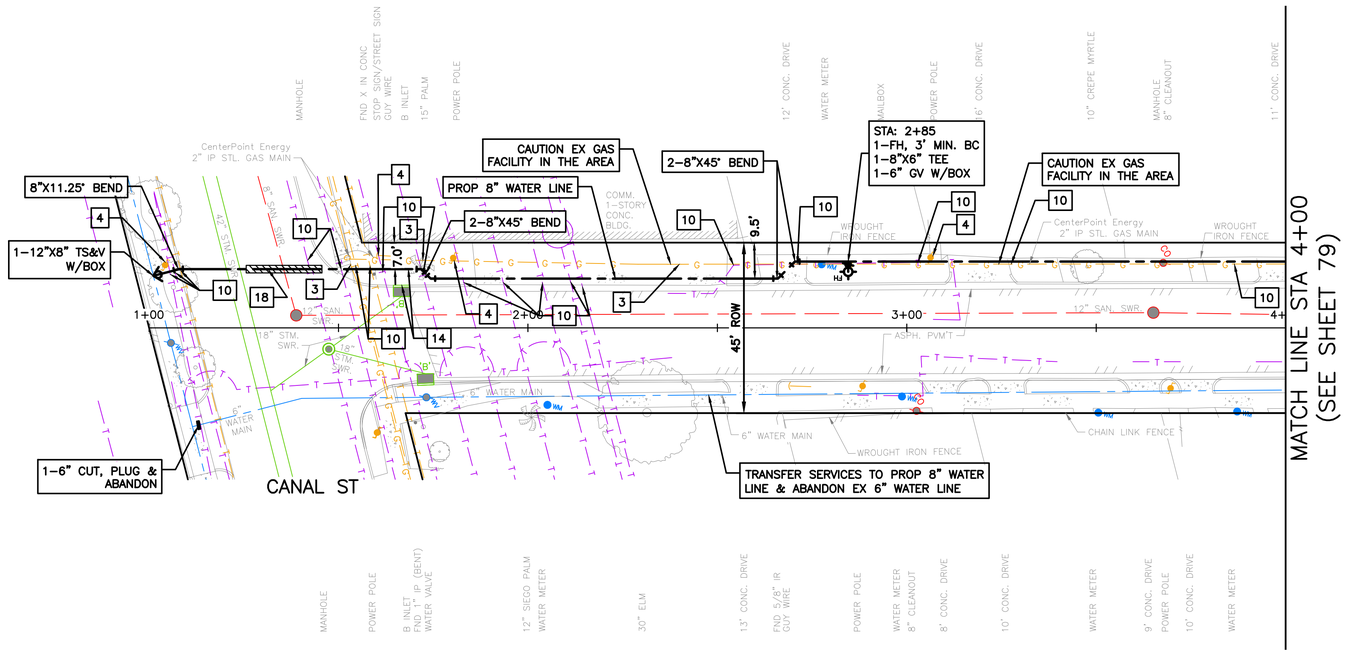
SECONDWARD WATERLINE REPLACEMENT

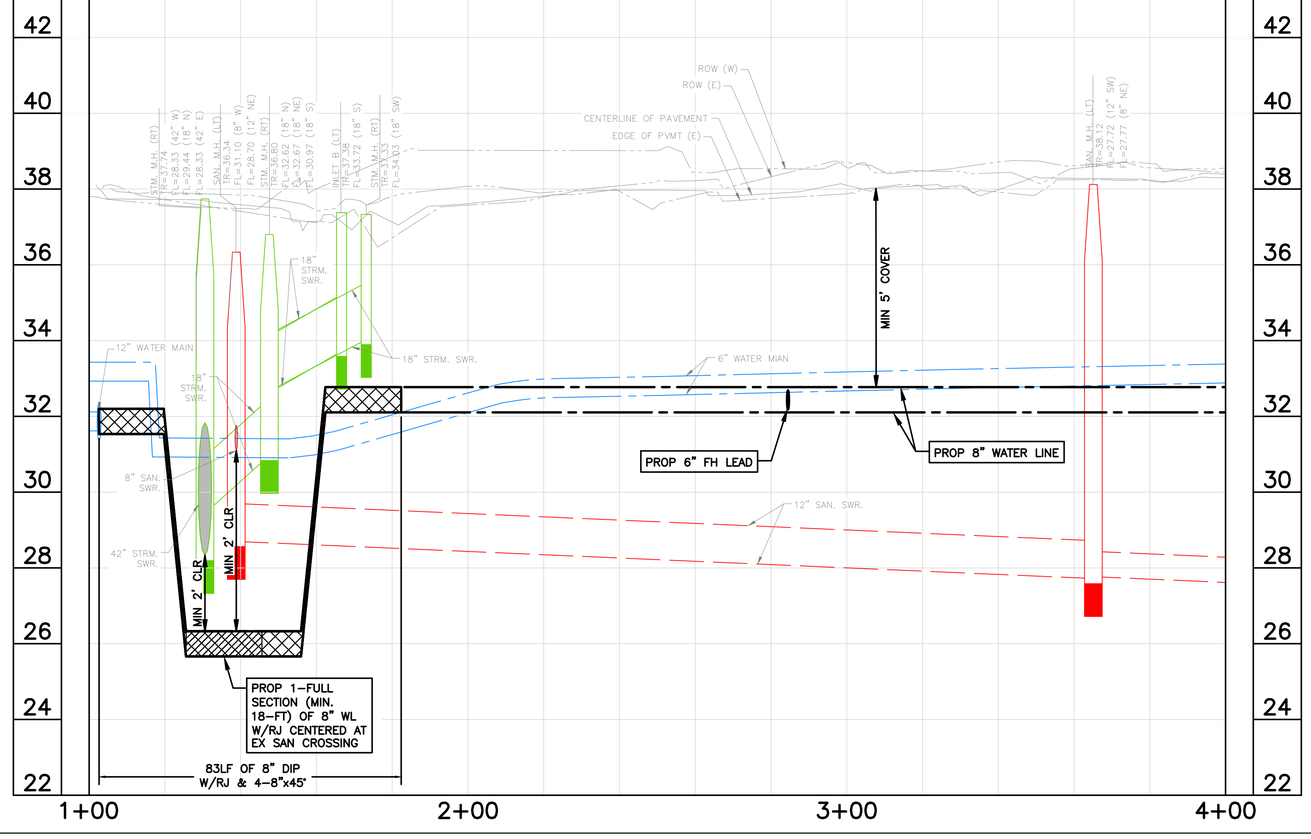
N JENKINS ST
PLAN & PROFILE
7+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 77 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL





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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

CHRISTENSEN ST
PLAN & PROFILE
1+00 TO 4+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 78 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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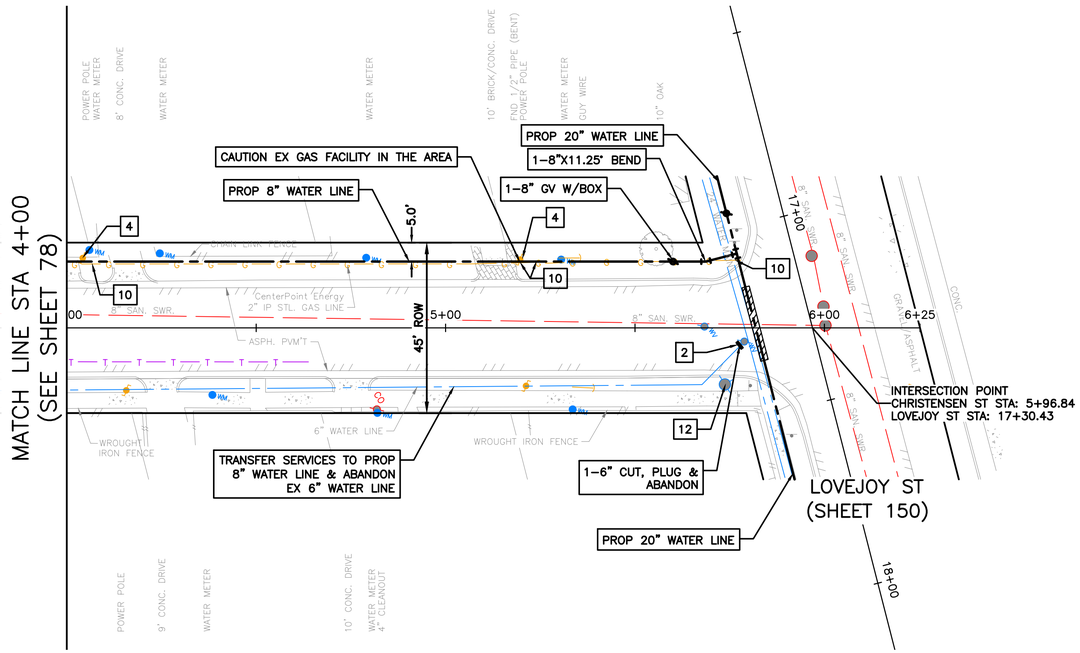
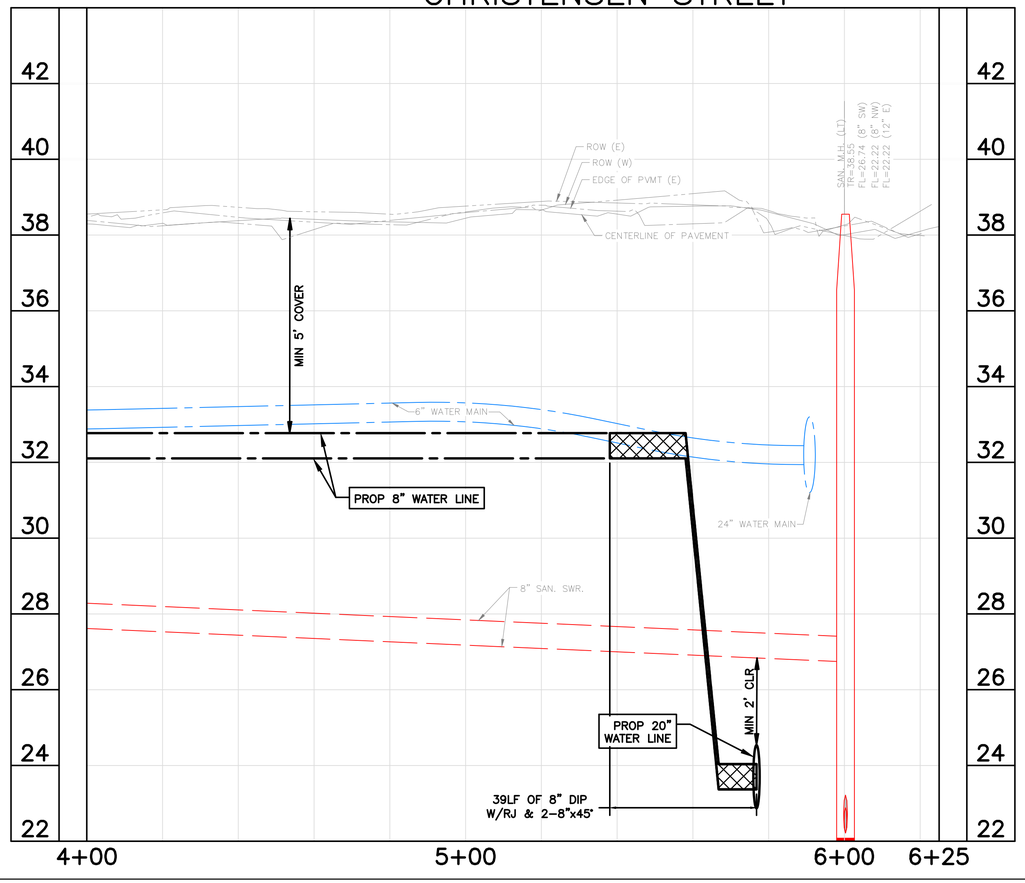
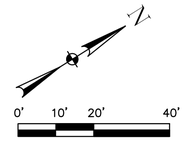


CHRISTENSEN STREET





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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

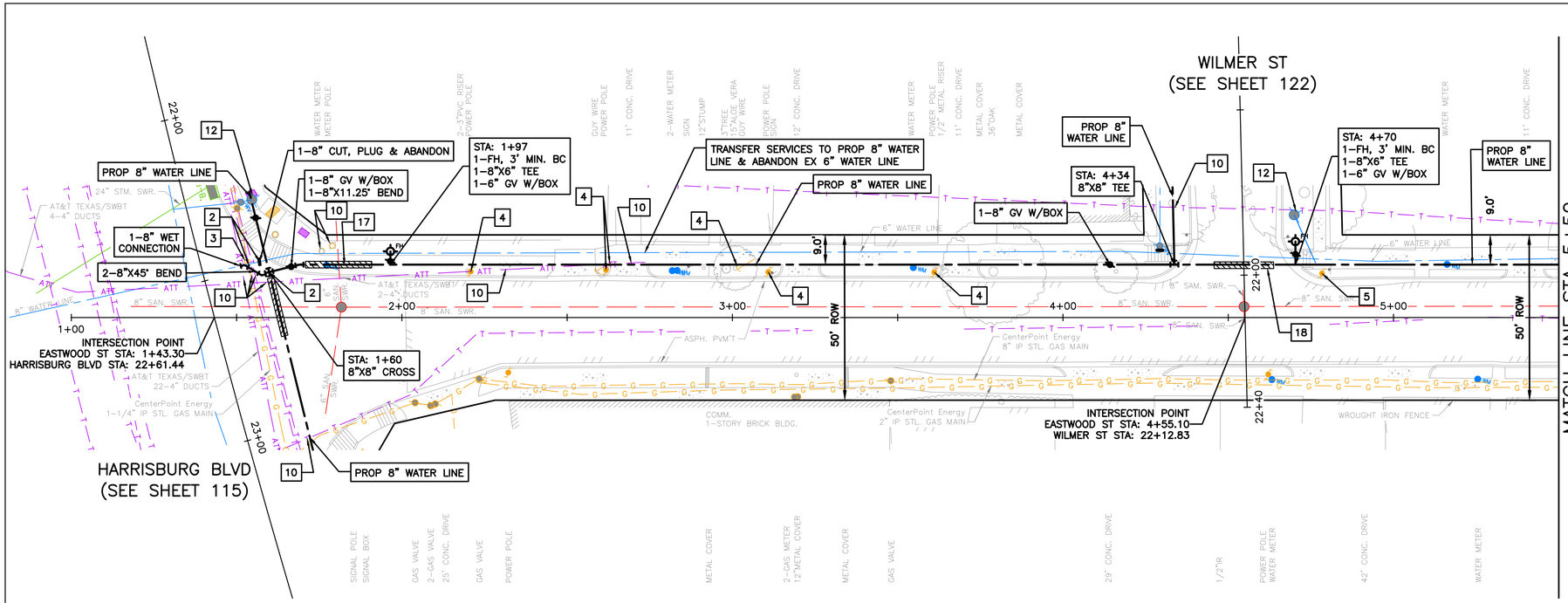
SECONDWARD WATERLINE REPLACEMENT

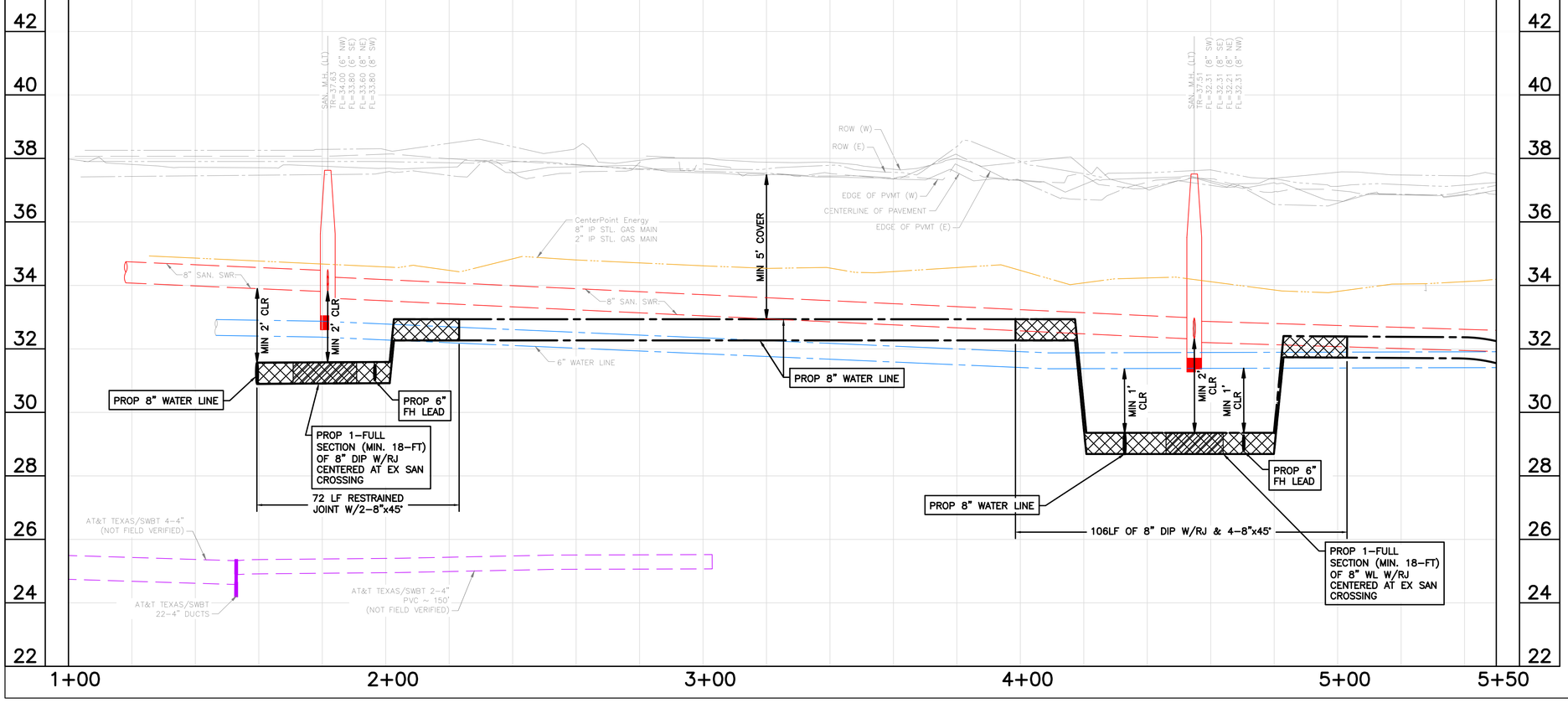
CHRISTENSEN ST
PLAN & PROFILE
4+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 79 OF 275	

APP. | REVISION | NO. | DATE

90% SUBMITTAL





SCALE: 1" = 20'

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DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

EASTWOOD ST
PLAN & PROFILE
1+00 TO 5+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 80 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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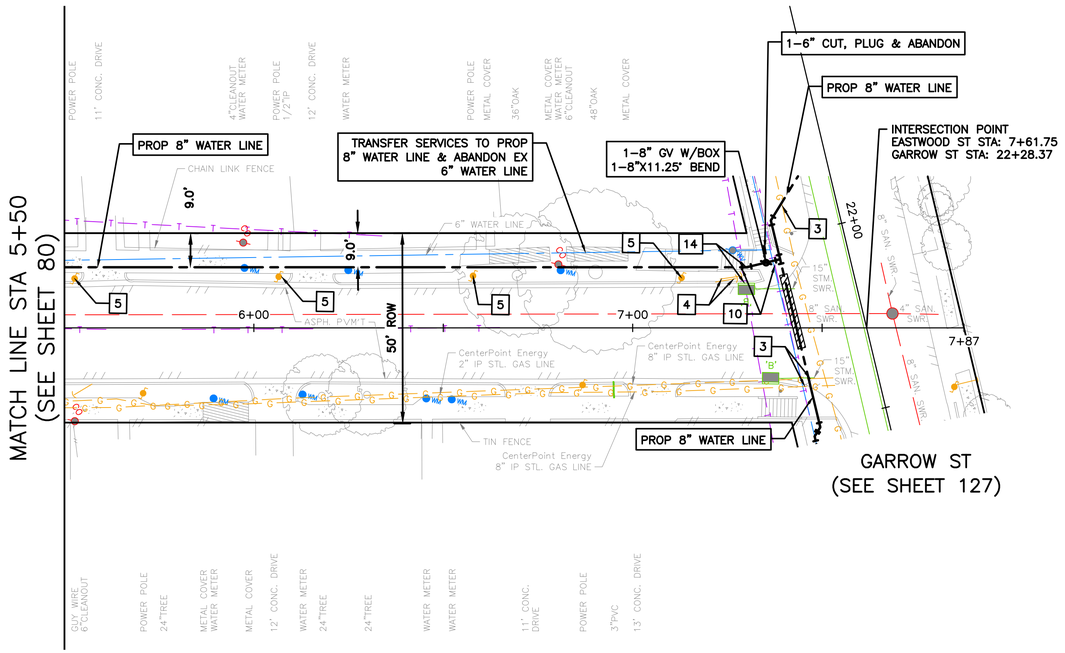
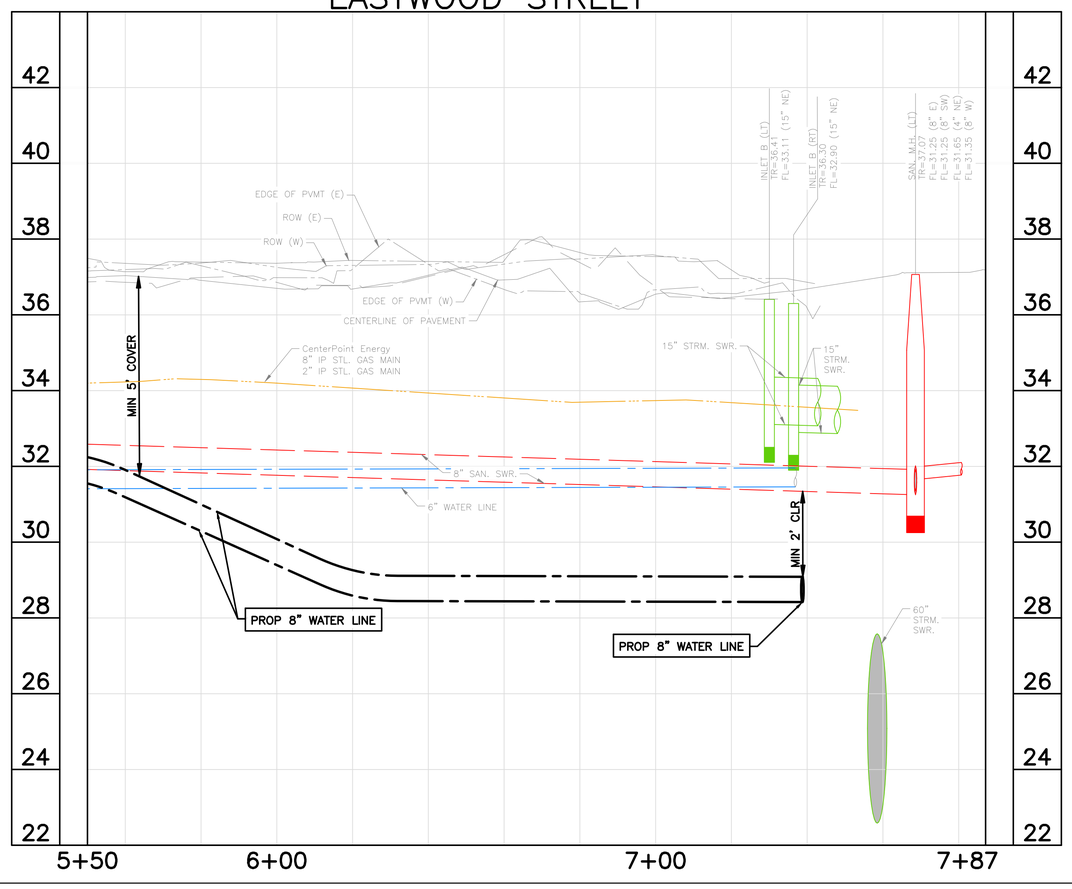
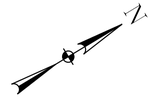


EASTWOOD STREET





SCALE: 1" = 20'

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DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

EASTWOOD ST
PLAN & PROFILE
5+50 TO 7+87

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 81 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

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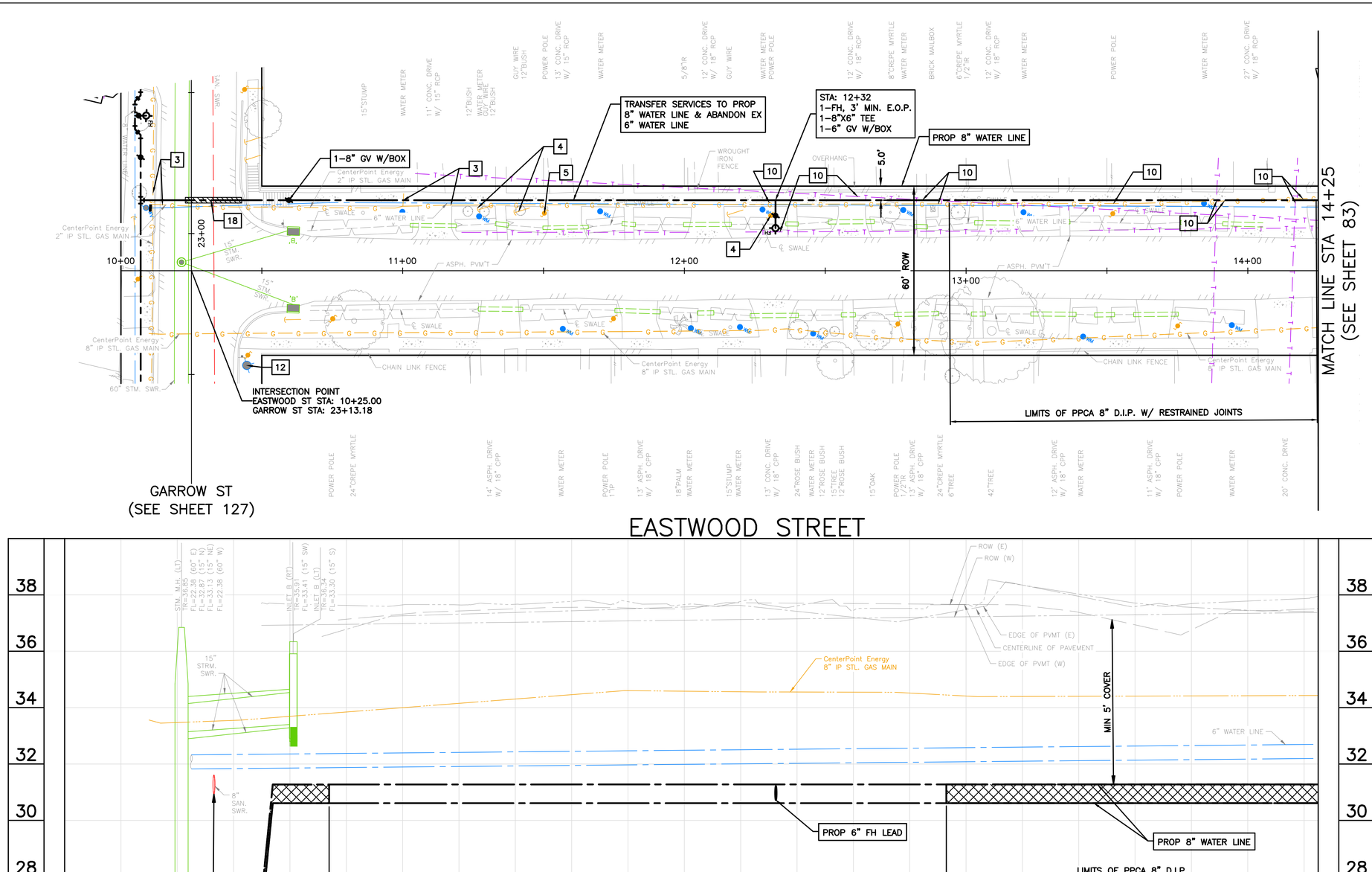

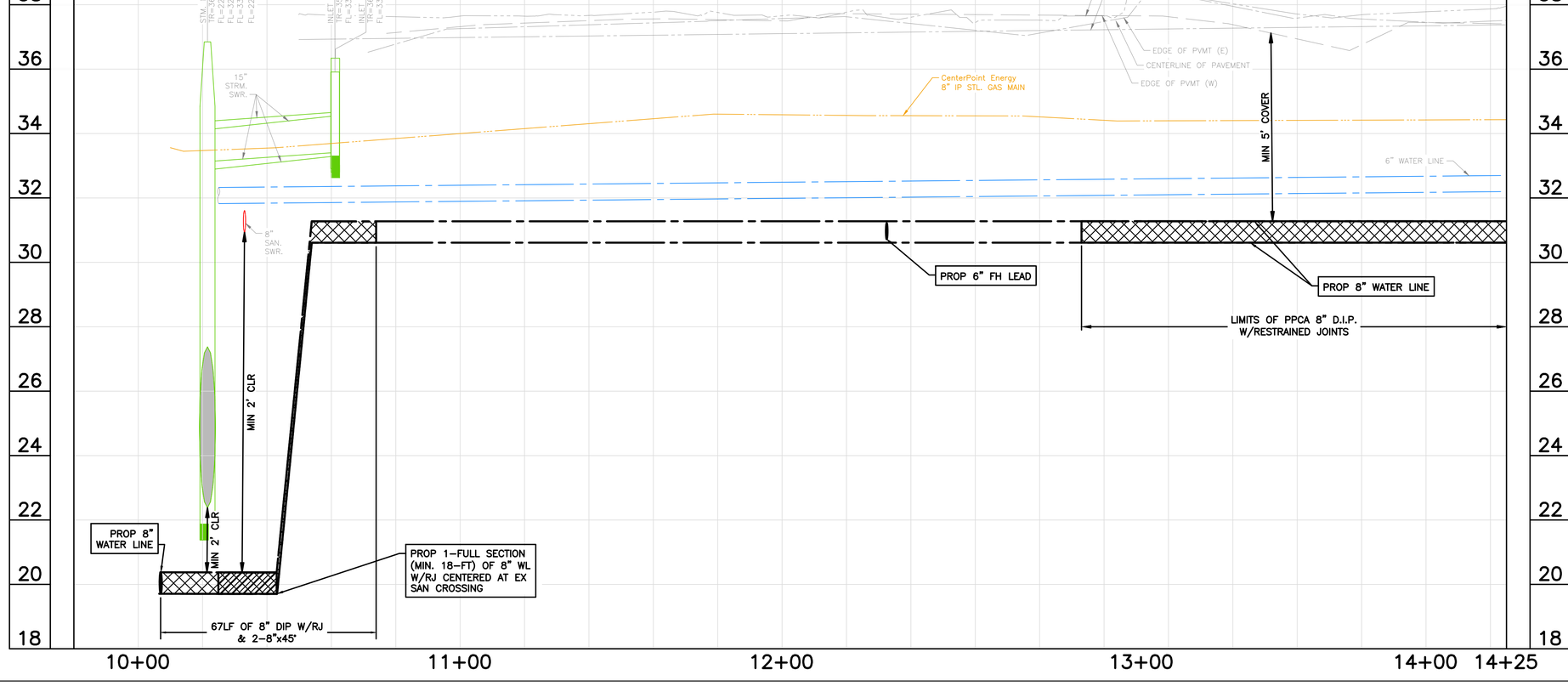

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

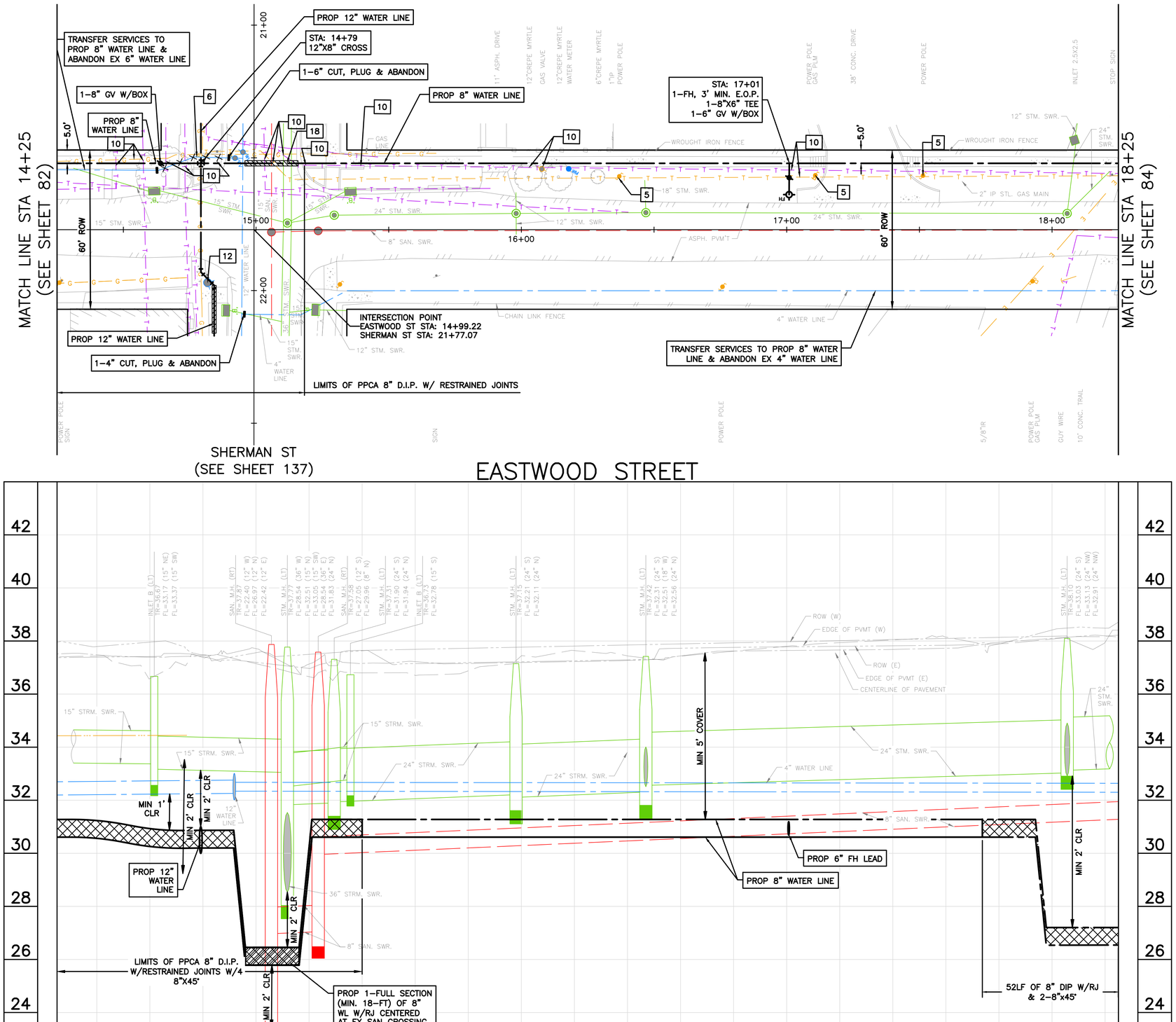
EASTWOOD ST
PLAN & PROFILE
10+00 TO 14+25

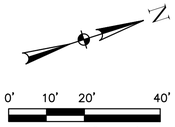
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 82 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 10:23 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–EASTWOOD STREET.dwg





NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 7: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 40' WEST OF SHERMAN ST. & JENKINS ST.
STA. 18+43.20, 26.2' LT (SHERMAN ST. BASELINE)
ELEV.=39.30'

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

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Signature valid for six months.

Date

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

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

EASTWOOD ST
PLAN & PROFILE
14+25 TO 18+25

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 83 OF 275	

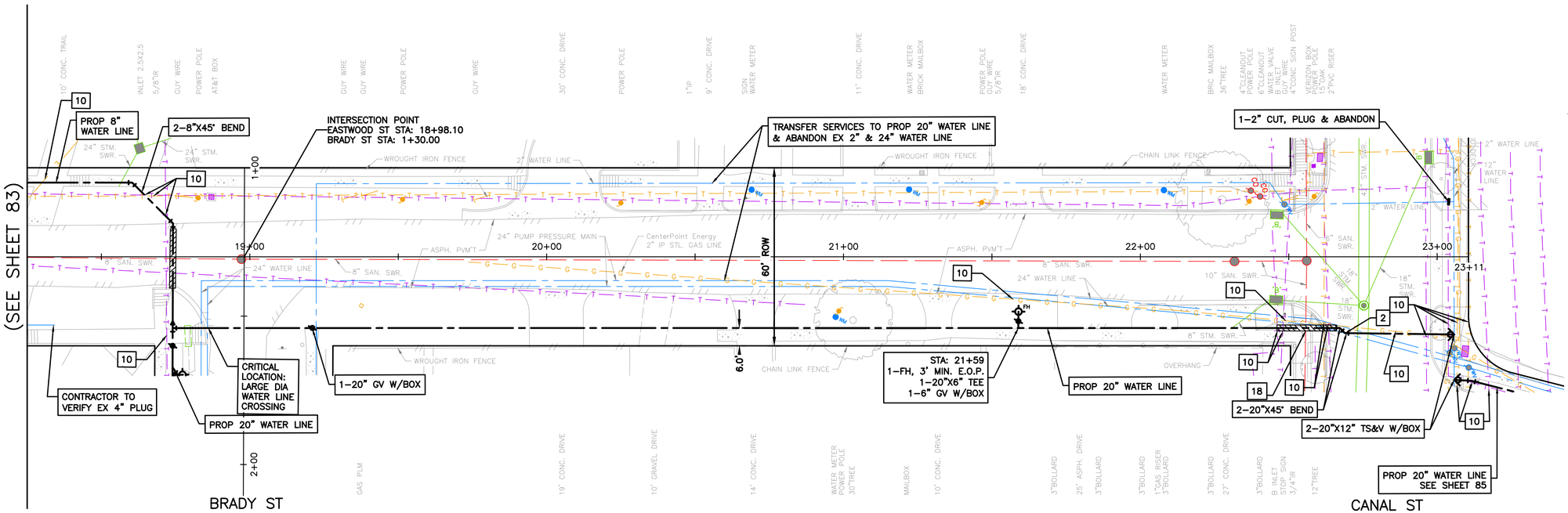
NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 10:24 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-EASTWOOD STREET.dwg

90% SUBMITTAL

PLOTTED: 8/15/2025 10:24 AM
PLOT STYLE: COH.ctb

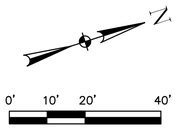
MATCH LINE STA 18+25
(SEE SHEET 83)



BRADY ST
(SEE SHEET 141)

EASTWOOD STREET

CANAL ST



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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

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WOOLPERT
ARCHITECTURE | ENGINEERING | INFRASTRUCTURE
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

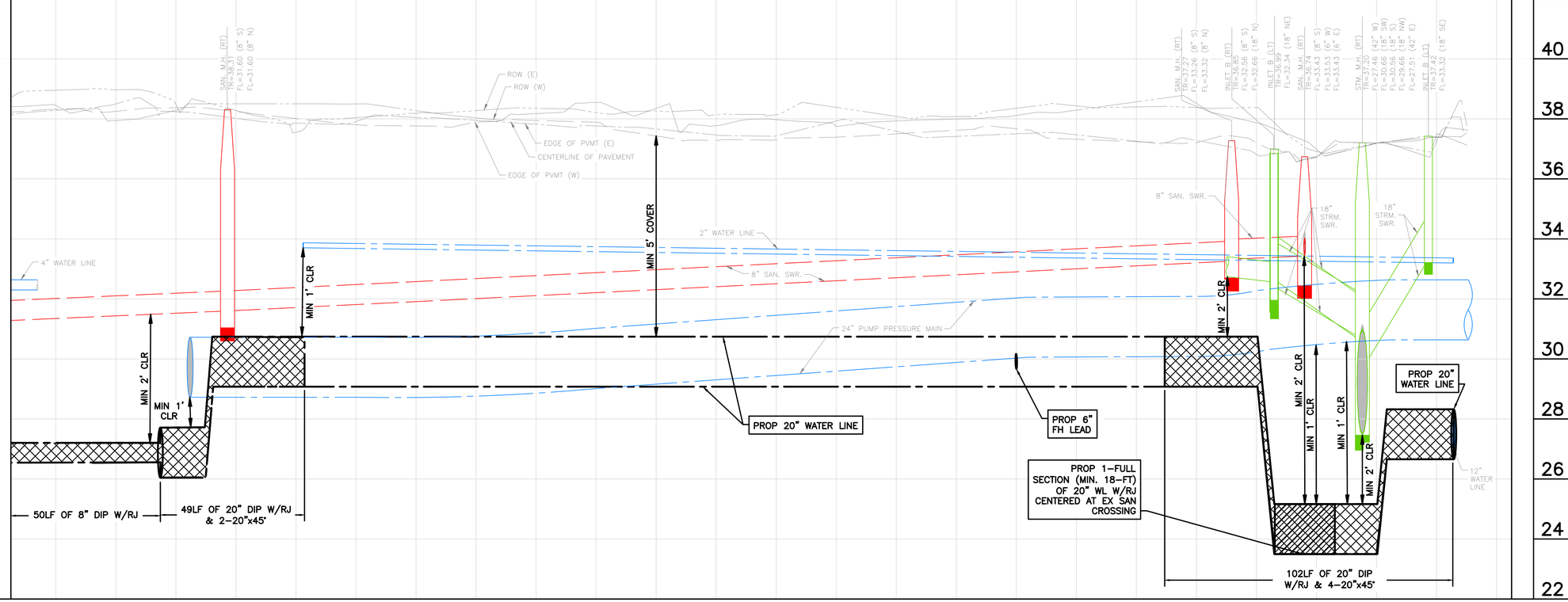
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

EASTWOOD ST
PLAN & PROFILE
18+25 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 84 OF 275	

APP. | REVISION | NO. | DATE



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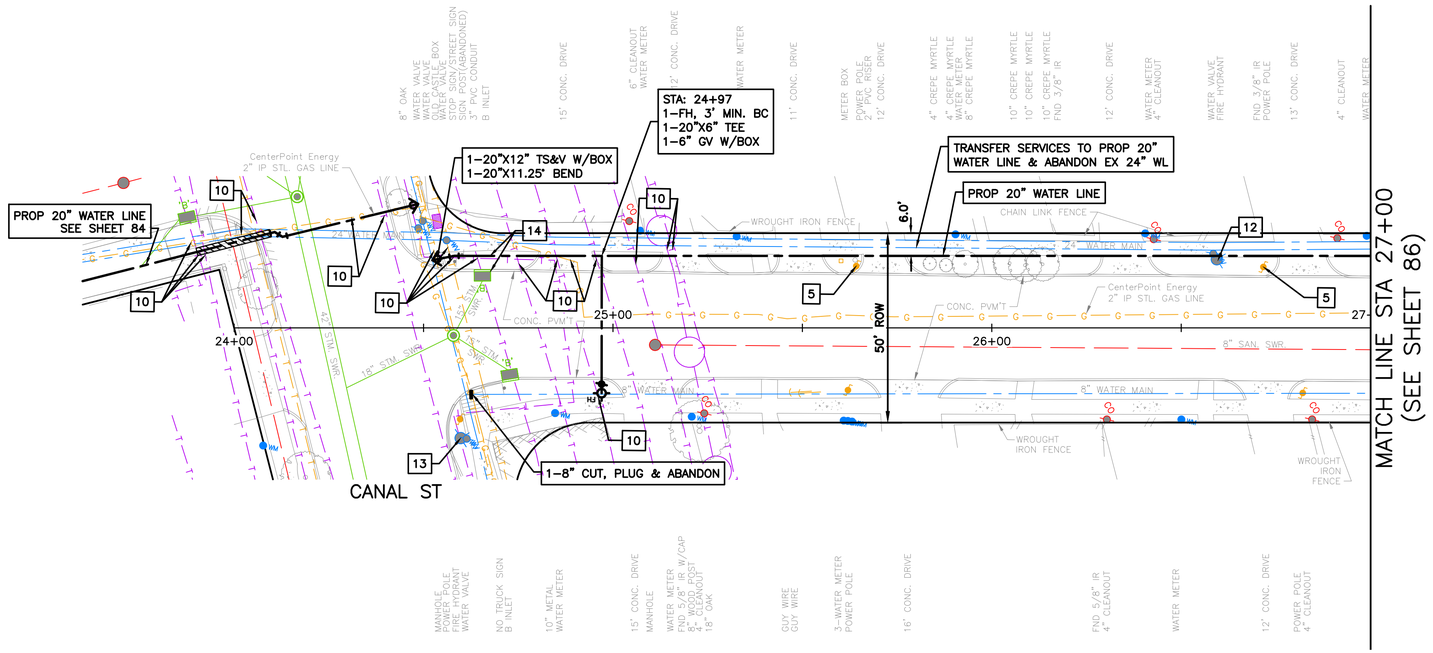
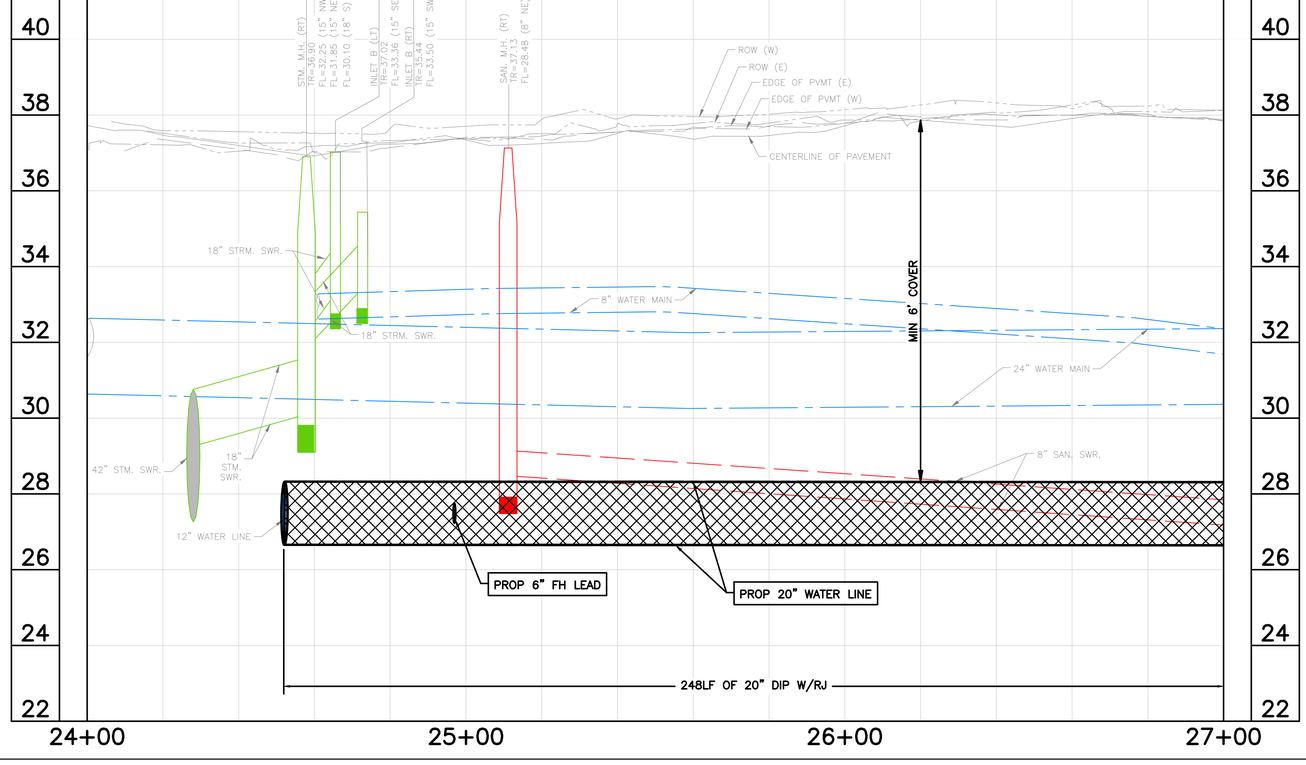
90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 11: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SCHROEDER ST. & N. EASTWOOD ST. STA, 1+33.99, 42.7' RT (SCHROEDER ST. BASELINE) ELEV.=39.86'

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

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
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Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

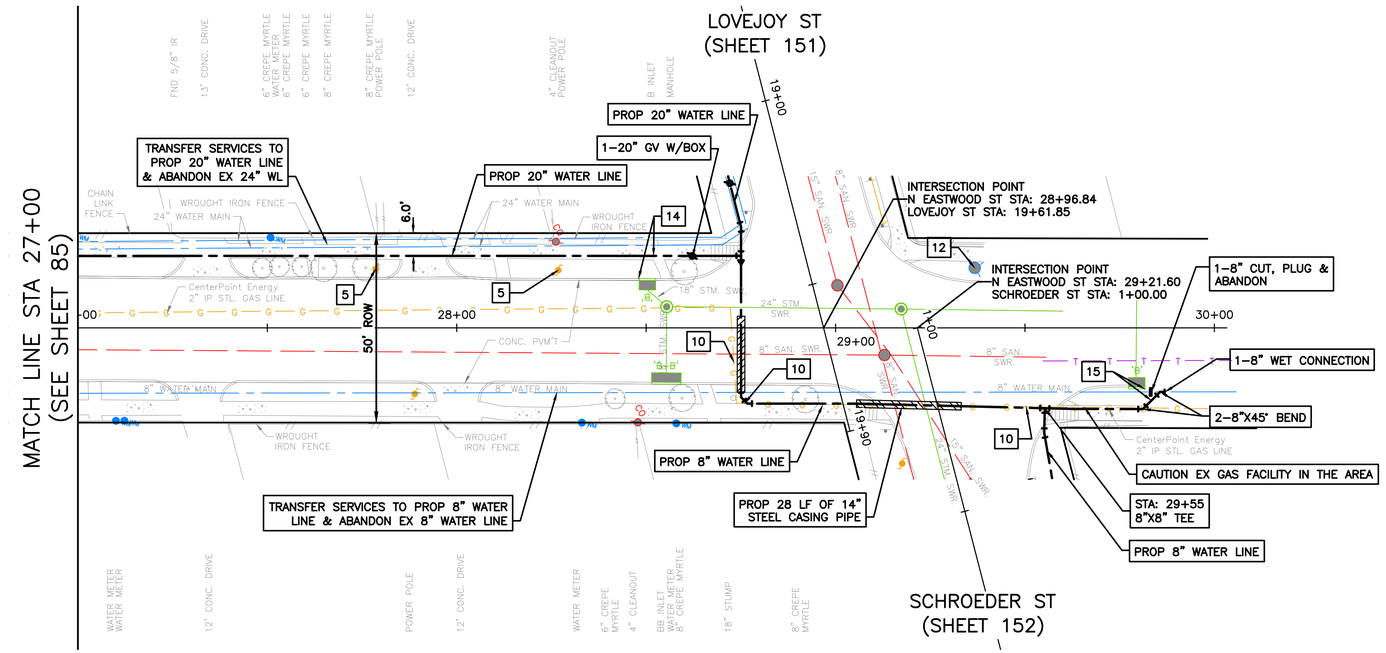
N EASTWOOD ST
PLAN & PROFILE
24+00 TO 27+00

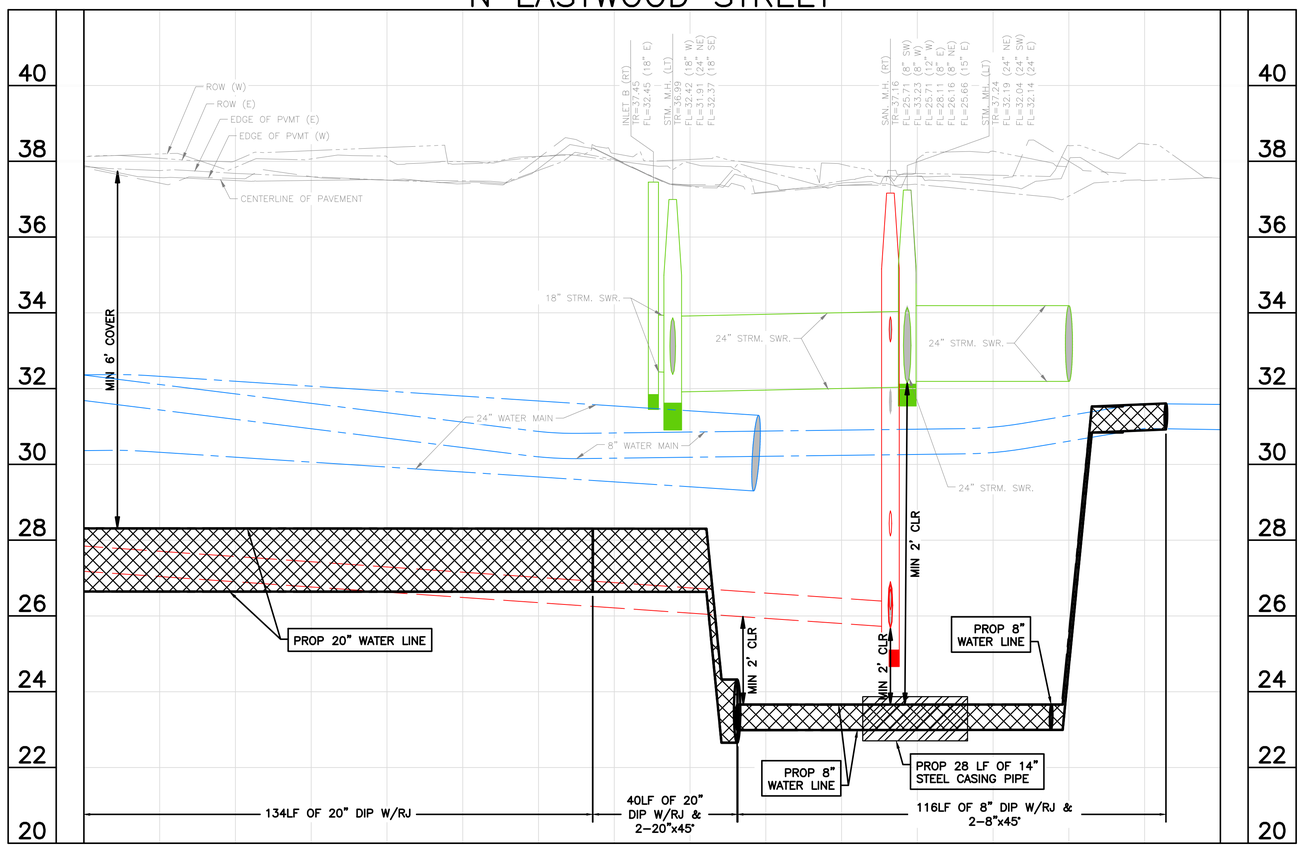
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 85 OF 275	

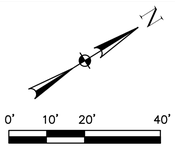
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:25 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N EASTWOOD STREET.dwg

90% SUBMITTAL







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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WOOLPERT
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11750 Katy Freeway, Suite 1260
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

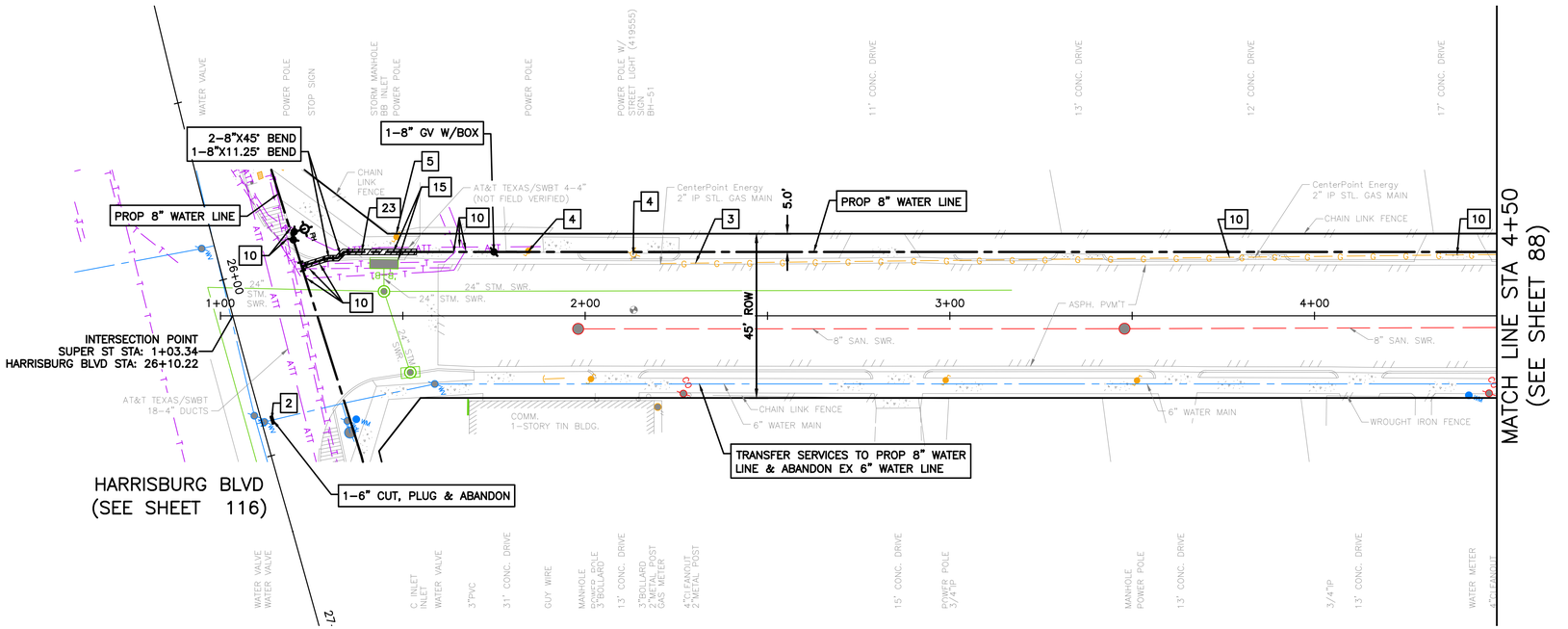
N EASTWOOD ST
PLAN & PROFILE
27+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 86 OF 275	

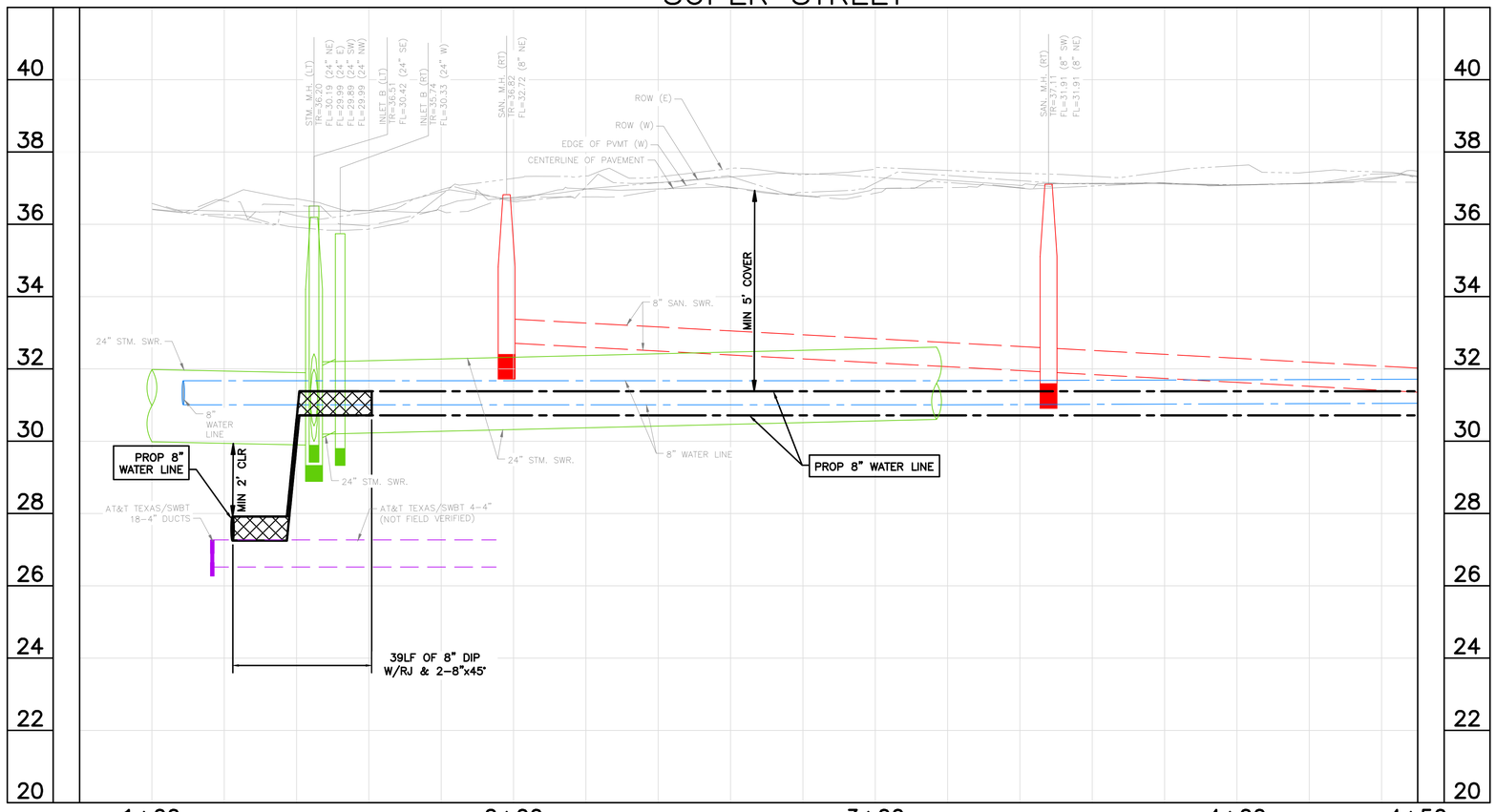
APP. | REVISION | NO. | DATE

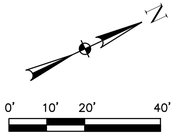
PLOTTED: 8/15/2025 10:26 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N EASTWOOD STREET.dwg

90% SUBMITTAL



SUPER STREET





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TBM 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW ST. IN FRONT OF ADDRESS 450B. STA. 19+93.37, 19.1' RT (GARROW ST. BASELINE) ELEV.=39.11'

NOTICE:
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DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

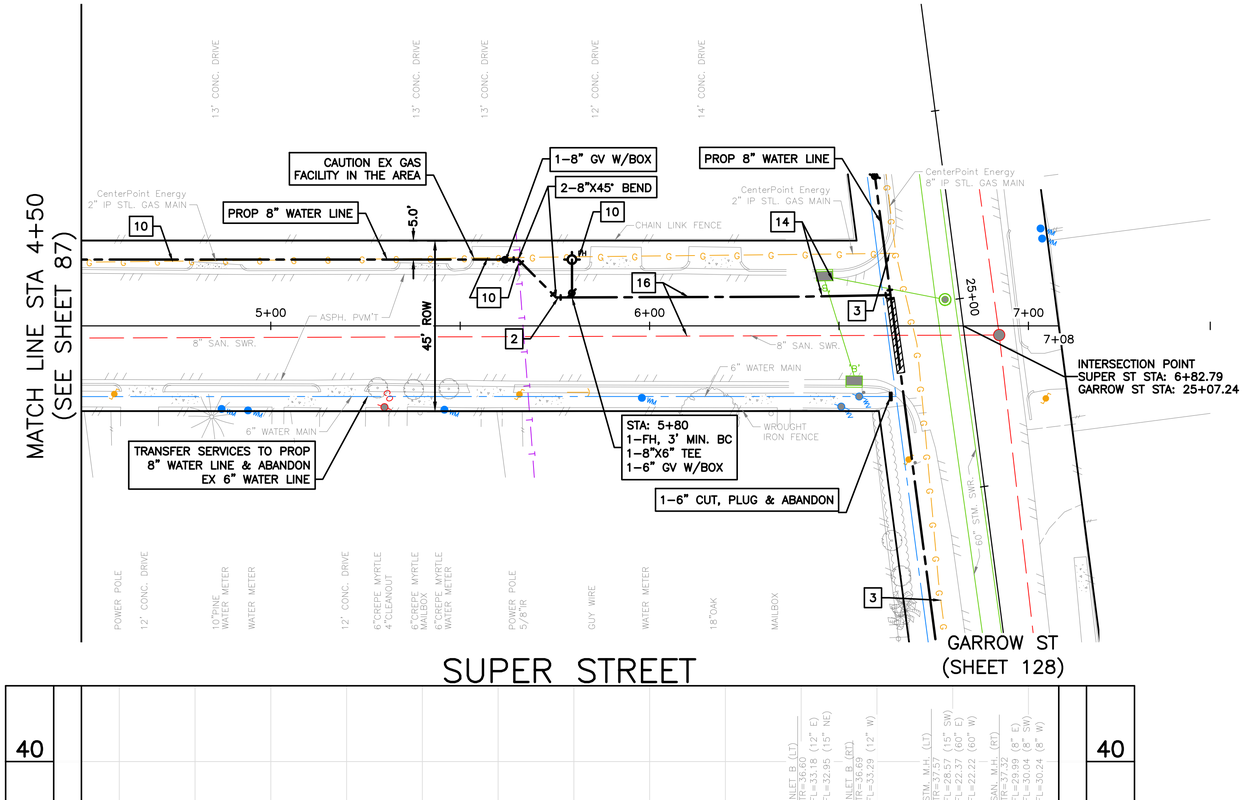
SUPER ST
PLAN & PROFILE
1+00 TO 4+50

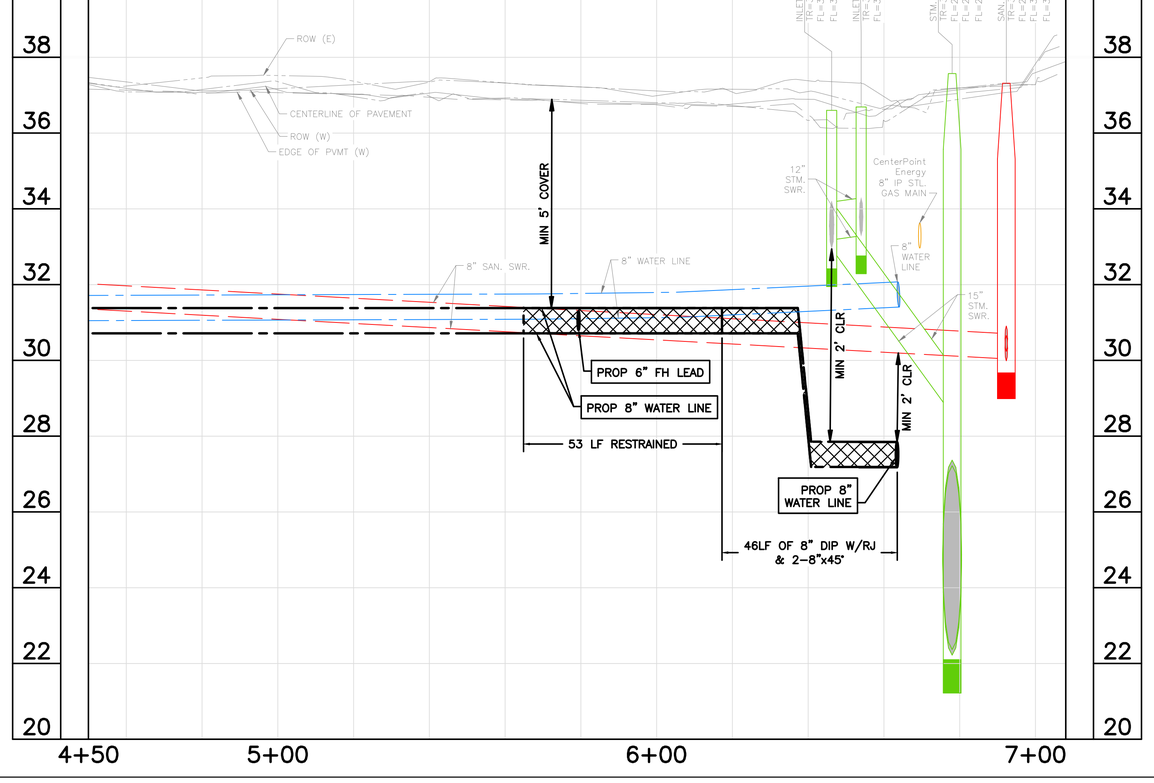
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 87 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:27 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SUPER STREET.dwg

90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1" = 20'

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5) PROPOSED WATER LINES LESS THAN 16-INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3-FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20-INCH WITH A MINIMUM COVER OF 4-FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW ST. IN FRONT OF ADDRESS 450B.
STA. 19+93.37, 19.1' RT (GARROW ST. BASELINE)
ELEV.=39.11'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | INFRASTRUCTURE
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

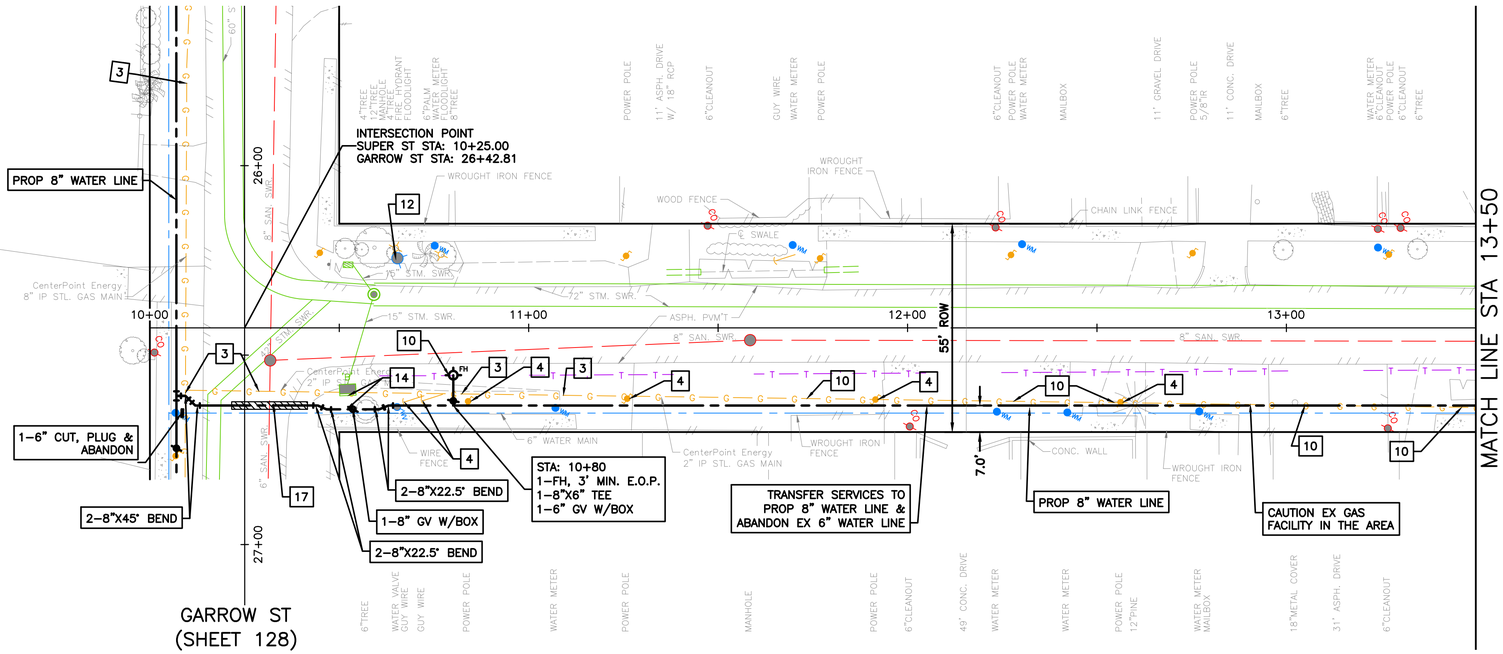
SUPER ST
PLAN & PROFILE
4+50 TO 7+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 88 OF 275	

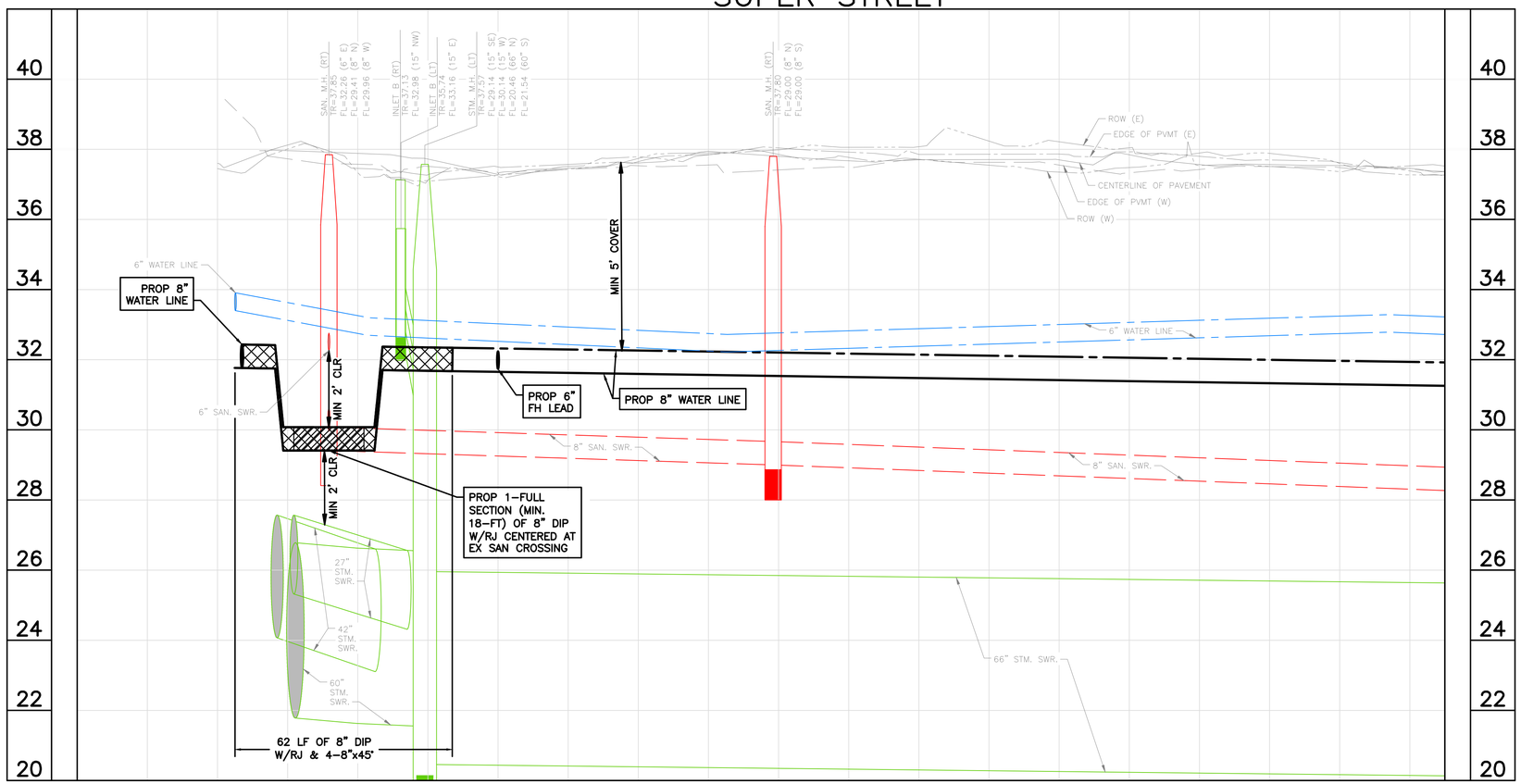
90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:28 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SUPER STREET.dwg



SUPER STREET



NOTES:
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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF GARROW ST. & HAGERMAN ST. STA. 29+51.19, 23.0' RT (GARROW ST. BASELINE) ELEV.=38.52'

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

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Signature valid for six months.

Date

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Signature valid for six months.

Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ARCHAEOLOGY
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

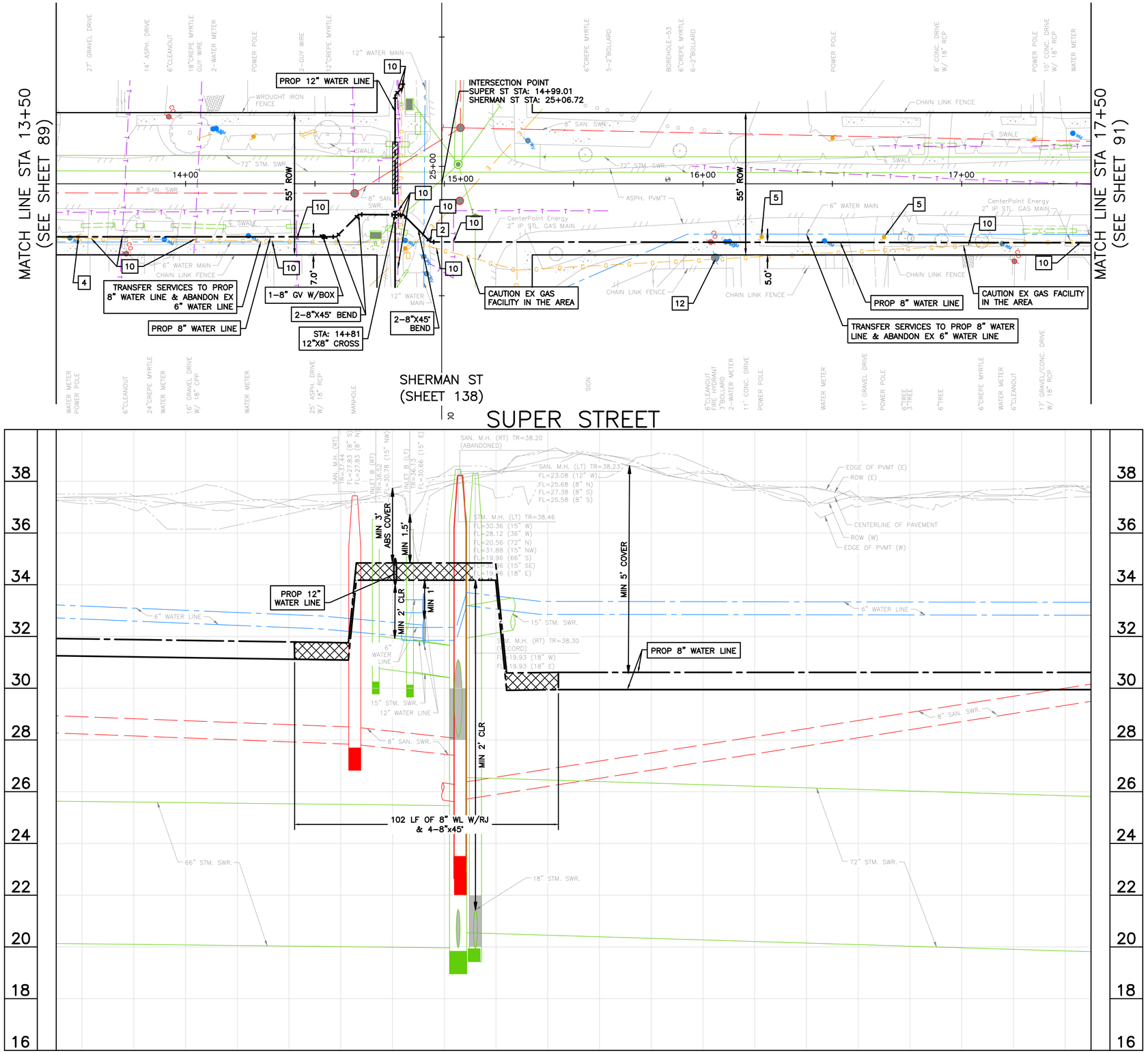
SUPER ST
PLAN & PROFILE
10+00 TO 13+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 89 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:28 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SUPER STREET.dwg

90% SUBMITTAL



0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA. 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
ELEV.=39.97'

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

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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

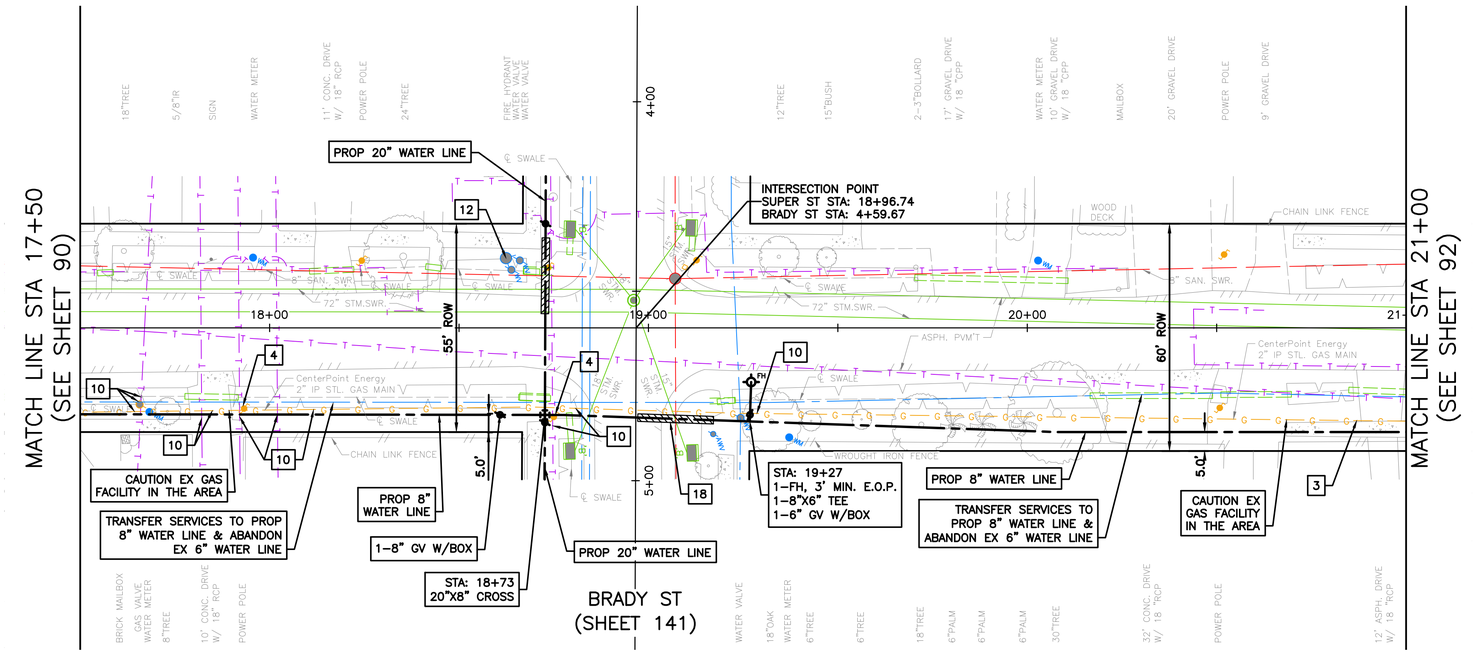
SUPER ST
PLAN & PROFILE
13+50 TO 17+50

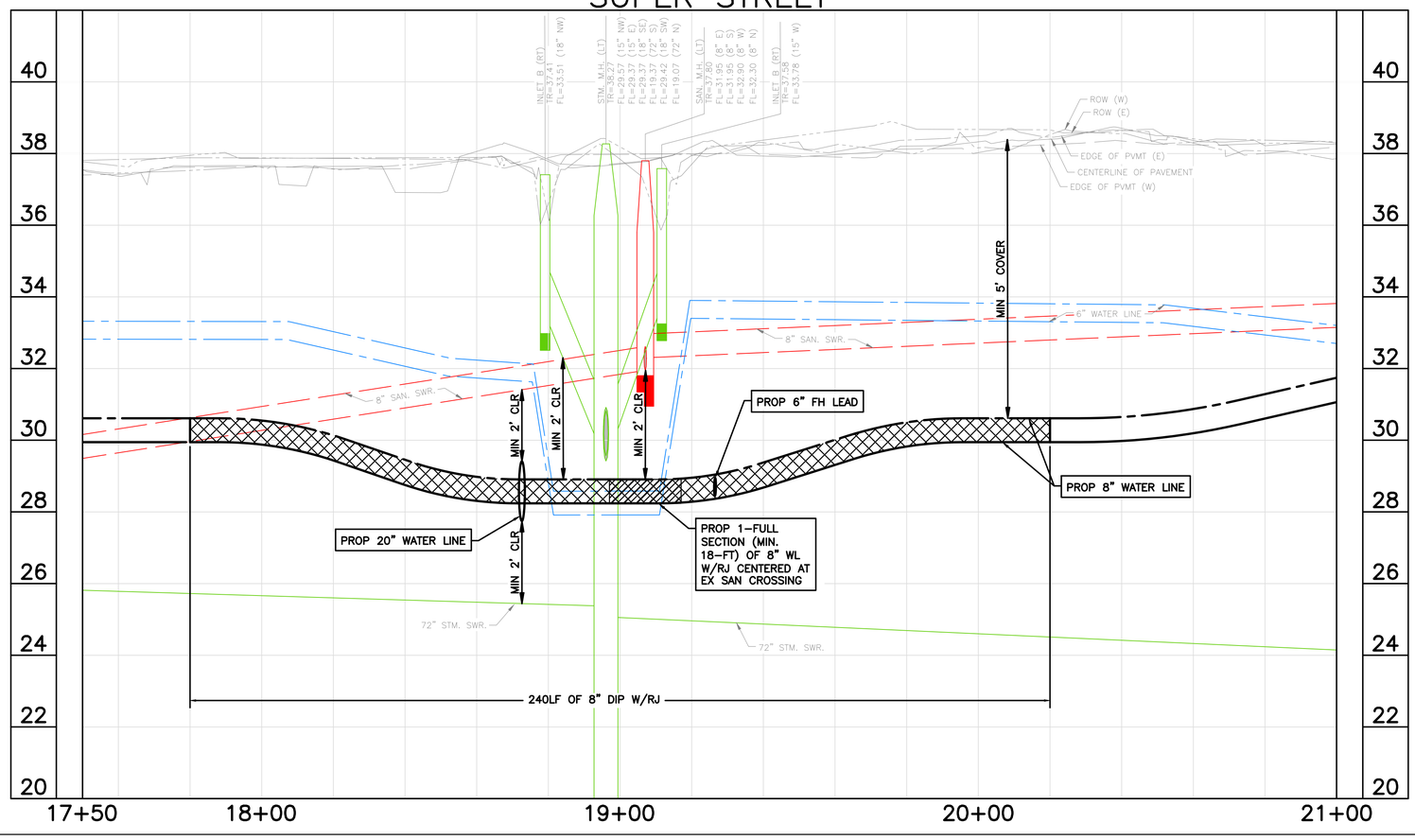
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 90 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 10:29 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SUPER STREET.dwg

90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA. 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
ELEV.=39.97'

NOTICE:
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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

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Signature valid for six months.

Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | INDUSTRIAL
11750 Katy Freeway, Suite 1260
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800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

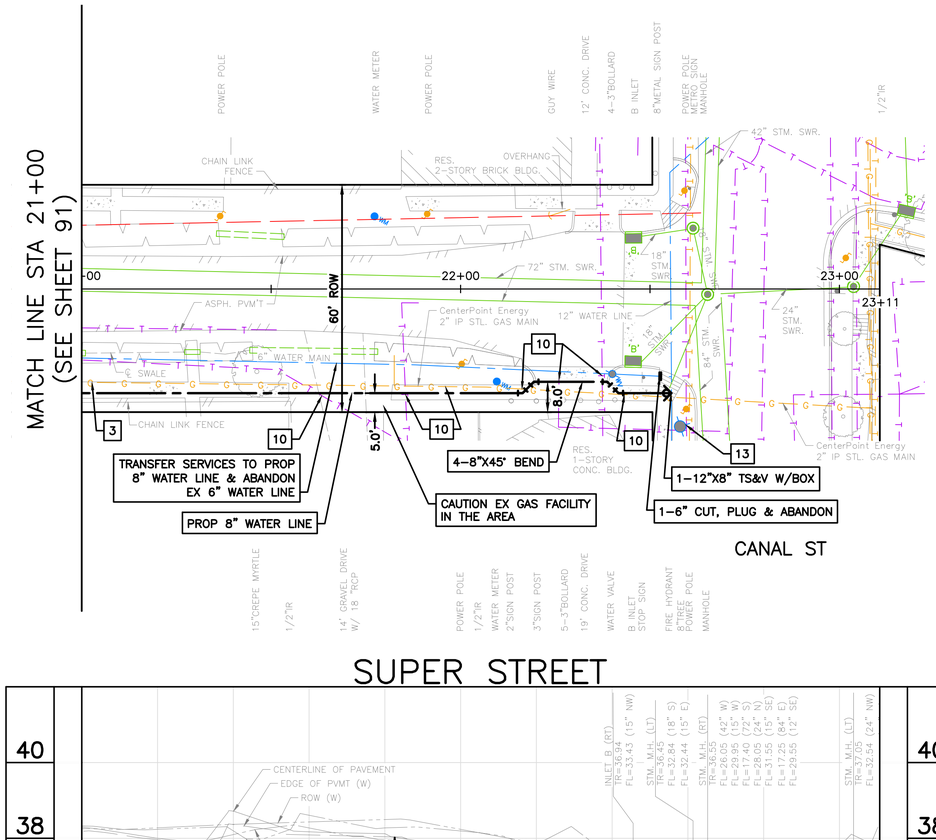
SUPER ST
PLAN & PROFILE
17+50 TO 21+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 91 OF 275	

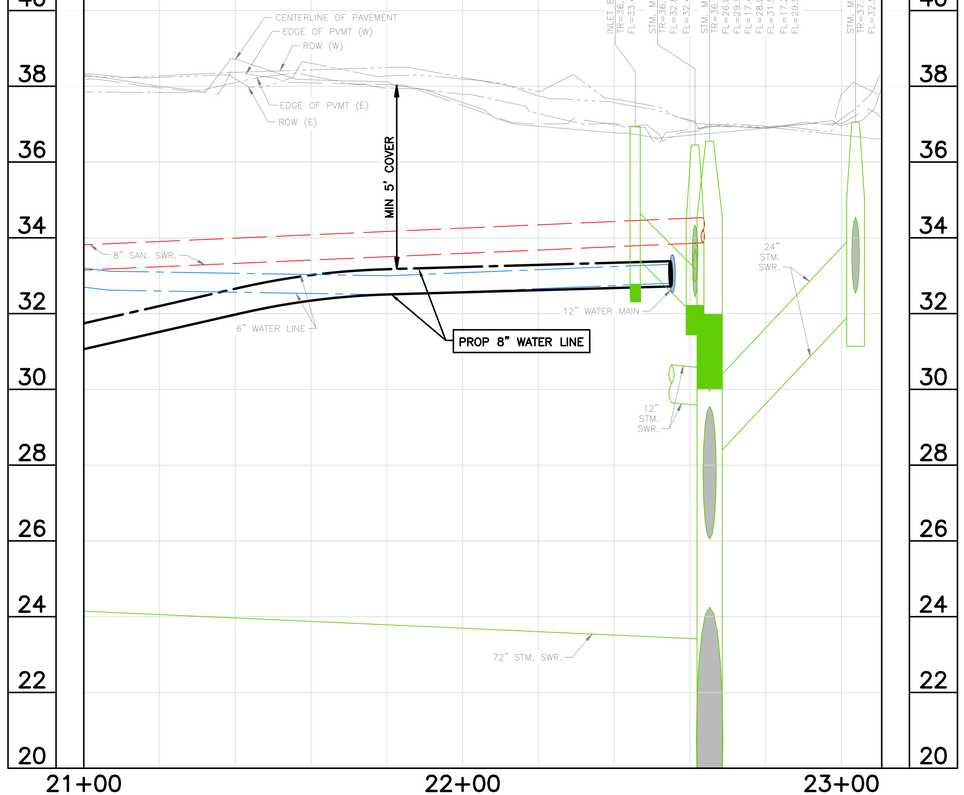
90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:29 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SUPER STREET.dwg



SUPER STREET



SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA. 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
ELEV.=39.97'

NOTICE:
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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

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Date

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

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

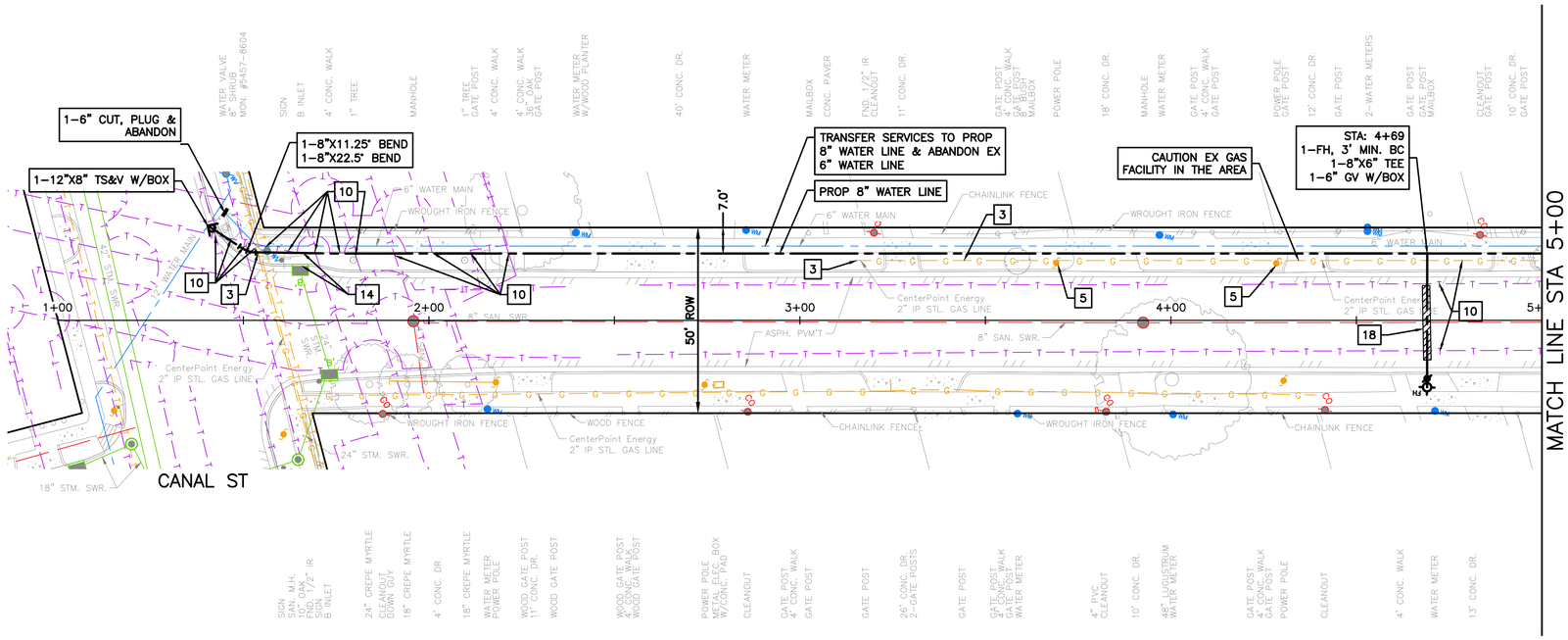
SUPER ST
PLAN & PROFILE
21+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 92 OF 275	

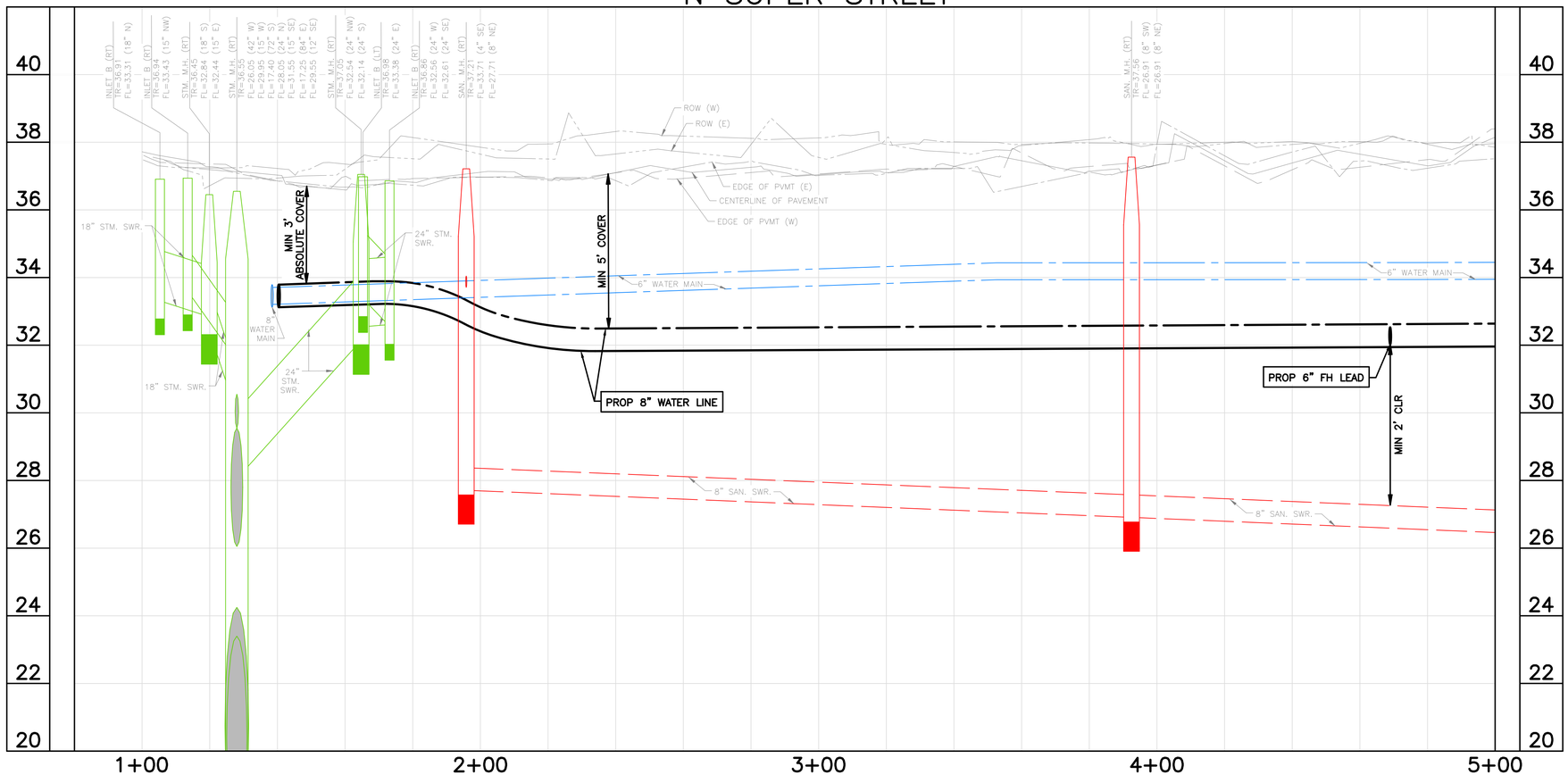
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:30 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SUPER STREET.dwg

90% SUBMITTAL



N SUPER STREET



0' 10' 20' 40'

SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 11: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SCHROEDER ST. & N. EASTWOOD ST. STA. 1+33.99, 42.7' RT (SCHROEDER ST. BASELINE) ELEV.=39.86'

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

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

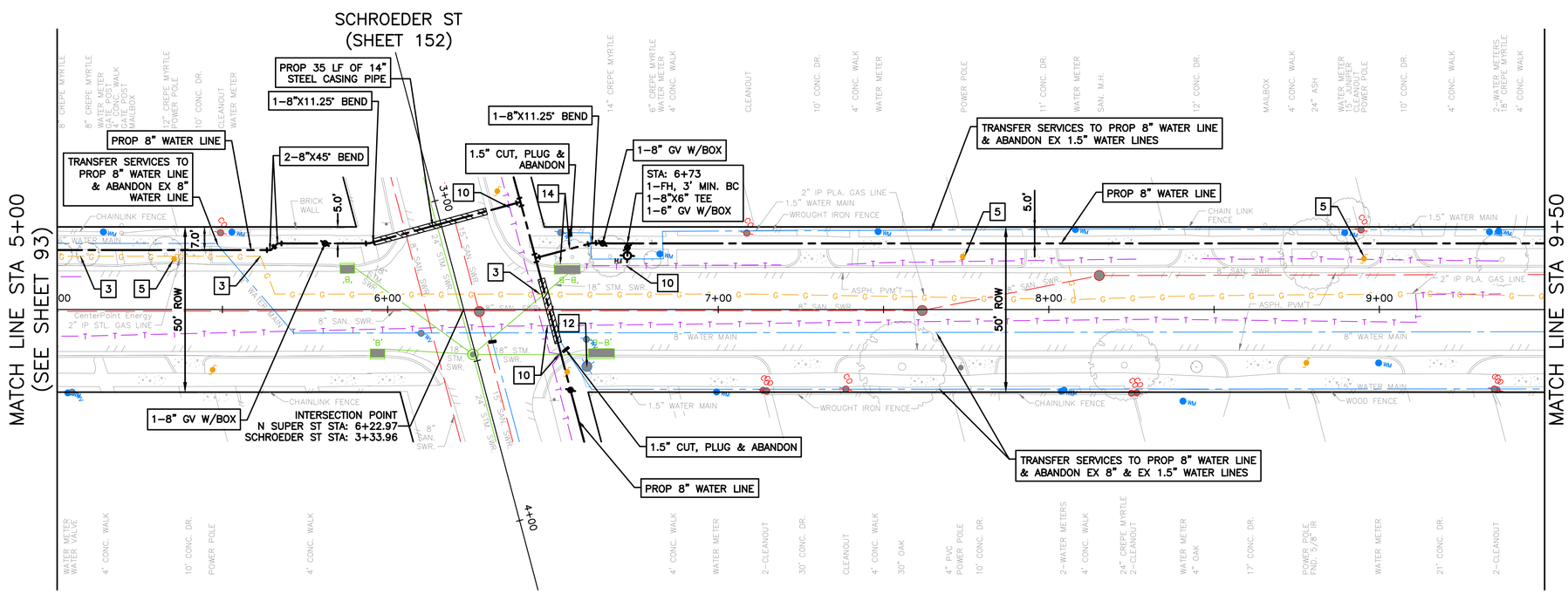
N SUPER ST
PLAN & PROFILE
1+00 TO 5+00

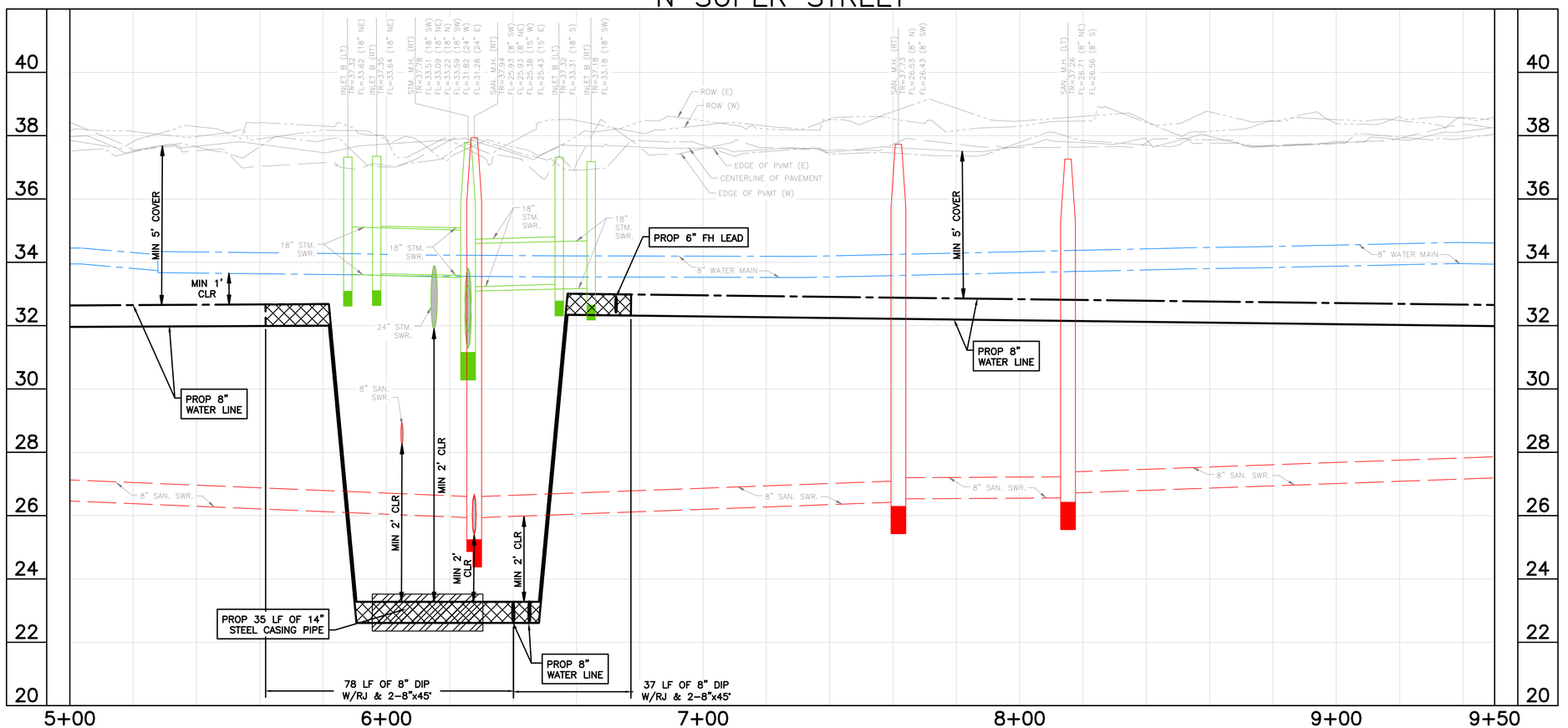
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 93 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:31 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N SUPER STREET.dwg

90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 11: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SCHROEDER ST. & N. EASTWOOD ST. STA. 1+33.99, 42.7' RT (SCHROEDER ST. BASELINE) ELEV.=39.86'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N SUPER ST
PLAN & PROFILE
5+00 TO 9+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 94 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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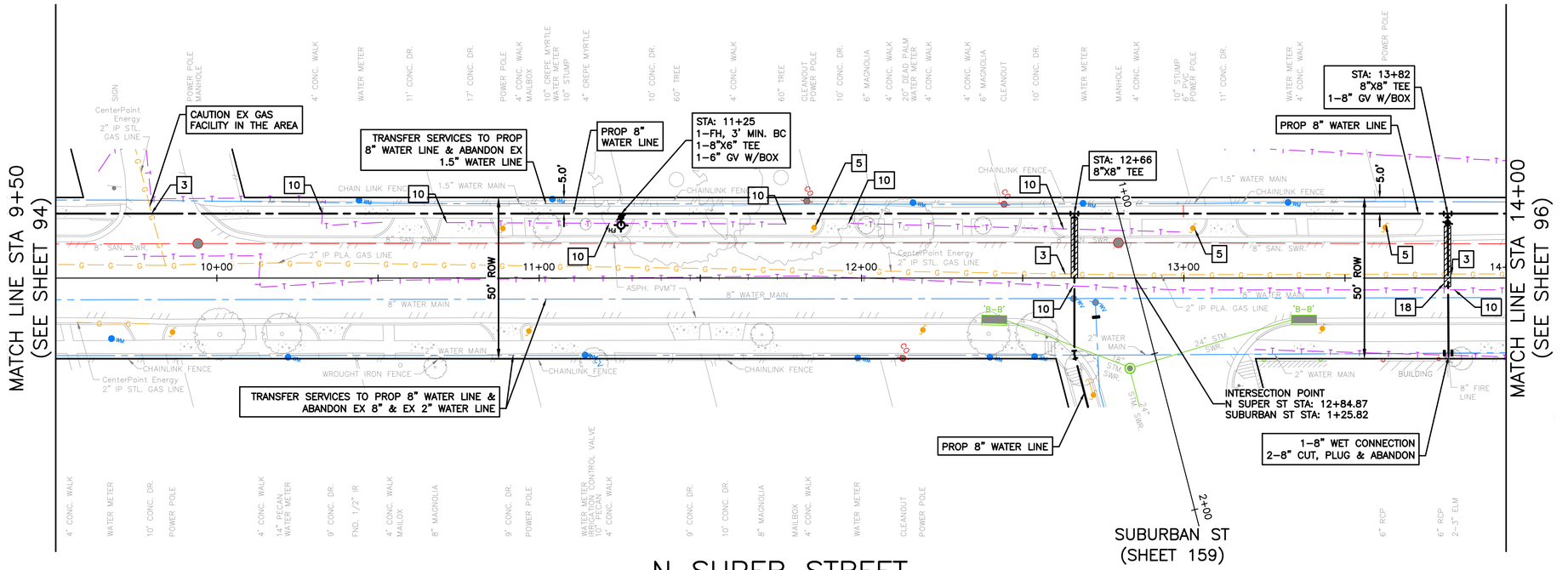
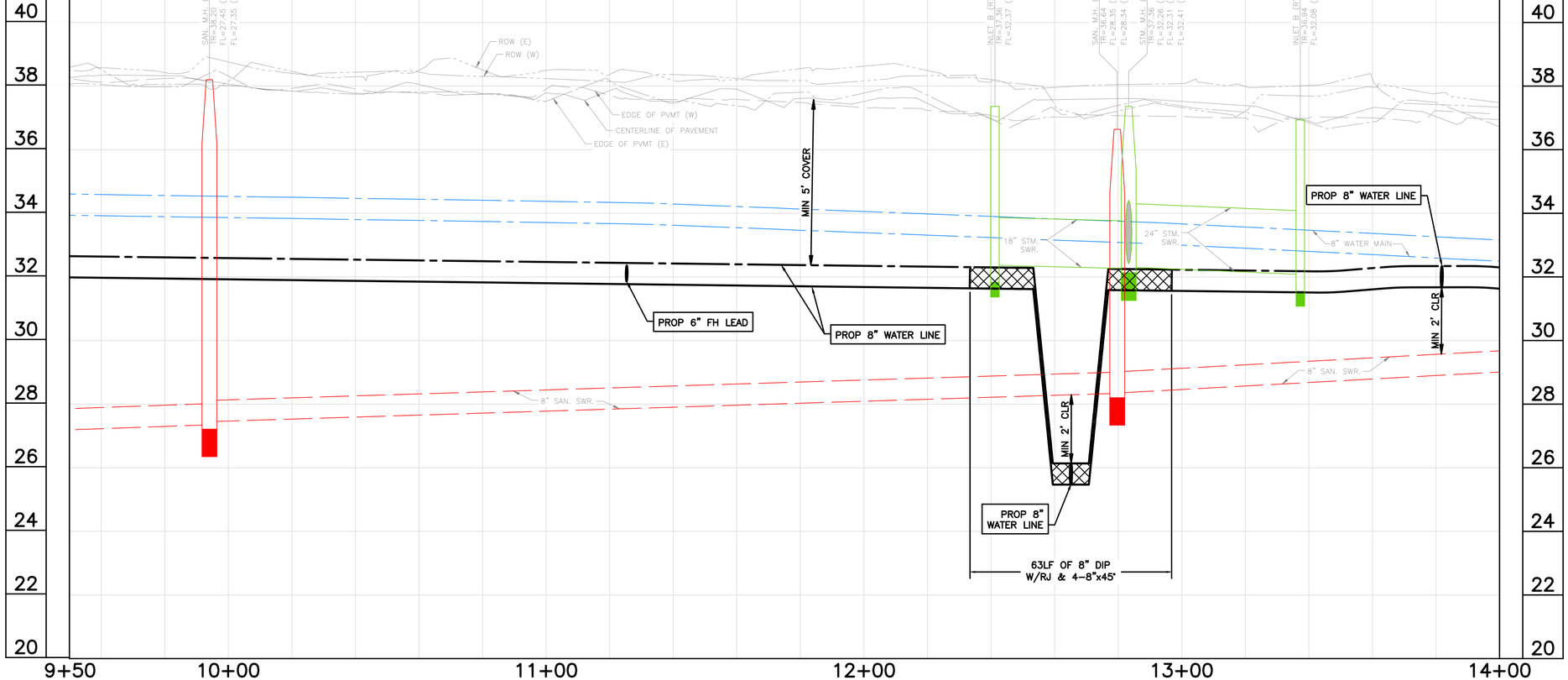
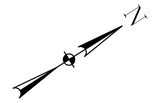
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N SUPER STREET.dwg

PLOTTED: 8/15/2025 10:32 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-N SUPER STREET.dwg







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 16: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SUBURBAN ST. & N. SUPER ST. STA. 1+58.04, 21.5' RT (SUBURBAN ST. BASELINE) ELEV.=38.97'

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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Date

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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800.414.1045

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FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

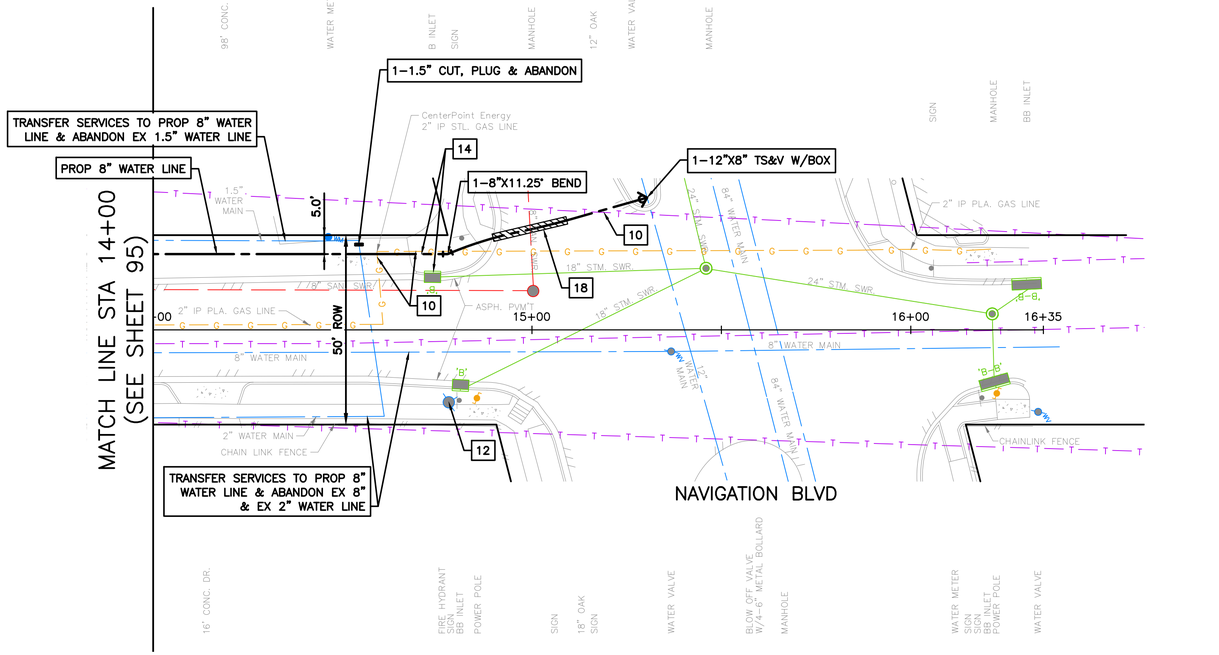
SECONDWARD WATERLINE REPLACEMENT

N SUPER ST
PLAN & PROFILE
9+50 TO 14+00

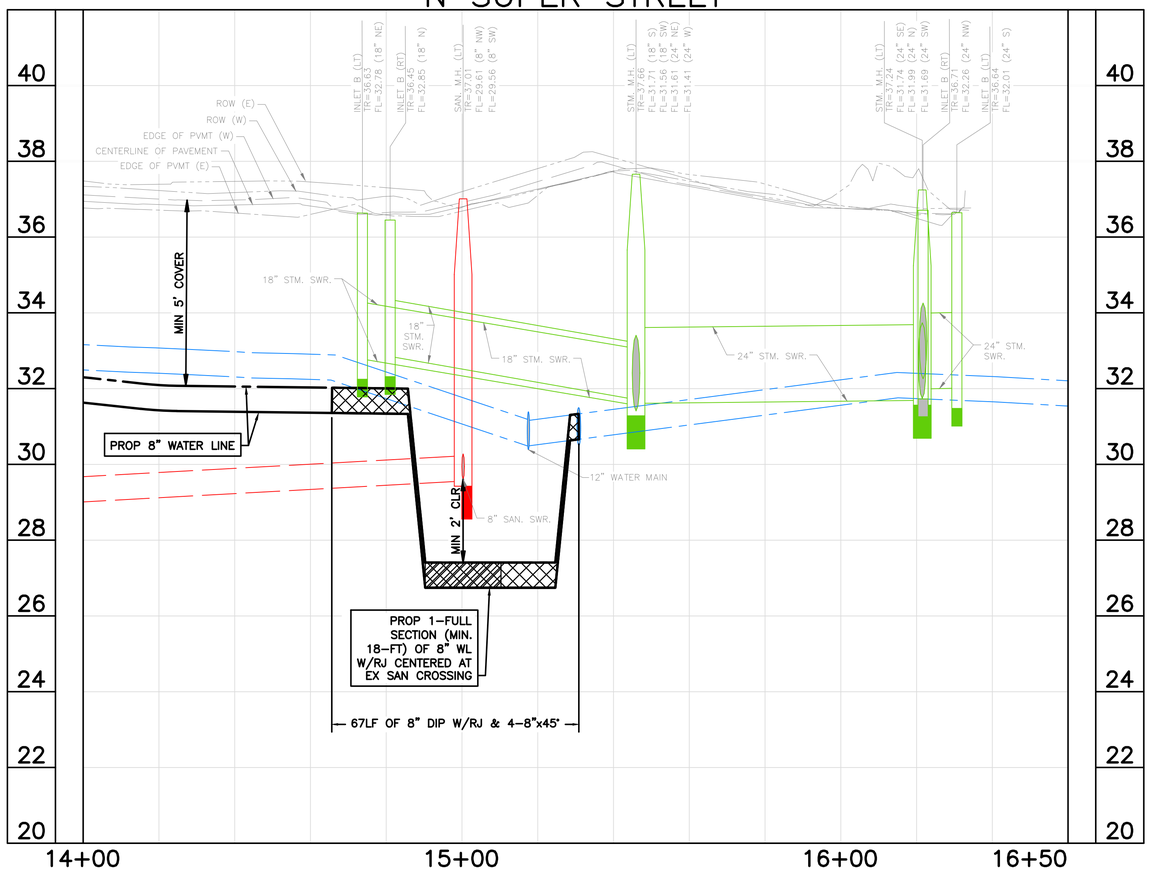
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 95 OF 275	

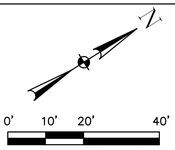
NO.	DATE	REVISION	APP.

90% SUBMITTAL



N SUPER STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 16: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SUBURBAN ST. & N. SUPER ST.
STA. 1+58.04, 21.5' RT (SUBURBAN ST. BASELINE)
ELEV.=38.97'

NOTICE:
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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

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Signature valid for one year.

WOOLPERT
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N SUPER ST
PLAN & PROFILE
14+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 96 OF 275	

APP. | REVISION | NO. | DATE

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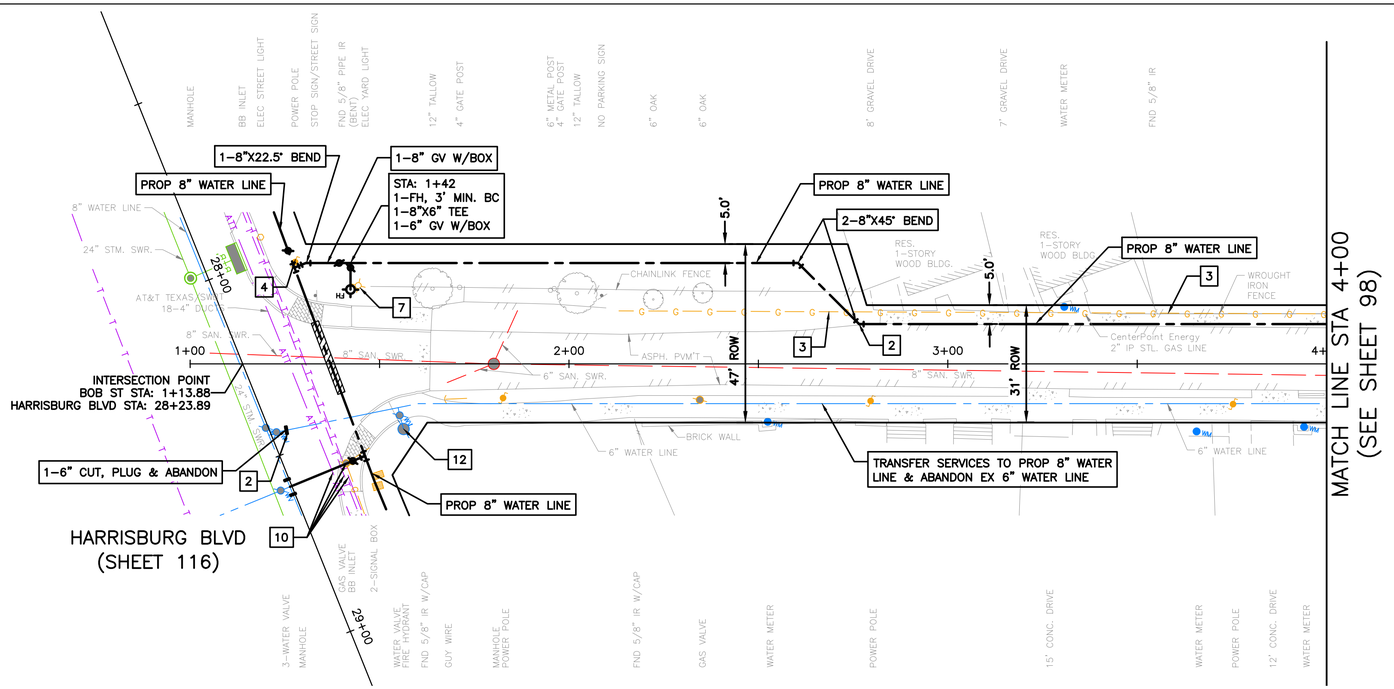
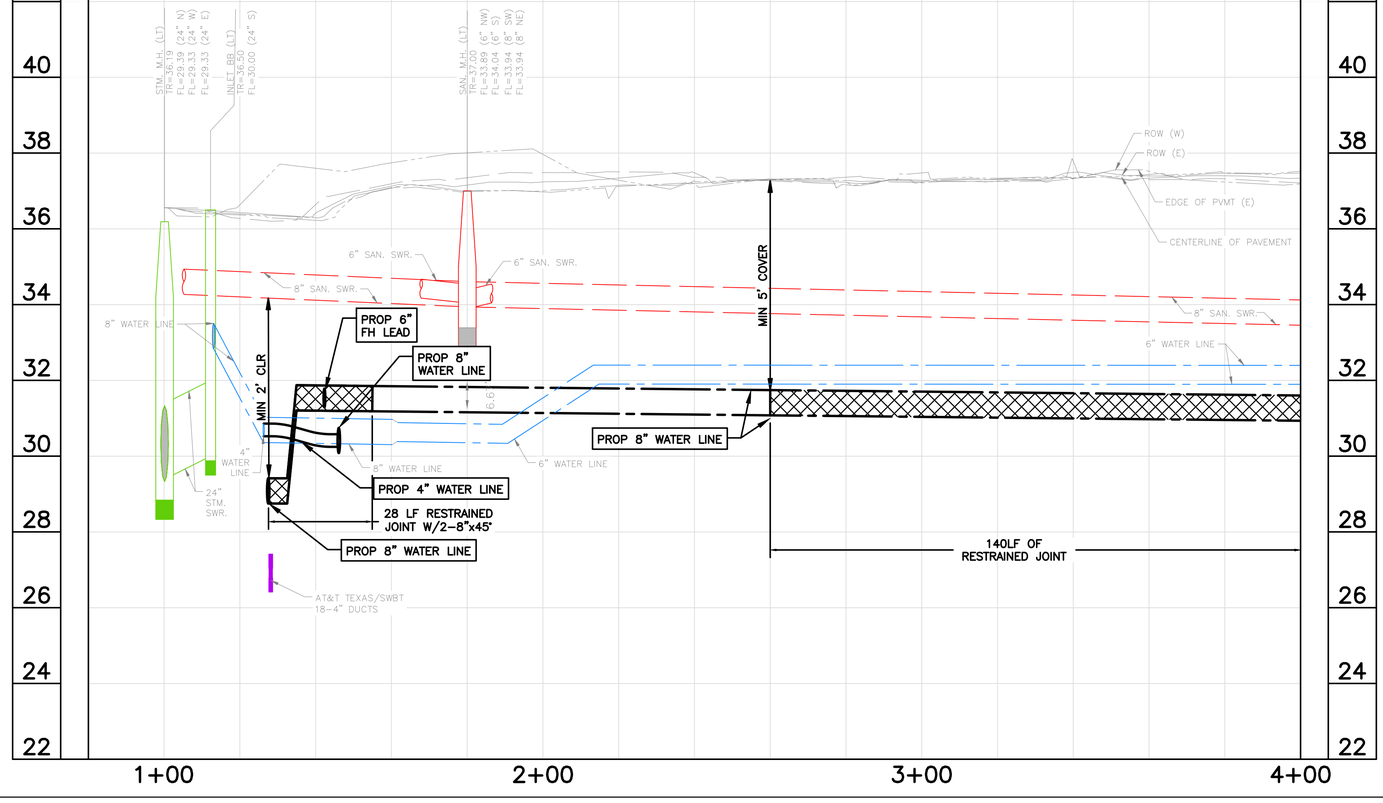
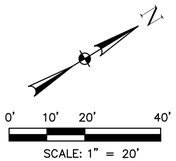
90% SUBMITTAL



BOB STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF GARROW ST. & HAGERMAN ST.
STA. 29+51.19, 23.0' RT (GARROW ST. BASELINE)
ELEV.=38.52'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

BOB ST
PLAN & PROFILE
1+00 TO 4+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 97 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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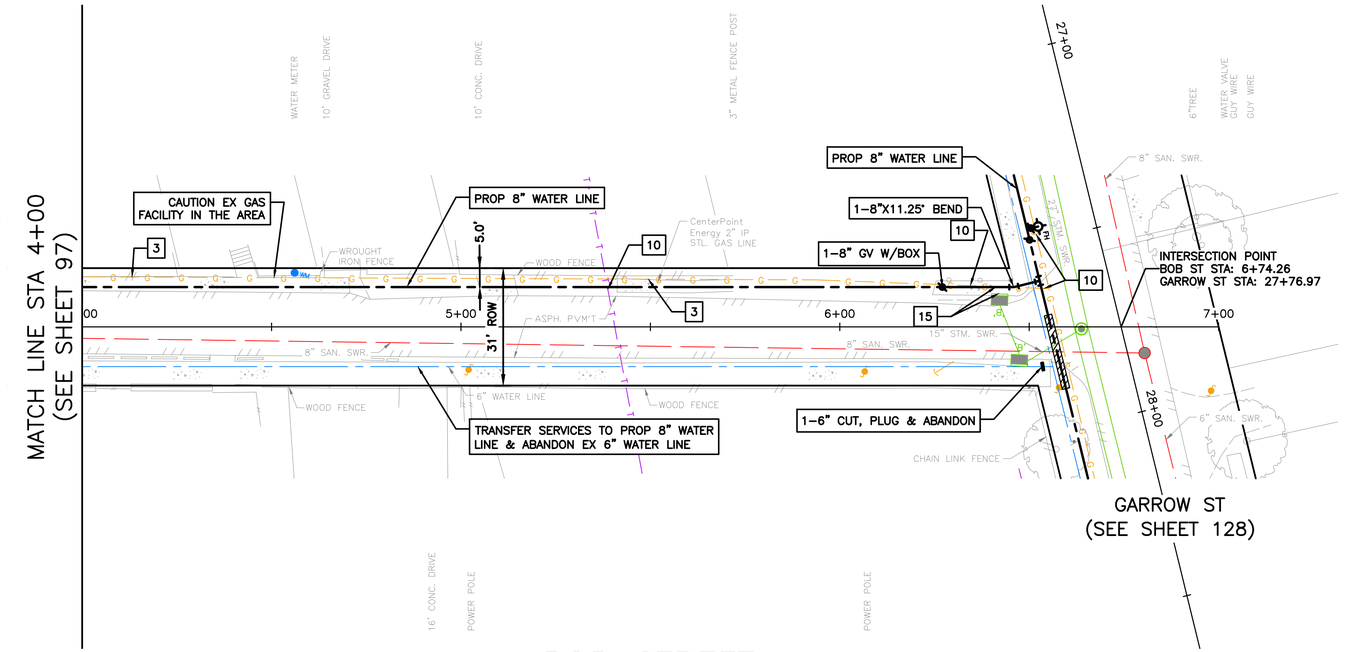
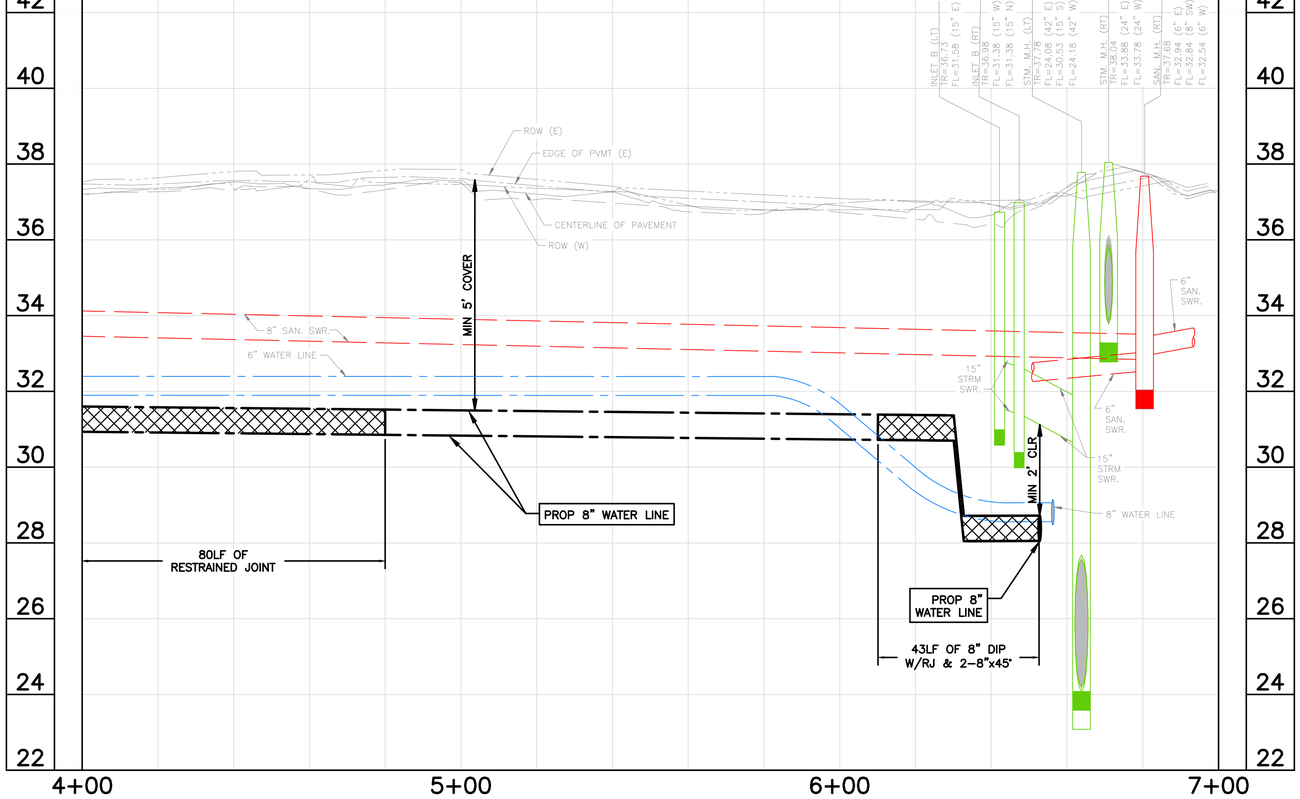
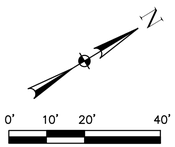


BOB STREET





SCALE: 1" = 20'

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

BOB ST
PLAN & PROFILE
4+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 98 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 10:34 AM
PLOT STYLE: COH.ctb
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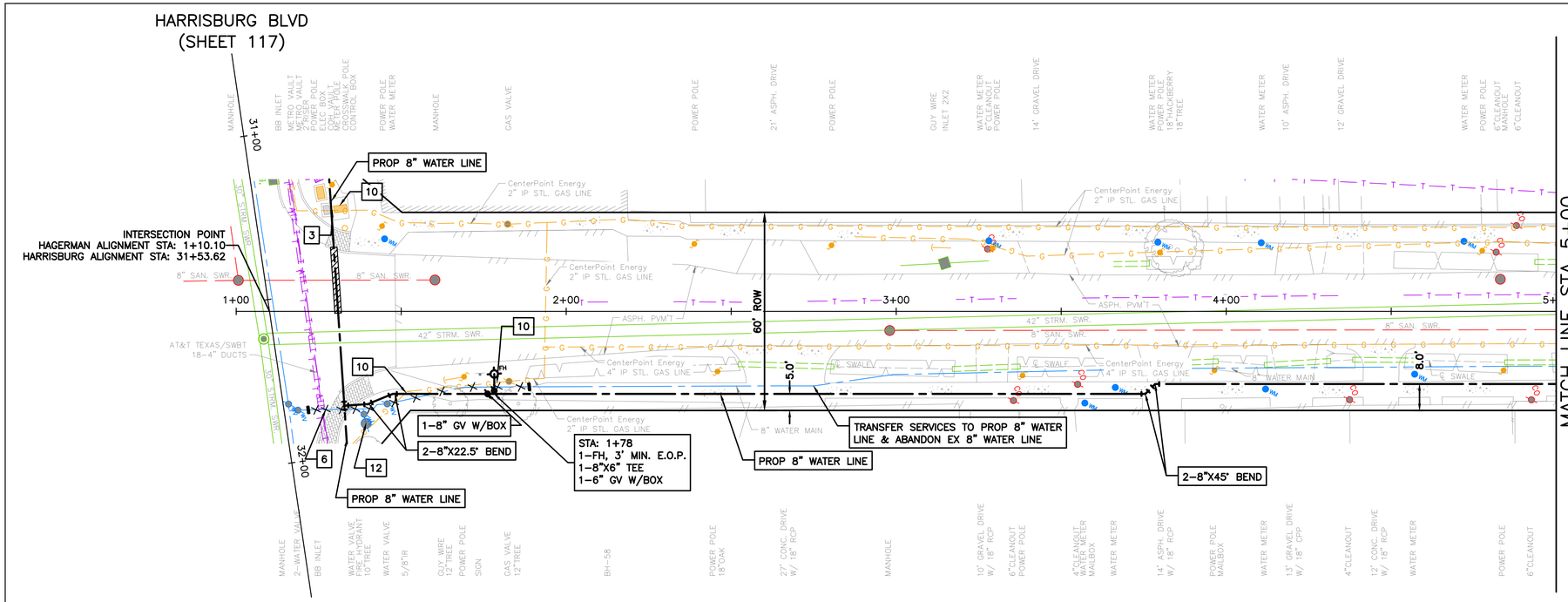
90% SUBMITTAL



0' 10' 20' 40'

SCALE: 1" = 20'

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HAGERMAN ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 99 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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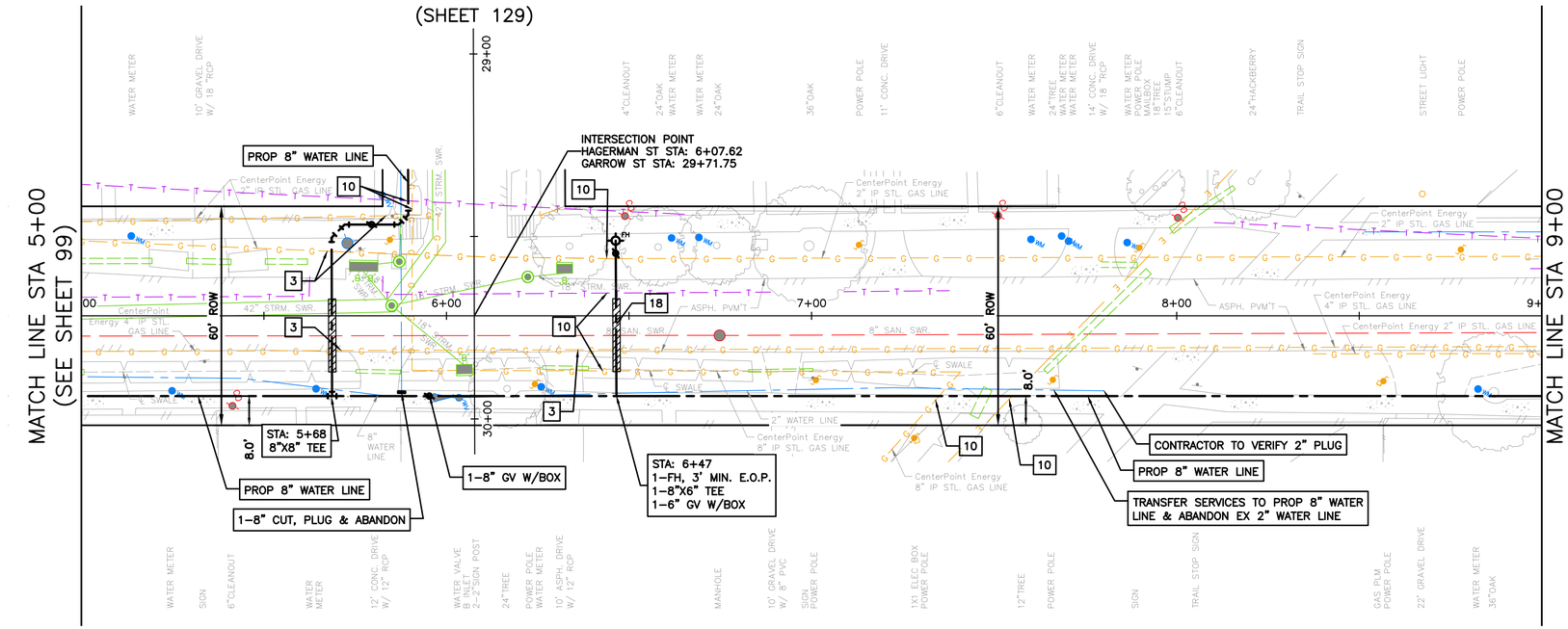
PLOTTED: 8/15/2025 10:36 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HAGERMAN STREET.dwg

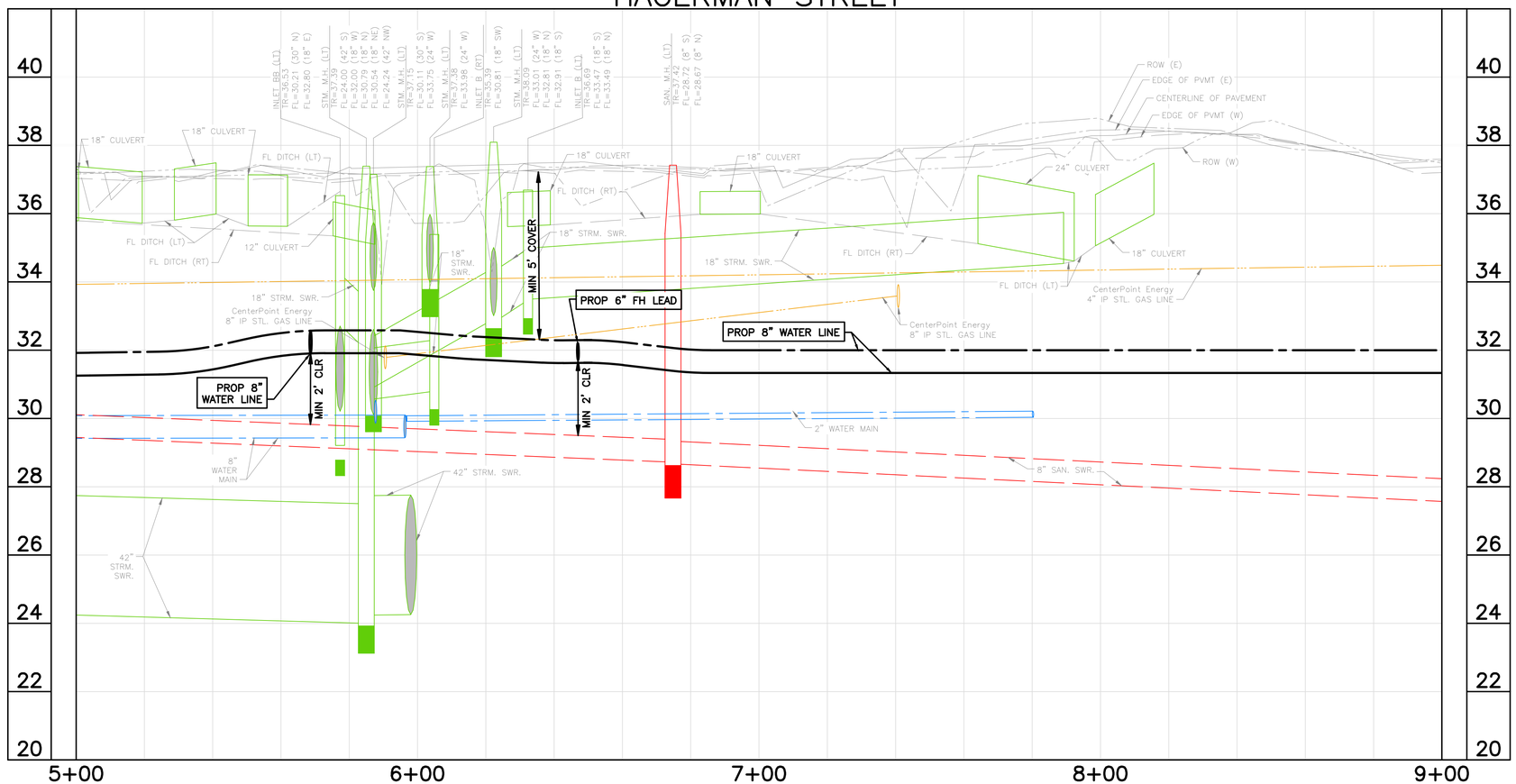
GARROW ST
(SHEET 129)

MATCH LINE STA 5+00
(SEE SHEET 99)

MATCH LINE STA 9+00
(SEE SHEET 101)



HAGERMAN STREET



NOTES:
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2) PROPOSED WATER LINES SHALL BE INSTALLED BY MEANS OF TRENCHLESS CONSTRUCTION METHOD EXCEPT WHERE NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF PITS IN THE FIELD SUBJECT TO THE CITY ENGINEER'S APPROVAL.
3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
5) PROPOSED WATER LINES LESS THAN 16-INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3-FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20-INCH WITH A MINIMUM COVER OF 4-FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF GARROW ST. & HAGERMAN ST.
STA. 29+51.19, 23.0' RT (GARROW ST. BASELINE)
ELEV.=38.52'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

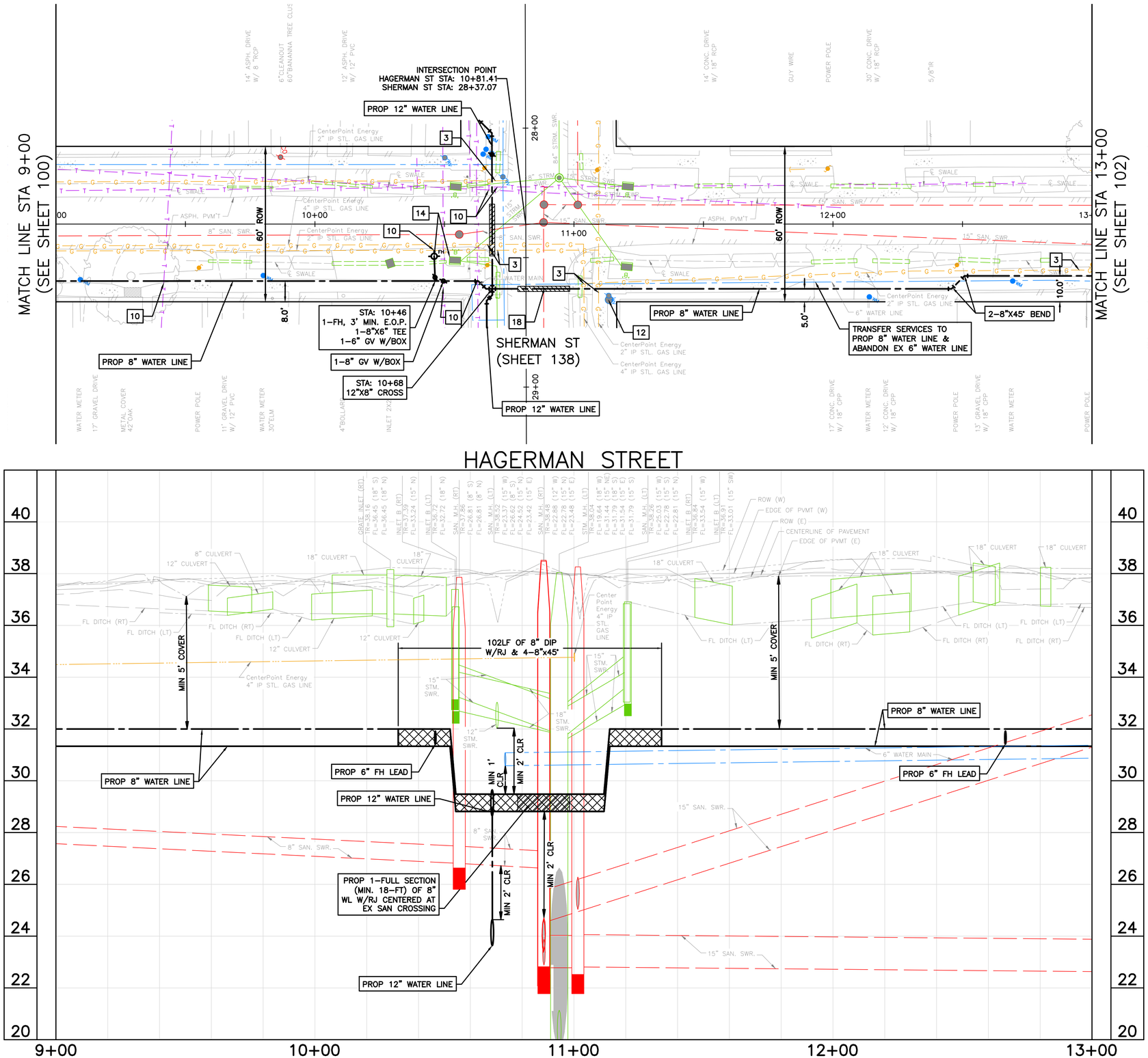
SECONDWARD WATERLINE REPLACEMENT

HAGERMAN ST
PLAN & PROFILE
5+00 TO 9+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 100 OF 275	

APP. | REVISION | NO. | DATE

90% SUBMITTAL



0' 10' 20' 40'

SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA, 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
ELEV.=39.97'

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HAGERMAN ST
PLAN & PROFILE
9+00 TO 13+00

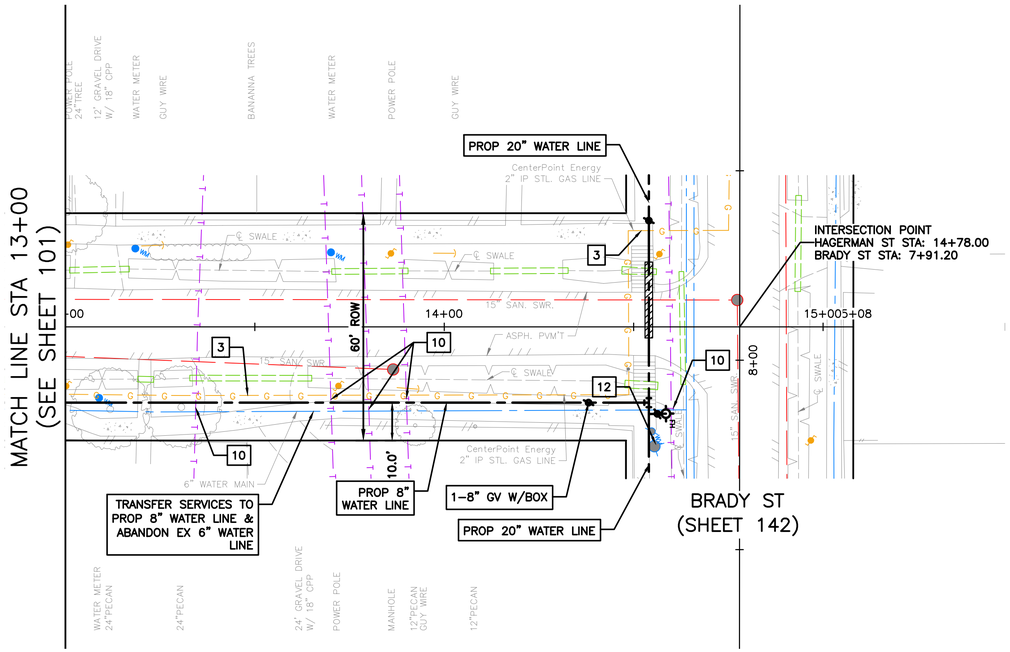
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 101 OF 275	

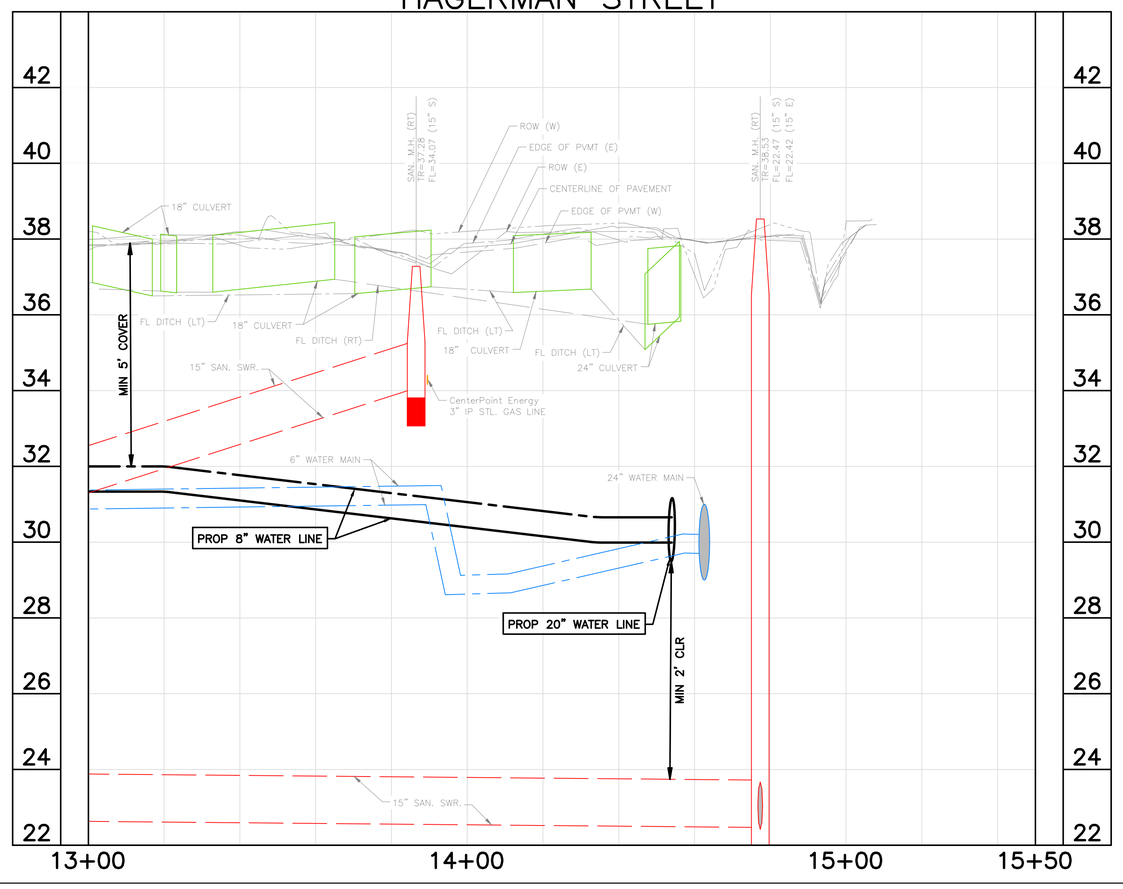
APP. | REVISION | NO. | DATE

90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 1:09 PM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–HAGERMAN STREET.dwg





0' 10' 20' 40'

SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA, 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
ELEV.=39.97'

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VERIFICATION OF PRIVATE UTILITY LINES

Date

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HAGERMAN ST
PLAN & PROFILE
13+00 TO END

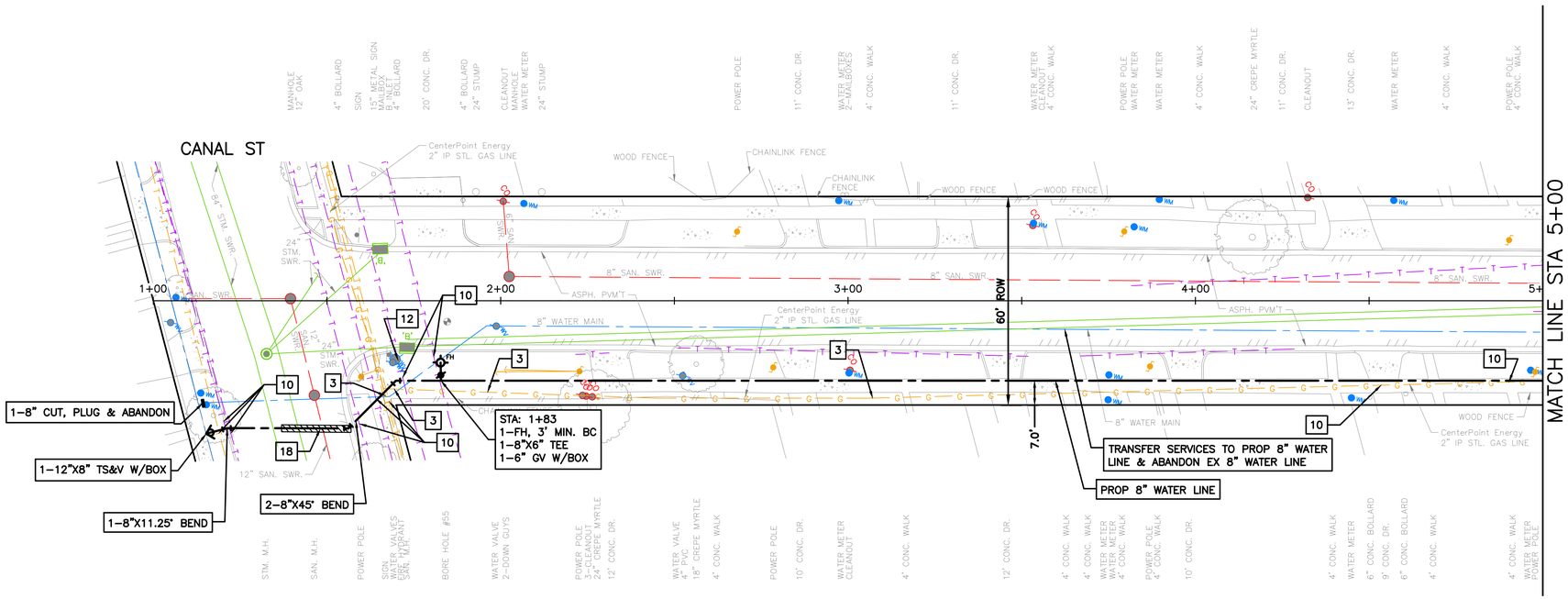
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 102 OF 275	

APP. | REVISION | NO. | DATE

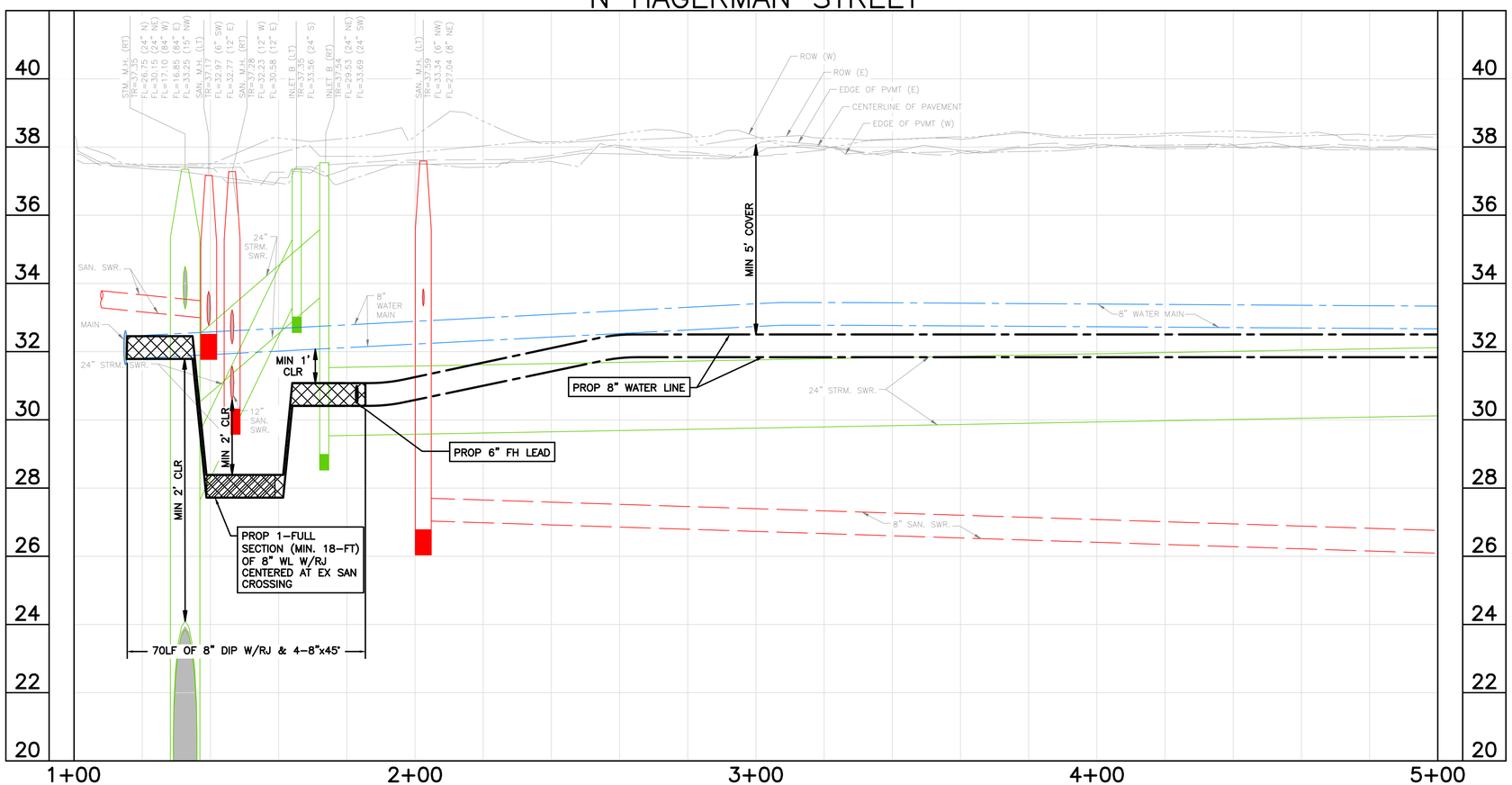
90% SUBMITTAL

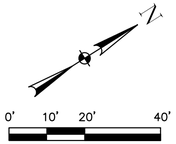
PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 1:10 PM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HAGERMAN STREET.dwg



N HAGERMAN STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 12: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SCHROEDER ST. & MAPLEWOOD ST. STA. 9+58.90, 41.97'RT (SCHROEDER ST. BASELINE) ELEV.=39.02'

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

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Signature valid for six months.

Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

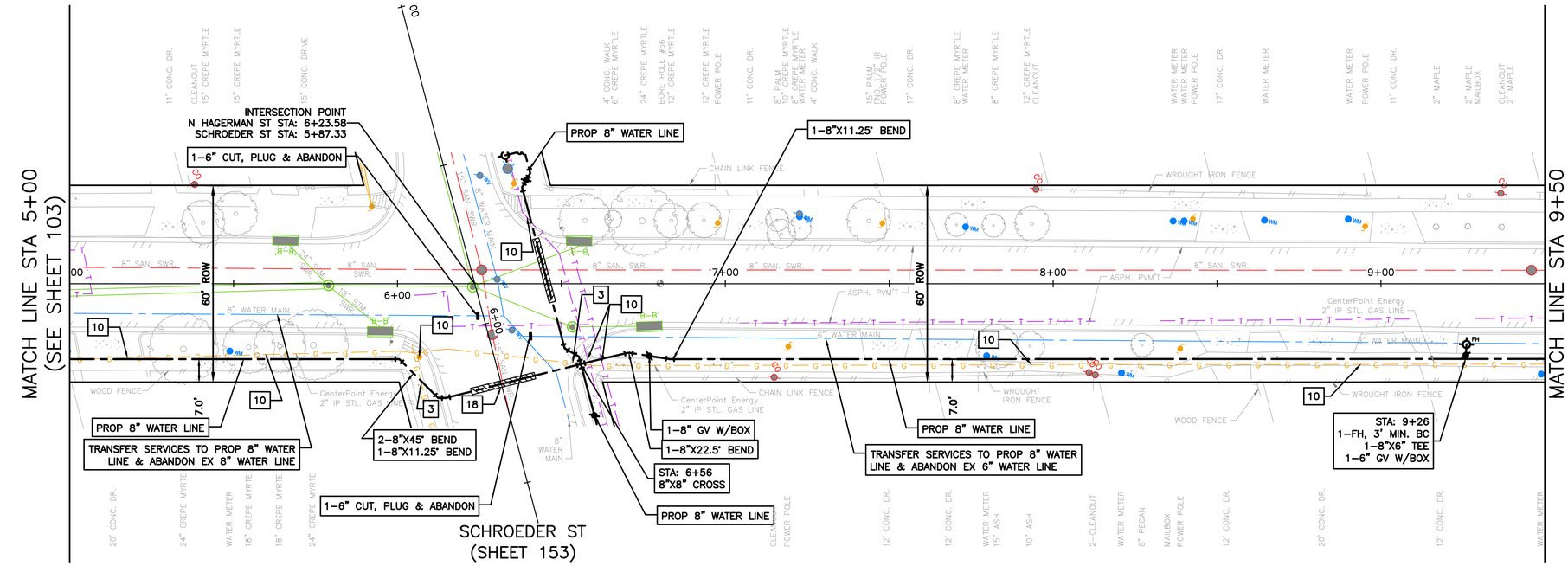
N HAGERMAN ST
PLAN & PROFILE
1+00 TO 5+00

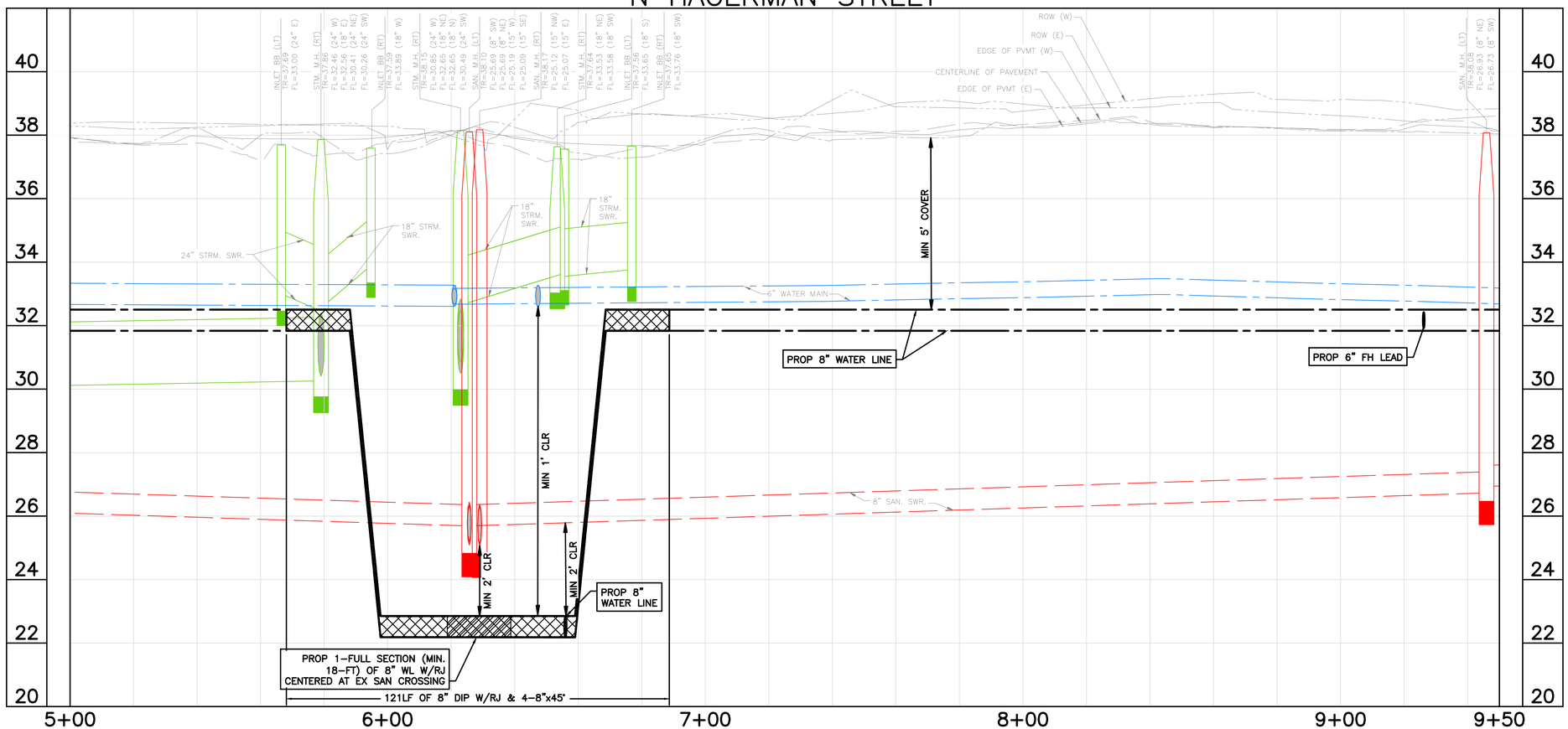
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 103 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 1:11 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N HAGERMAN STREET.dwg





PLOTTED: 8/15/2025 1:12 PM

PLOT STYLE: COH.ctb

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N HAGERMAN STREET.dwg

NO.	DATE	REVISION	APP.

0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 16: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SUBURBAN ST. & N. SUPER ST. STA. 1+58.04, 21.5' RT (SUBURBAN ST. BASELINE) ELEV.=38.97'

NOTICE:
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DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

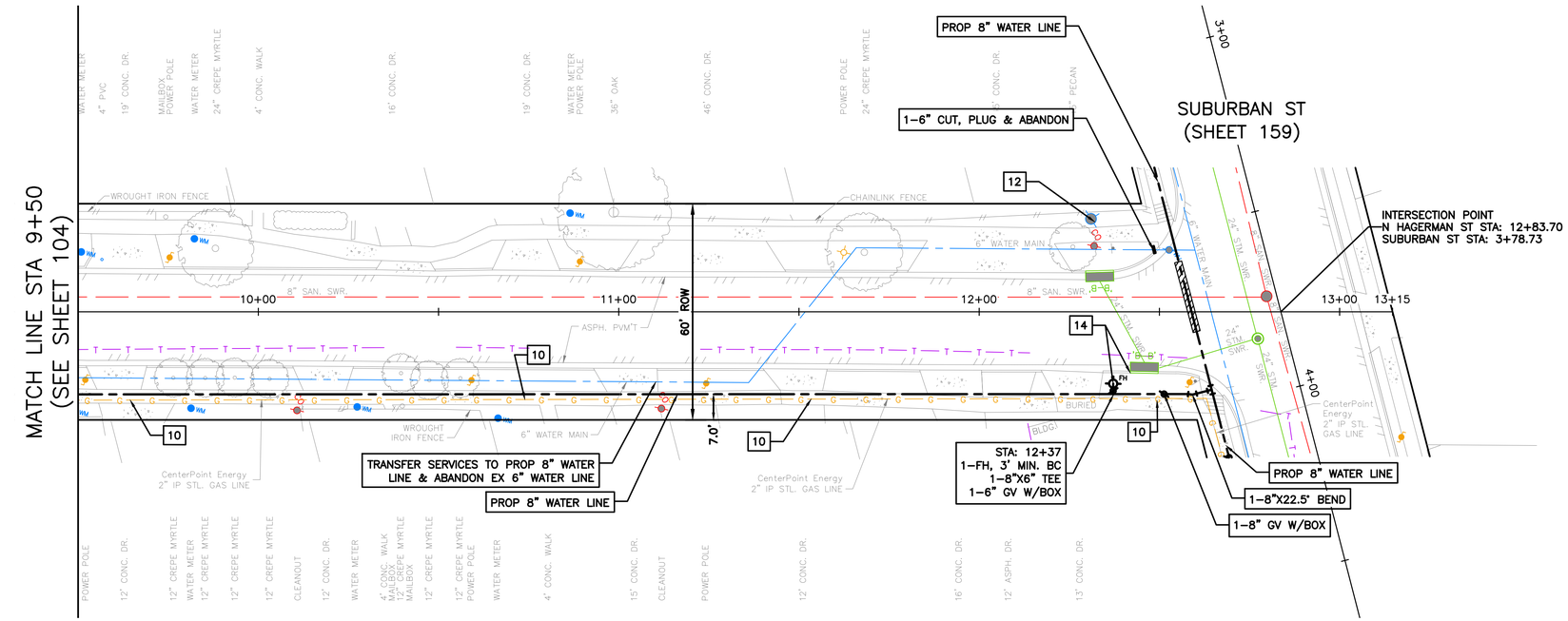
N HAGERMAN ST
PLAN & PROFILE
5+00 TO 9+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 104 OF 275	

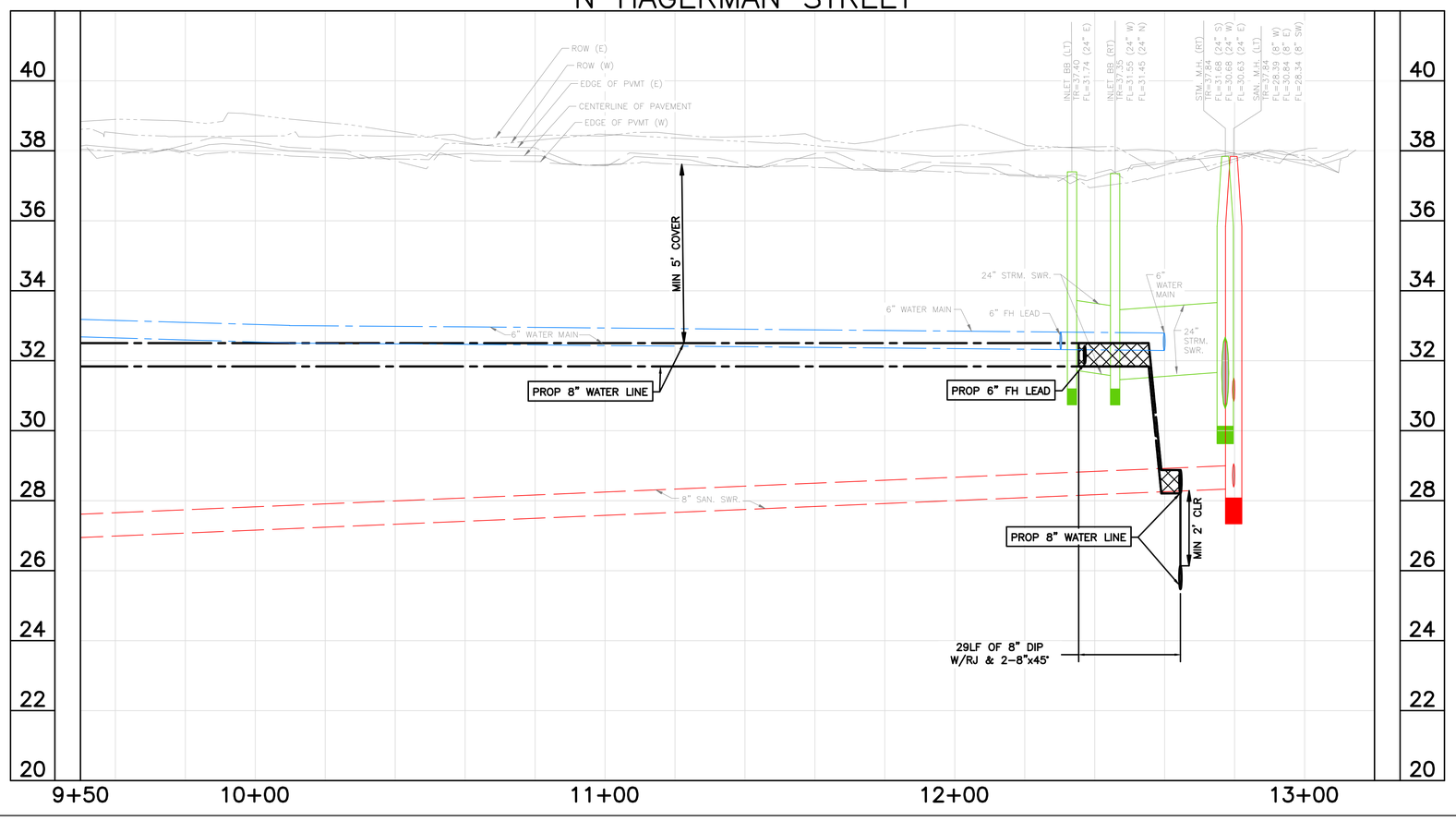
90% SUBMITTAL

PLOTTED: 8/15/2025 1:12 PM
PLOT STYLE: COH.ctb

MATCH LINE STA 9+50
(SEE SHEET 104)



N HAGERMAN STREET



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

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HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N HAGERMAN ST
PLAN & PROFILE
9+50 TO END

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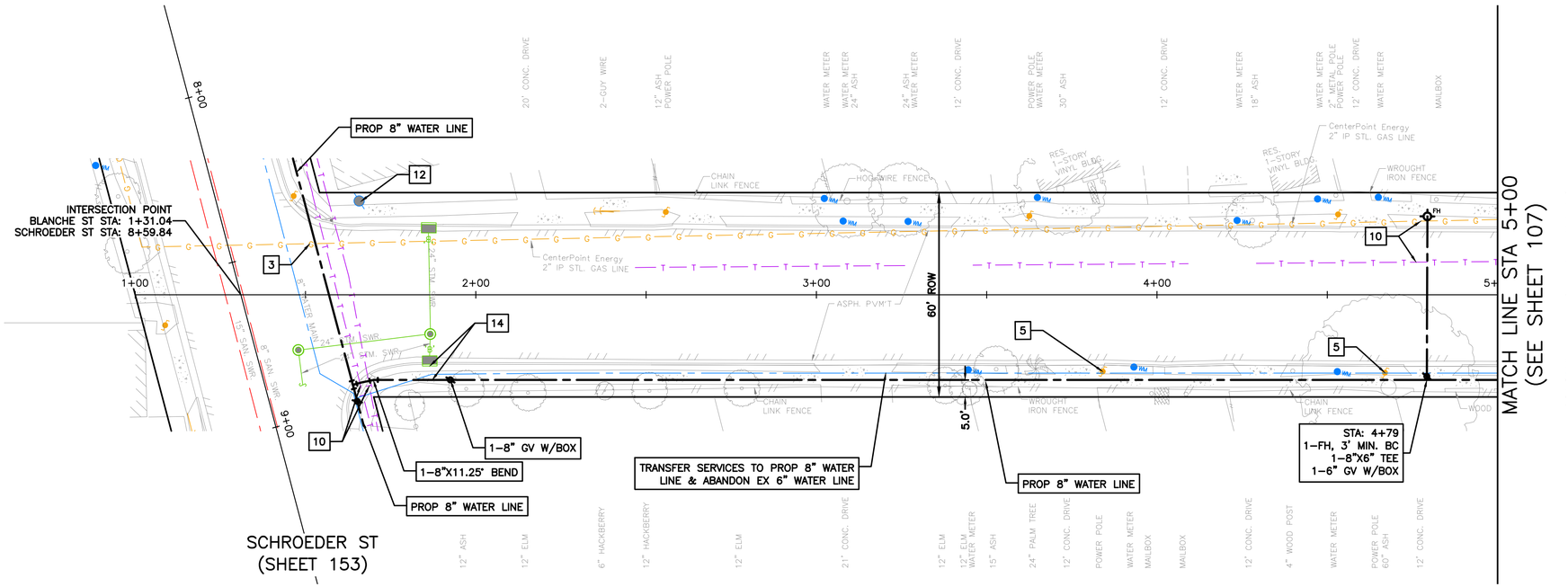
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 105 OF 275	

APP. | REVISION | NO. | DATE

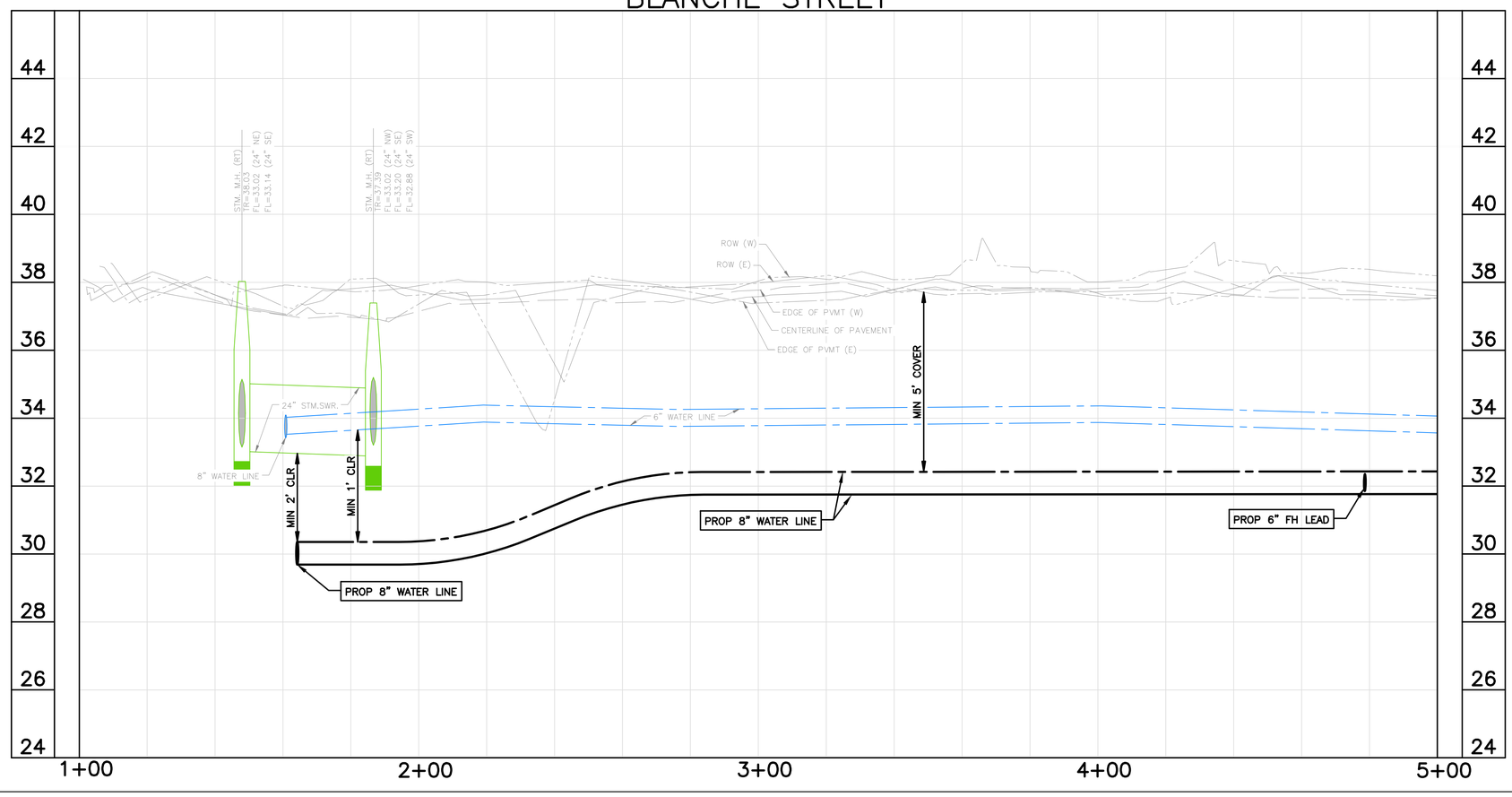
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–N HAGERMAN STREET.dwg

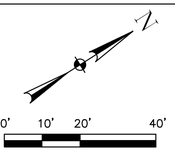
90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 1:41 PM



BLANCHE STREET





NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 17: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SUBURBAN ST. & LOCKWOOD DR. STA. 8+86.58, 24.9' RT (SUBURBAN ST. BASELINE) ELEV.=38.48'

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

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Date

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

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

BLANCHE ST
PLAN & PROFILE
1+00 TO 5+00

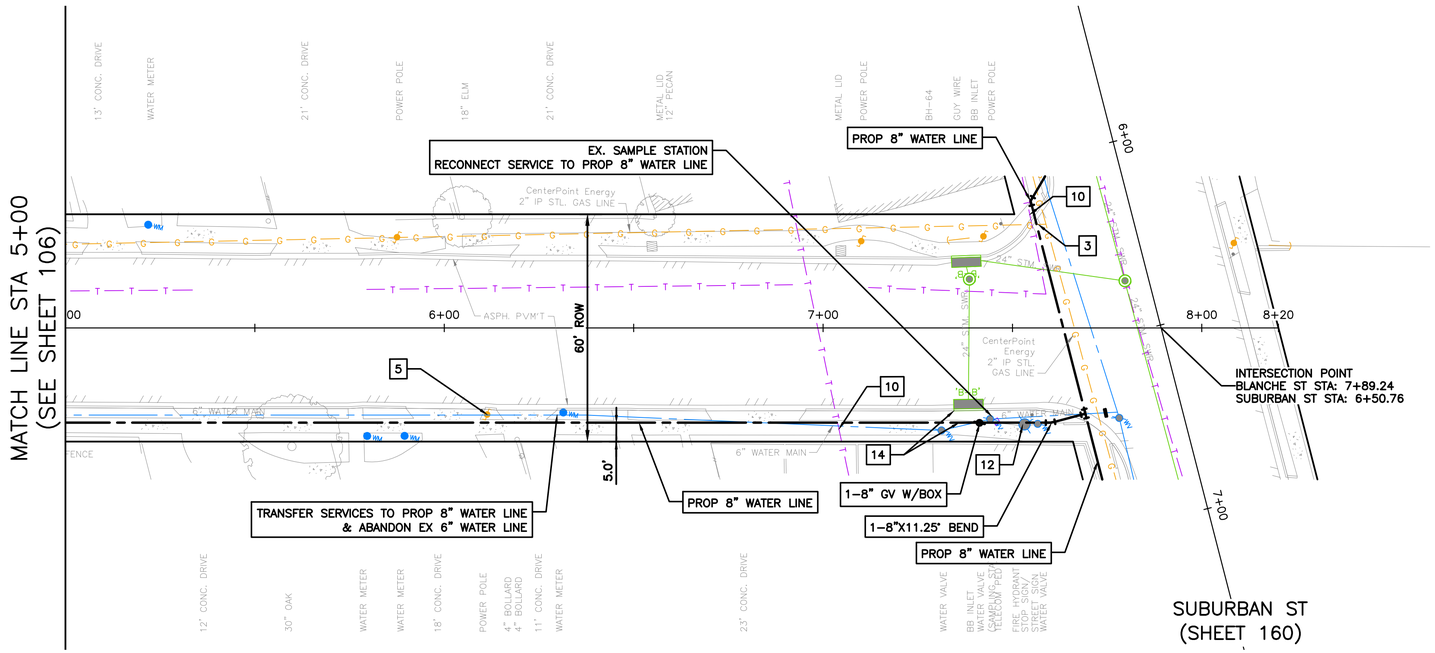
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 106 OF 275	

APP. | REVISION | NO. | DATE

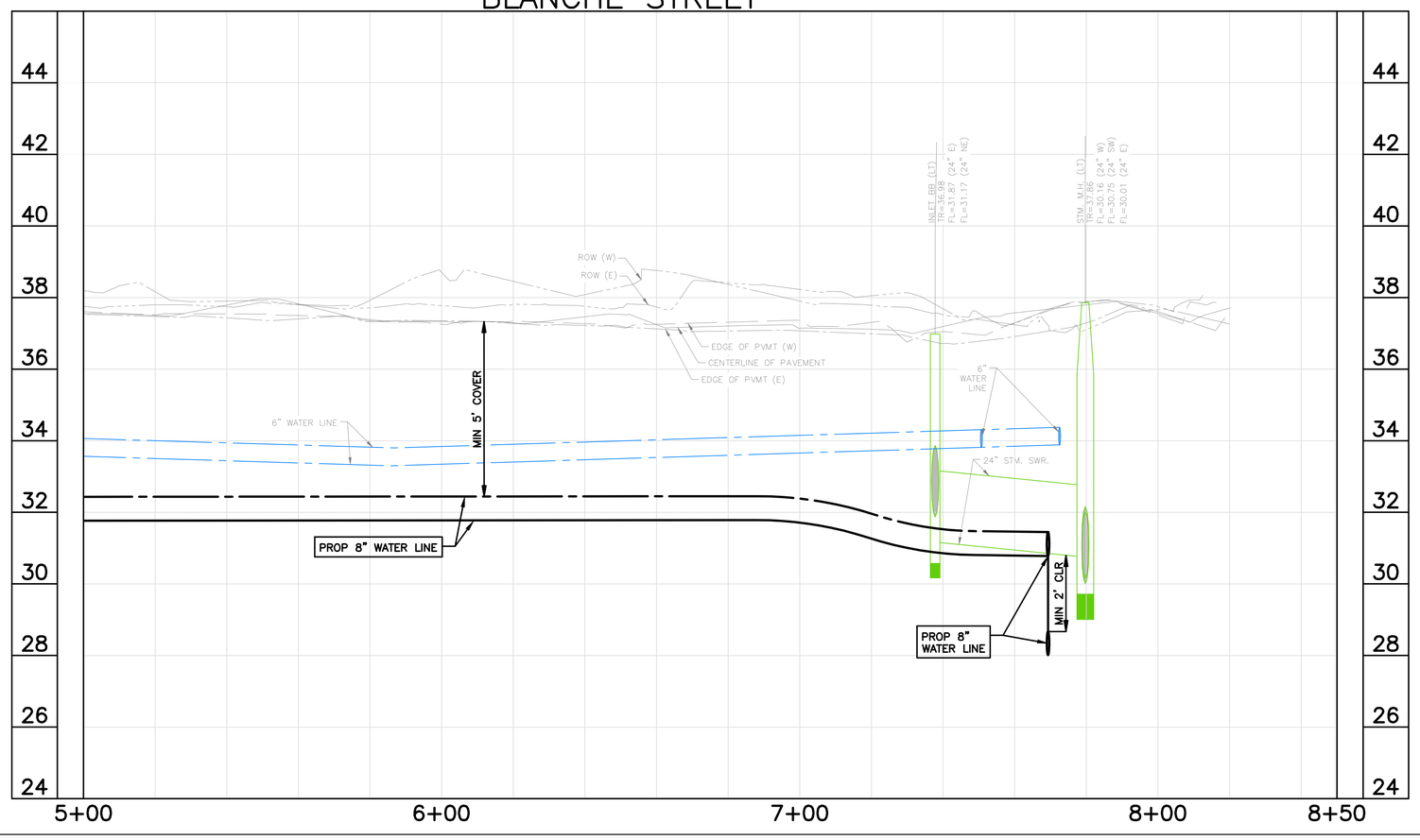
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–BLANCHE STREET.dwg

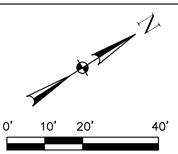
90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 1:42 PM



BLANCHE STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 17: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SUBURBAN ST. & LOCKWOOD DR.
STA. 8+86.58, 24.9' RT (SUBURBAN ST. BASELINE)
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

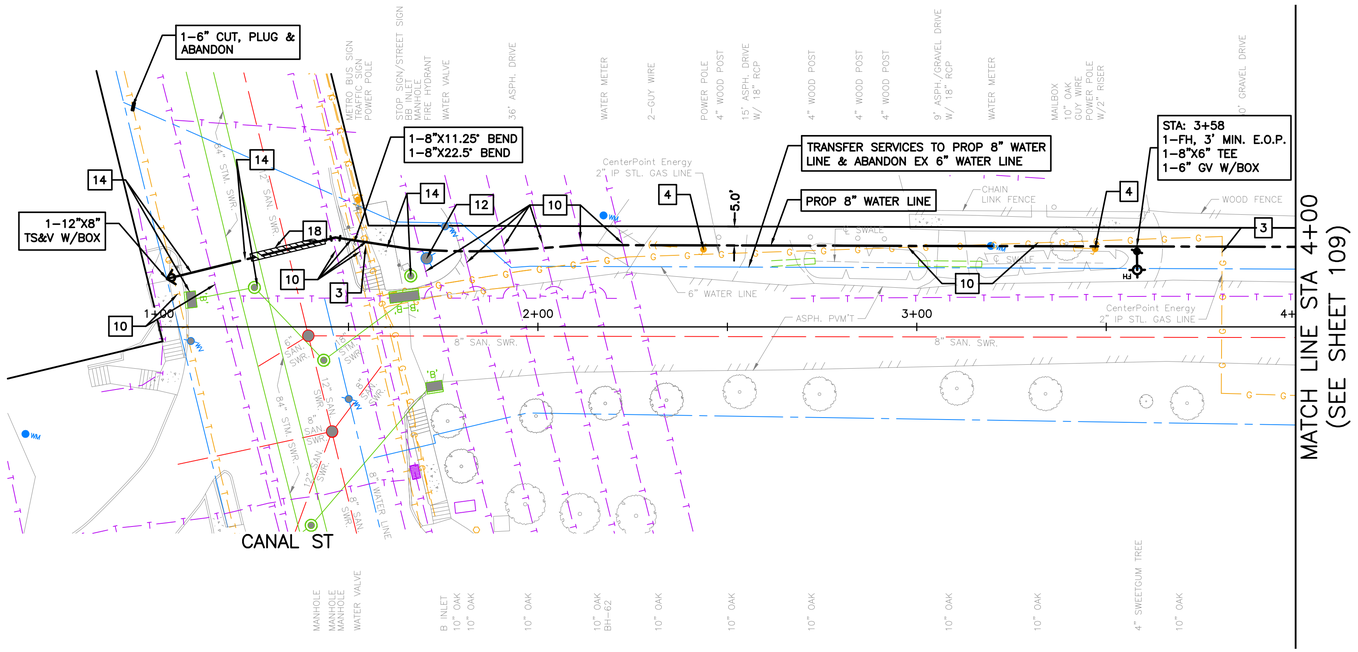
BLANCHE ST
PLAN & PROFILE
5+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 107 OF 275	

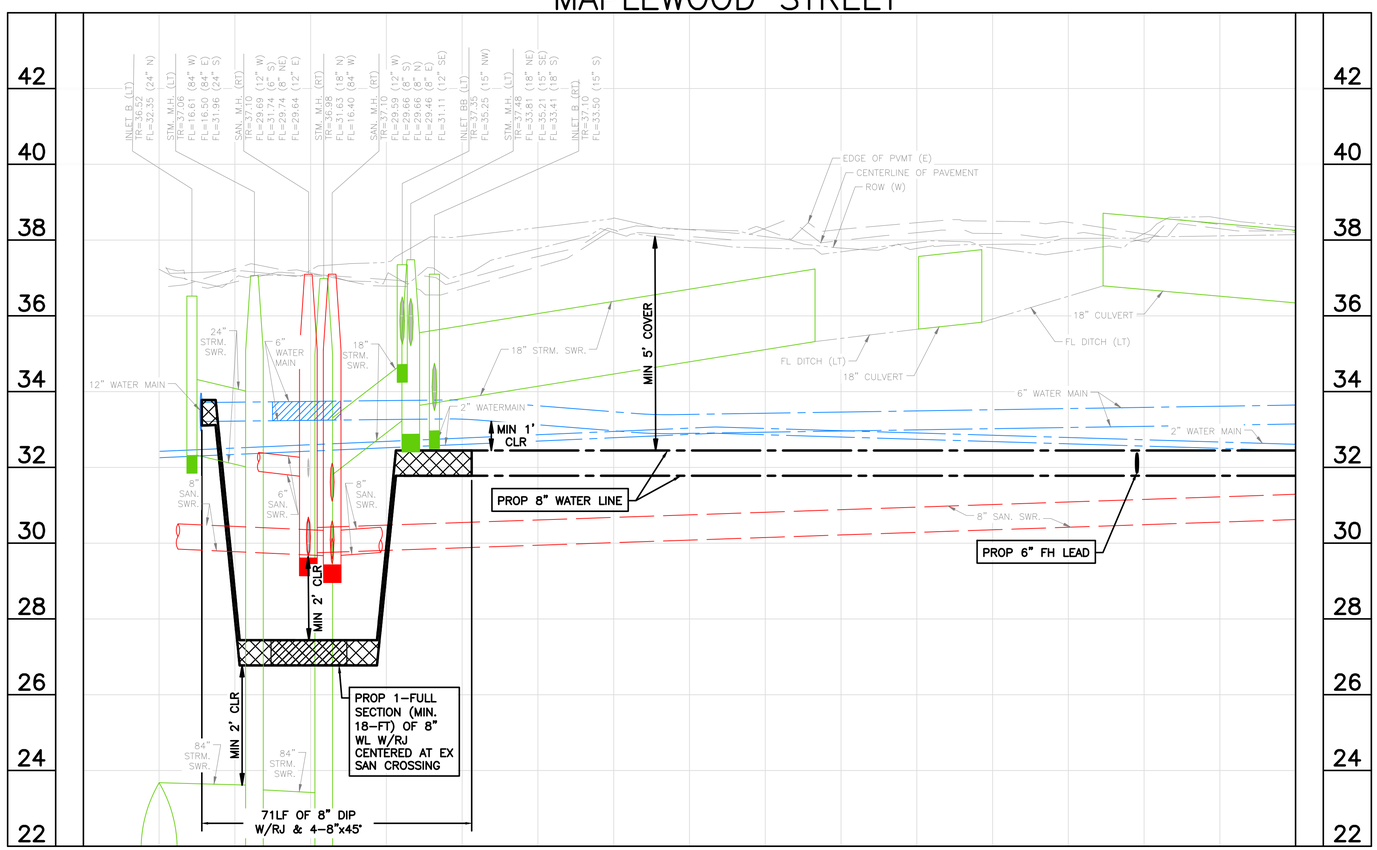
APP. | REVISION | NO. | DATE

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-BLANCHE STREET.dwg

90% SUBMITTAL



MAPLEWOOD STREET



0' 10' 20' 40'

SCALE: 1" = 20'

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TBM 12: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SCHROEDER ST. & MAPLEWOOD ST. STA. 9+58.90, 41.97'RT (SCHROEDER ST. BASELINE) ELEV.=39.02'

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

MAPLEWOOD ST
PLAN & PROFILE
1+00 TO 4+00

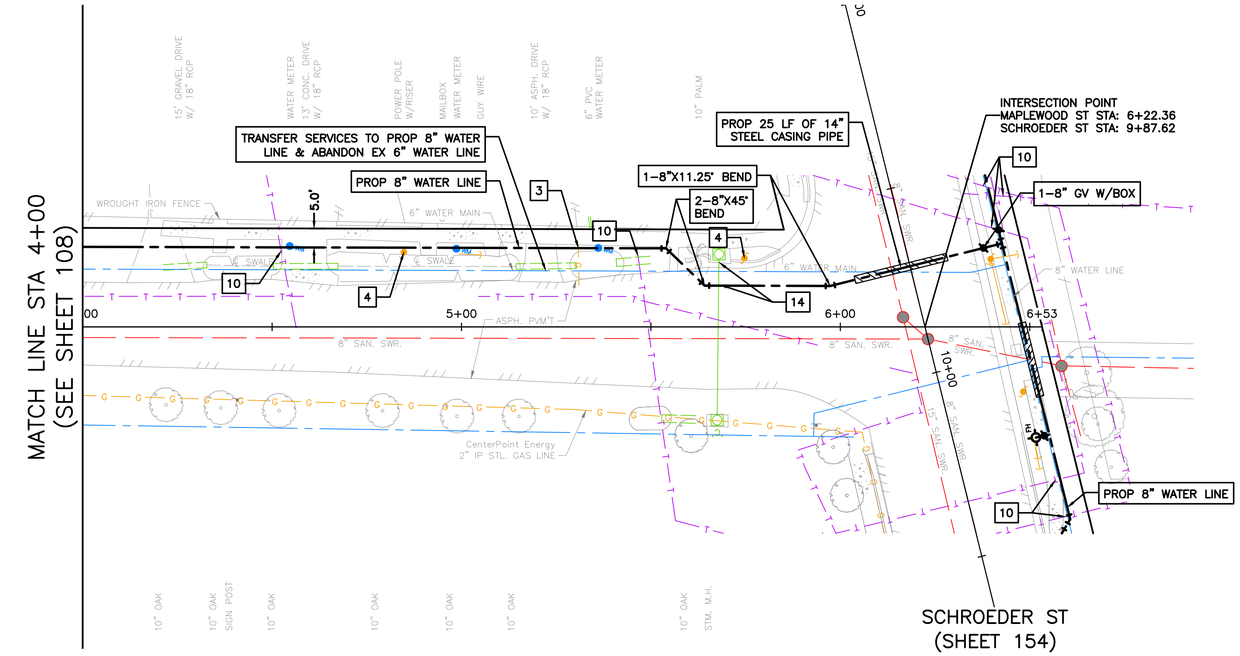
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 108 OF 275	

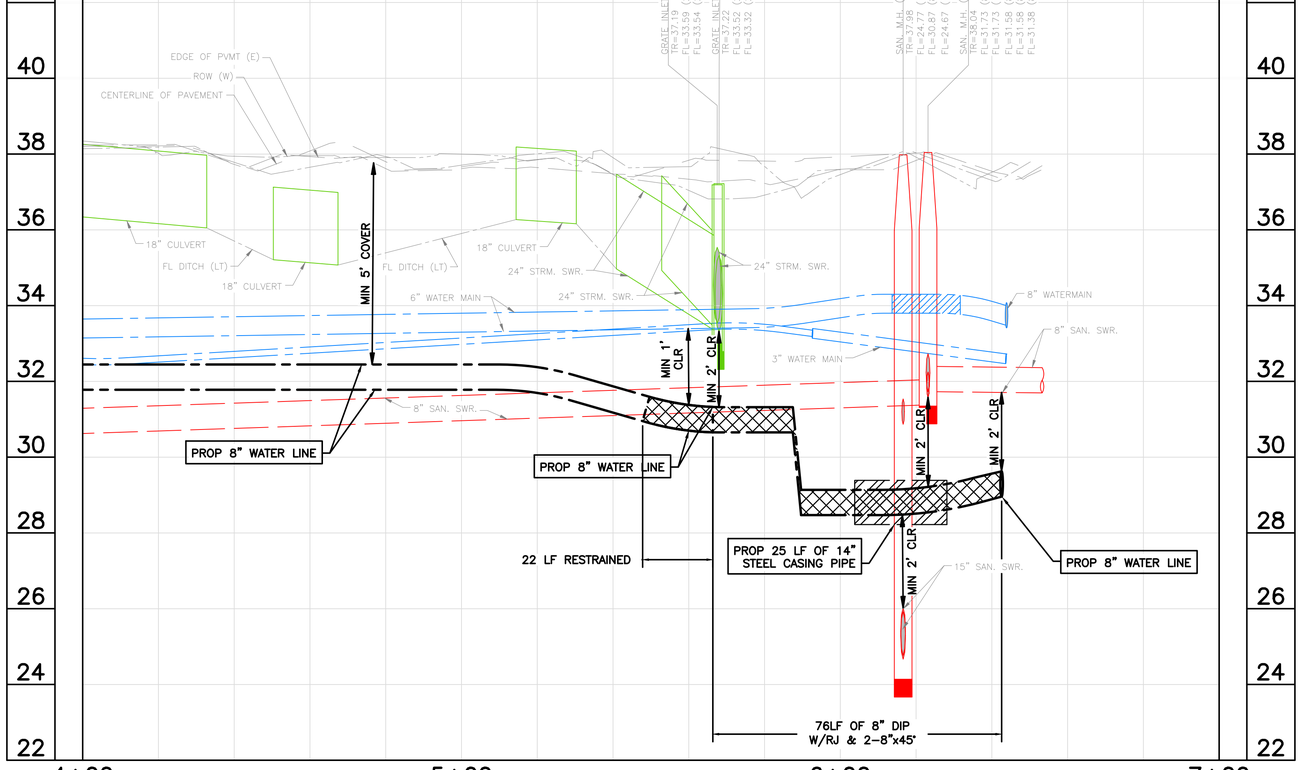
NO.	DATE	REVISION	APP.

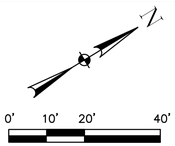
90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 1:25 PM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-MAPLEWOOD STREET.dwg







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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

MAPLEWOOD ST
PLAN & PROFILE
4+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 109 OF 275	

APP. | REVISION | NO. | DATE

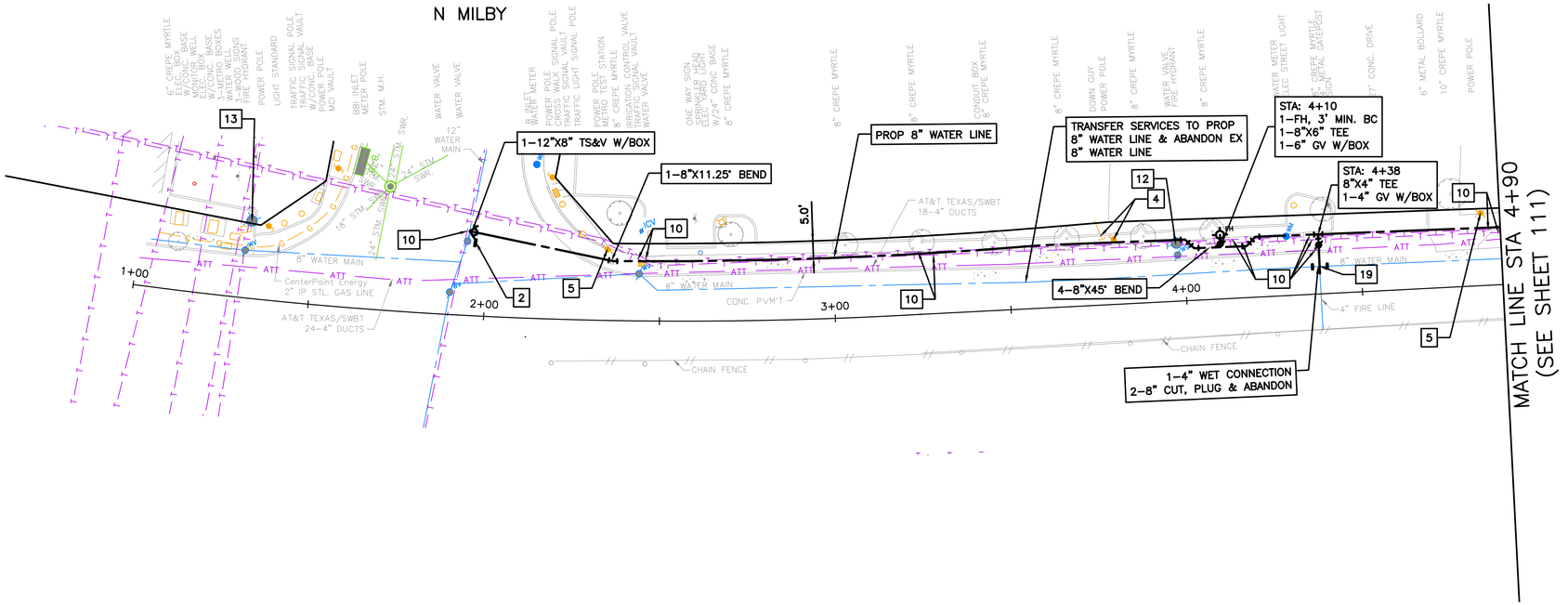
90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 1:25 PM

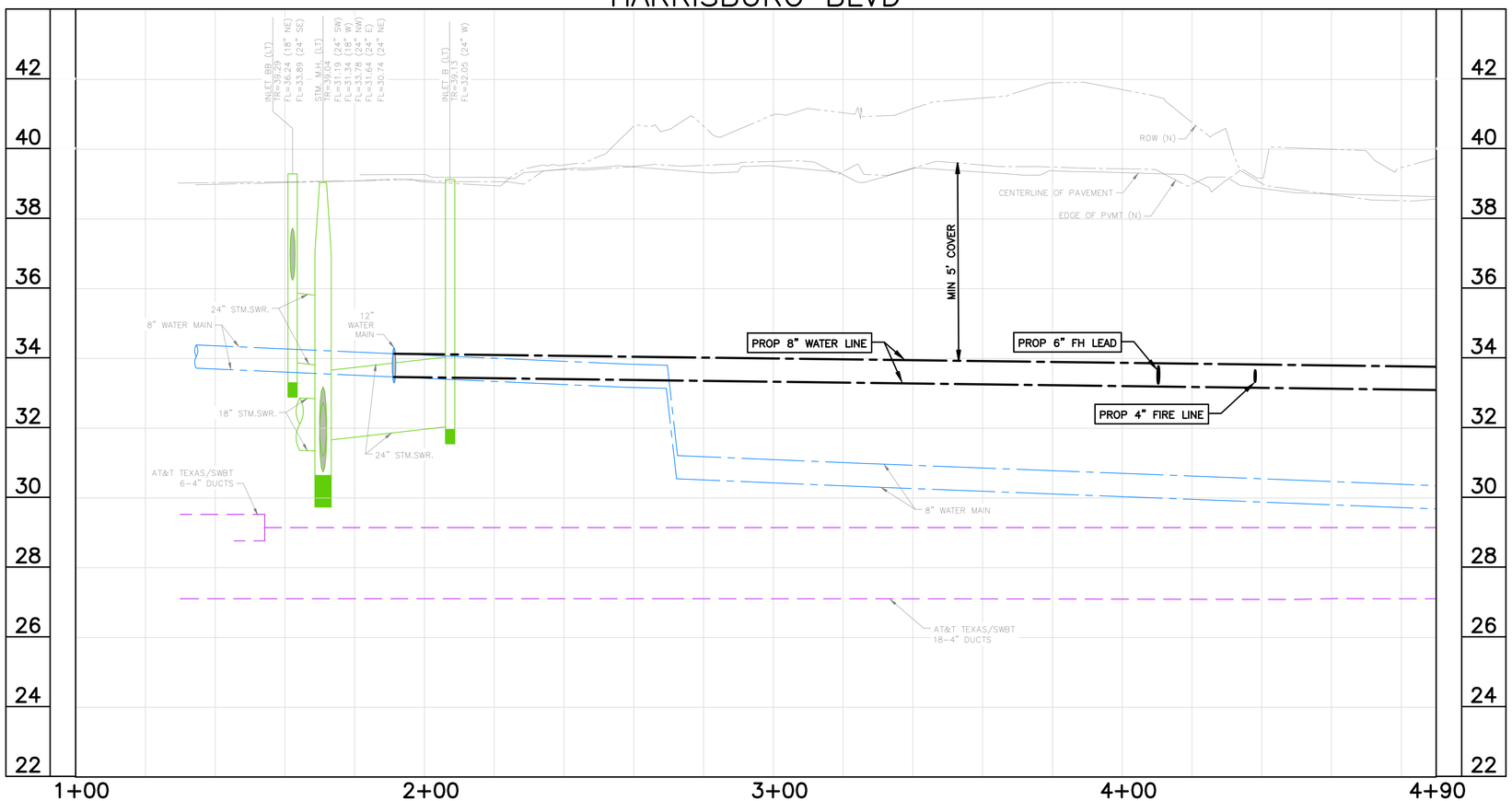
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-MAPLEWOOD STREET.dwg

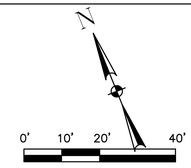
PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 12:08 PM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HARRISBURG STREET.dwg



HARRISBURG BLVD





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TBM 1: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. AND MILBY ST.
STA 1+42.47, 32.9' RT (GARROW ST. BASELINE)
ELEV.=40.94

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DATE: 08/15/2025
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

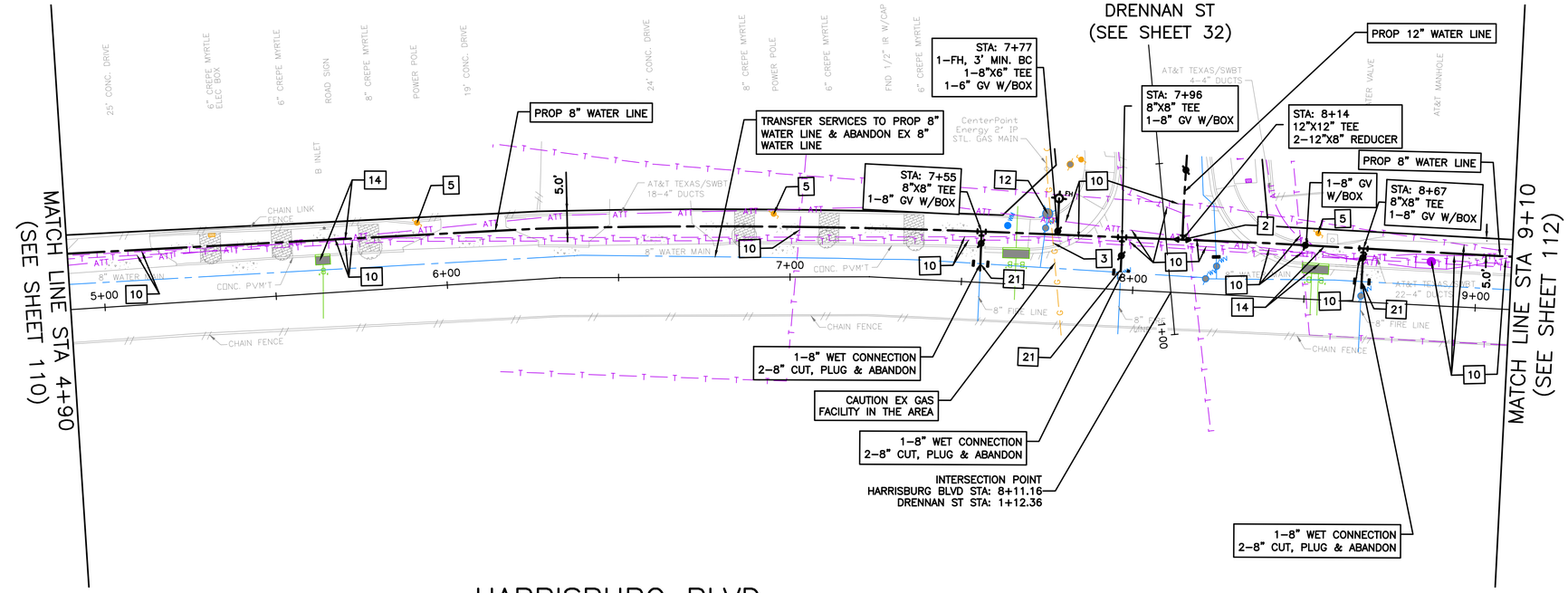
HARRISBURG BLVD
PLAN & PROFILE
1+00 TO 4+90

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 110 OF 275	

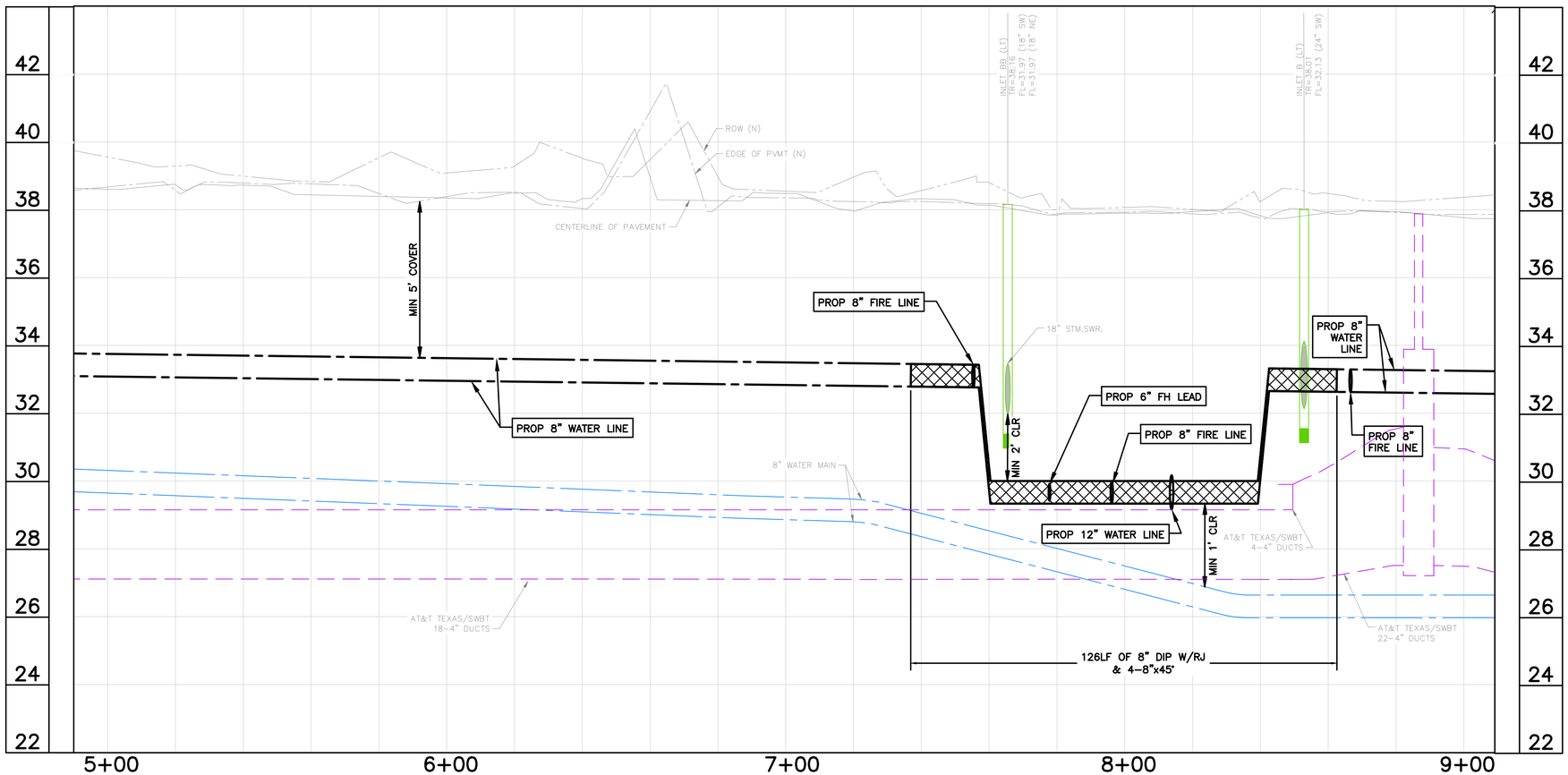
NO.	DATE	REVISION	APP.

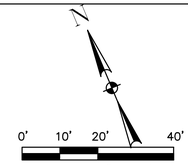
90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 12:08 PM



HARRISBURG BLVD





SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 1: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. AND MILBY ST. STA 1+42.47, 32.9' RT (GARROW ST. BASELINE) ELEV.=40.94

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HARRISBURG BLVD
PLAN & PROFILE
4+90 TO 9+10

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 111 OF 275	

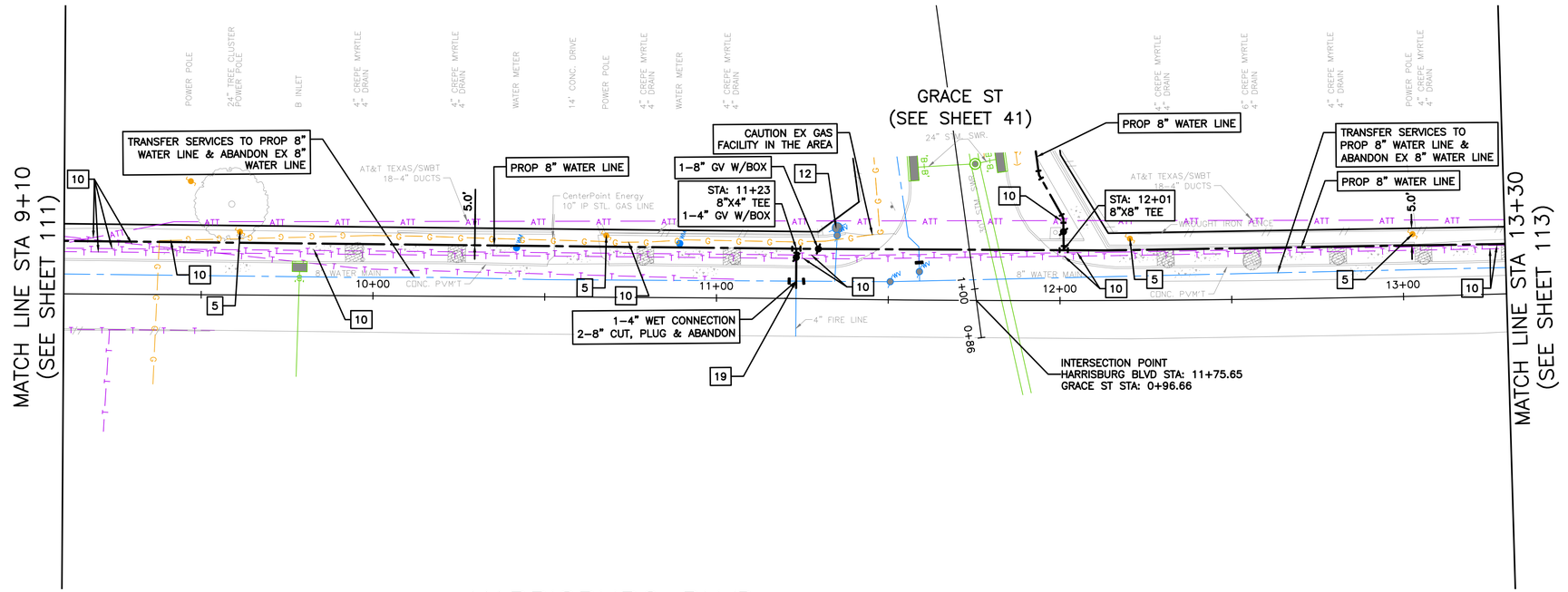
NO.	DATE	REVISION	APP.

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–HARRISBURG STREET.dwg

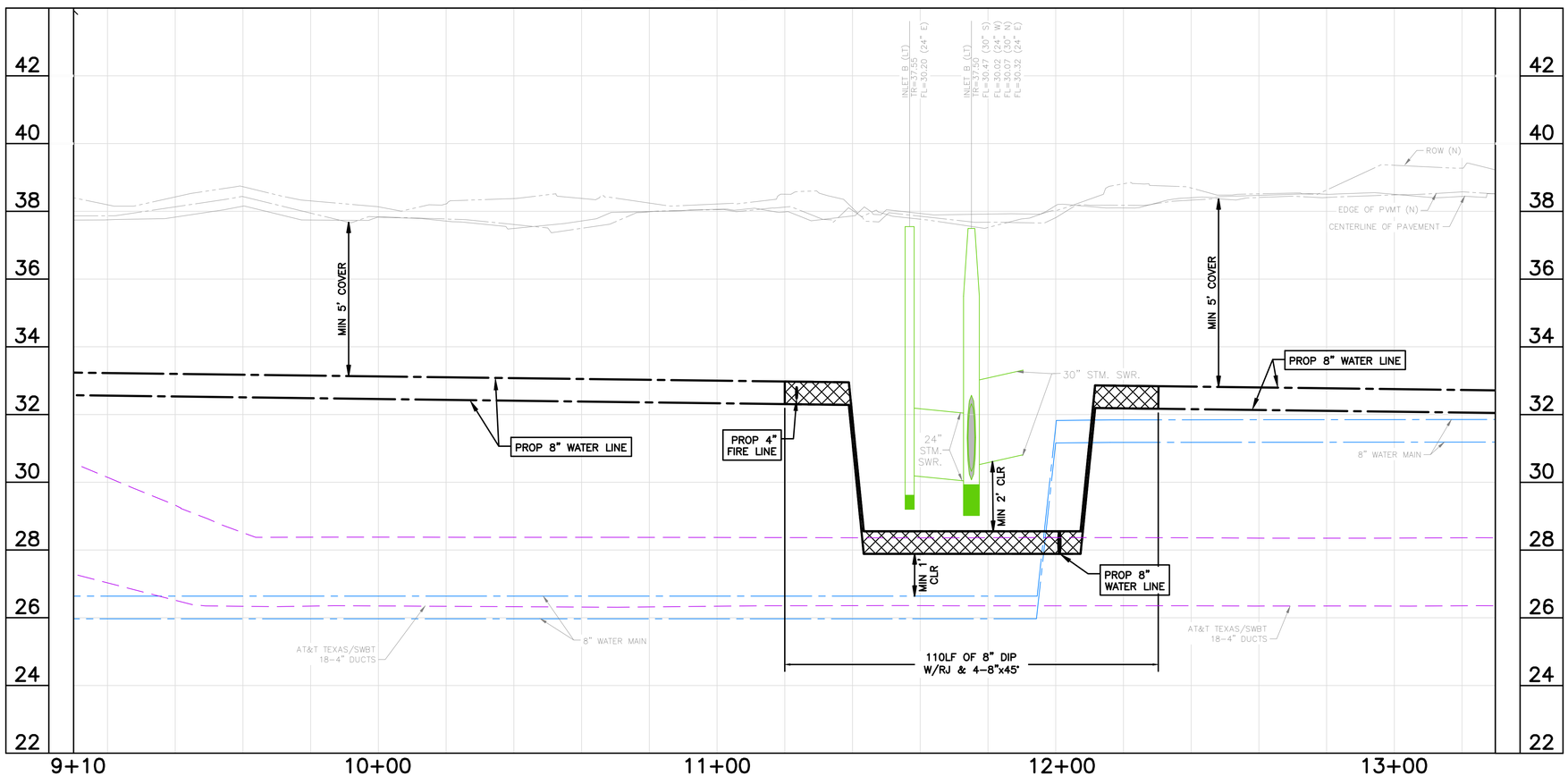
90% SUBMITTAL

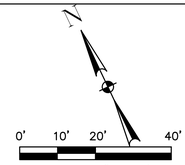
PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 12:09 PM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HARRISBURG STREET.dwg



HARRISBURG BLVD





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. & GRACE ST.
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

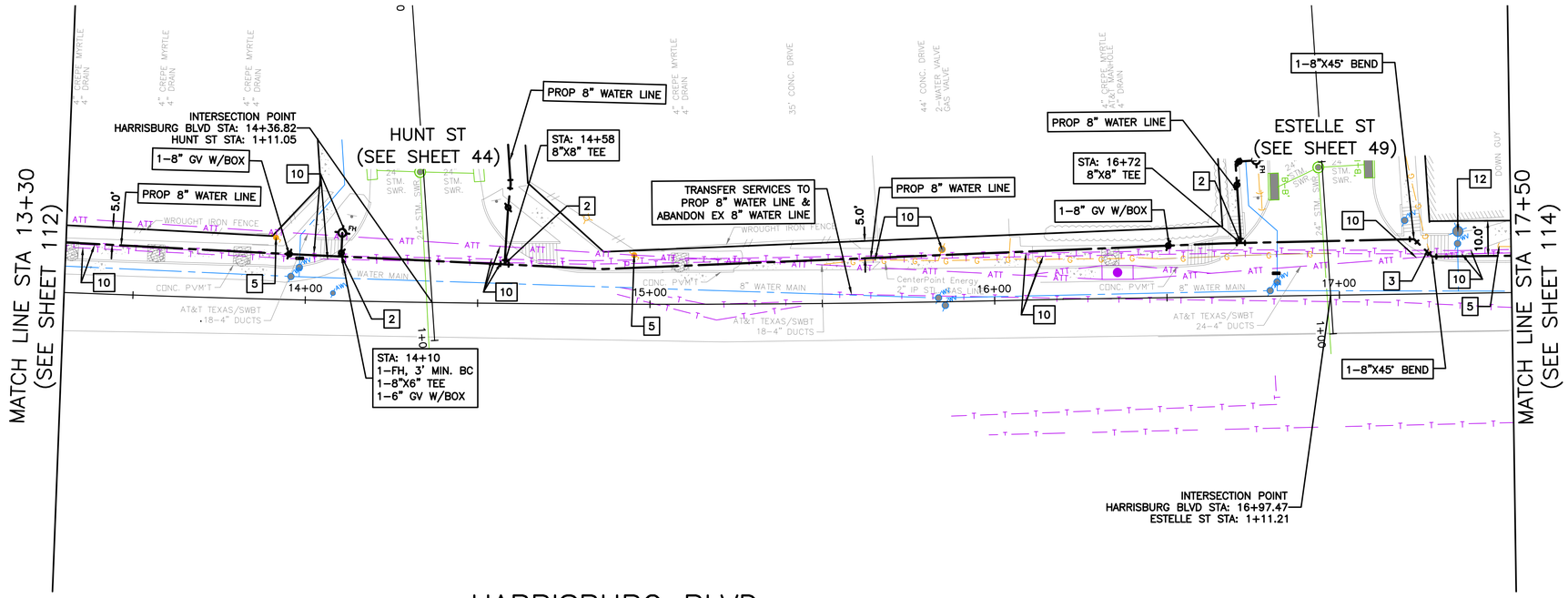
SECONDWARD WATERLINE REPLACEMENT

HARRISBURG BLVD
PLAN & PROFILE
9+10 TO 13+30

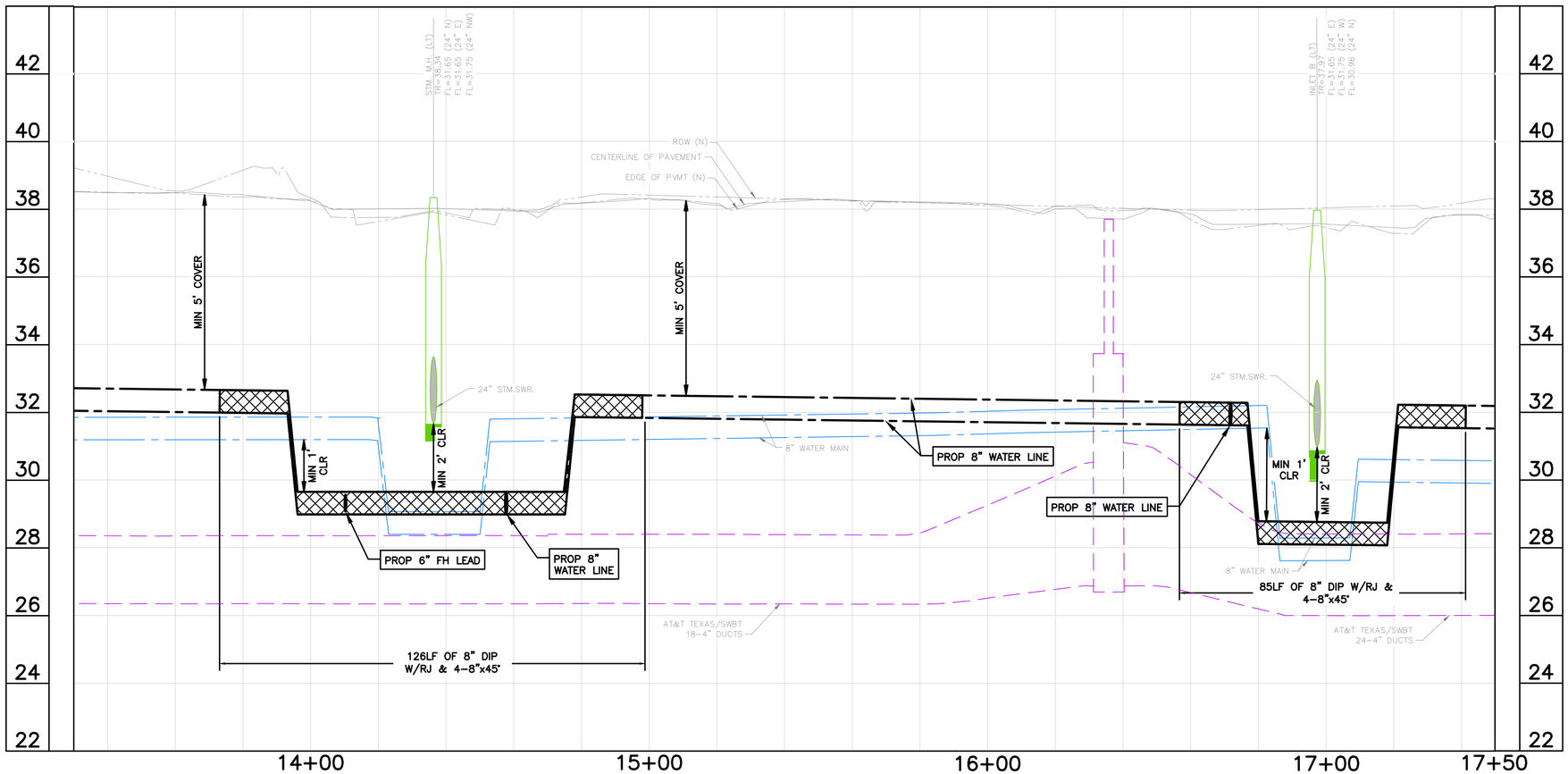
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 112 OF 275	

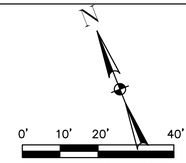
NO.	DATE	REVISION	APP.

90% SUBMITTAL



HARRISBURG BLVD





SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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VERIFICATION OF PRIVATE UTILITY LINES

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800.414.1045

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FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HARRISBURG BLVD
PLAN & PROFILE
13+30 TO 17+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 113 OF 275	

APP. | REVISION | NO. | DATE

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 12:10 PM
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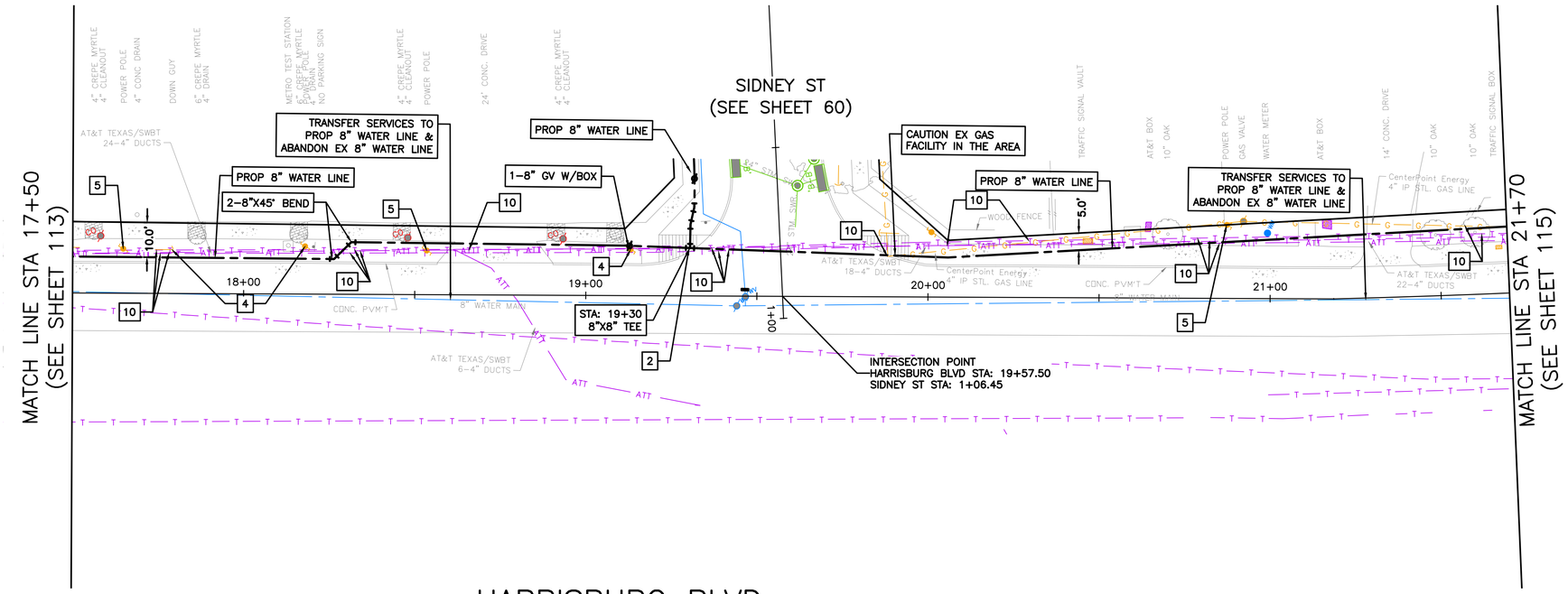
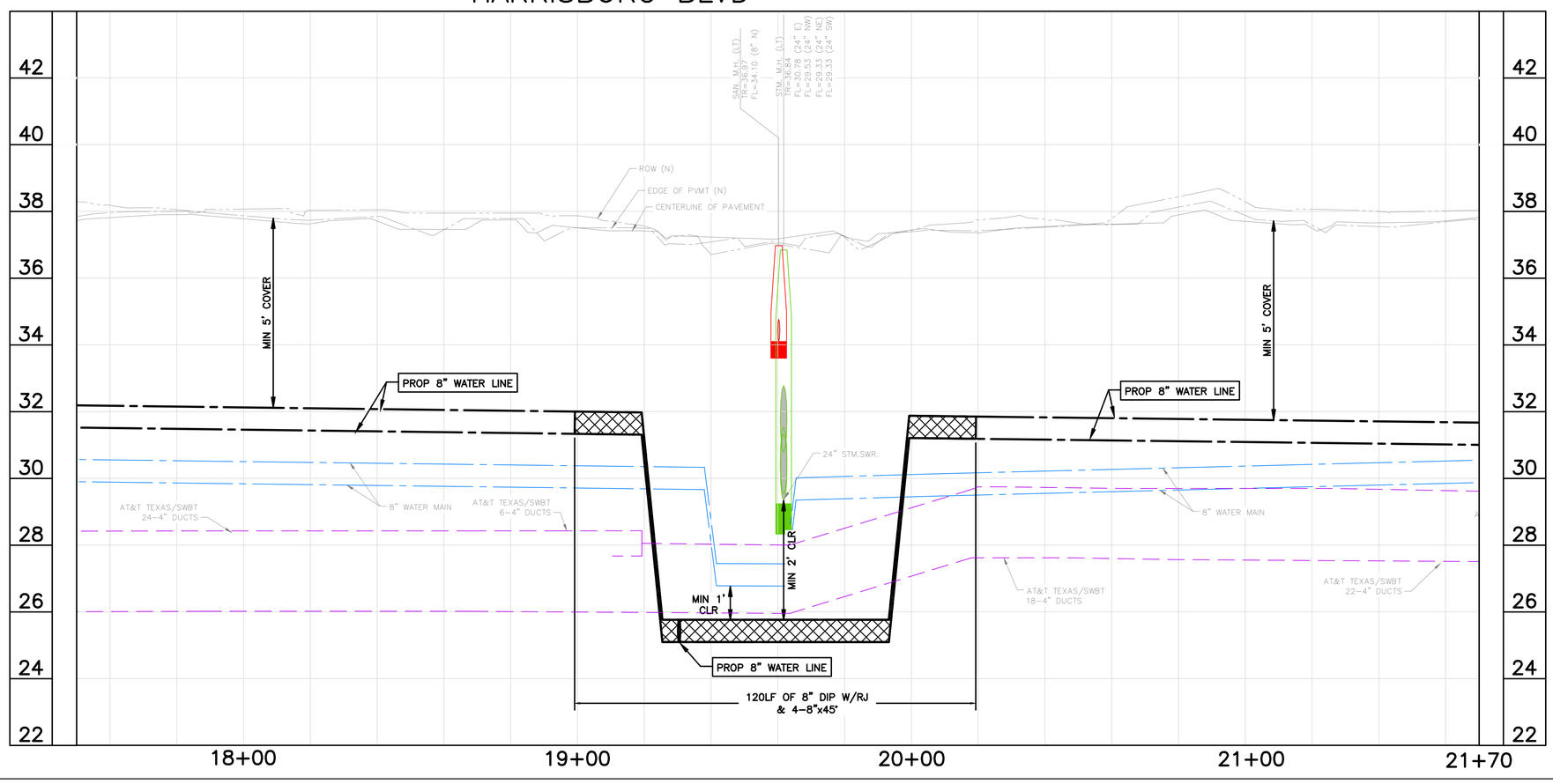
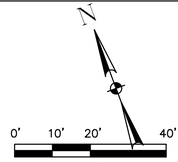
90% SUBMITTAL







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW ST. IN FRONT OF ADDRESS 450B. STA. 19+93.37, 19.1' RT (GARROW ST. BASELINE) ELEV.=39.11'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ARCHIVAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HARRISBURG BLVD
PLAN & PROFILE
17+50 TO 21+70

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 114 OF 275	

APP. | REVISION | NO. | DATE

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90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 12:11 PM

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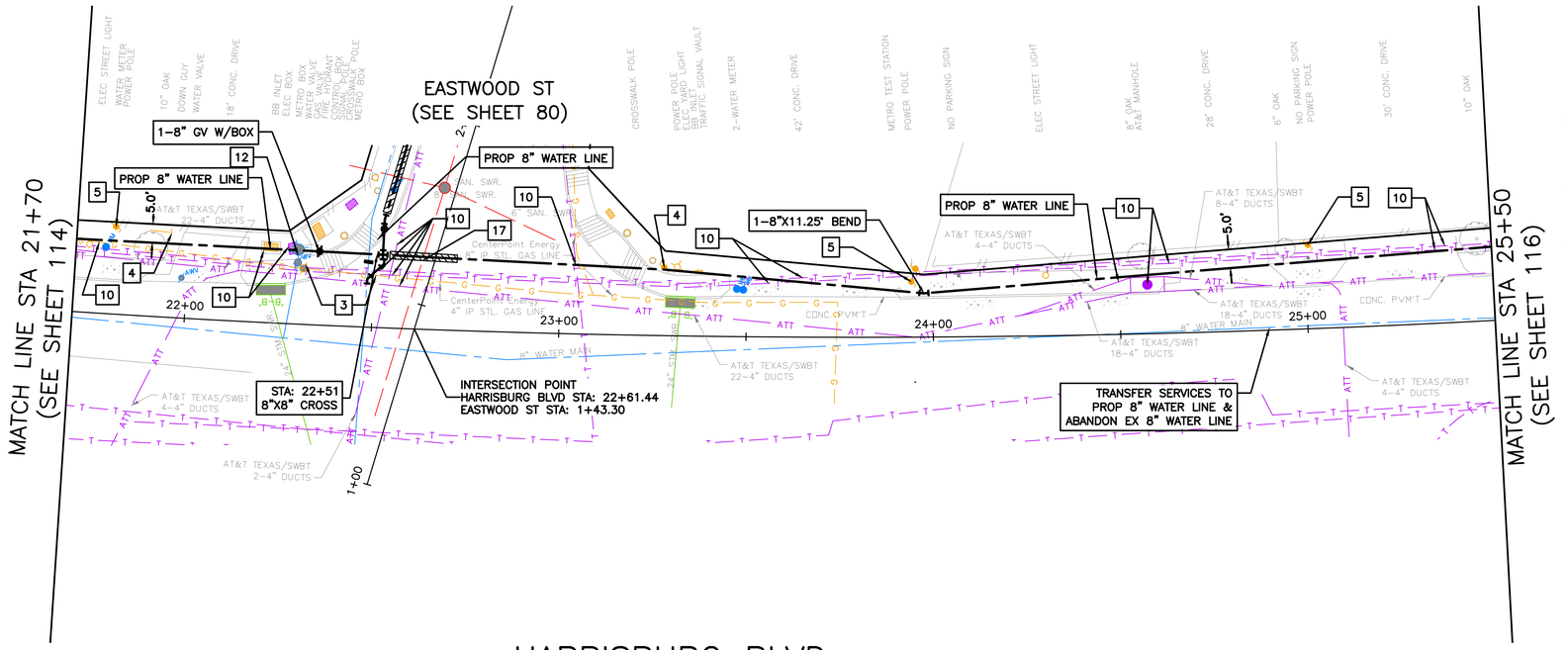
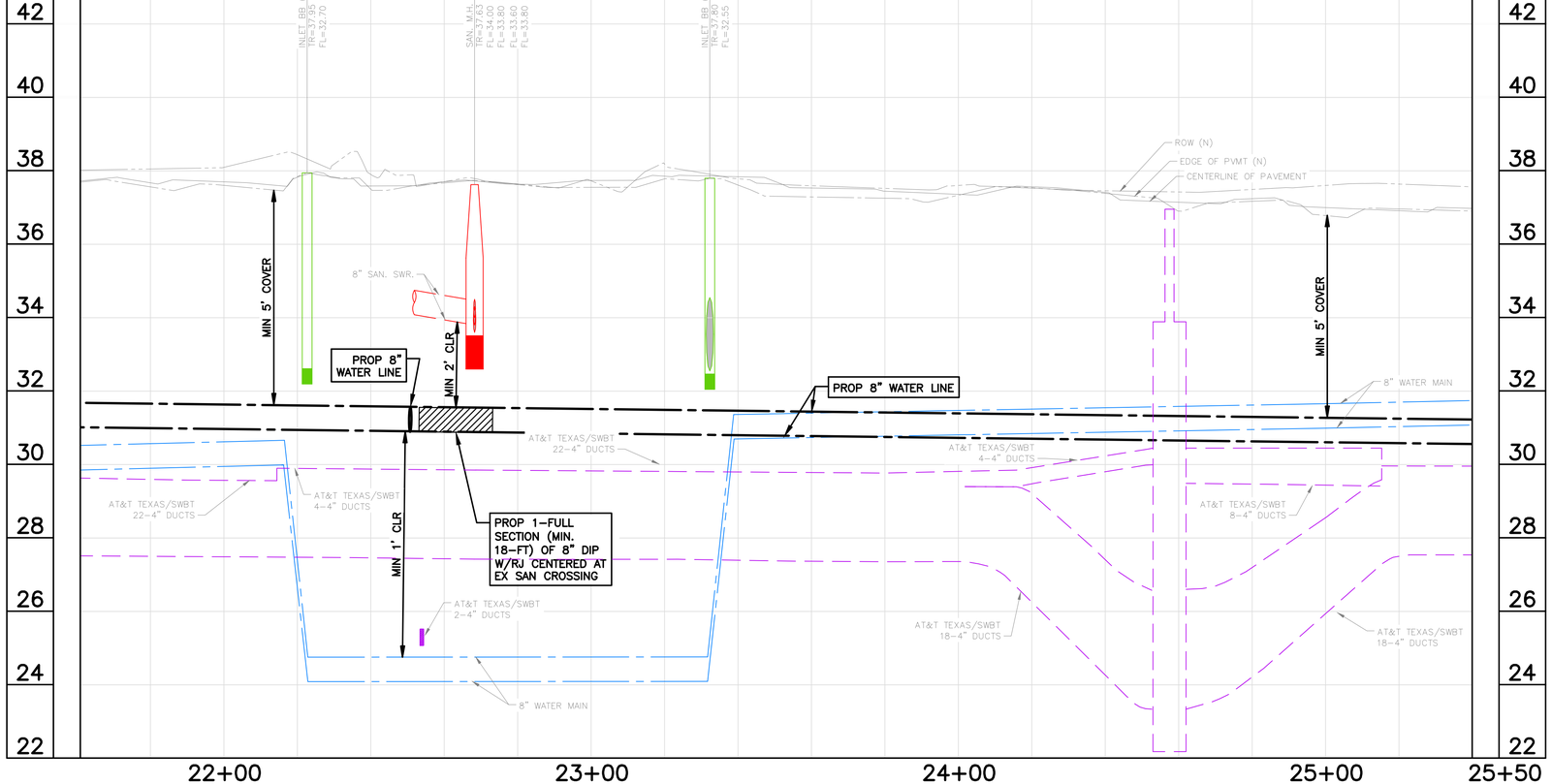
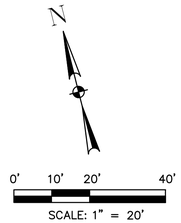


HARRISBURG BLVD





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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HARRISBURG BLVD
PLAN & PROFILE
21+70 TO 25+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 115 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL

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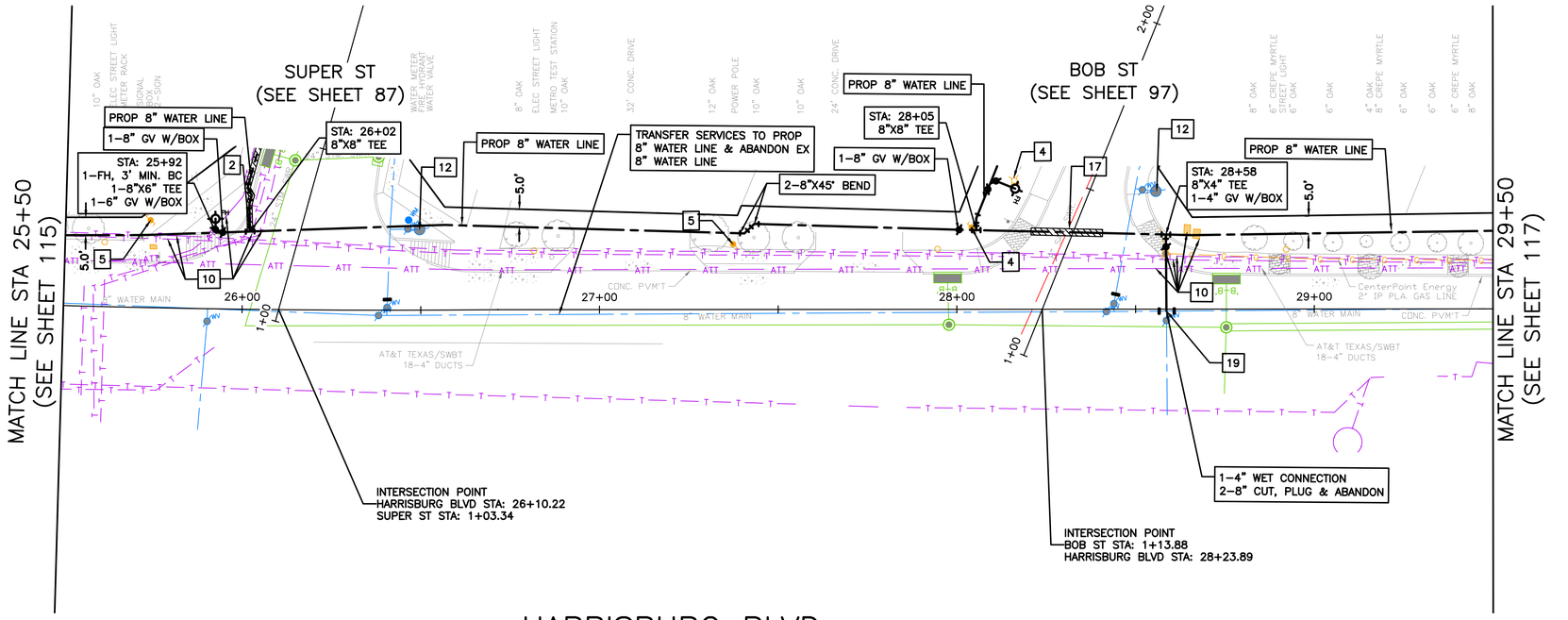

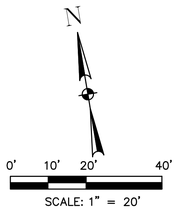

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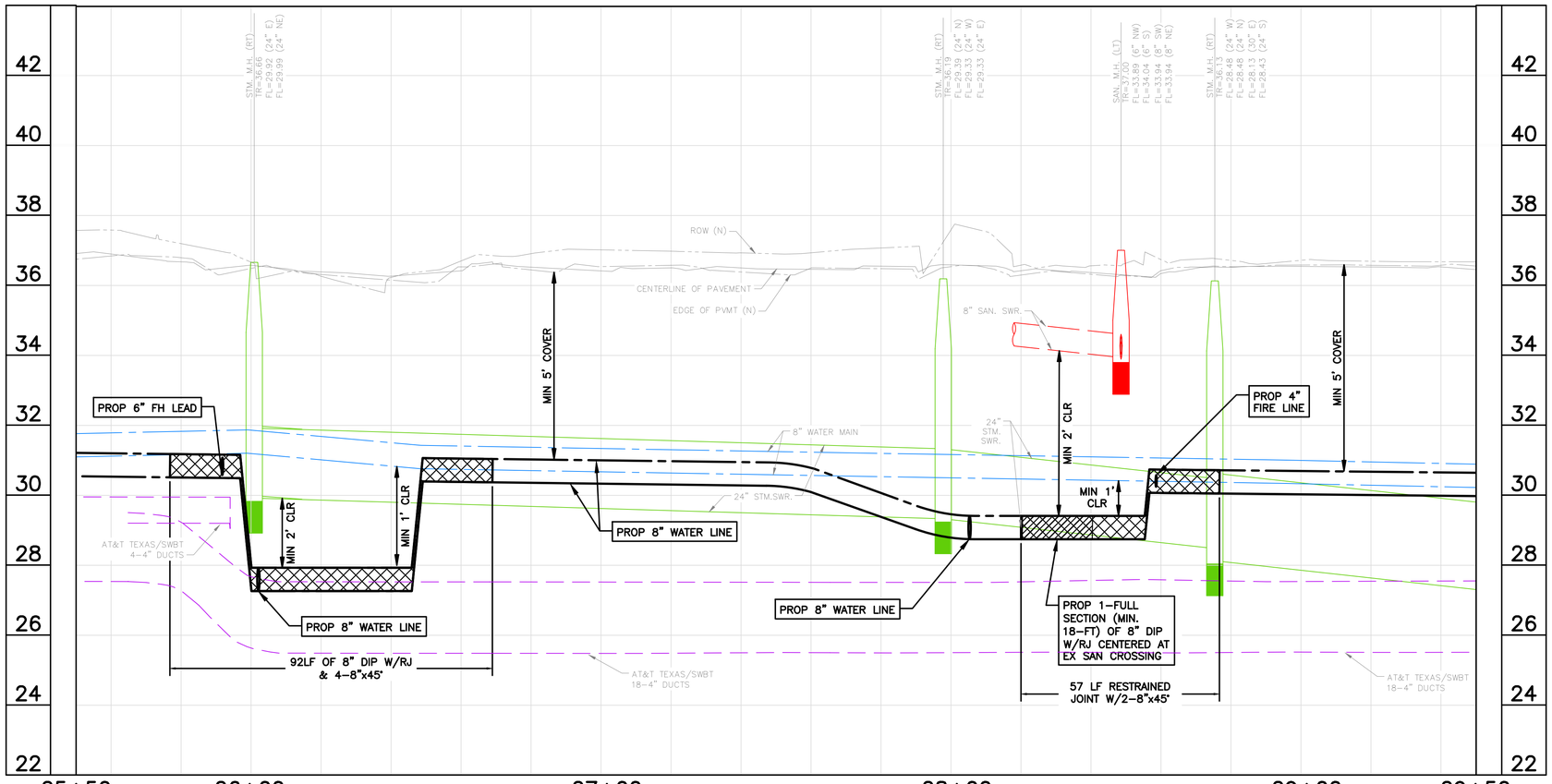
TBM 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF GARROW ST. & HAGERMAN ST. STA. 29+51.19, 23.0' RT (GARROW ST. BASELINE) ELEV.=38.52'

HARRISBURG BLVD



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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

HARRISBURG BLVD
PLAN & PROFILE
25+50 TO 29+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 116 OF 275	

APP. | REVISION | NO. | DATE

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HARRISBURG STREET.dwg

90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 12:12 PM

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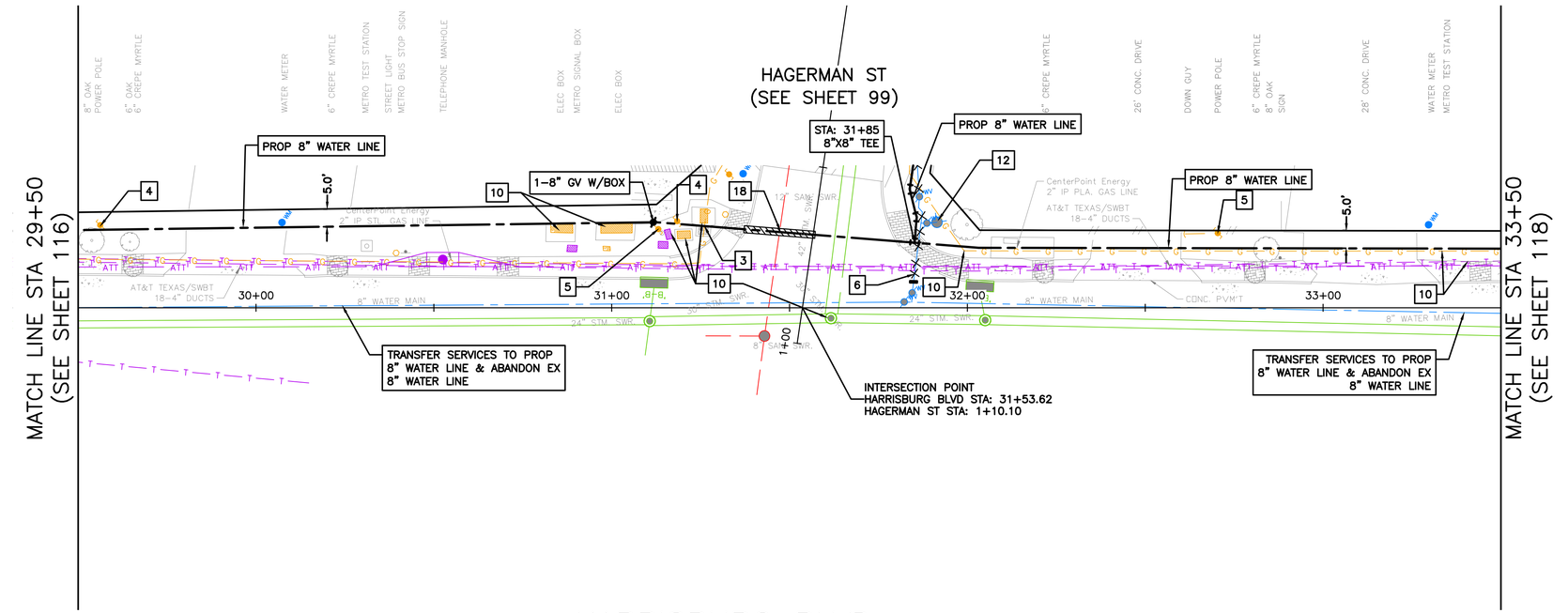

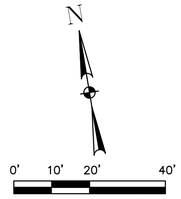

NOTES:

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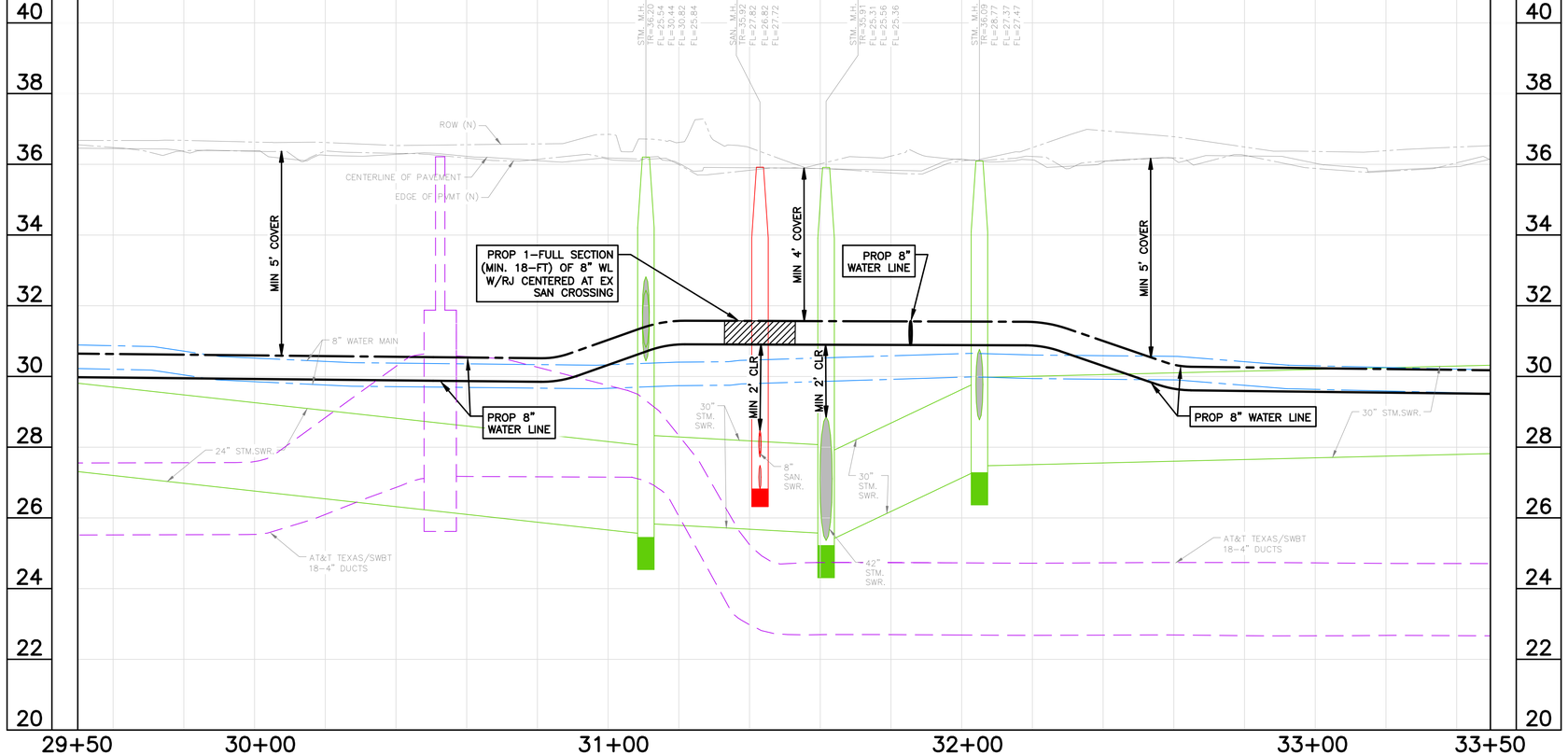
BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF GARROW ST. & HAGERMAN ST. STA. 29+51.19, 23.0' RT (GARROW ST. BASELINE) ELEV.=38.52'

HARRISBURG BLVD



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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

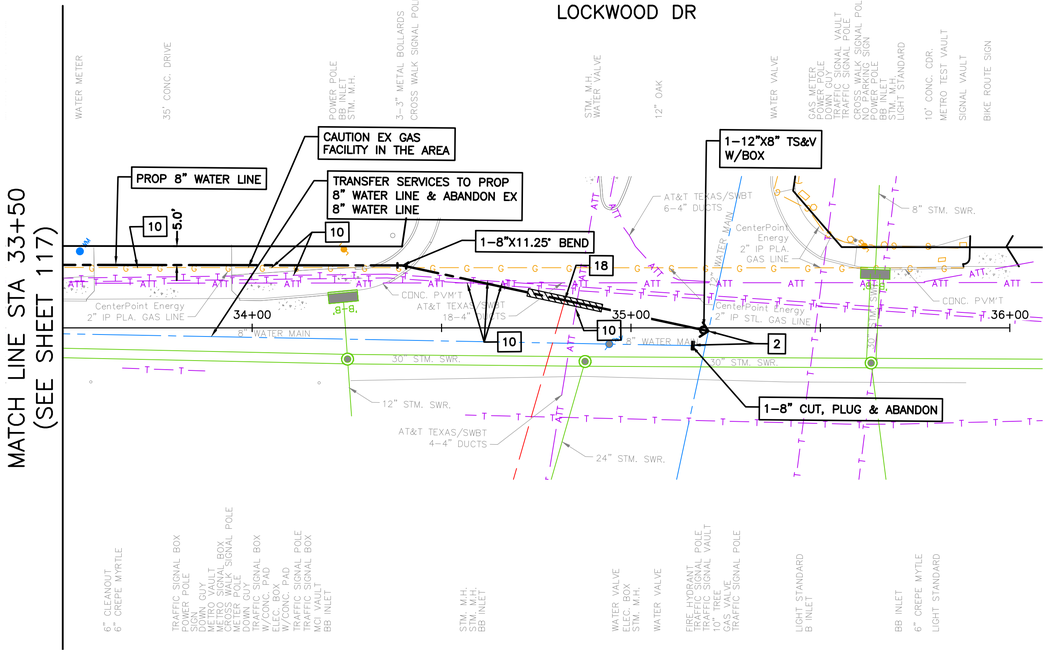
HARRISBURG BLVD
PLAN & PROFILE
29+50 TO 33+50

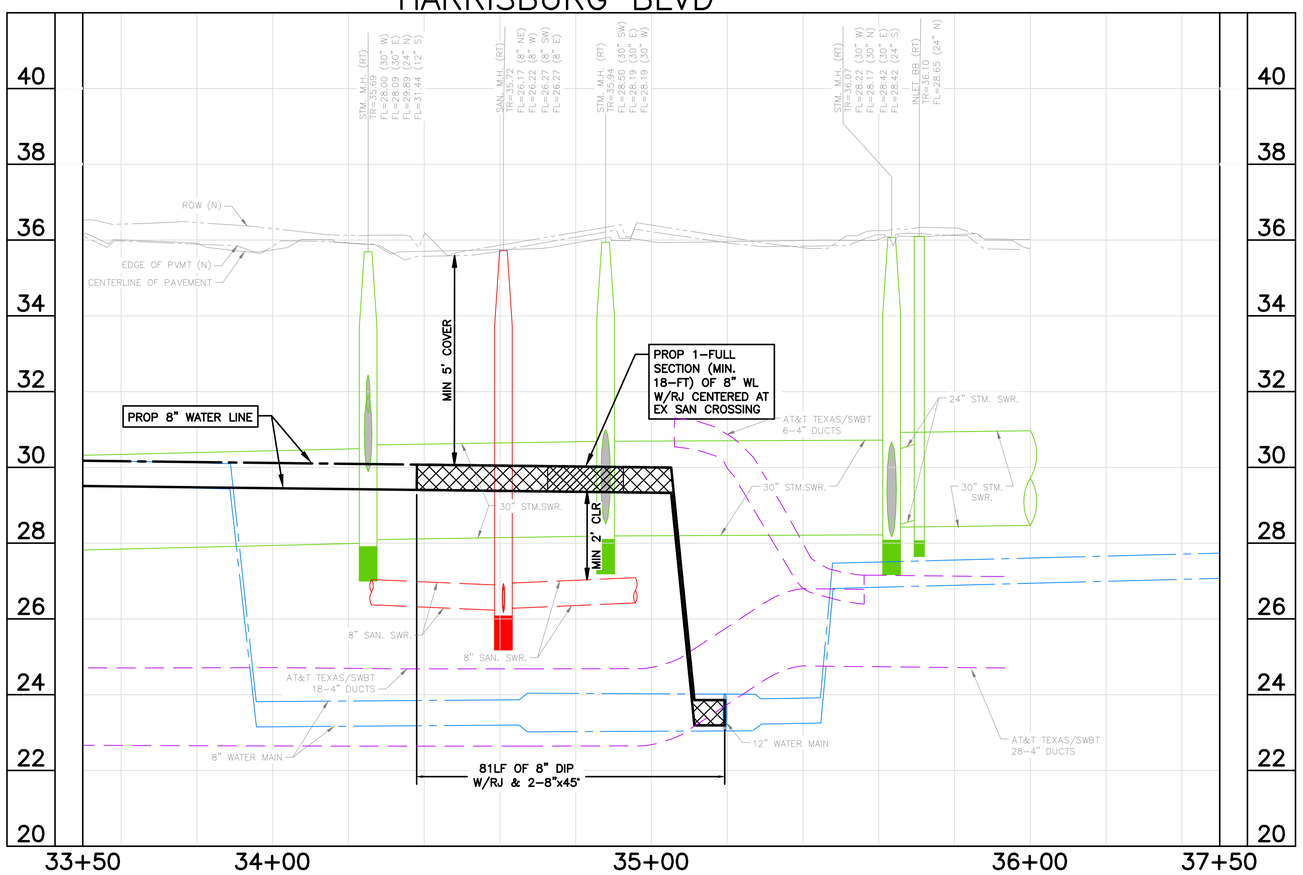
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 117 OF 275	

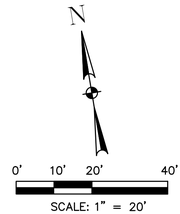
90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 12:13 PM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-HARRISBURG STREET.dwg







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF GARROW ST. & HAGERMAN ST. STA. 29+51.19, 23.0' RT (GARROW ST. BASELINE) ELEV.=38.52'

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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

Date

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

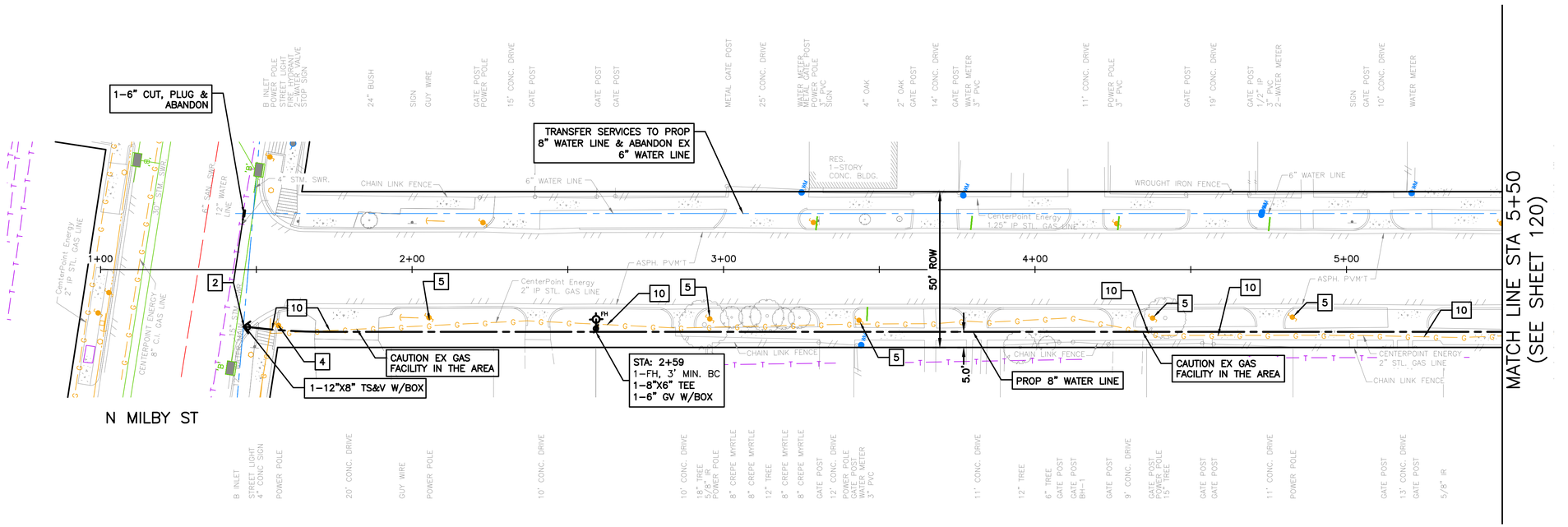
SECONDWARD WATERLINE REPLACEMENT

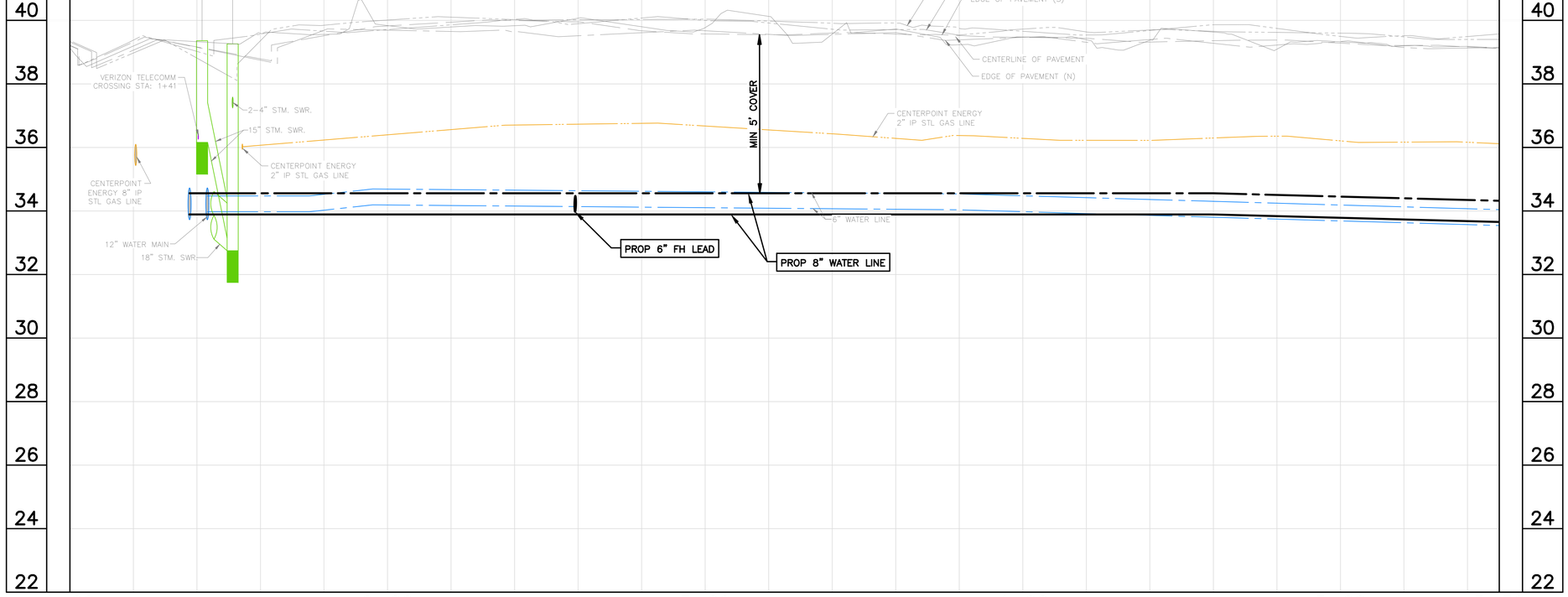
HARRISBURG BLVD
PLAN & PROFILE
33+50 TO END

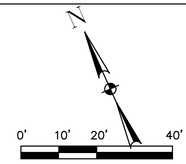
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 118 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL







SCALE: 1"=20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 1: SET 60D NAIL IN POWER POLE LOCATED AT THE SOUTHEAST CORNER OF GARROW STREET AND MILBY STREET. STA 1+42.47, 32.9' RT ELEV.=40.94

NOTICE:
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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.

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Date

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Signature valid for one year.

WOOLPERT
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11750 Katy Freeway, Suite 1260
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

WILMER ST
PLAN & PROFILE
1+00 TO 5+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 119 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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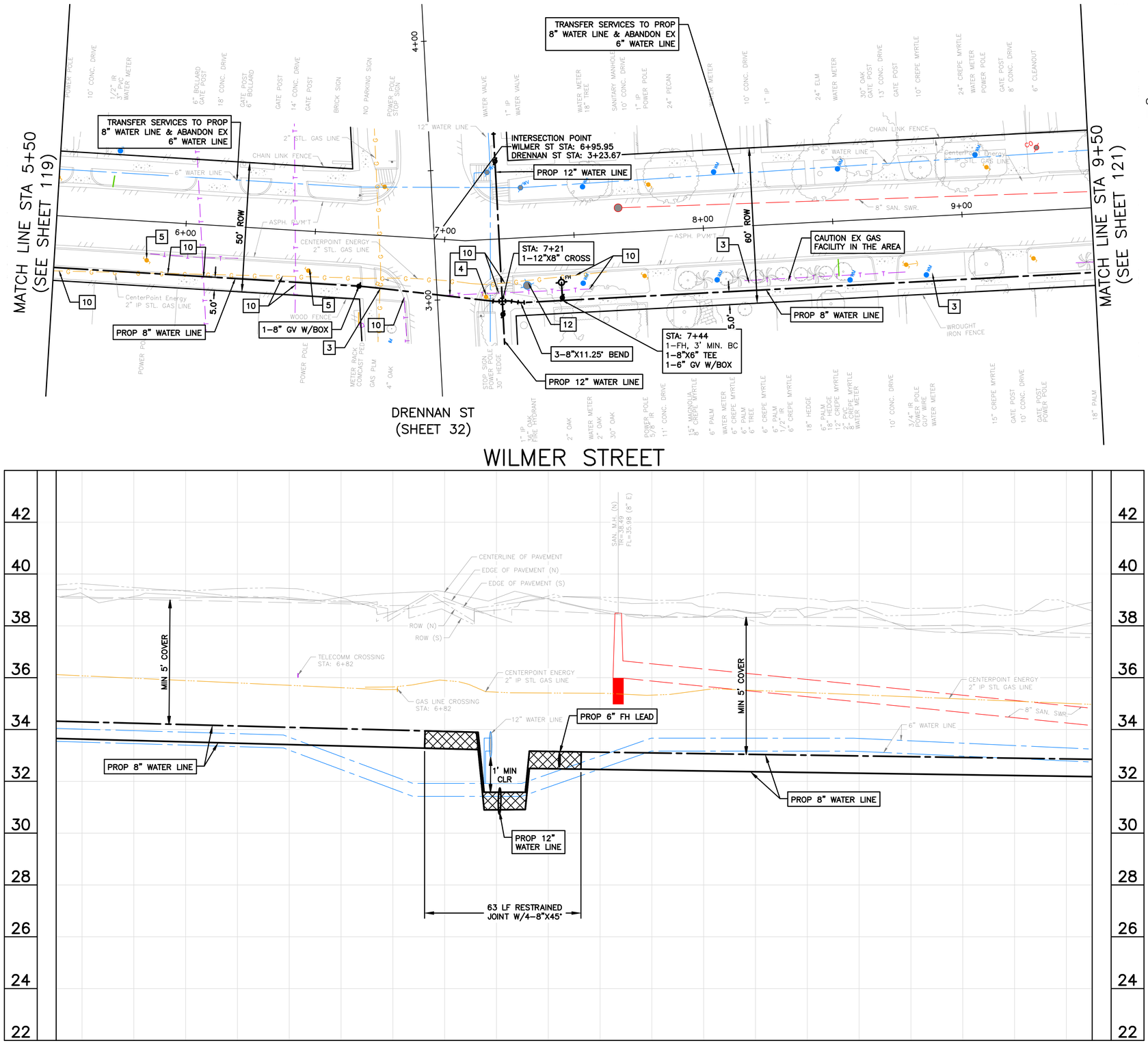
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–WILMER STREET.dwg



0' 10' 20' 40'

SCALE: 1"=20'

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

WILMER ST
PLAN & PROFILE
5+50 TO 9+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 120 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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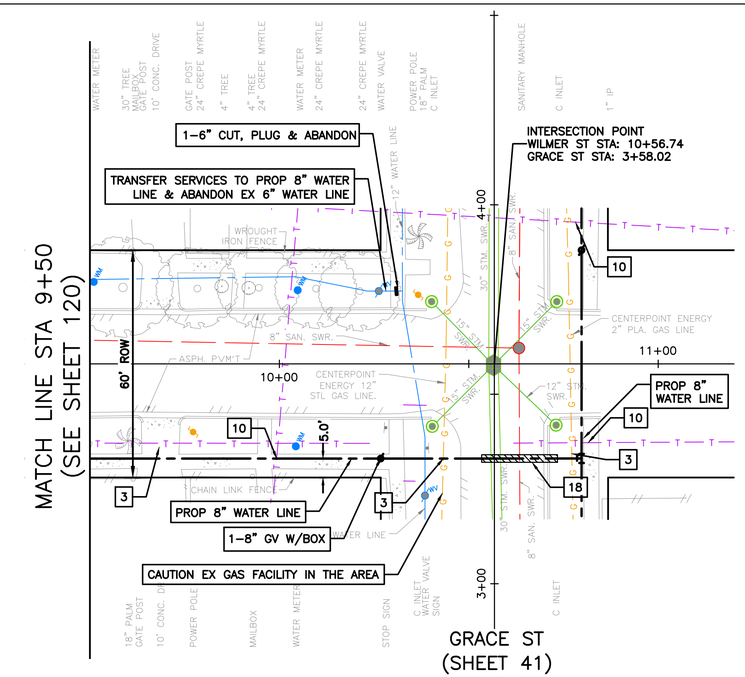
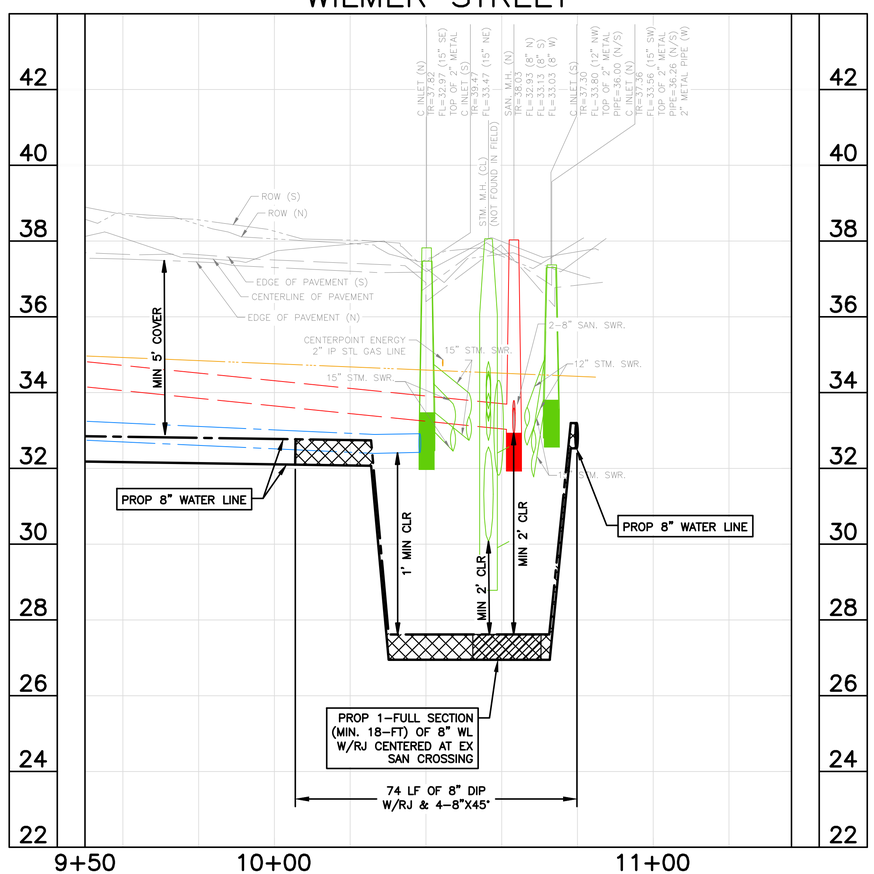
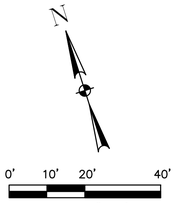


WILMER STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. & GRACE ST.
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'

NOTICE:
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

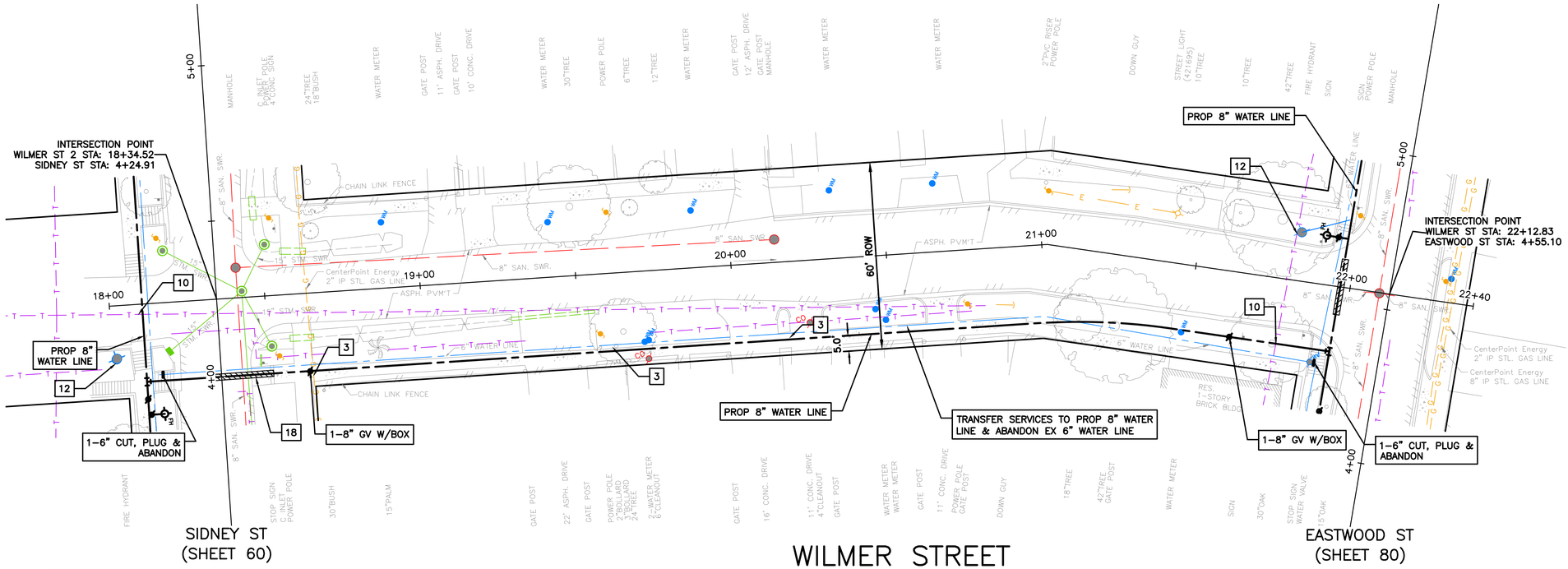
WILMER ST
PLAN & PROFILE
9+50 TO 11+00

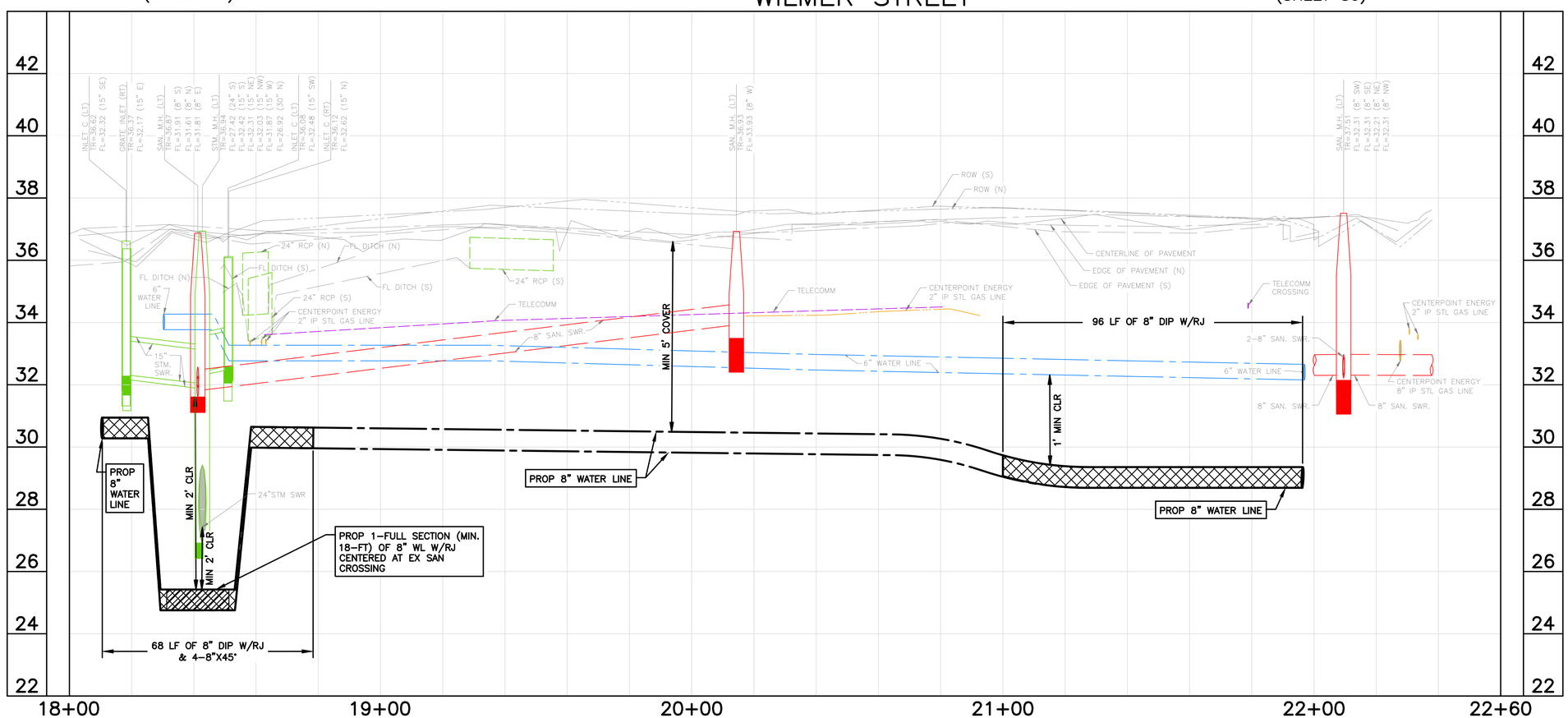
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 121 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 12:15 PM
PLOT STYLE: COH.ctb
FILE PATH: Q:\2019\395062\Drawings\SHEETS\PP–WILMER STREET.dwg

90% SUBMITTAL





0' 10' 20' 40'

SCALE: 1"=20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW ST. IN FRONT OF ADDRESS 450B. STA. 19+93.37, 19.1' RT (GARROW ST. BASELINE) ELEV.=39.11'

NOTICE:
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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

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Signature valid for six months.

Date

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

WOOLPERT
ARCHITECTURE | ENGINEERING | INFORMATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

WILMER ST
PLAN & PROFILE
18+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 122 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 12:16 PM
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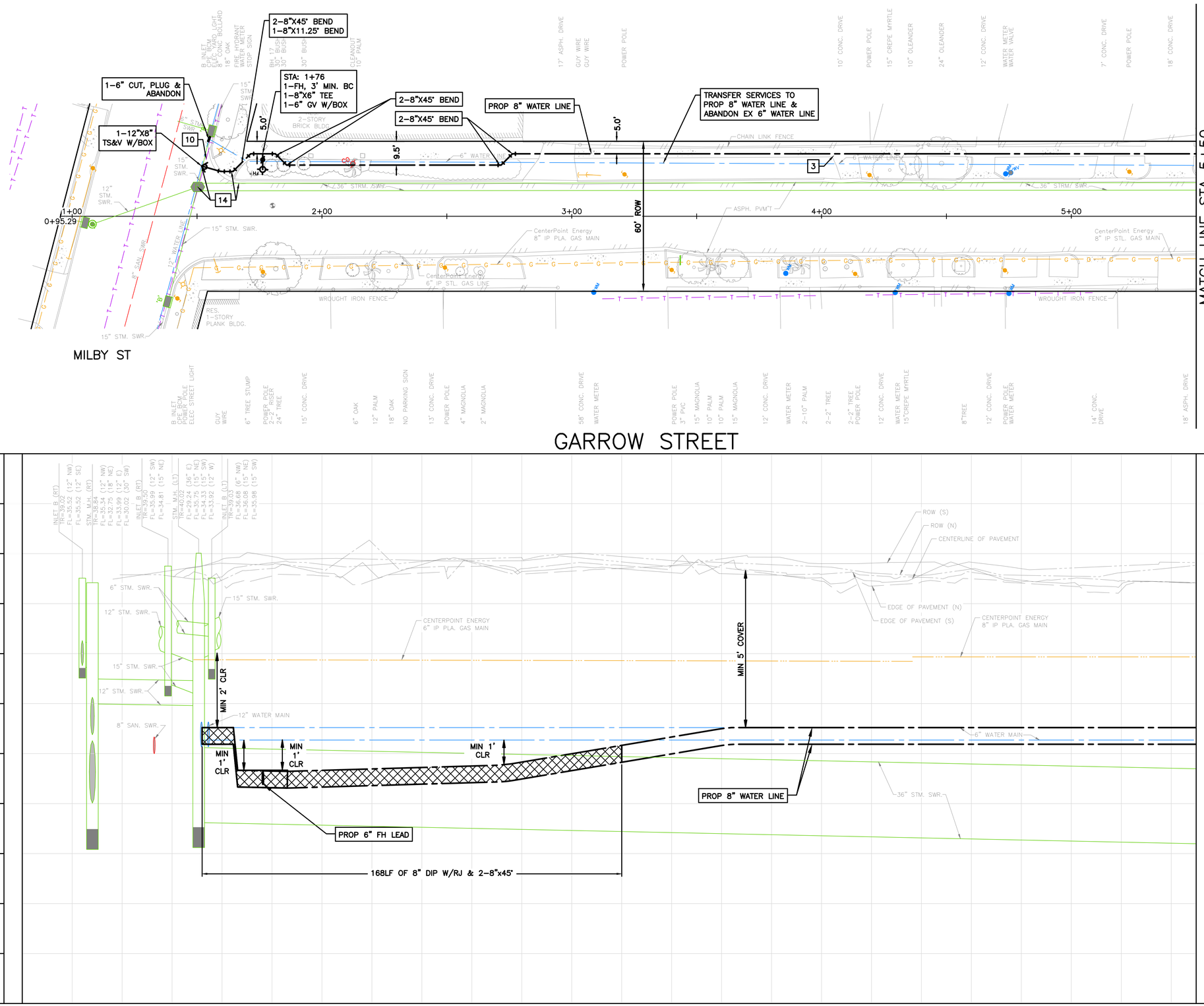
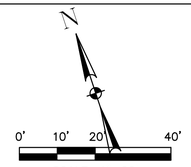
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-WILMER STREET.dwg

90% SUBMITTAL





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 1: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. AND MILBY ST. STA 1+42.47, 32.9' RT (GARROW ST. BASELINE) ELEV.=40.94

NOTICE:
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WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

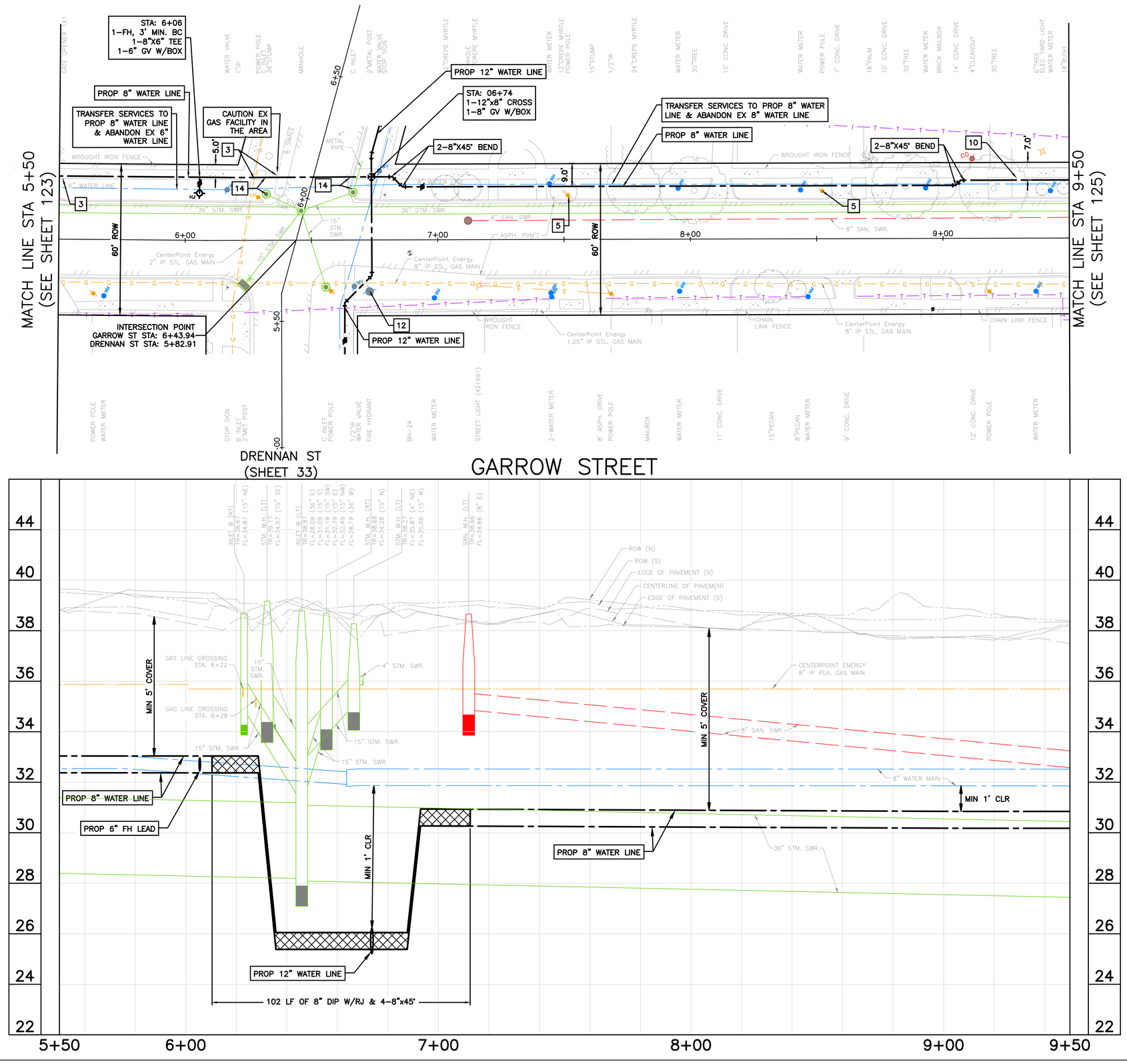
GARROW ST
PLAN & PROFILE
1+00 TO 5+50

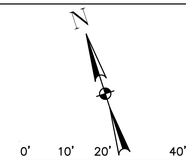
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 123 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 12:18 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-GARROW STREET.dwg

90% SUBMITTAL





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. & GRACE ST.
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'

NOTICE:
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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

GARROW ST
PLAN & PROFILE
5+50 TO 9+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 124 OF 275	

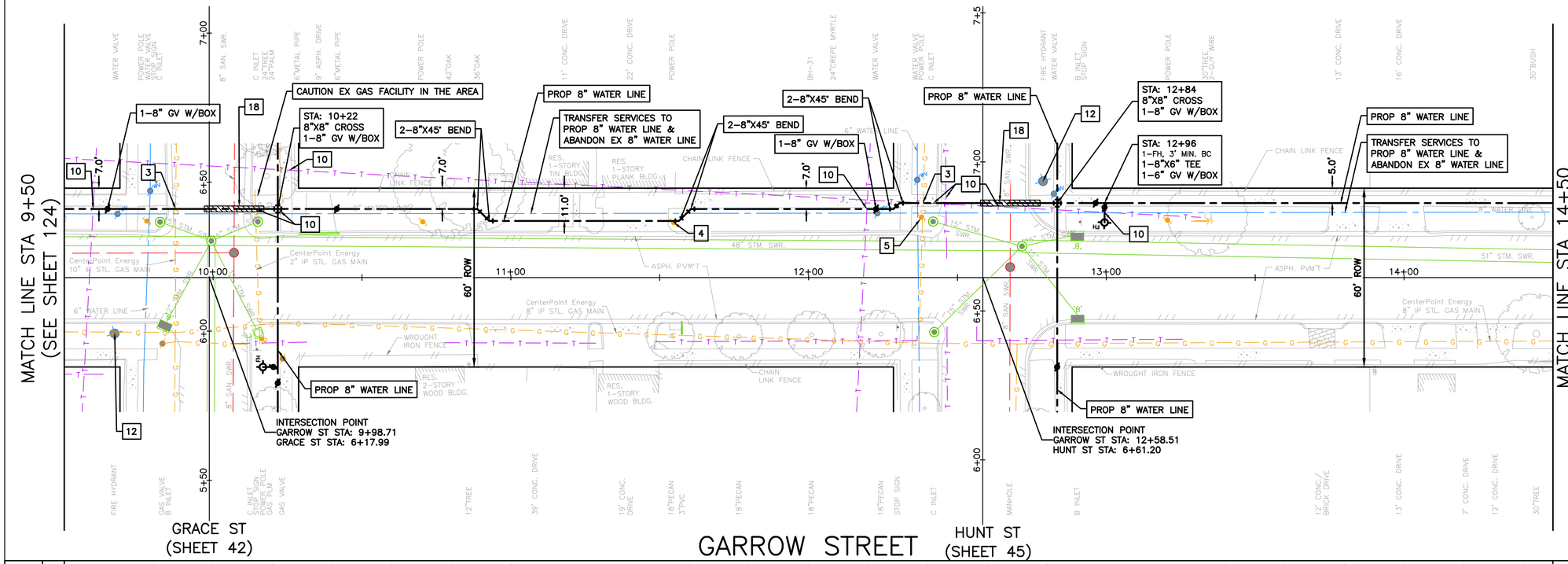
90% SUBMITTAL

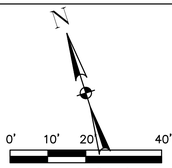
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 12:18 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–GARROW STREET.dwg

PLOTTED: 8/15/2025 12:19 PM

PLOT STYLE: COH.ctb





SCALE: 1"=20'

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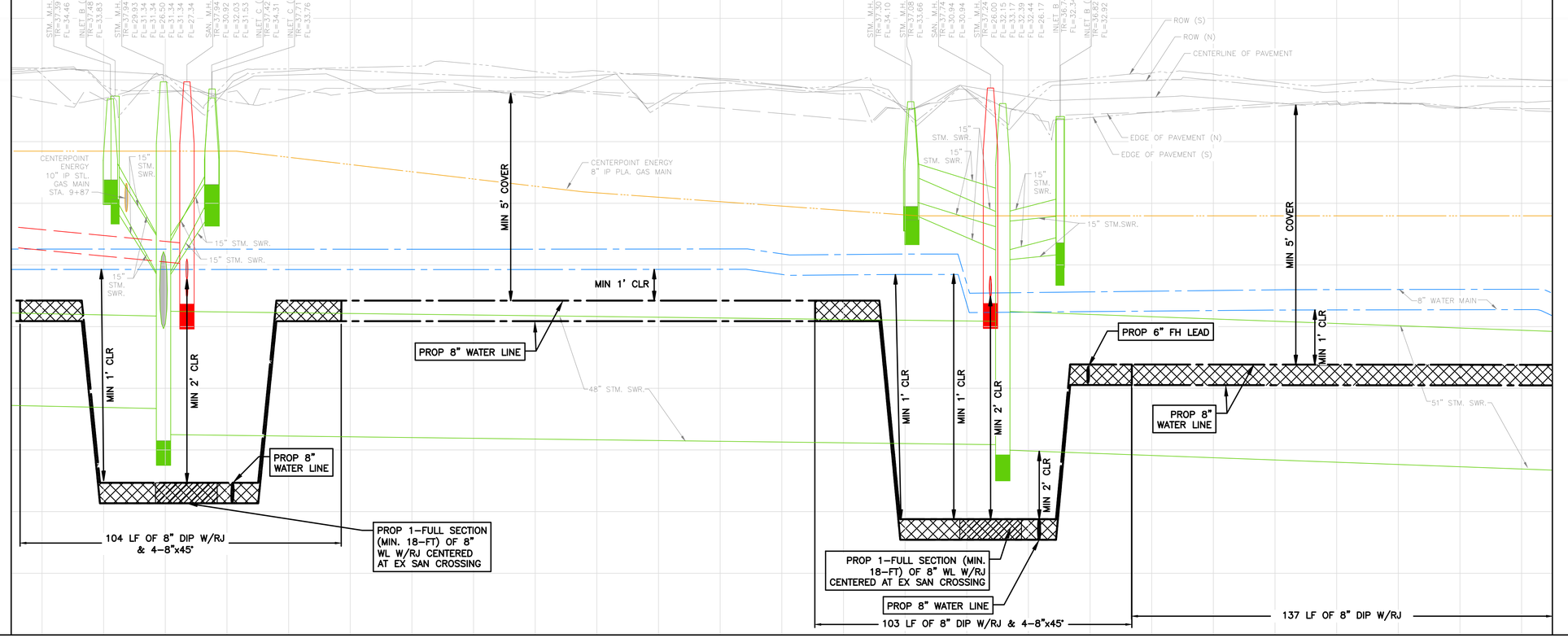
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'



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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | INDUSTRIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

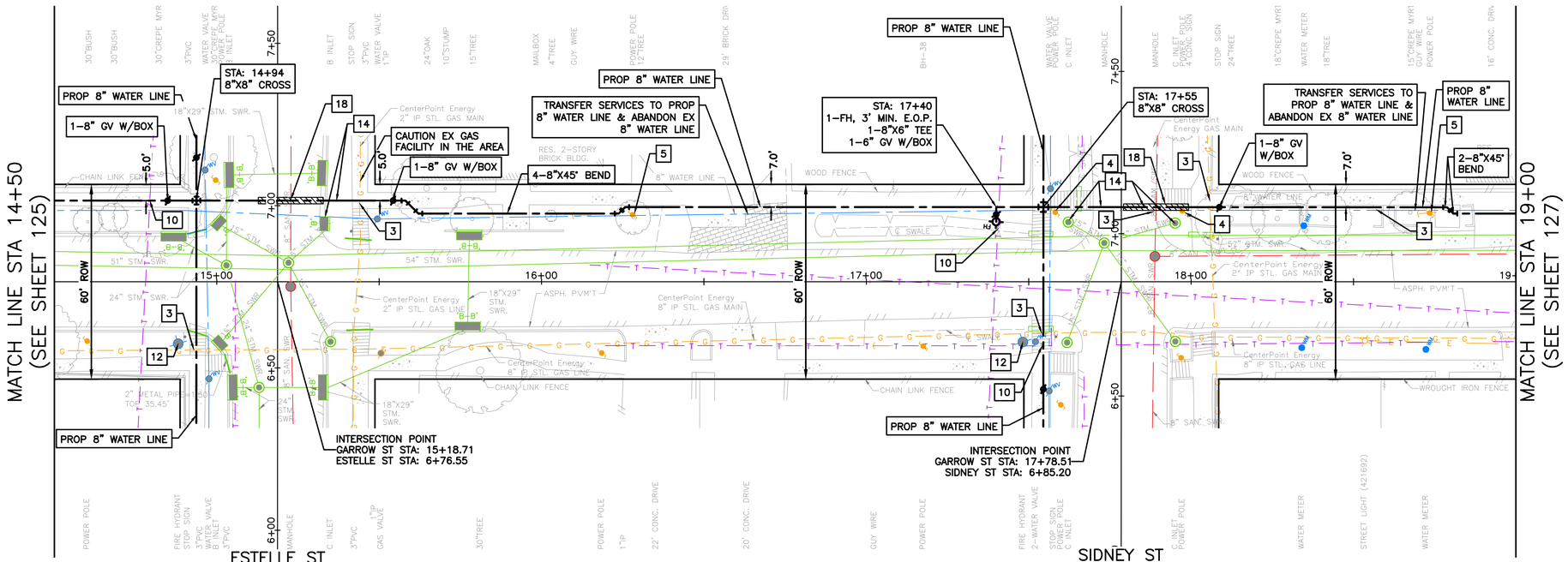
GARROW ST
PLAN & PROFILE
9+50 TO 14+50

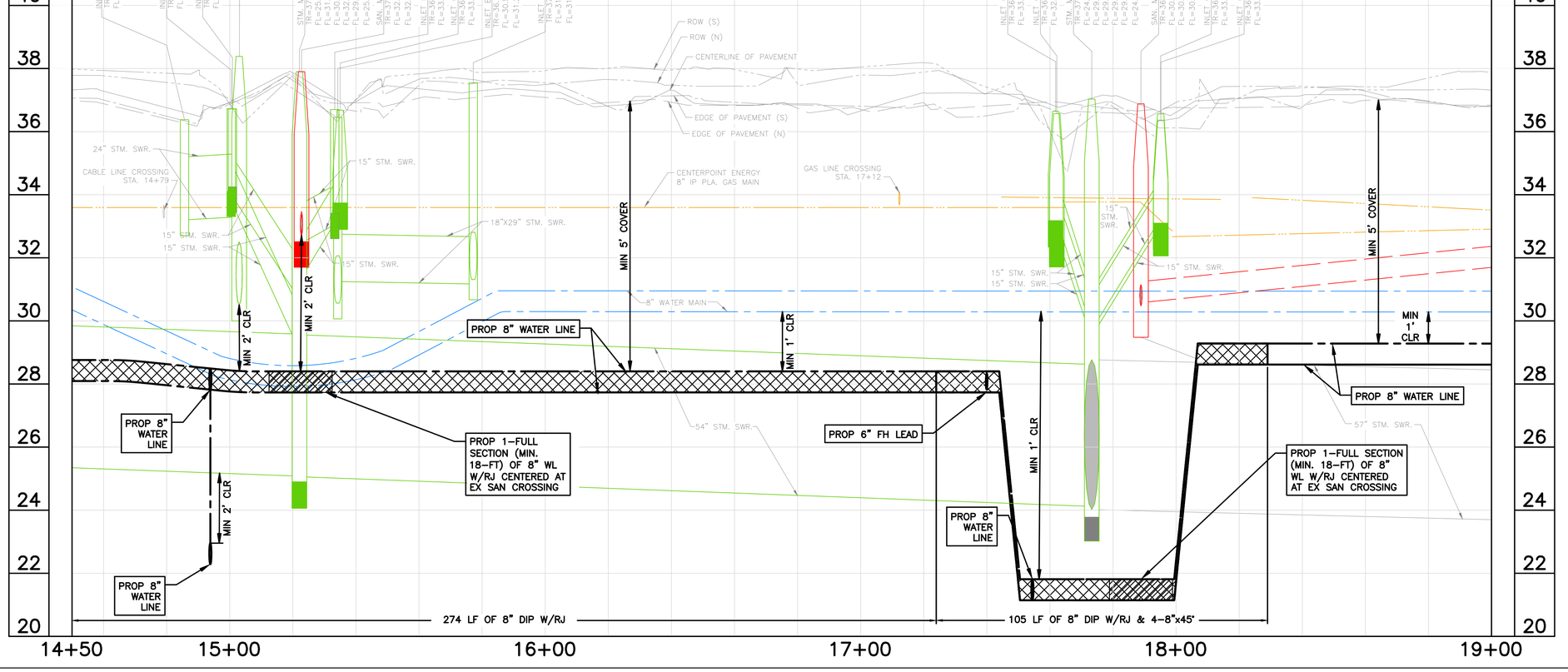
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 125 OF 275	

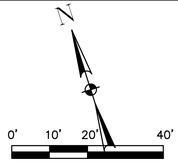
APP. | REVISION | NO. | DATE

FILE PATH: O:\2019_395062\Drawings\SHEETS\PP–GARROW STREET.dwg

90% SUBMITTAL







SCALE: 1"=20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

GARROW ST
PLAN & PROFILE
14+50 TO 19+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 126 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 12:19 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-GARROW STREET.dwg

90% SUBMITTAL

PLOTTED: 8/15/2025 12:20 PM
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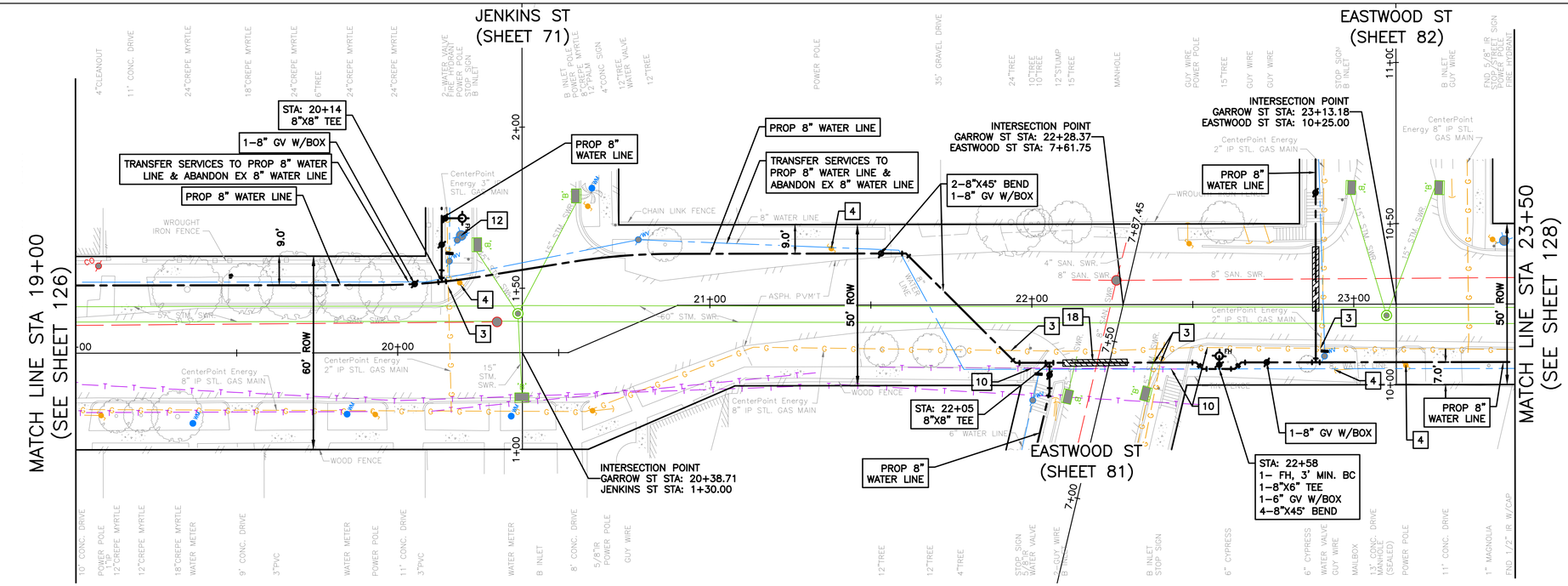

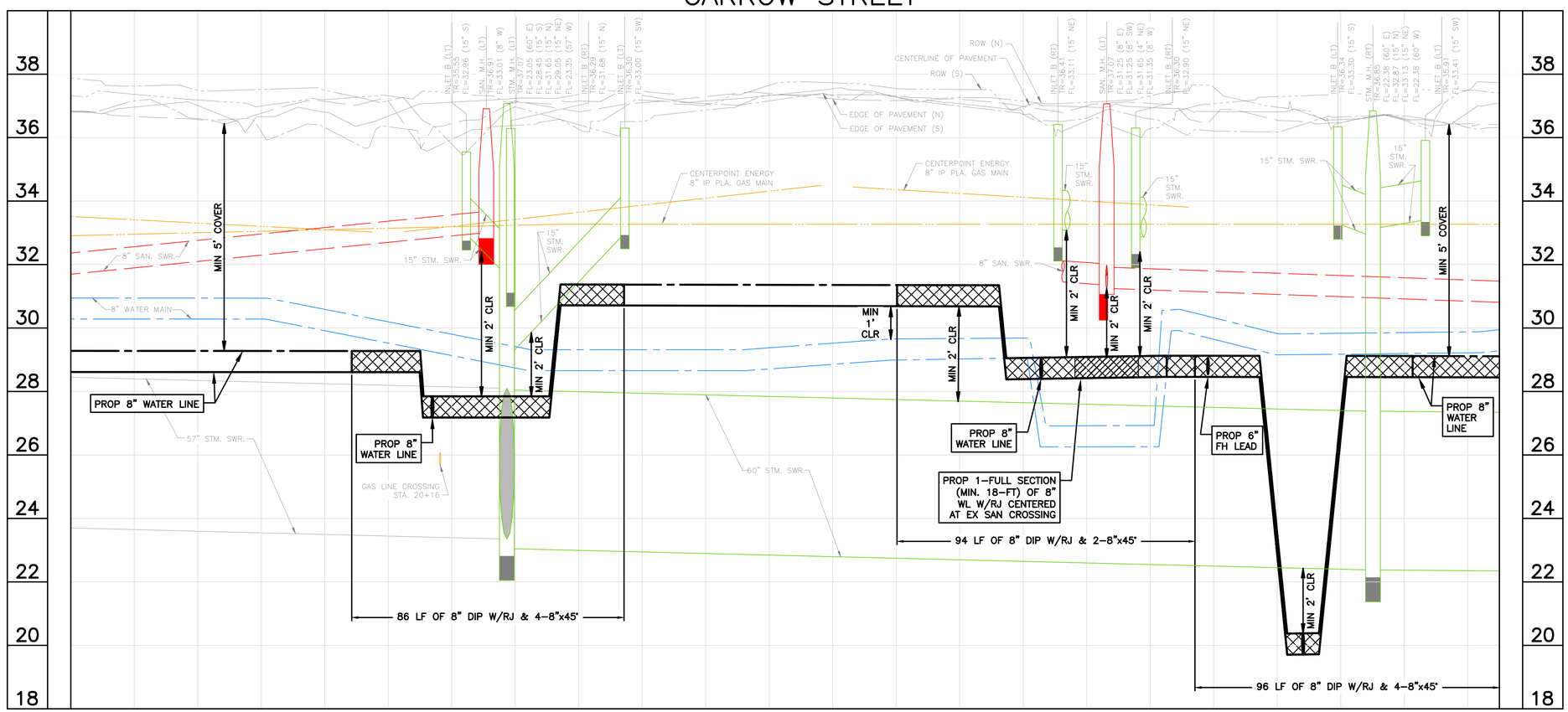

0' 10' 20' 40'

SCALE: 1"=20'

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DATE: 08/15/2025
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

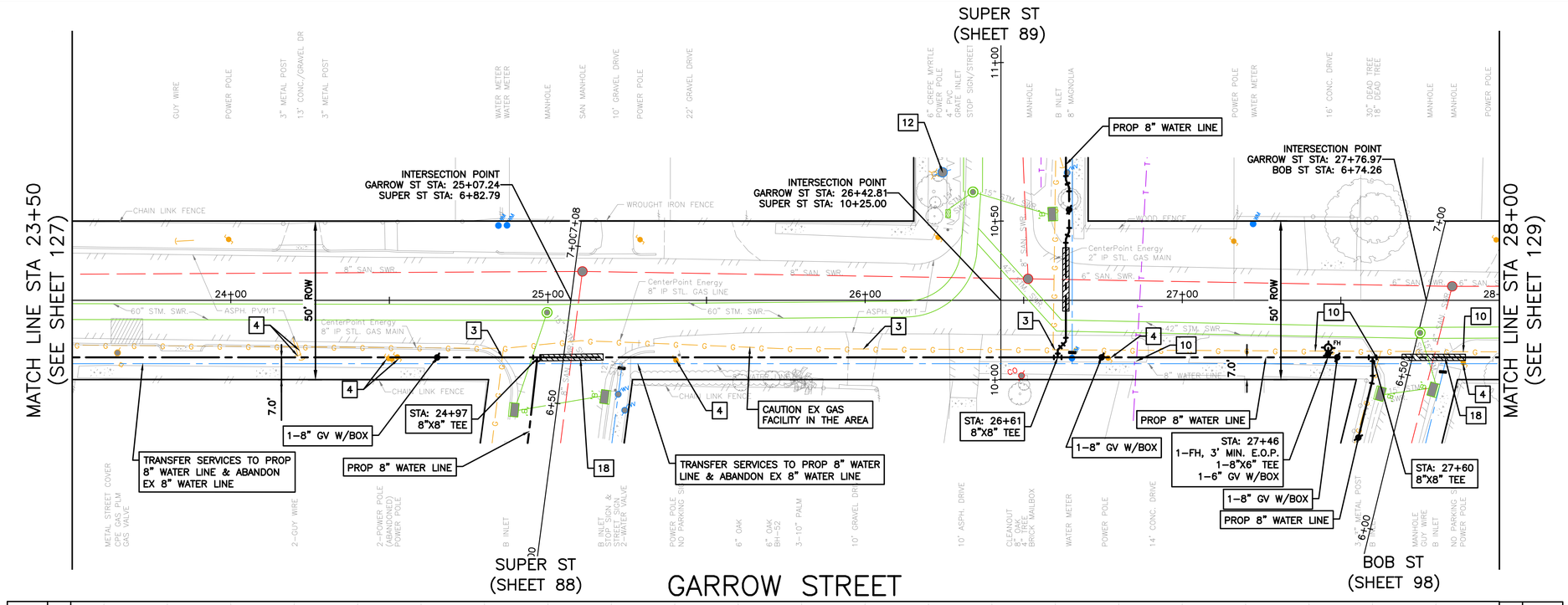
GARROW ST
PLAN & PROFILE
19+00 TO 23+50

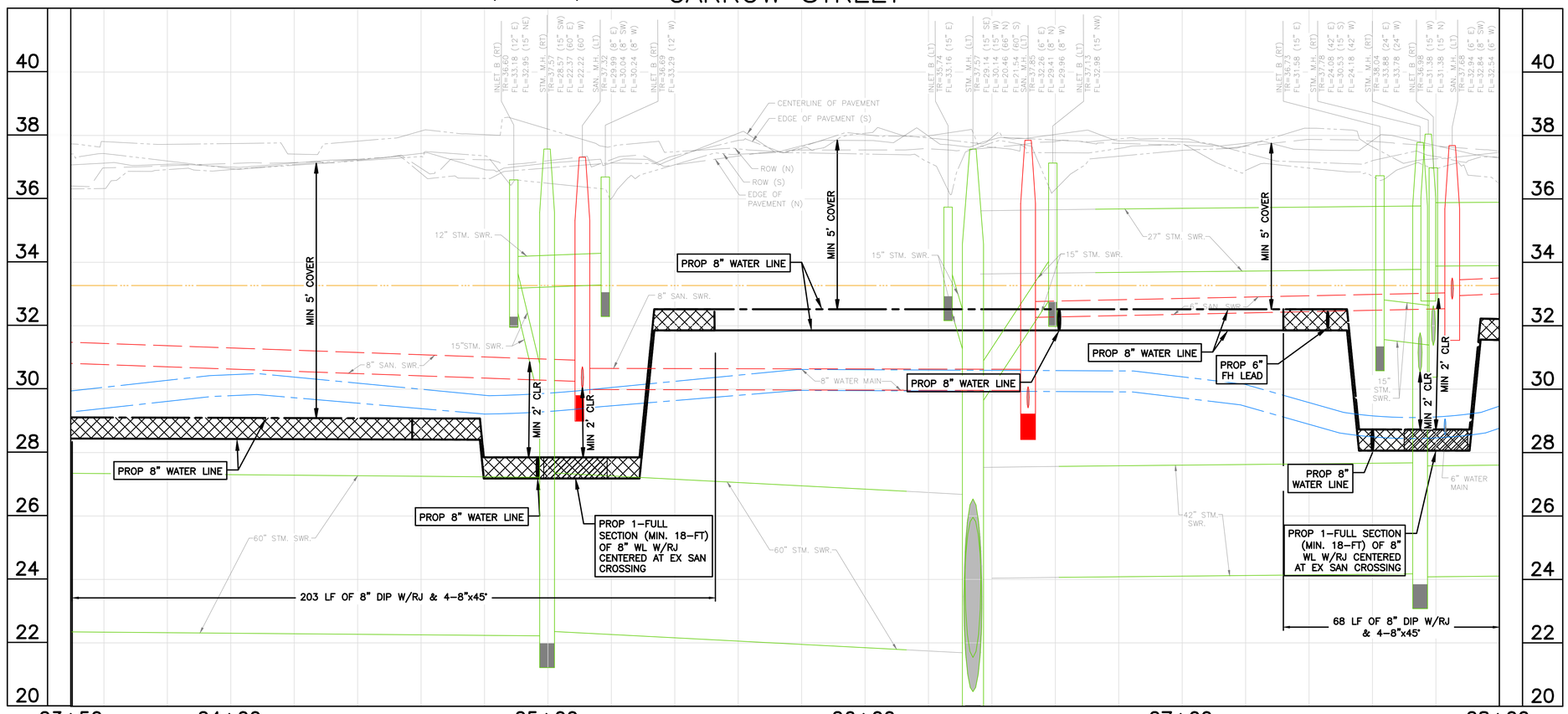
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 127 OF 275	

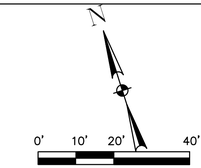
NO.	DATE	REVISION	APP.

90% SUBMITTAL

PLOTTED: 8/15/2025 12:20 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-GARROW STREET.dwg







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 3: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF GARROW ST. IN FRONT OF ADDRESS 450B. STA. 19+93.37, 19.1' RT (GARROW ST. BASELINE) ELEV.=39.11'

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

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Signature valid for six months.

Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

GARROW ST
PLAN & PROFILE
23+50 TO 28+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 128 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL

PLOT STYLE: COH.ctb
PLOTTED: 8/15/2025 12:21 PM
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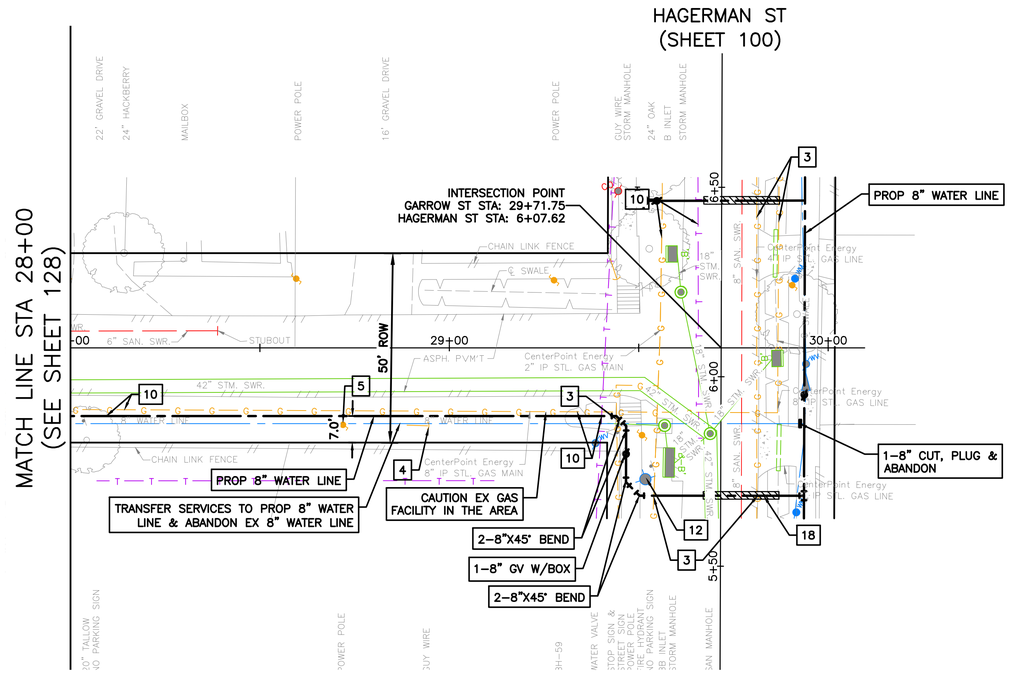

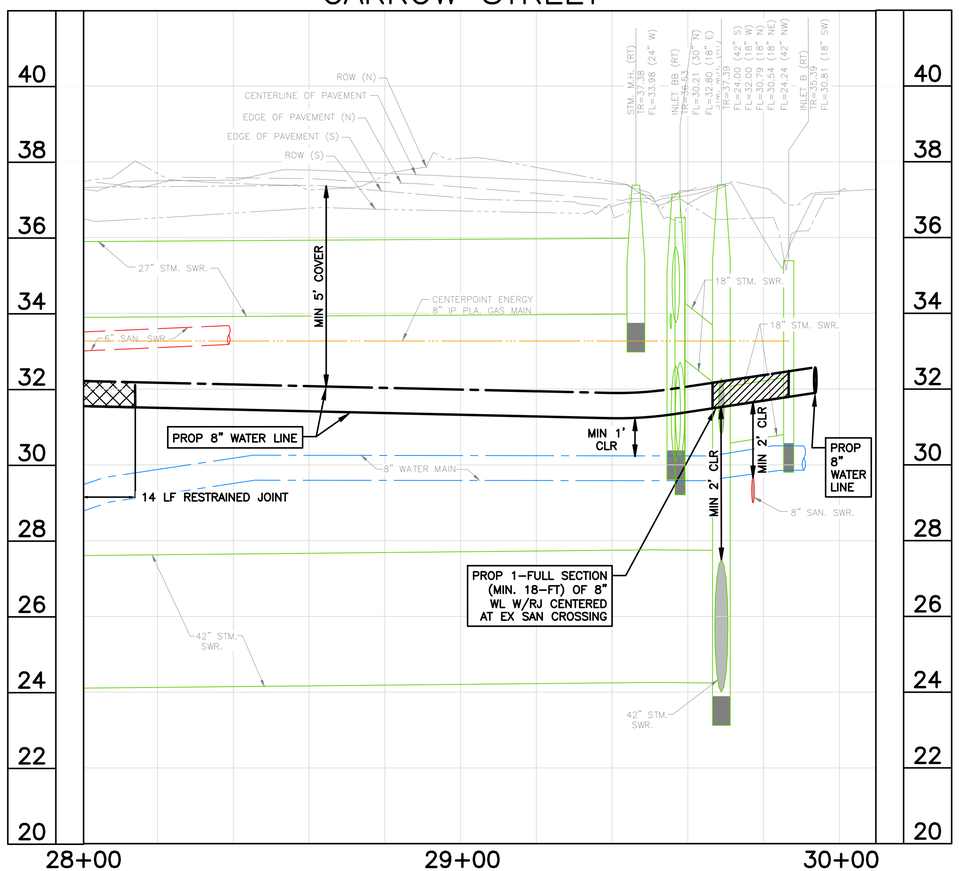

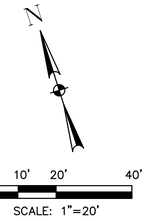

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 4: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF GARROW ST. & HAGERMAN ST.
STA. 29+51.19, 23.0' RT (GARROW ST. BASELINE)
ELEV.=38.52'

NOTICE:
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ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
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FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

GARROW ST
PLAN & PROFILE
28+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 129 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL

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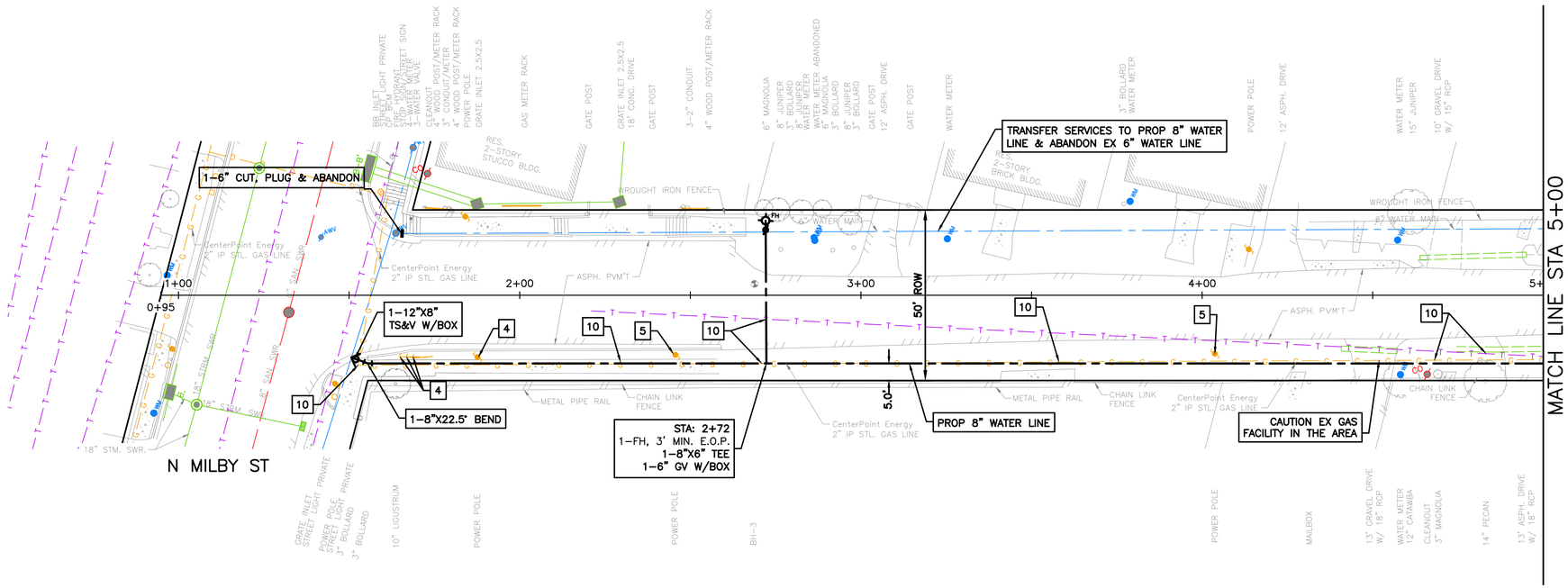

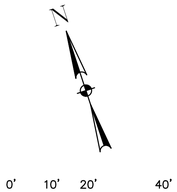

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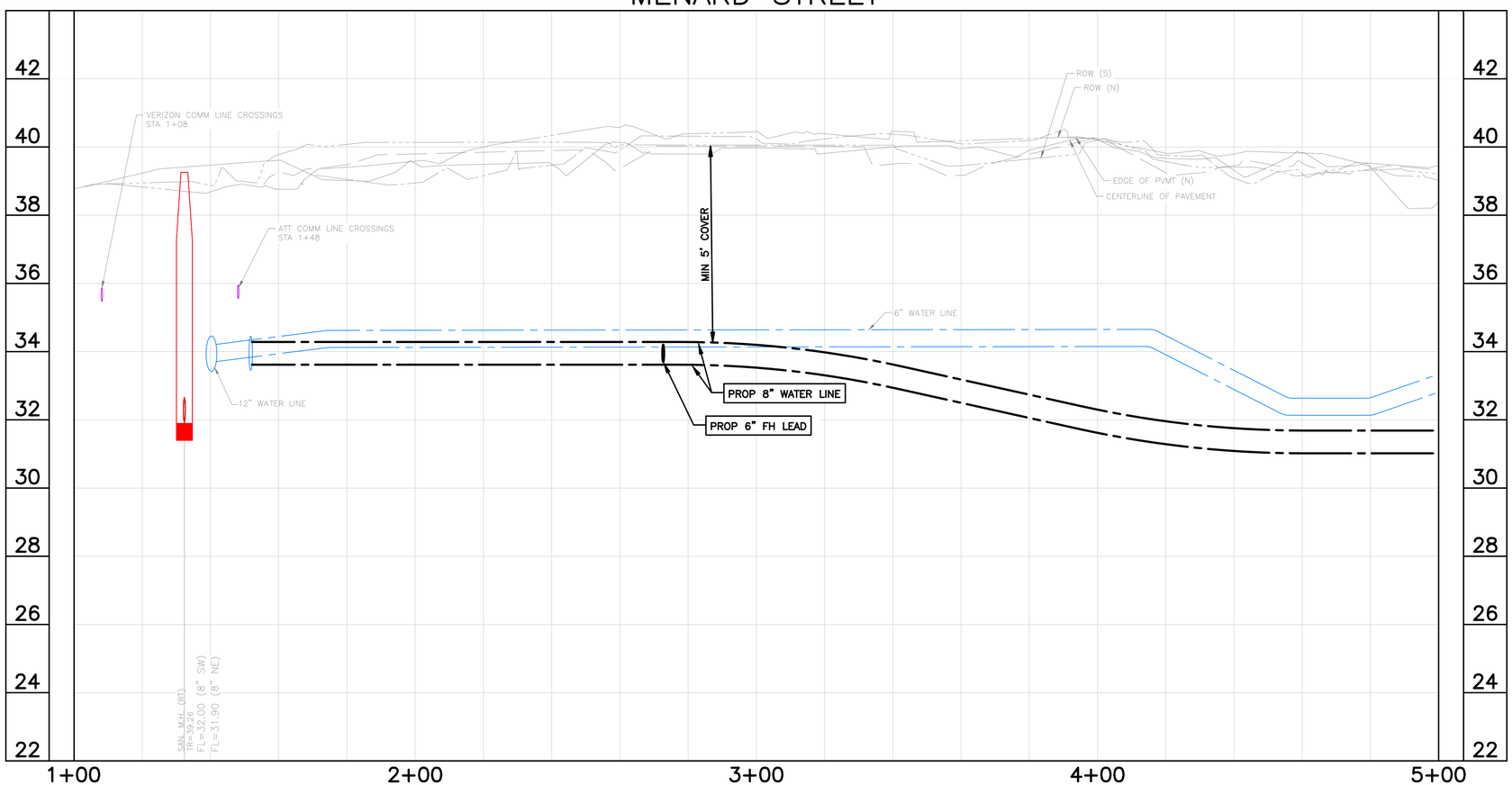

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WOOLPERT
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FB NO. 10038100

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

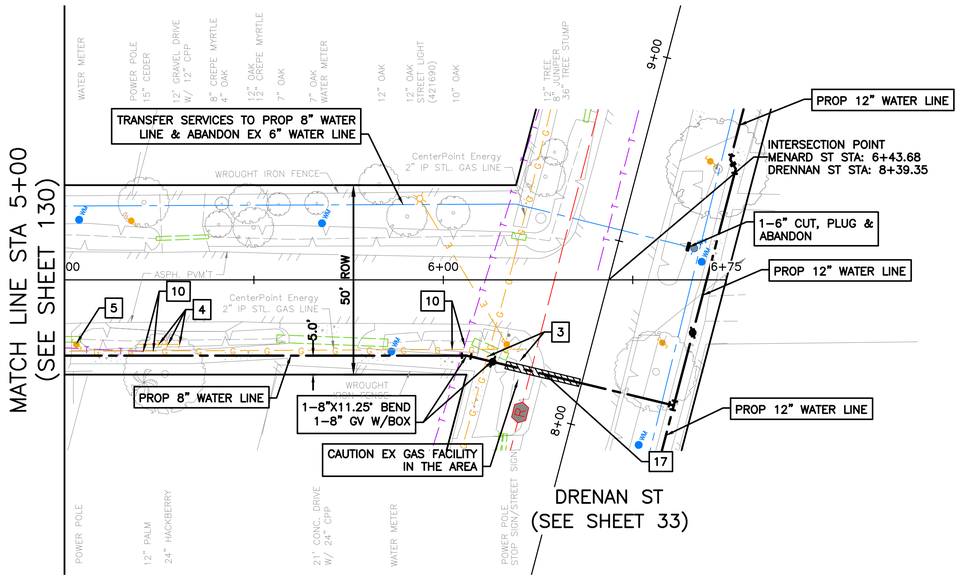
MENARD ST
PLAN & PROFILE
1+00 to 5+00

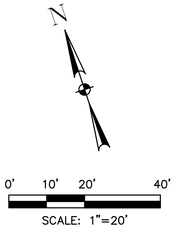
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 130 OF 275	

NO.	DATE	REVISION	APP.

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-MENARD STREET.dwg

90% SUBMITTAL





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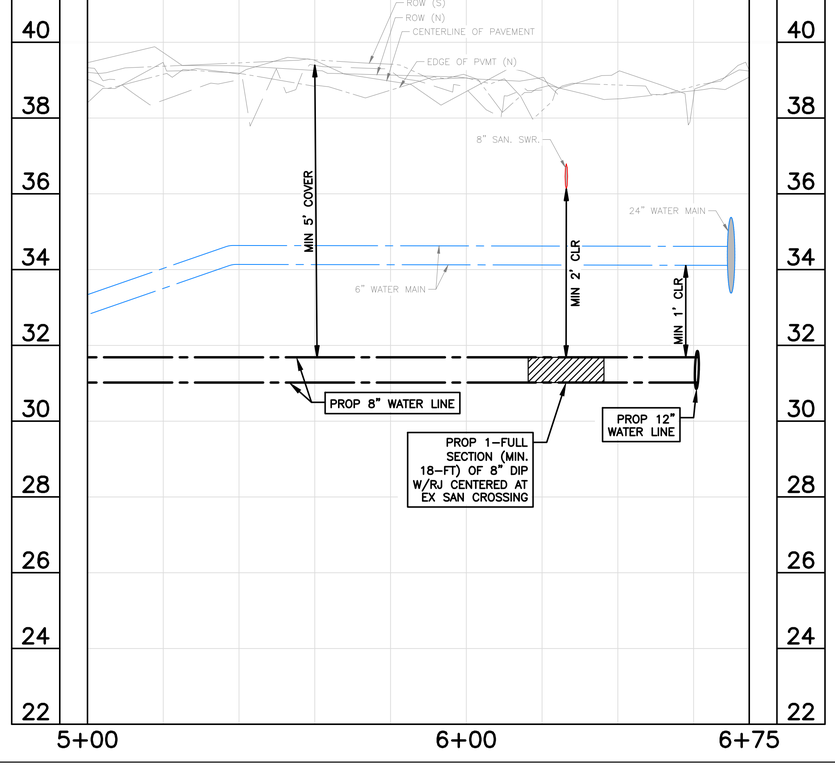
MENARD STREET



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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

MENARD ST
PLAN & PROFILE
5+00 to END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 131 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL

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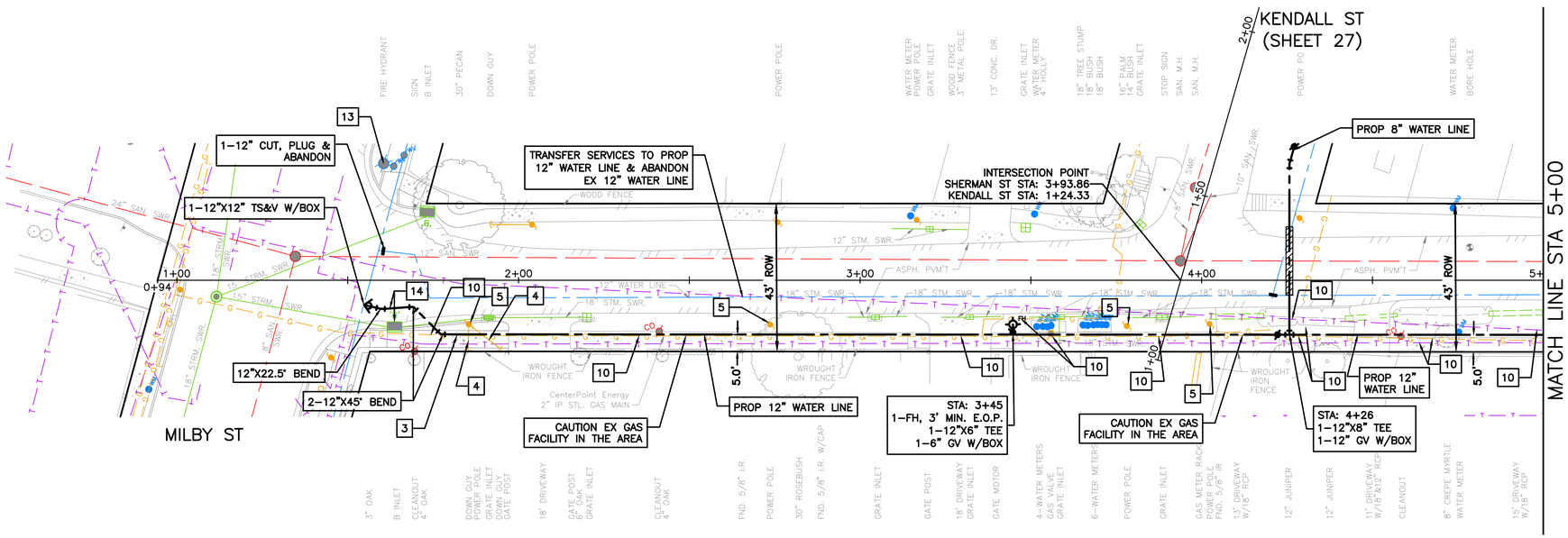
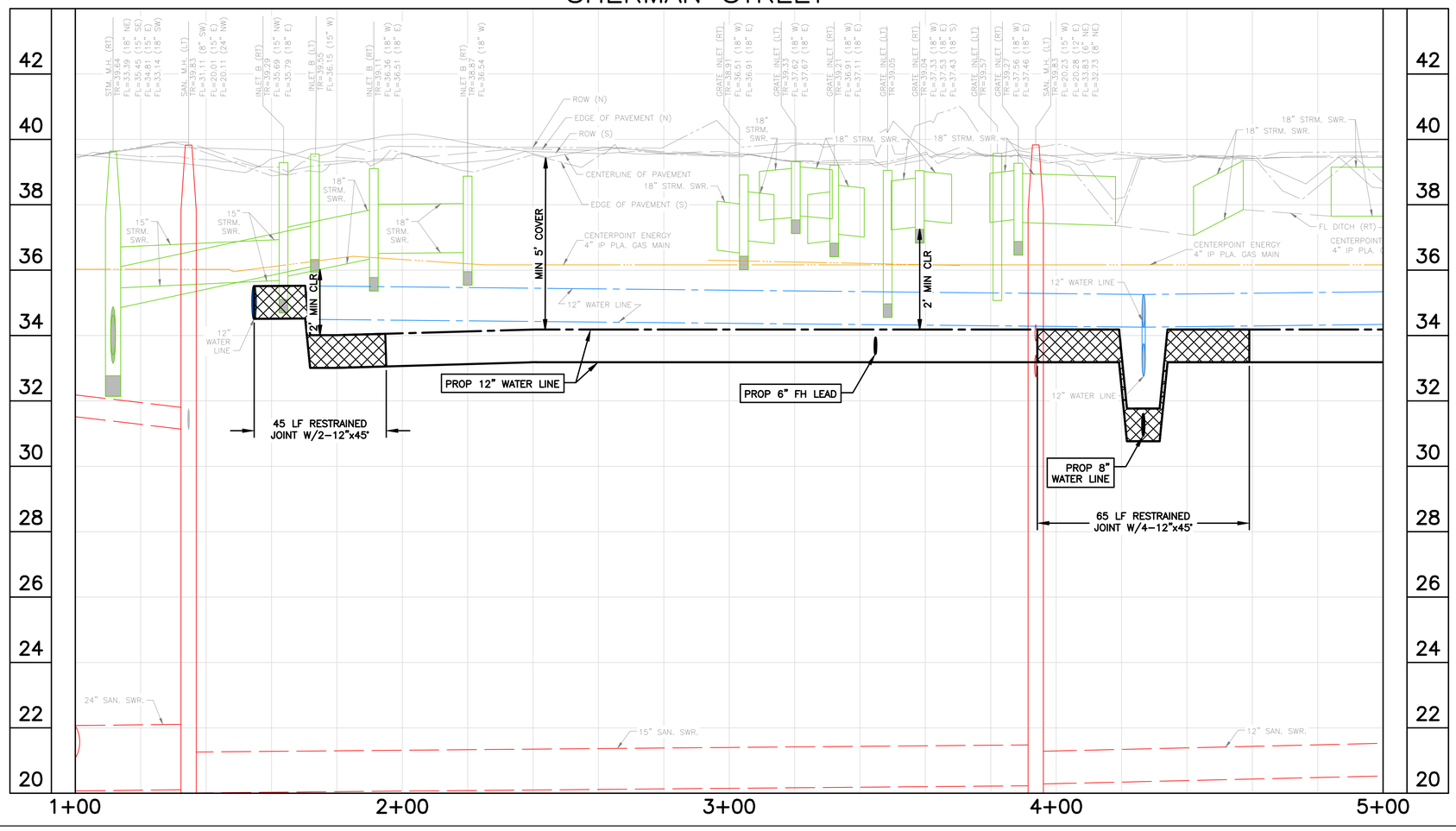
PLOTTED: 8/15/2025 11:53 AM

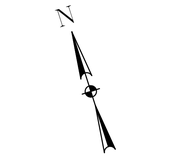
PLOT STYLE: COH.ctb

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SHERMAN STREET.dwg



SHERMAN STREET





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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

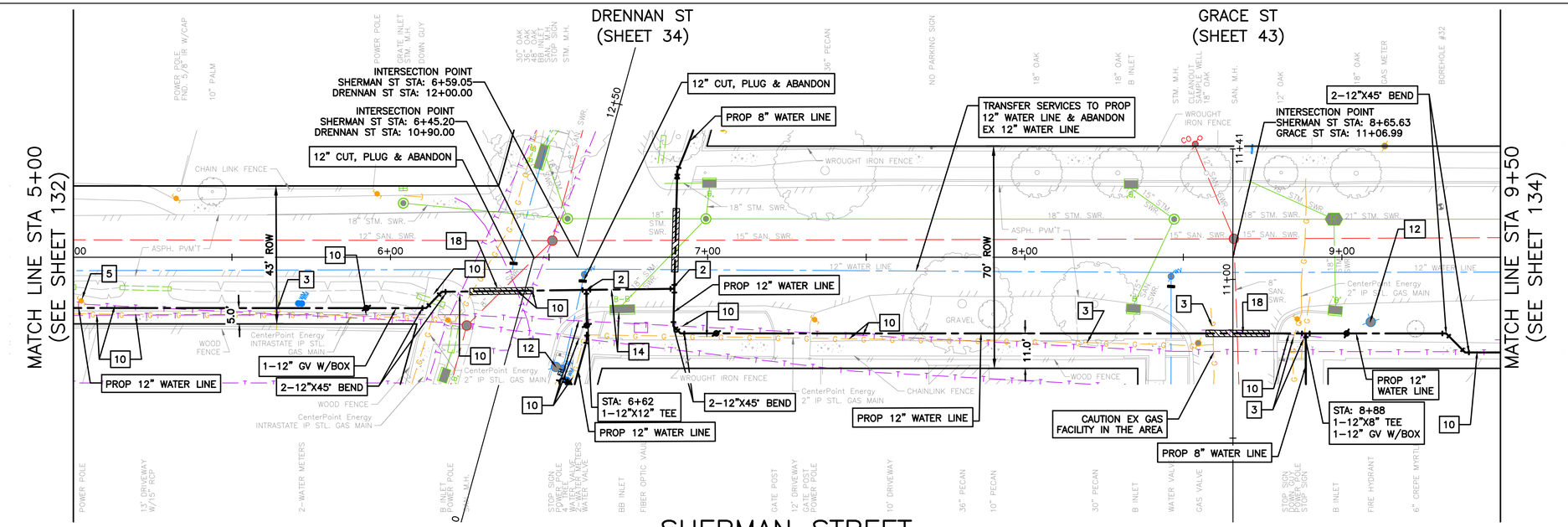
SECONDWARD WATERLINE REPLACEMENT

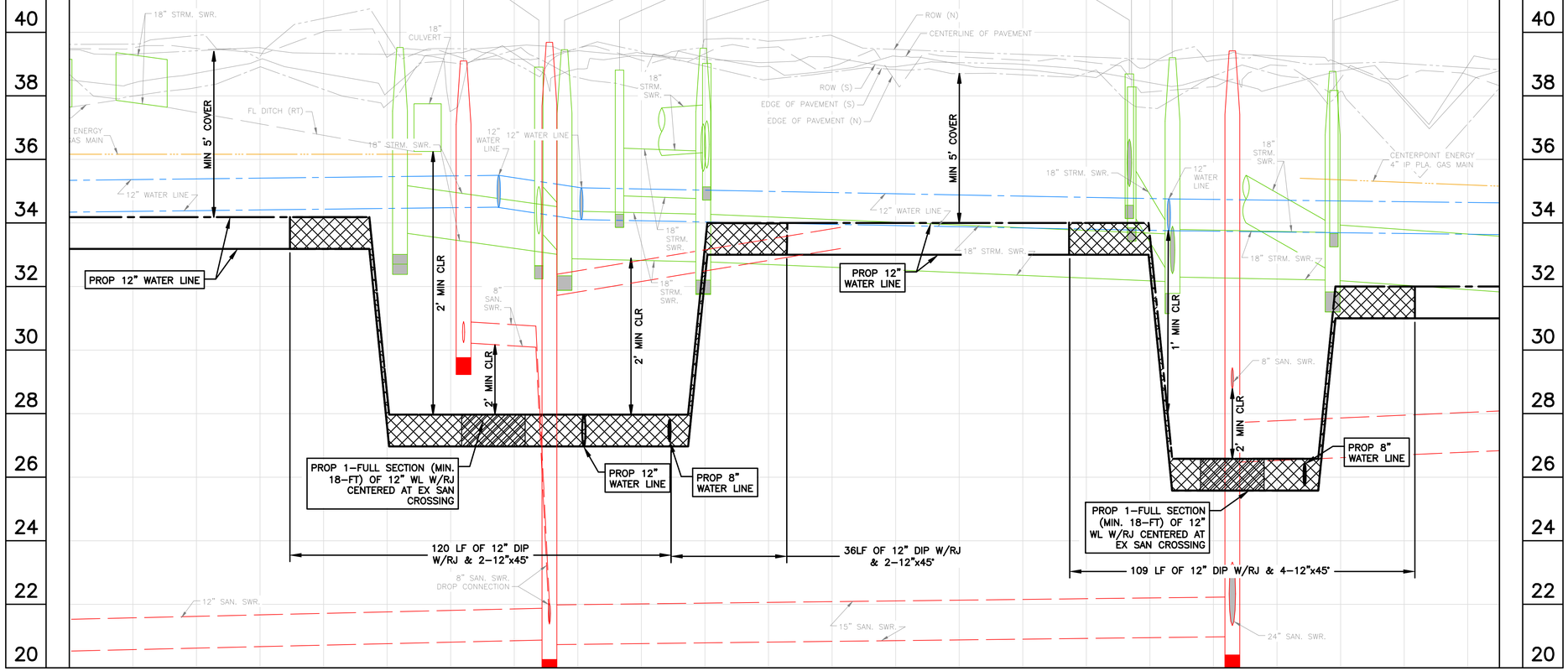
SHERMAN ST
PLAN & PROFILE
0+94 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 132 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL





N

0' 10' 20' 40'

SCALE: 1" = 20'

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TBM 5: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SHERMAN ST. & MILBY ST. STA. 14+45.44, 22.7' RT (SHERMAN ST. BASELINE) ELEV.=40.70'

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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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

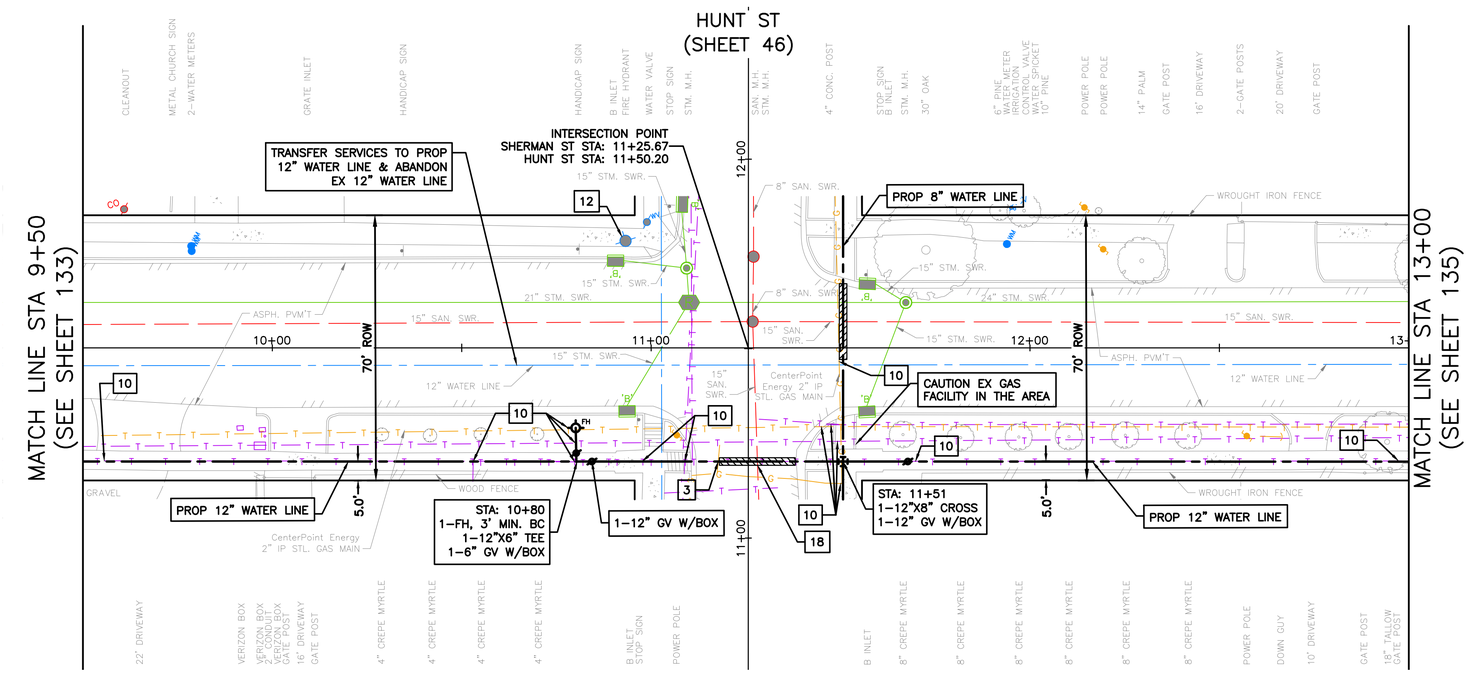
SHERMAN ST
PLAN & PROFILE
5+00 TO 9+50

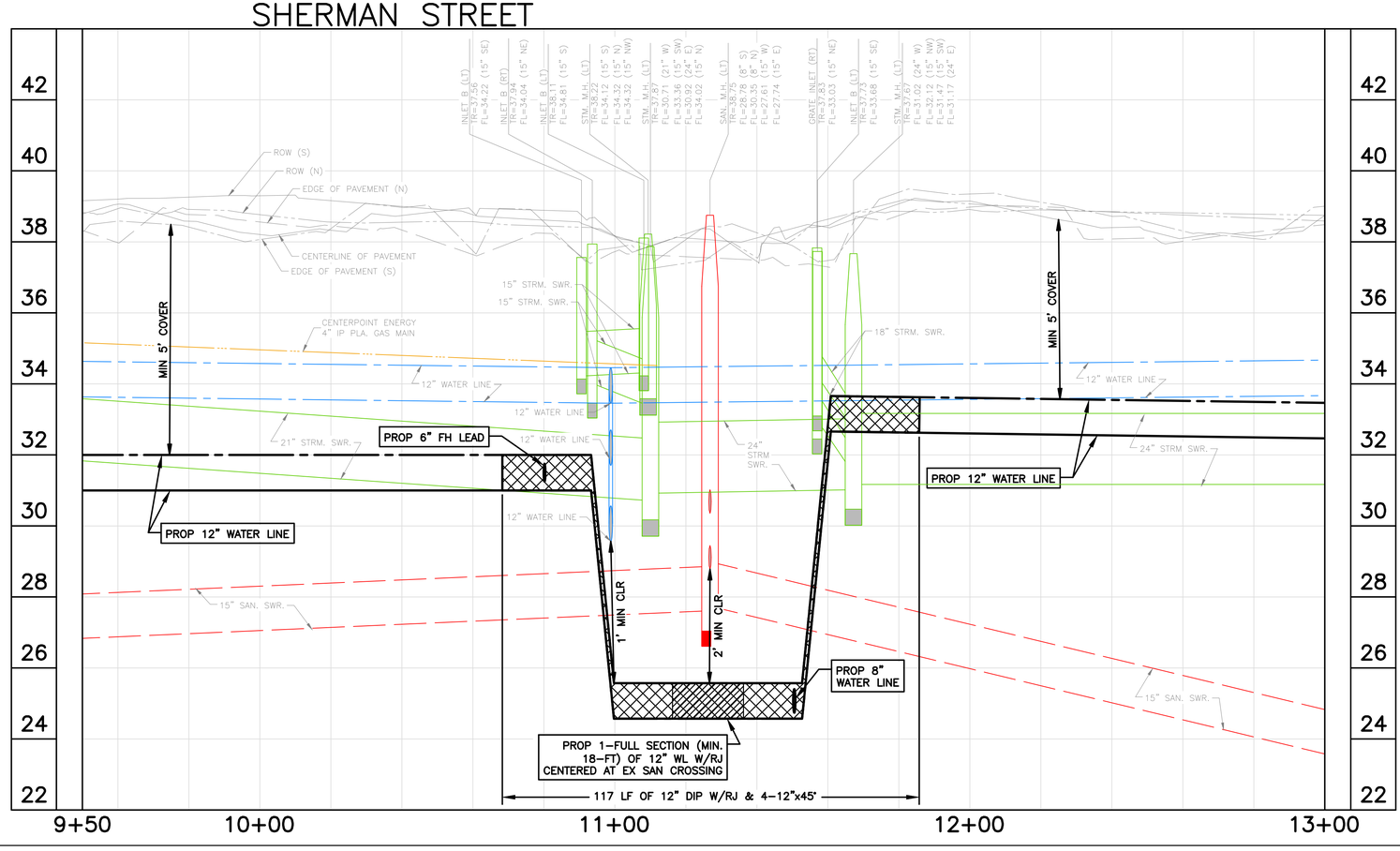
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 133 OF 275	

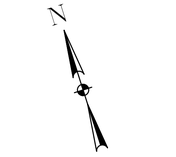
NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 11:54 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SHERMAN STREET.dwg

90% SUBMITTAL







NOTES:
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2) PROPOSED WATER LINES SHALL BE INSTALLED BY MEANS OF TRENCHLESS CONSTRUCTION METHOD EXCEPT WHERE NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF PITS IN THE FIELD SUBJECT TO THE CITY ENGINEER'S APPROVAL.
3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST.
STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE)
ELEV.=39.66

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

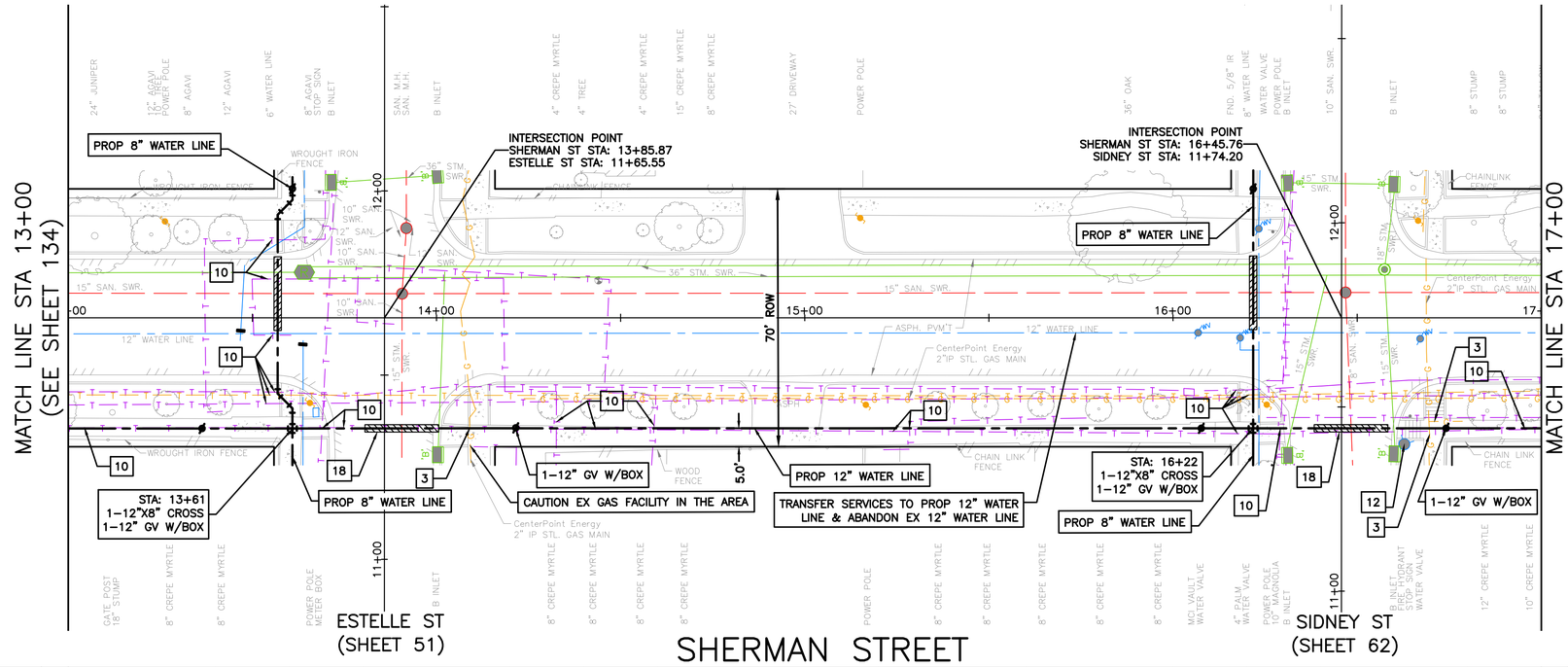
SHERMAN ST
PLAN & PROFILE
9+50 TO 13+00

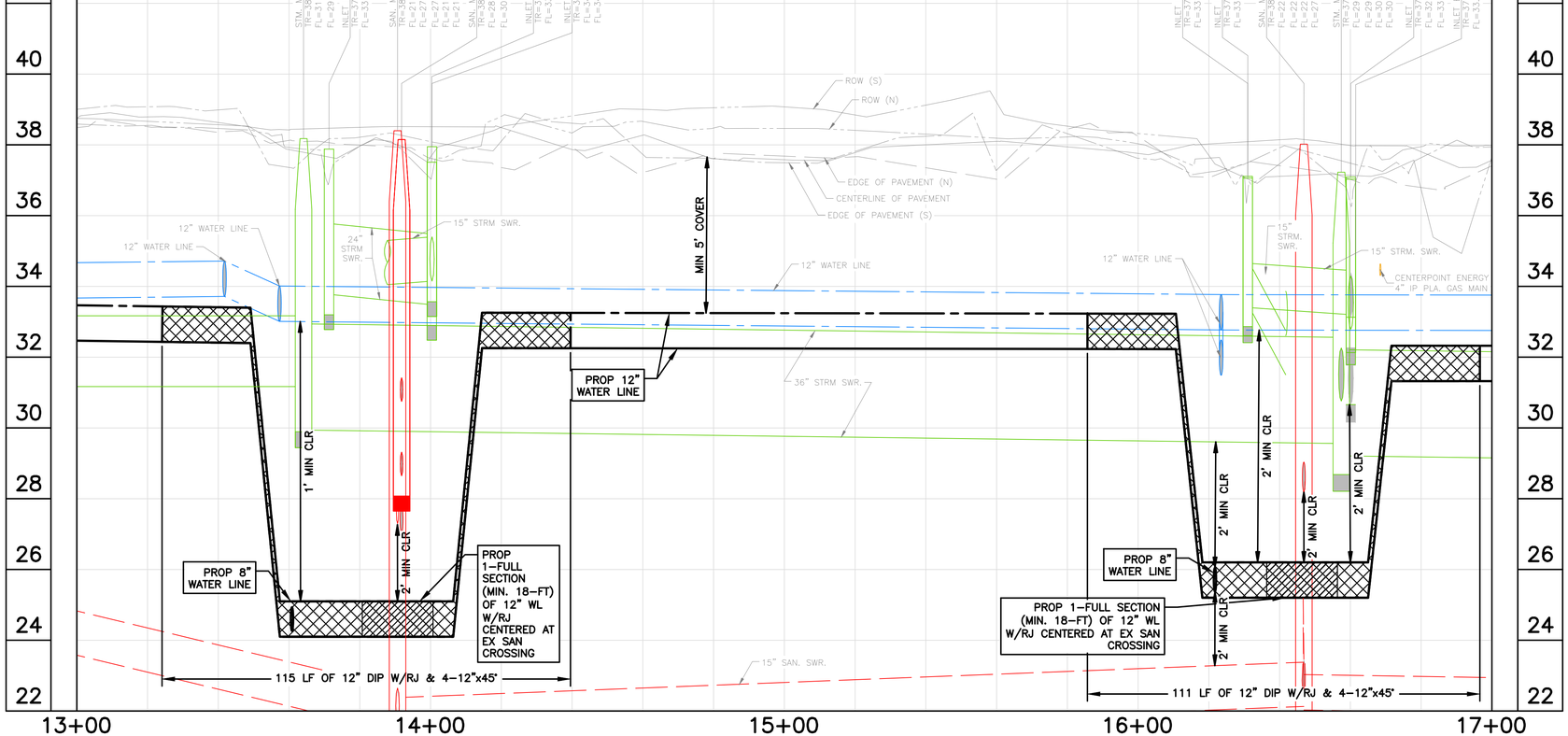
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 134 OF 275	

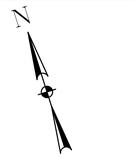
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:54 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SHERMAN STREET.dwg

90% SUBMITTAL







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 6: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SHERMAN ST. & HUNT ST.
STA. 11+07.12 23.1' RT (SHERMAN ST. BASELINE)
ELEV.=39.66

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

Date

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Date

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Signature valid for one year.

WOOLPERT
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

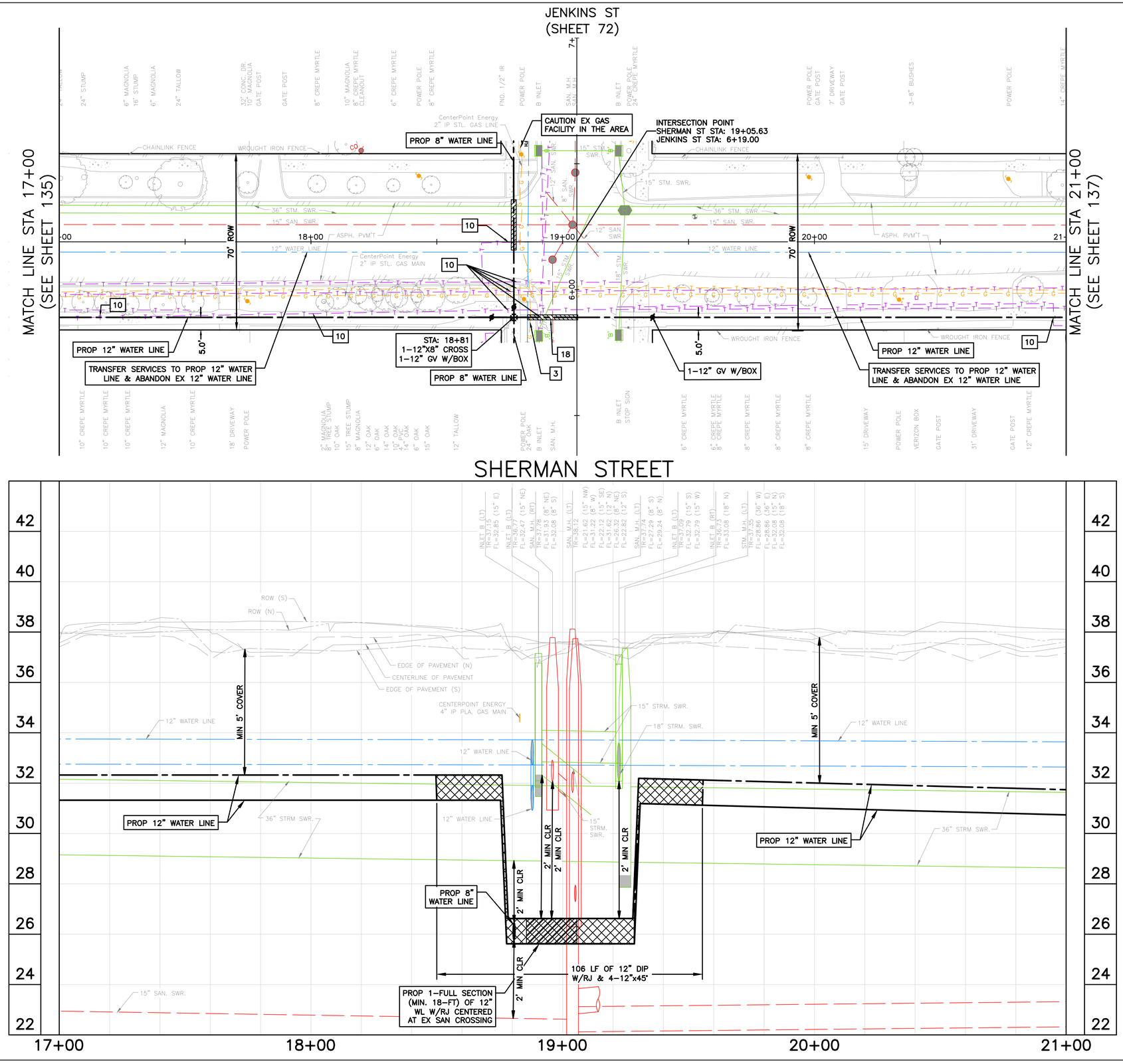
SHERMAN ST
PLAN & PROFILE
13+00 TO 17+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 135 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:55 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SHERMAN STREET.dwg

90% SUBMITTAL



SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 7: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 40' WEST OF SHERMAN ST. & JENKINS ST.
STA. 18+43.20, 26.2' LT (SHERMAN ST. BASELINE)
ELEV.=39.30'

NOTICE:
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SHERMAN ST
PLAN & PROFILE
17+00 TO 21+00

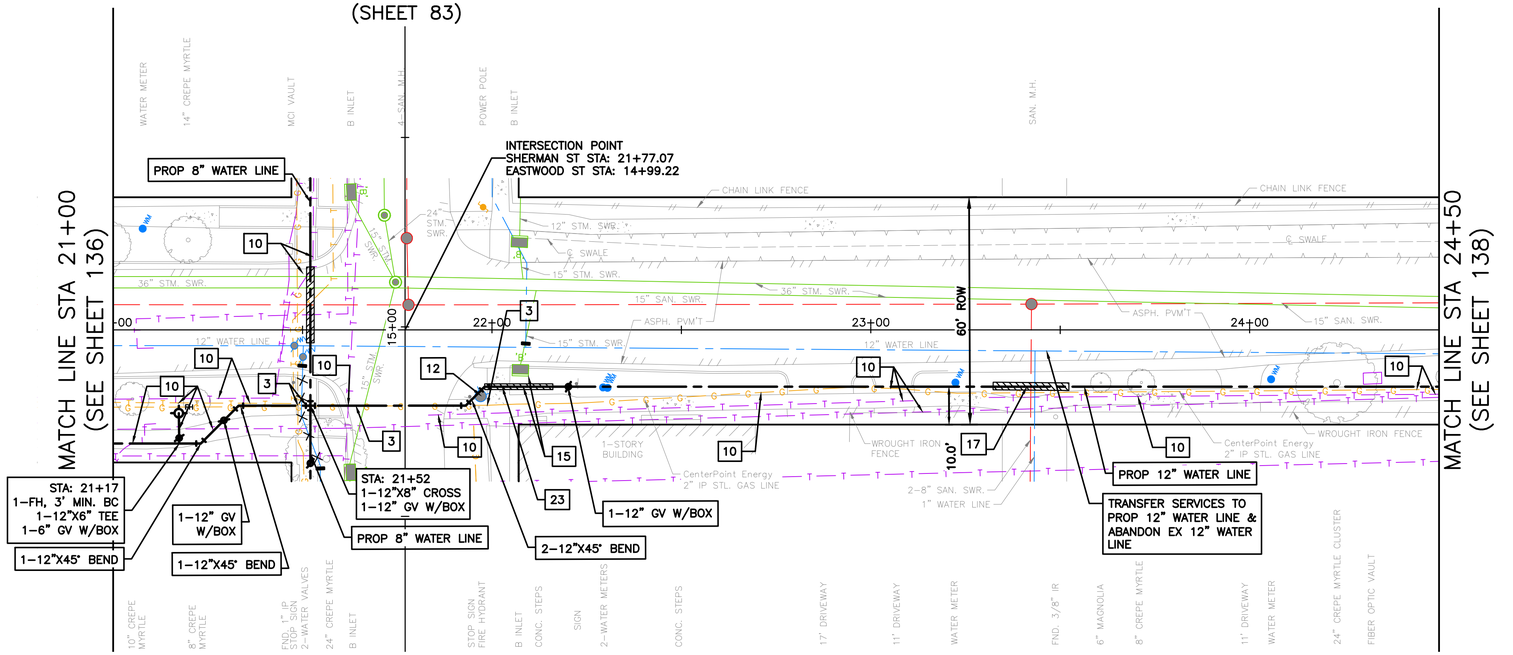
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 136 OF 275	

NO.	DATE	REVISION	APP.

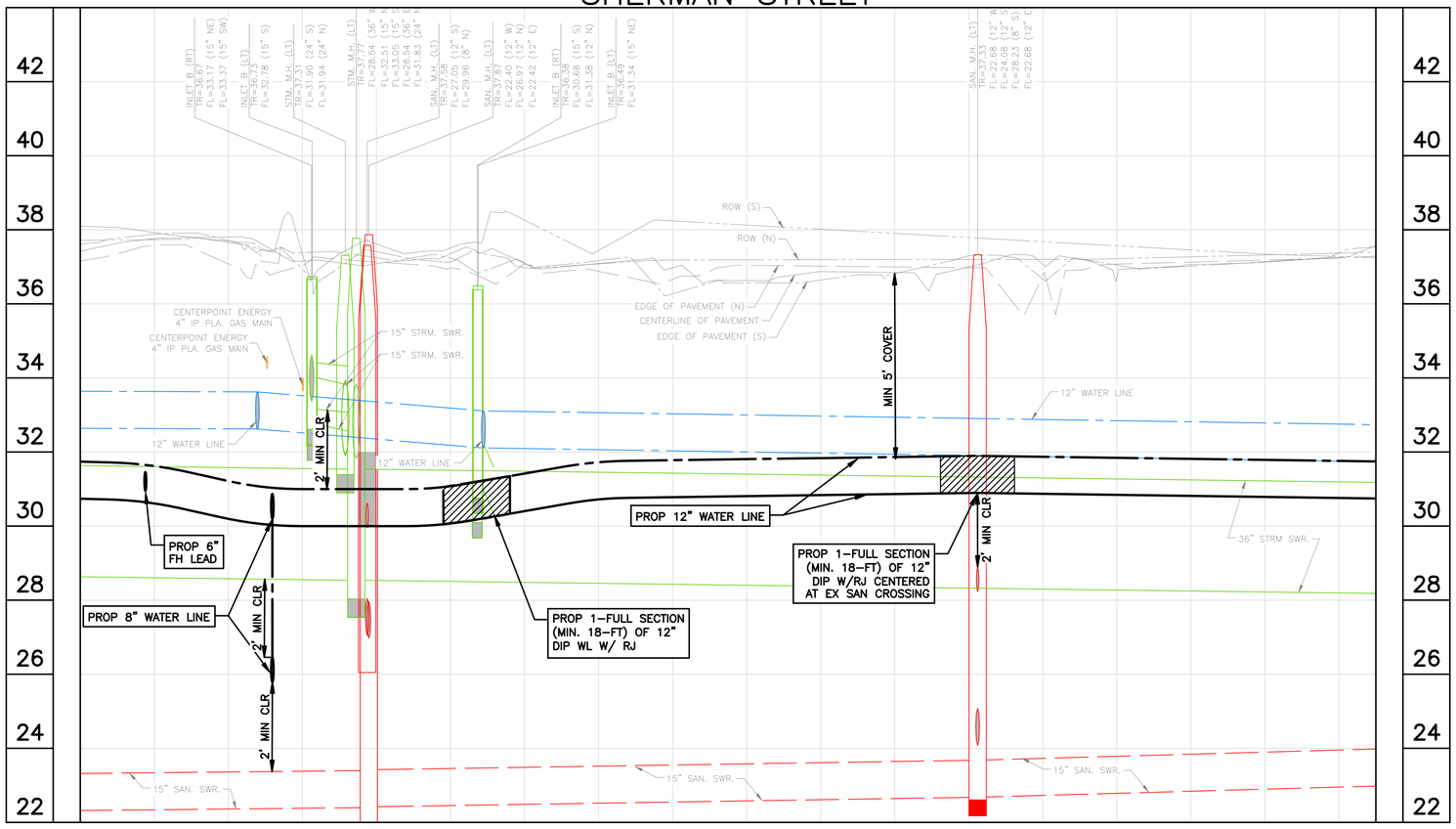
PLOTTED: 8/15/2025 11:56 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SHERMAN STREET.dwg

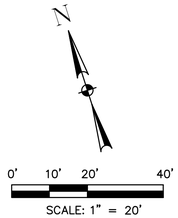
90% SUBMITTAL

PLOTTED: 8/15/2025 11:56 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SHERMAN STREET.dwg



SHERMAN STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 7: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 40' WEST OF SHERMAN ST. & JENKINS ST.
STA. 18+43.20, 26.2' LT (SHERMAN ST. BASELINE)
ELEV.=39.30'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SHERMAN ST
PLAN & PROFILE
21+00 TO 24+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 137 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL

PLOTTED: 8/15/2025 11:57 AM

PLOT STYLE: COH.ctb

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SHERMAN STREET.dwg

MATCH LINE STA 24+50 (SEE SHEET 137)

SUPER ST (SHEET 90)

MATCH LINE STA 29+00 (SEE SHEET 139)

HAGERMAN ST (SHEET 101)

SHERMAN STREET

INTERSECTION POINT
SHERMAN ST STA: 25+06.72
SUPER ST STA: 14+99.01

INTERSECTION POINT
SHERMAN ST STA: 28+37.07
HAGERMAN ST STA: 10+81.41

60' ROW

7.0'

10.0'

PROP 12" WATER LINE

2-12"X45' BEND

1-12" GV W/BOX

CAUTION EX GAS FACILITY IN THE AREA

PROP 8" WATER LINE

STA: 25+19
1-12"X8" CROSS
2-12" GV W/BOX

STA: 25+57
1-FH, 3' MIN. E.O.P.
1-12"X6" TEE
1-6" GV W/BOX

TRANSFER SERVICES TO PROP 12" WATER LINE & ABANDON EX 12" WATER LINE

STA: 28+62
1-12"X8" CROSS

1-PROP 12" WATER LINE

PROP 1-FULL SECTION (MIN. 18-FT) OF 12" DIP W/RJ CENTERED AT EX SAN CROSSING

109 LF OF 12" WL W/RJ & 4-12"x45"

114 LF OF 12" DIP W/RJ & 4-12"x45"

MIN 3' ABSOLUTE COVER

MIN 5' COVER

2' MIN CLR

1' MIN CLR

PROP 6" FH LEAD

CENTERLINE OF PAVEMENT

EDGE OF PAVEMENT (N)

EDGE OF PAVEMENT (S)

ROW (N)

ROW (S)

24+50 25+00 26+00 27+00 28+00 29+00

16 18 20 22 24 26 28 30 32 34 36 38 40

0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA. 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
ELEV.=39.97'

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SHERMAN ST
PLAN & PROFILE
24+50 TO 29+00

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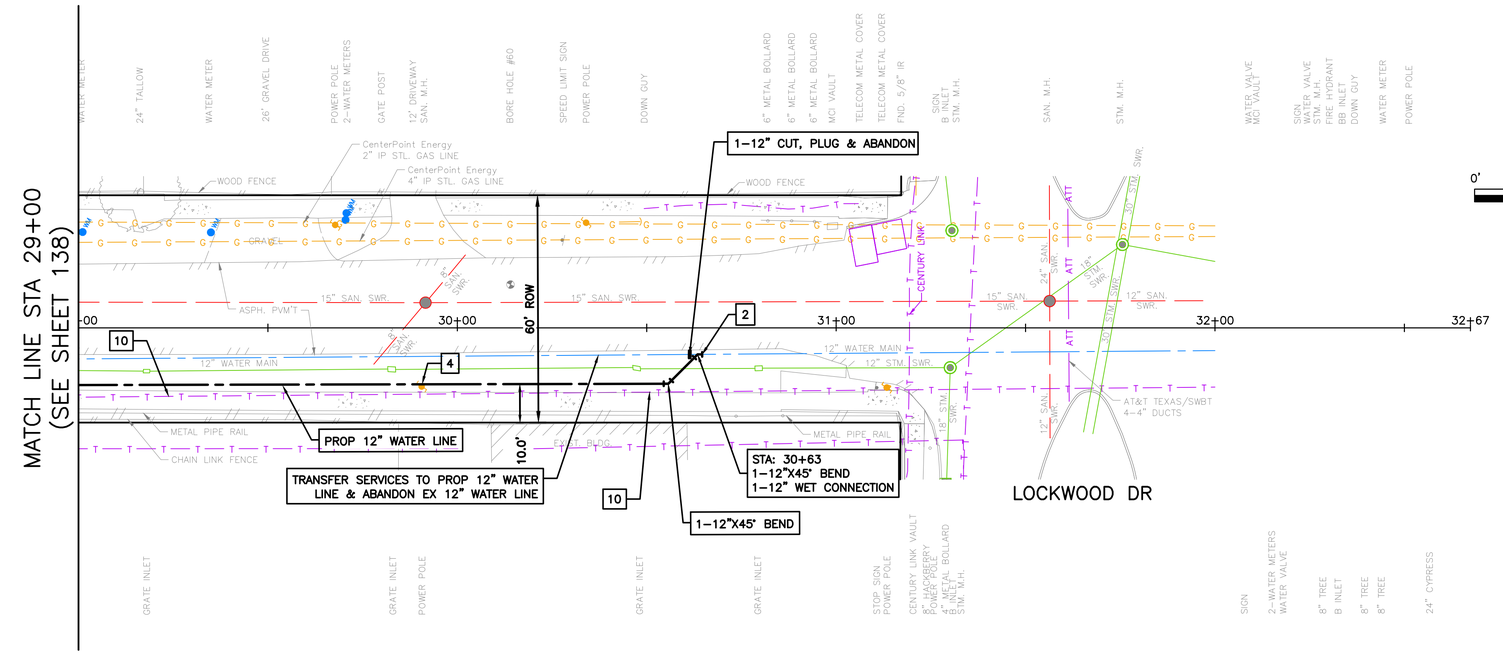
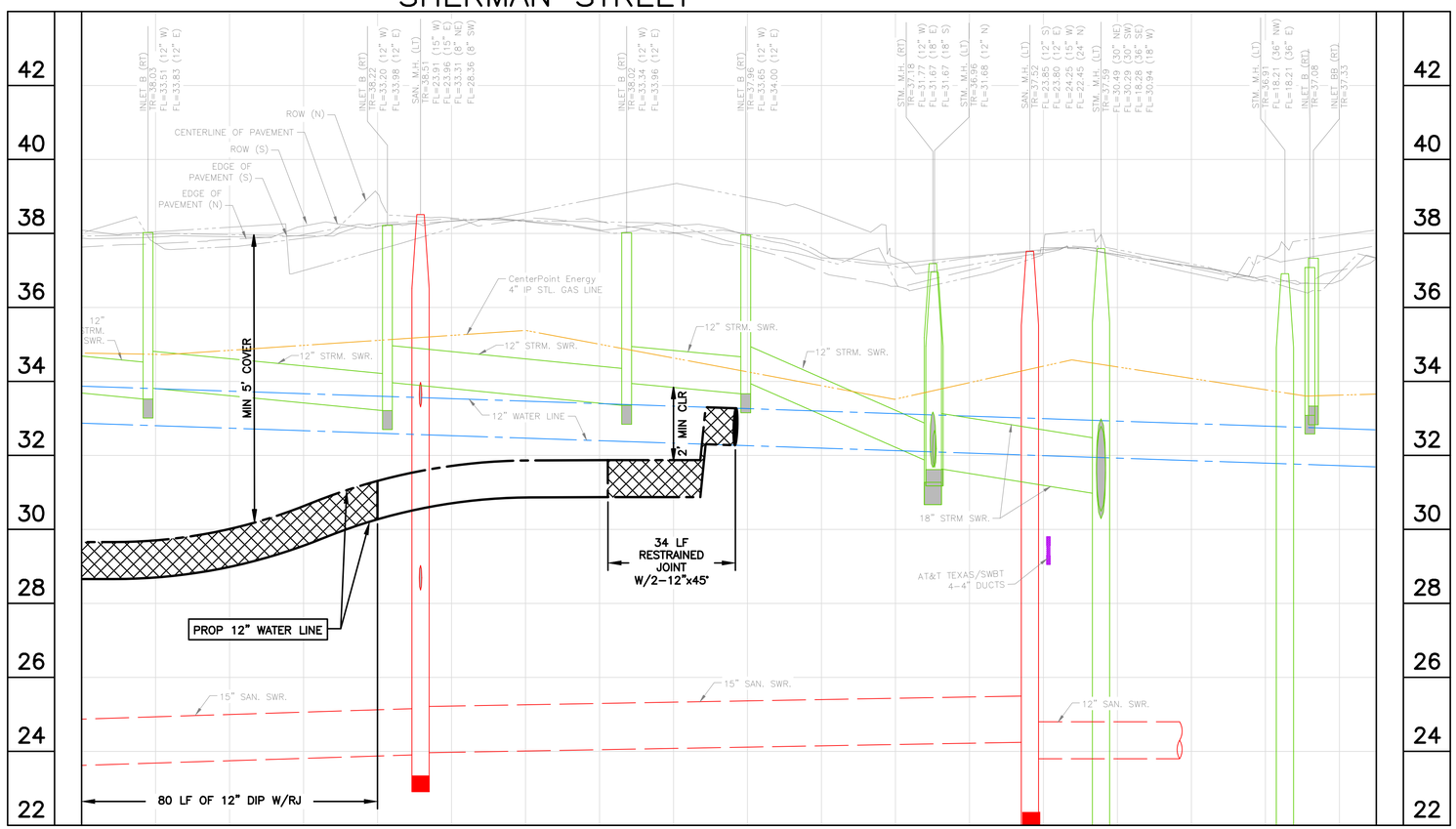
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 138 OF 275	

APP. | REVISION | NO. | DATE

90% SUBMITTAL



SHERMAN STREET



NOTES:

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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA, 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
ELEV.=39.97'

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

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Signature valid for six months.

Date

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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ORIGINATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

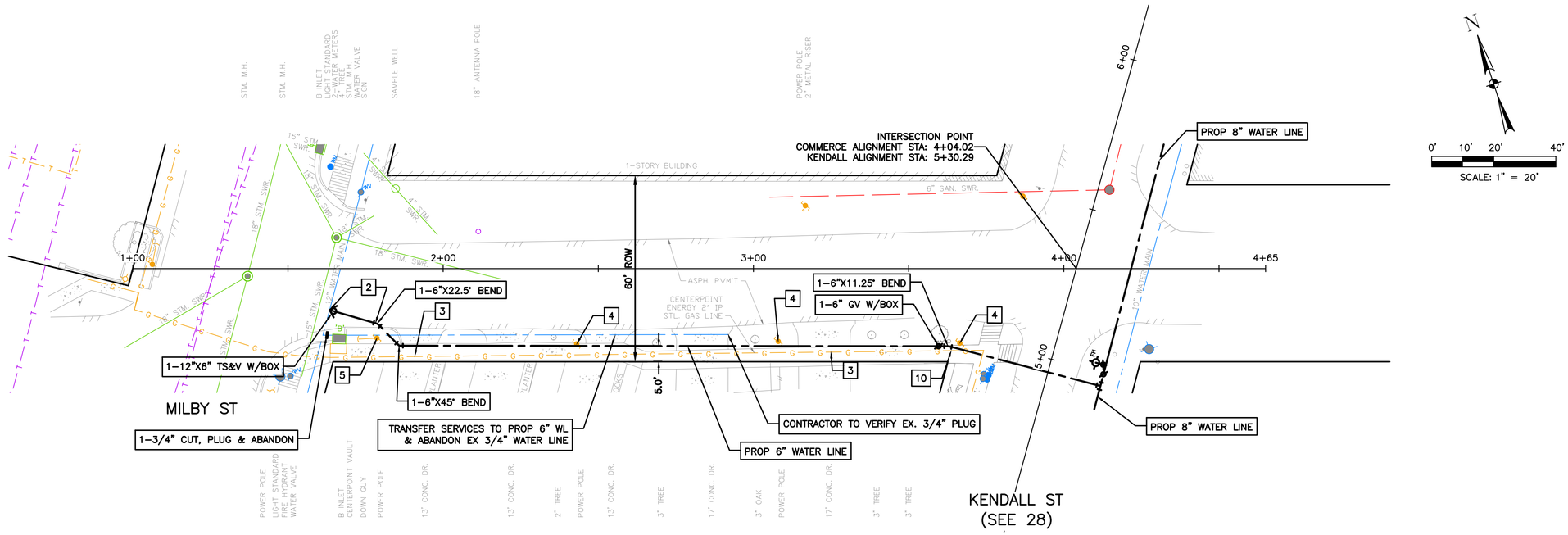
SHERMAN ST
PLAN & PROFILE
29+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20, VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 139 OF 275	

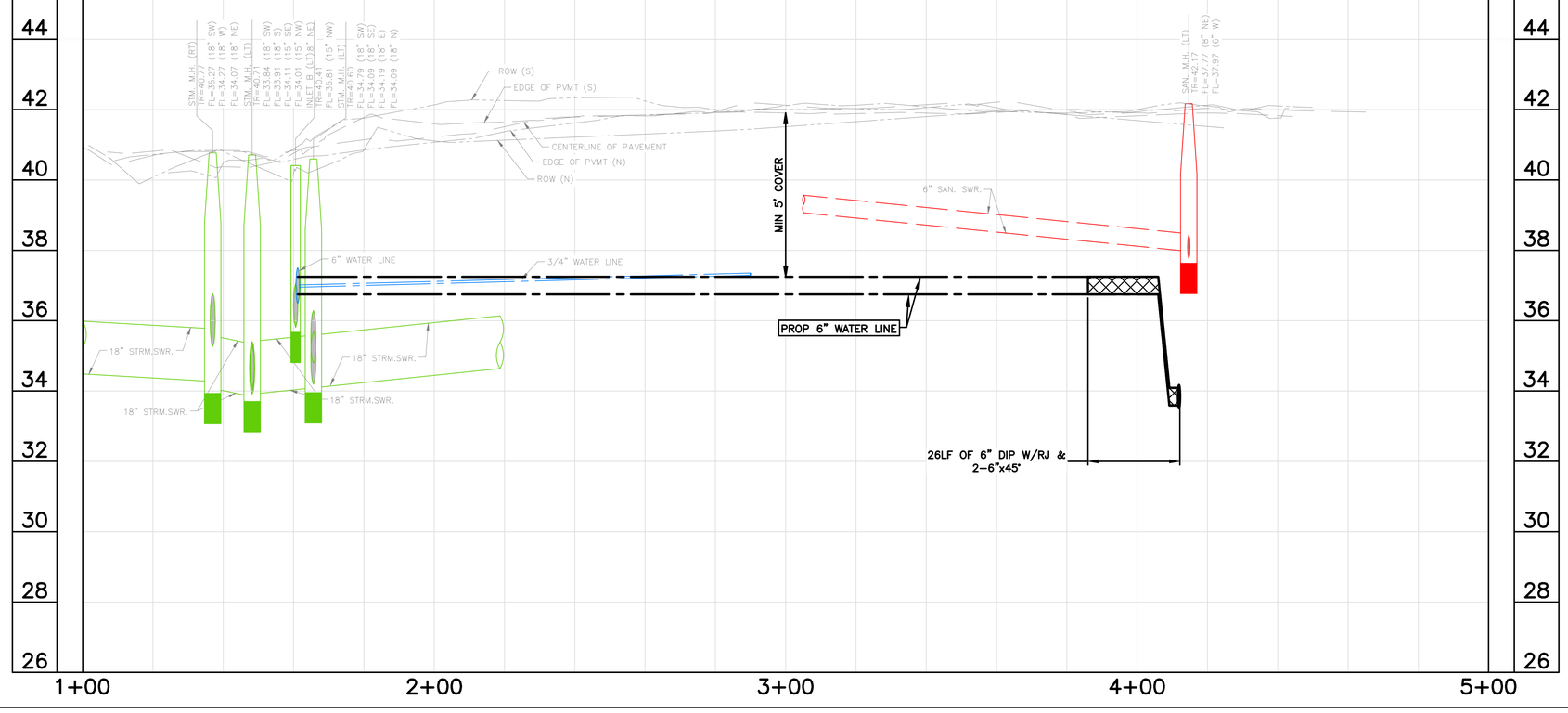
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:58 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SHERMAN STREET.dwg

90% SUBMITTAL



COMMERCE STREET



N

0' 10' 20' 40'

SCALE: 1" = 20'

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 5: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SHERMAN ST. & MILBY ST. STA. 14+45.44, 22.7' RT (SHERMAN ST. BASELINE) ELEV.=40.70'

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

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Signature valid for six months.

Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

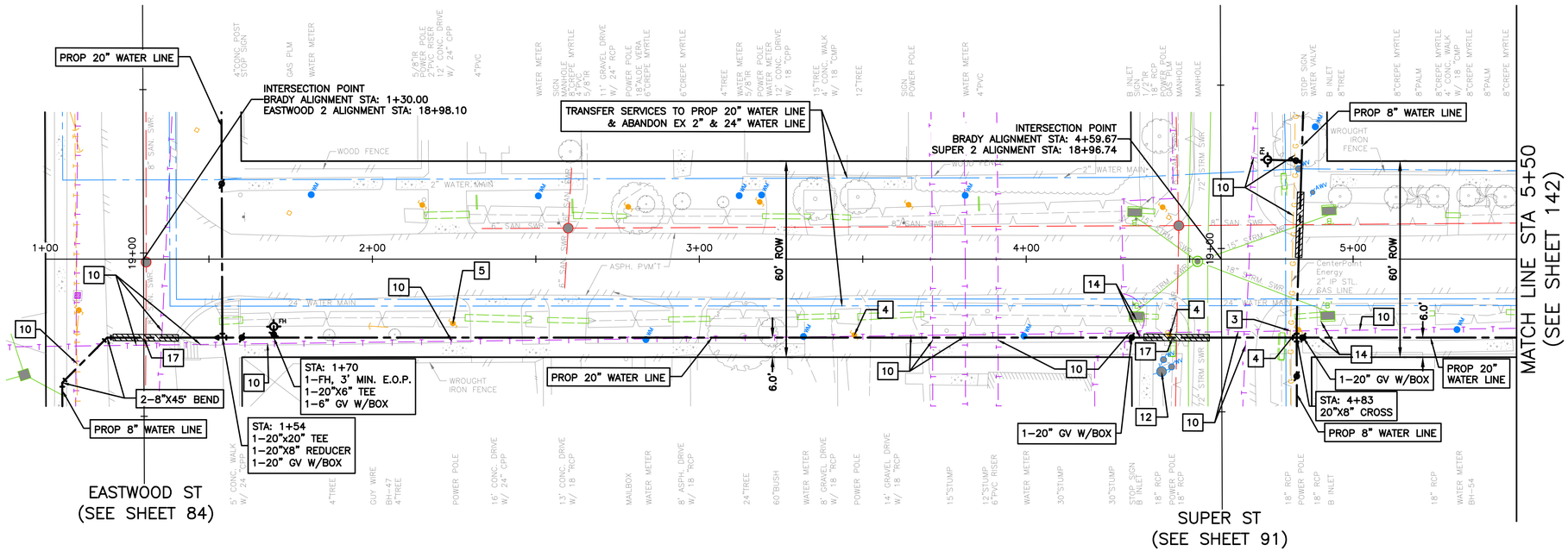
COMMERCE ST
PLAN & PROFILE
1+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 140 OF 275	

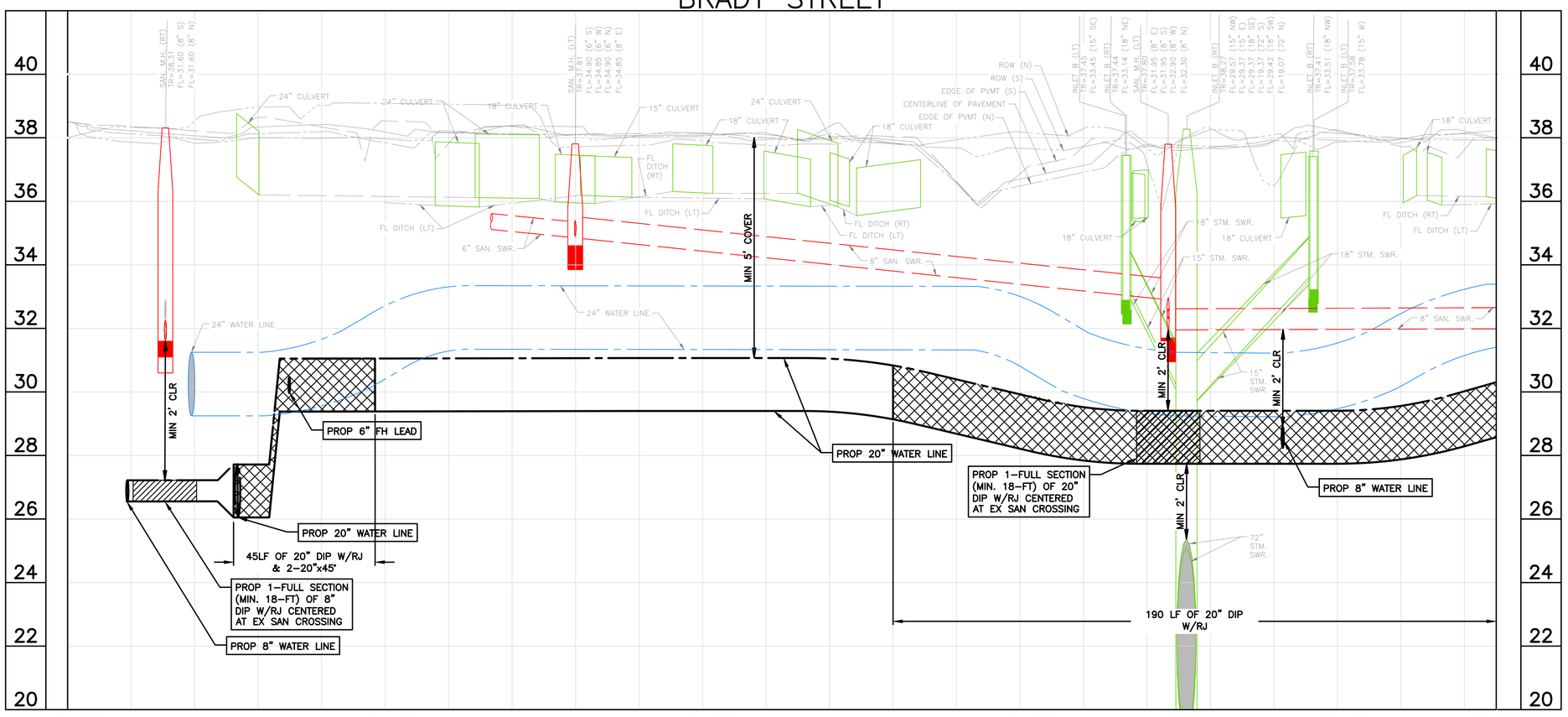
APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:59 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-COMMERCE STREET.dwg

90% SUBMITTAL



BRADY STREET



0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 2: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF GARROW ST. & GRACE ST.
STA. 10+16.64, 20.6' RT (GARROW ST. BASELINE)
ELEV.=40.31'

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

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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)

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Date

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Signature valid for one year.

WOOLPERT
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

BRADY ST
PLAN & PROFILE
1+00 TO 5+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 141 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 12:00 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-BRADY ST.dwg

90% SUBMITTAL

PLOTTED: 8/15/2025 12:00 PM
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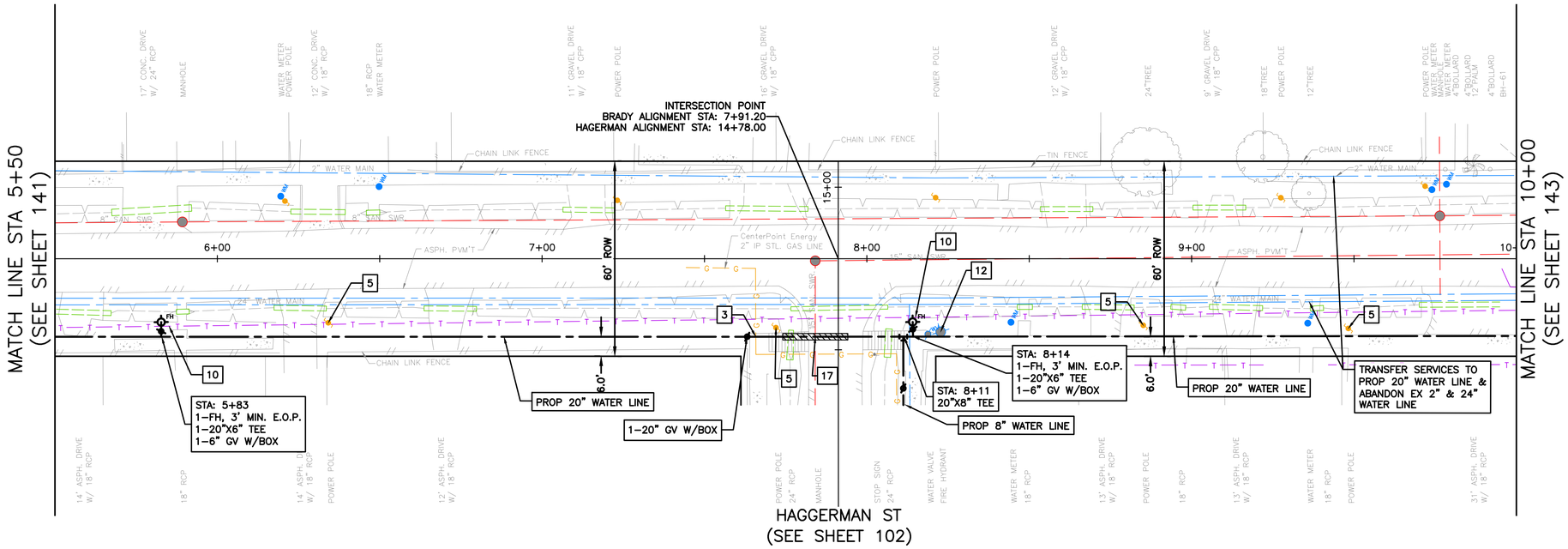
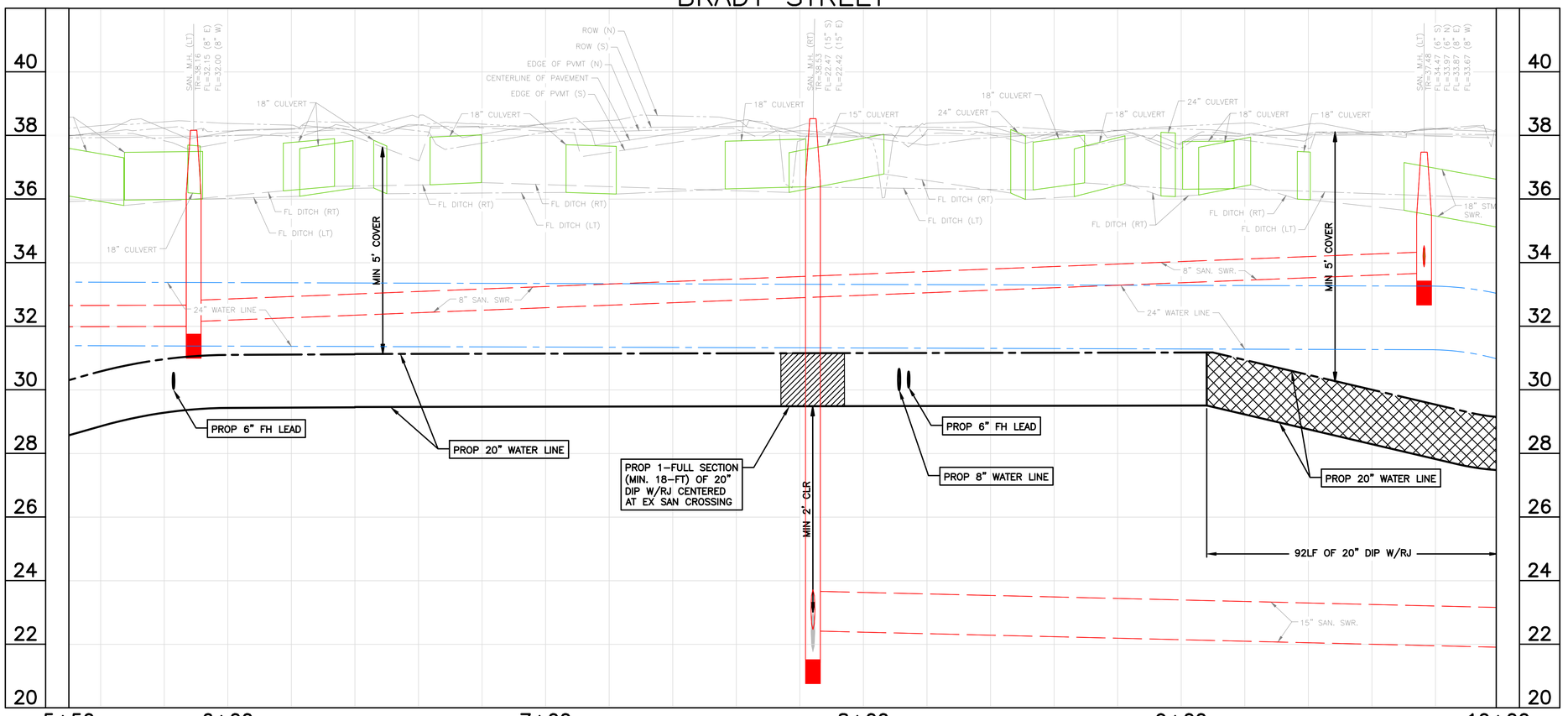
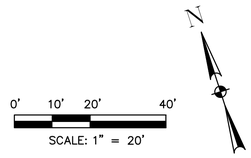


BRADY STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 8: SET 60D NAIL IN POWER POLE LOCATED ALONG THE NORTH SIDE OF SHERMAN ST. APPROXIMATELY 100' WEST OF LOCKWOOD DR.
STA, 30+34.34, 27.7' LT (SHERMAN ST. BASELINE)
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
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Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

BRADY ST
PLAN & PROFILE
5+50 TO 10+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 142 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL

PLOT STYLE: COH.ctb
PLOTTED: 8/15/2025 12:01 PM
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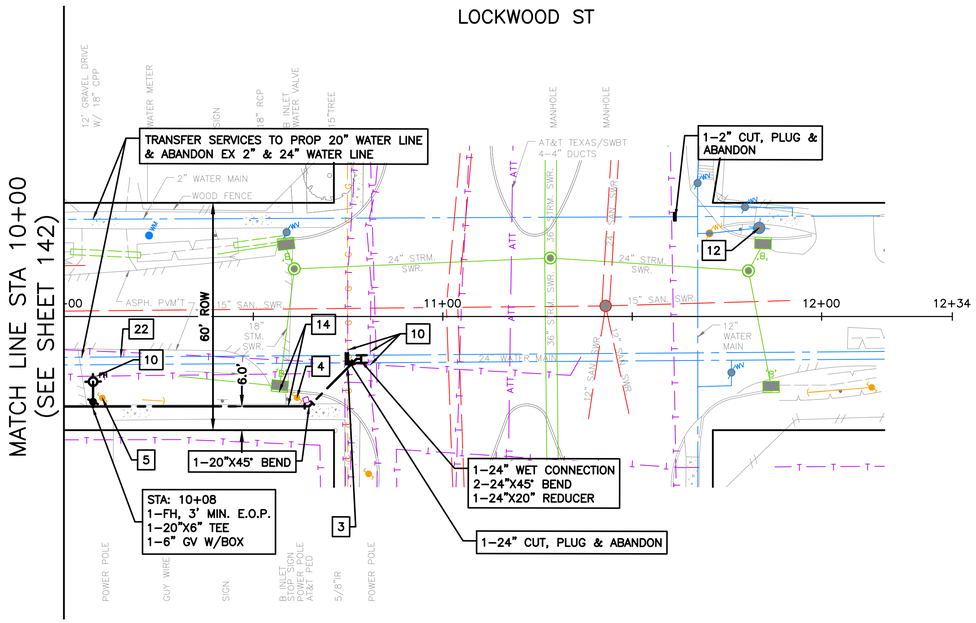

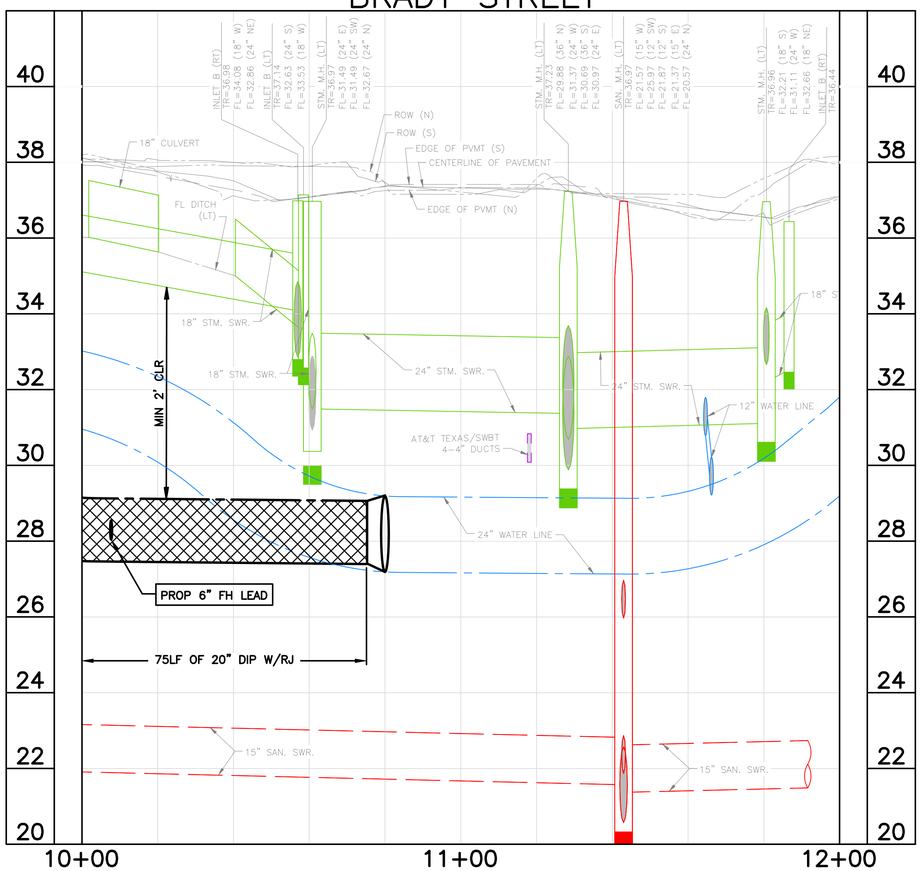

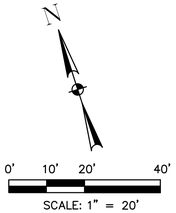

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ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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11750 Katy Freeway, Suite 1260
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800.414.1045

SURVEYED BY: WGC
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

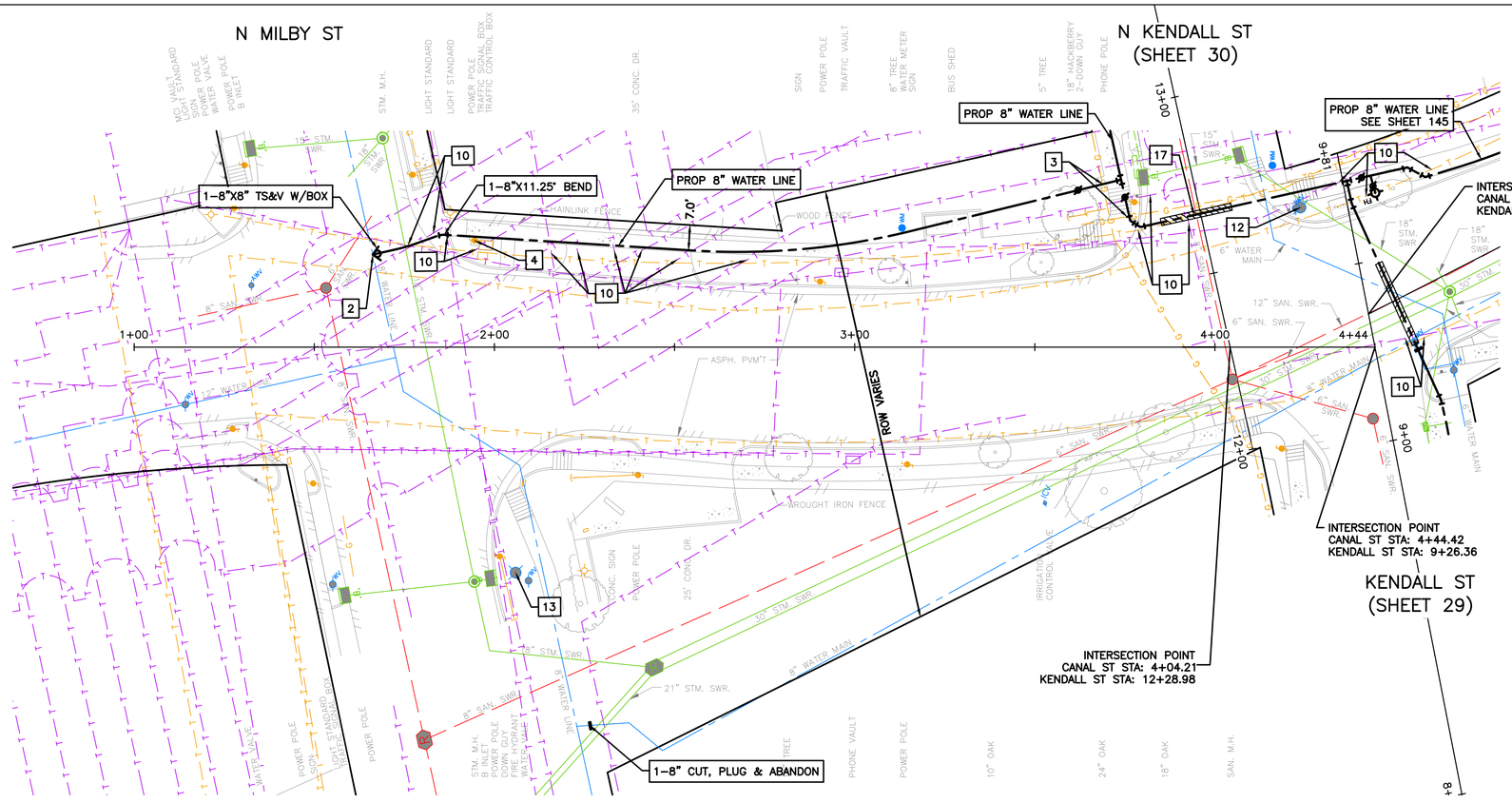
SECONDWARD WATERLINE REPLACEMENT

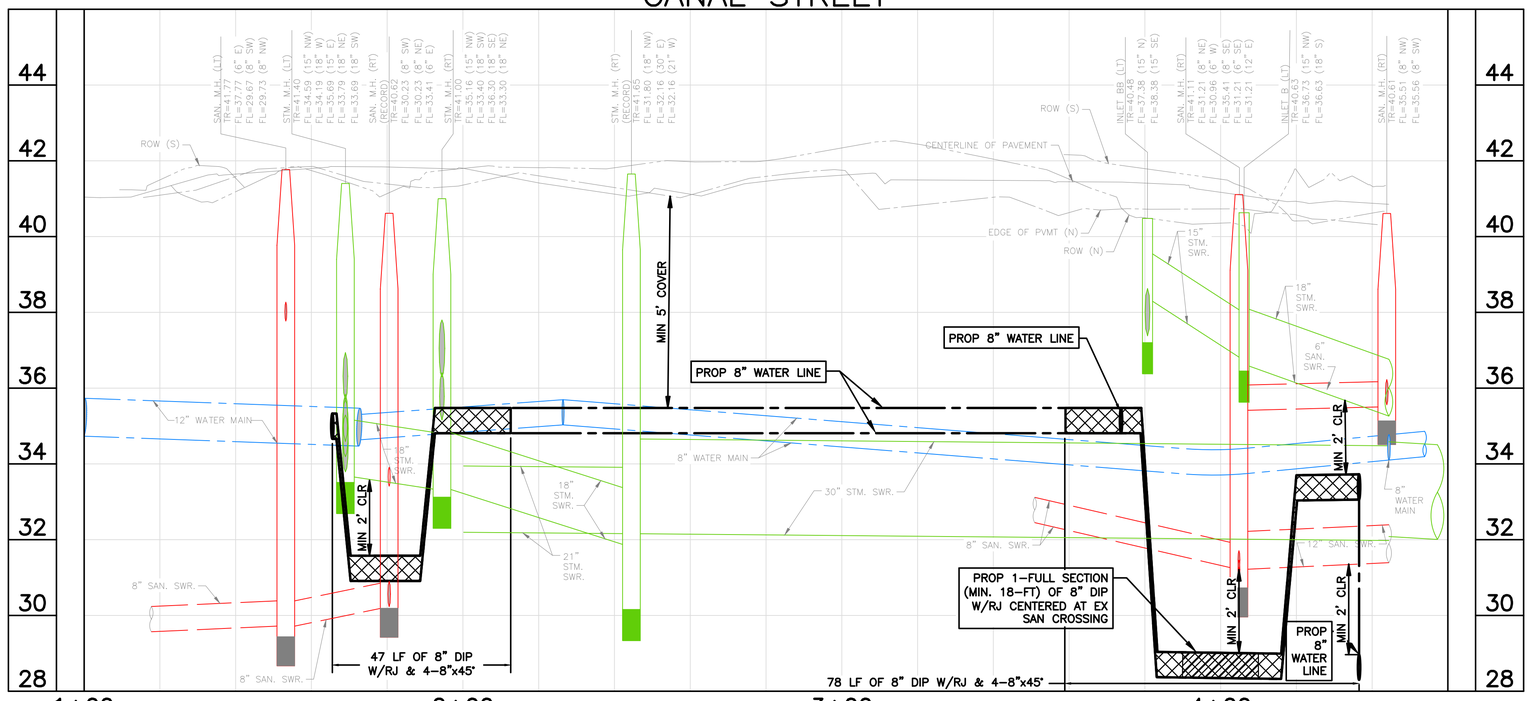
BRADY ST
PLAN & PROFILE
10+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 143 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL





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ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 9: SET 60D NAIL IN POWER POLE LOCATED AT THE NE CORNER OF LOVEJOY ST. & MILBY ST.
STA. 1+05.66, 46.3' LT (LOVEJOY ST. BASELINE)
ELEV.=42.92'

NOTICE:
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SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

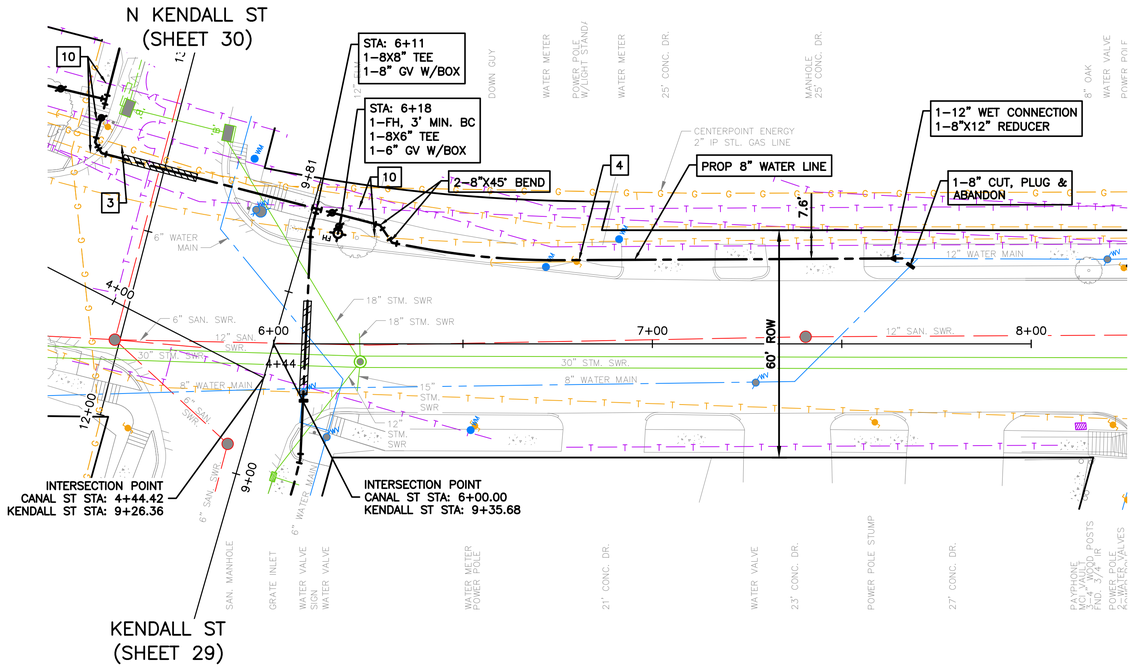
CANAL ST
PLAN & PROFILE
1+00 TO 4+44

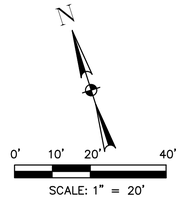
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 144 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 12:02 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-CANAL STREET.dwg

90% SUBMITTAL





NOTES:

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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ELEV.=42.92'

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | ARCHIVAL
11750 Katy Freeway, Suite 1260
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800.414.1045

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FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

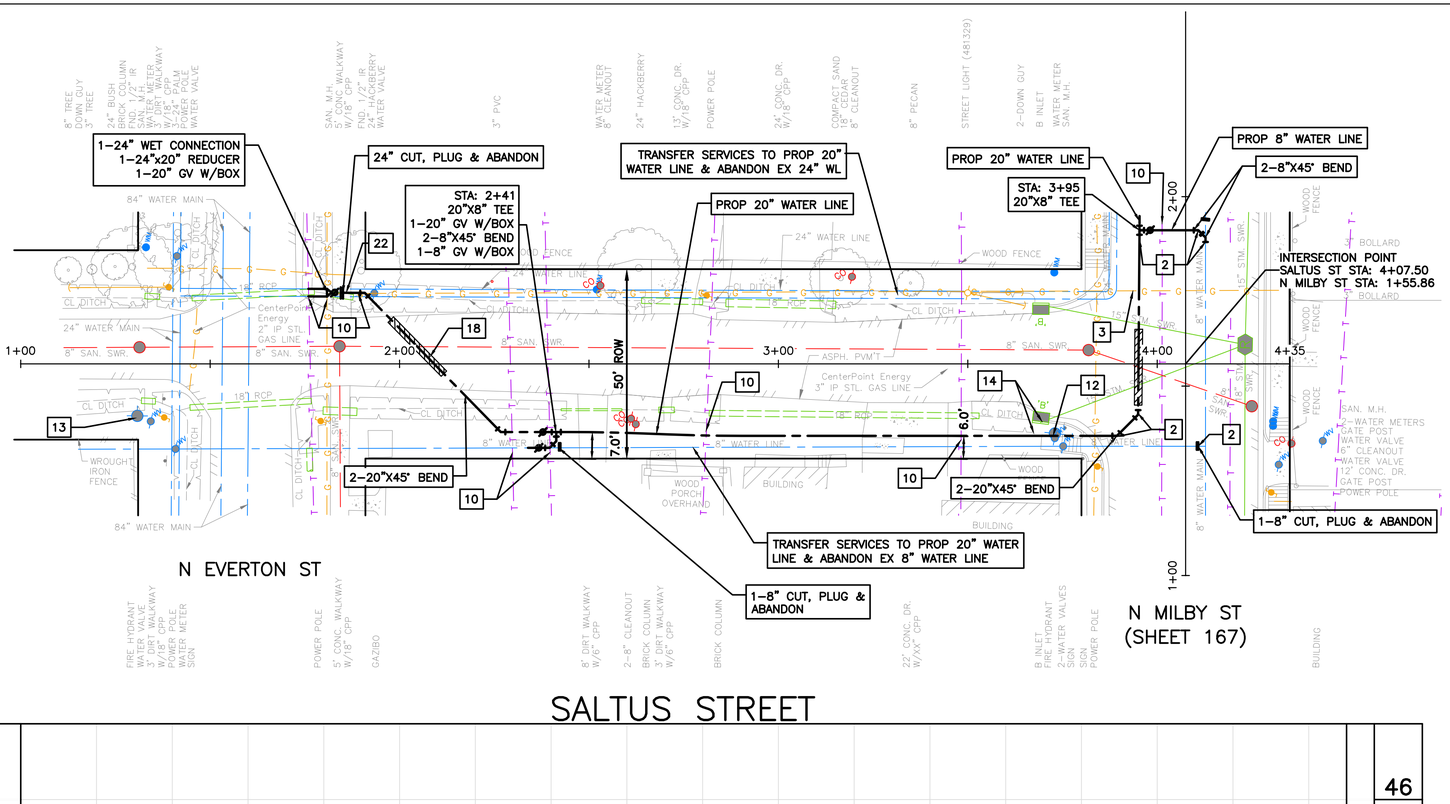
CANAL ST
PLAN & PROFILE
6+00 TO 8+00

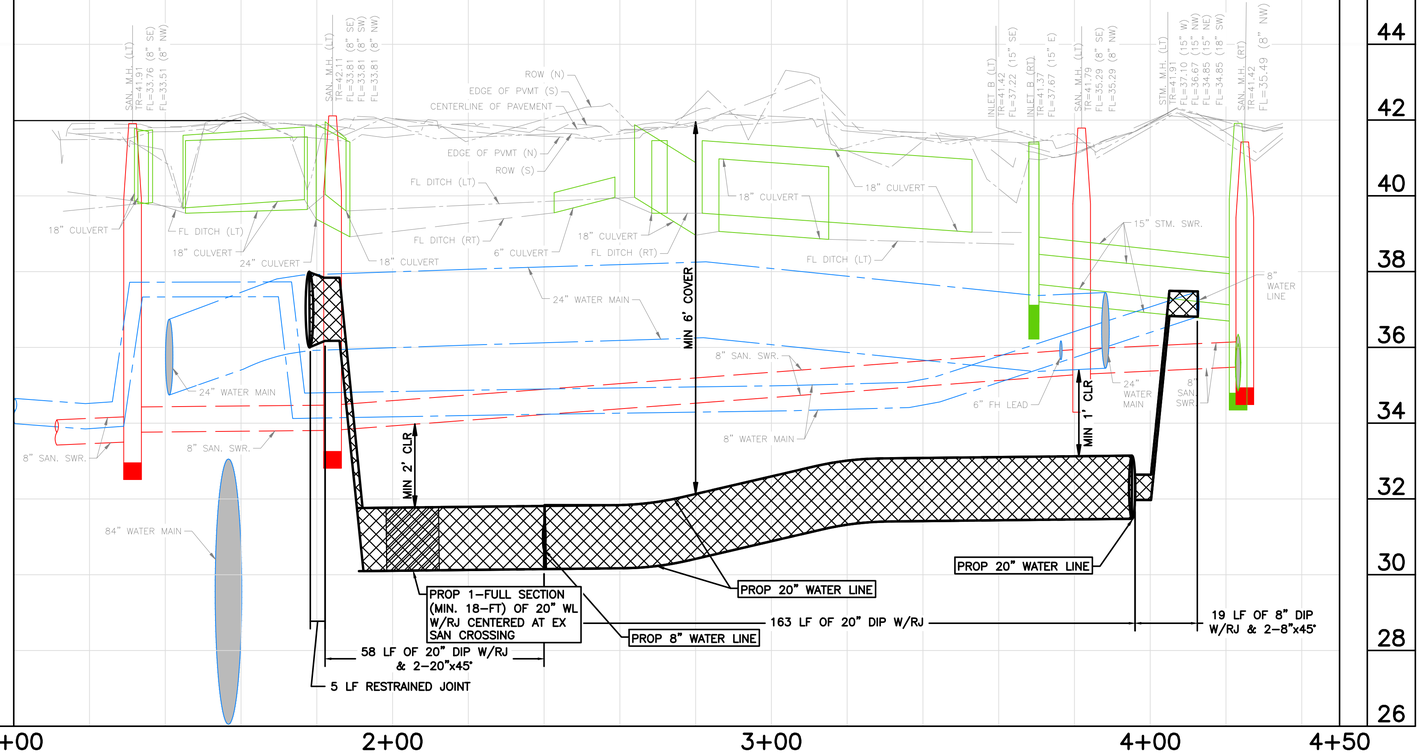
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 145 OF 275	

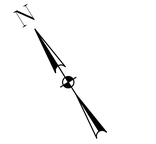
APP. | REVISION | NO. | DATE

CANAL STREET

PLOTTED: 8/15/2025 12:03 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–CANAL STREET.dwg







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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800.414.1045

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FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

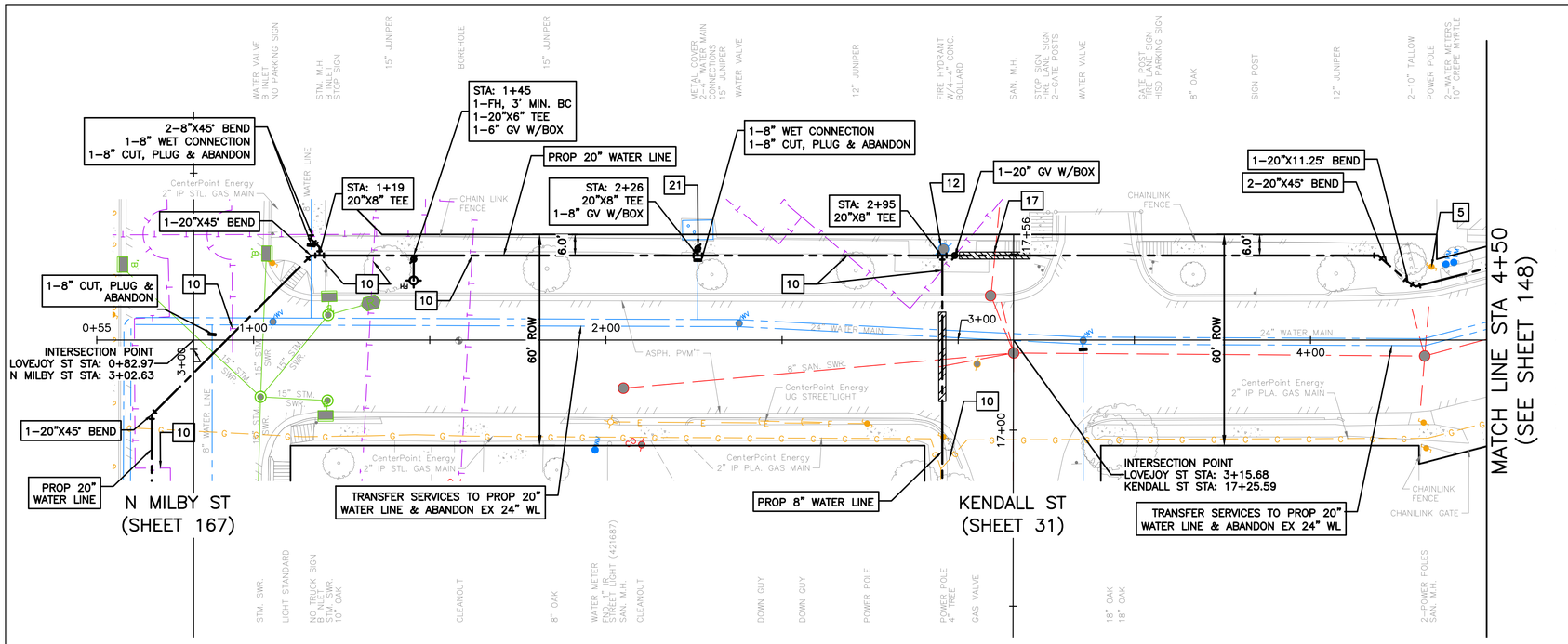
SALTUS ST
PLAN & PROFILE
1+00 TO END

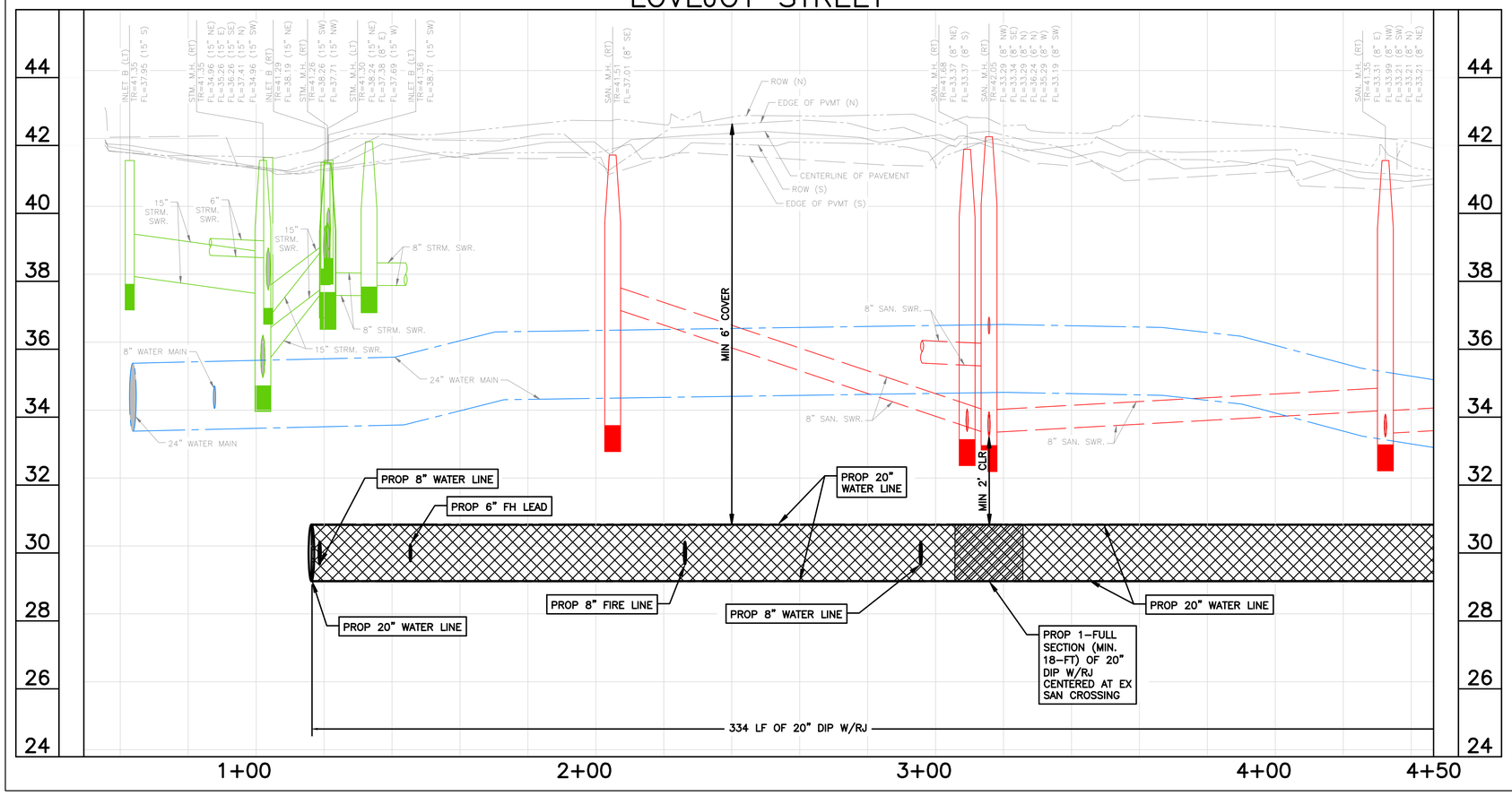
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 146 OF 275	

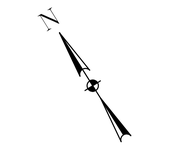
90% SUBMITTAL

APP. | REVISION | DATE | NO.

PLOTTED: 8/15/2025 12:04 PM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SALTUS STREET.dwg







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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

LOVEJOY ST
PLAN & PROFILE
1+00 TO 4+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 147 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 11:20 AM

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-LOVEJOY STREET.dwg

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 11:20 AM

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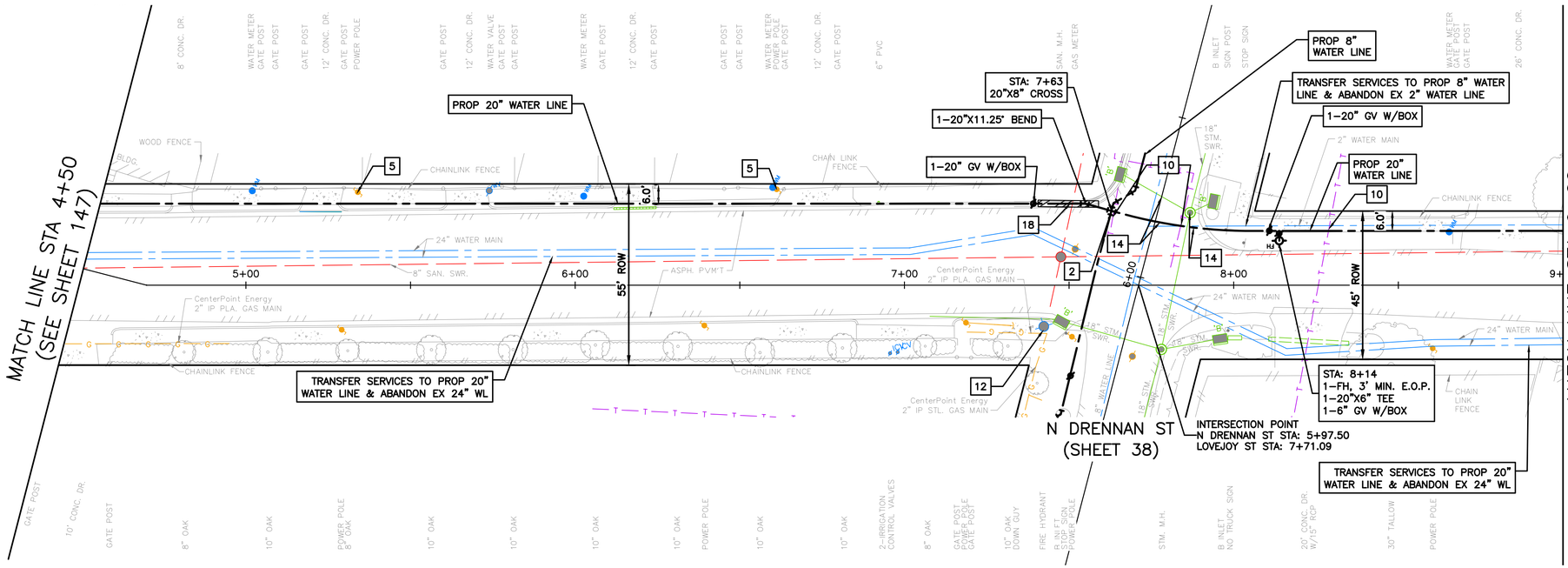

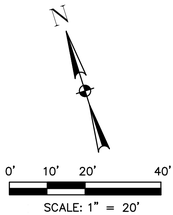

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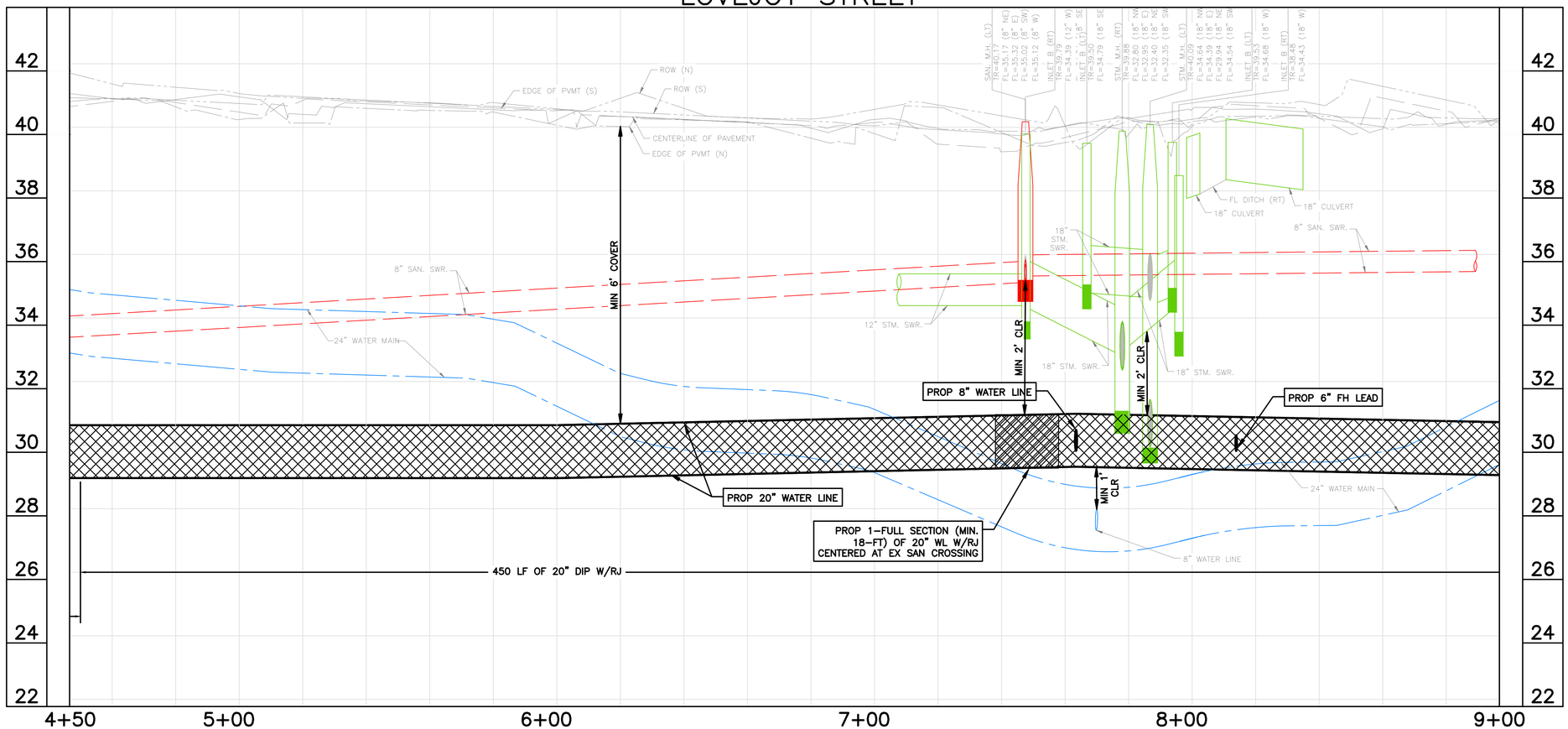
STA. 9494.83, 19.7' RT (LOVEJOY ST. BASELINE)
ELEV.=40.84'

LOVEJOY STREET



NO.	DATE	REVISION	APP.

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FB NO. 10038100

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

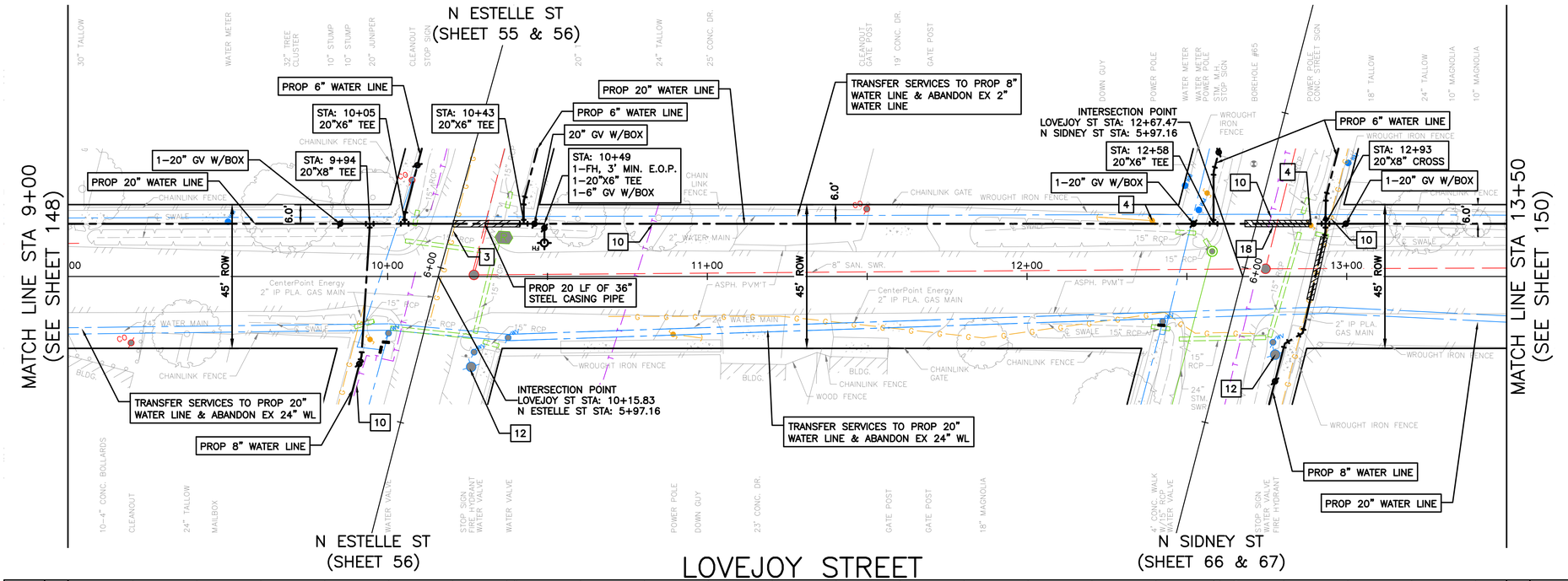
SECONDWARD WATERLINE REPLACEMENT

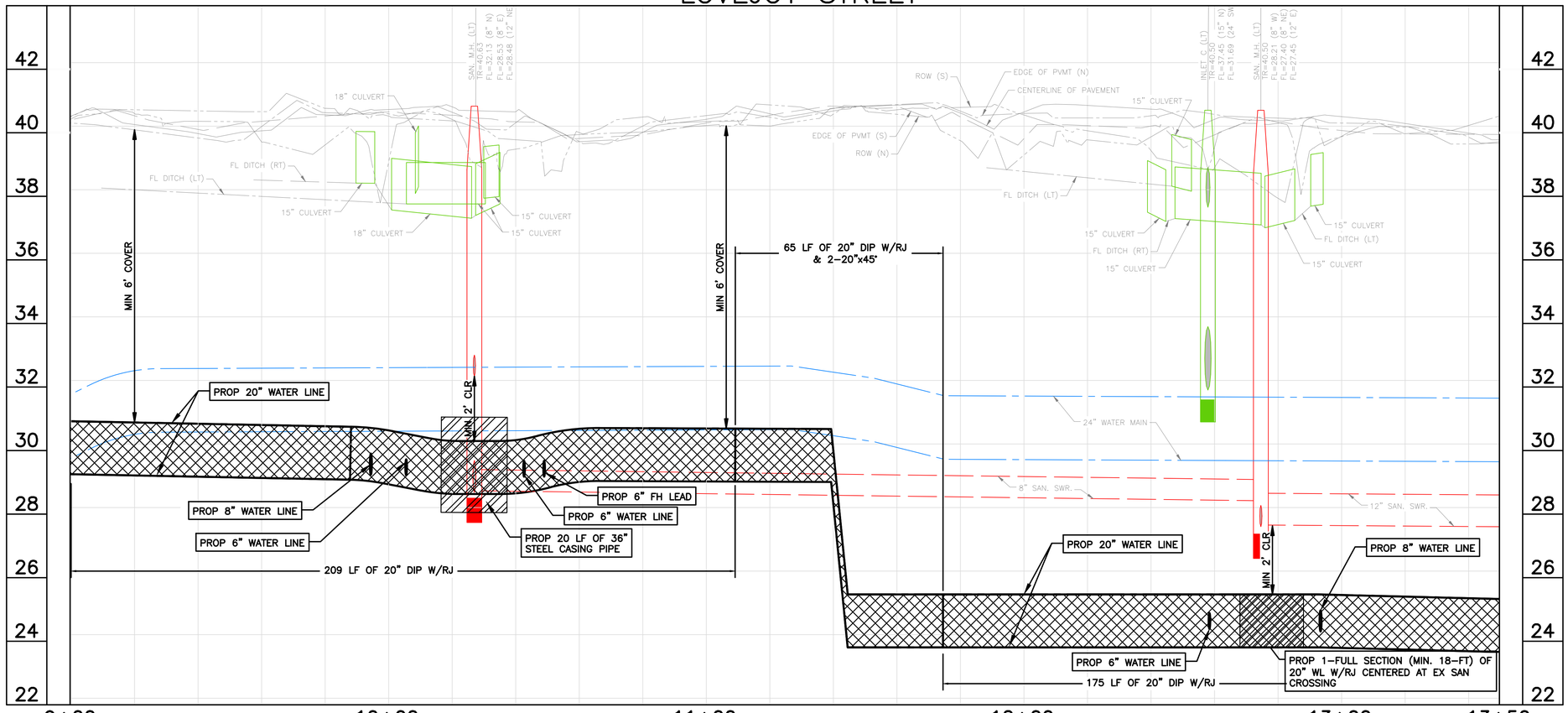
LOVEJOY ST
PLAN & PROFILE
4+50 TO 9+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 148 OF 275	

90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 11:21 AM





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0' 10' 20' 40'

SCALE: 1" = 20'

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

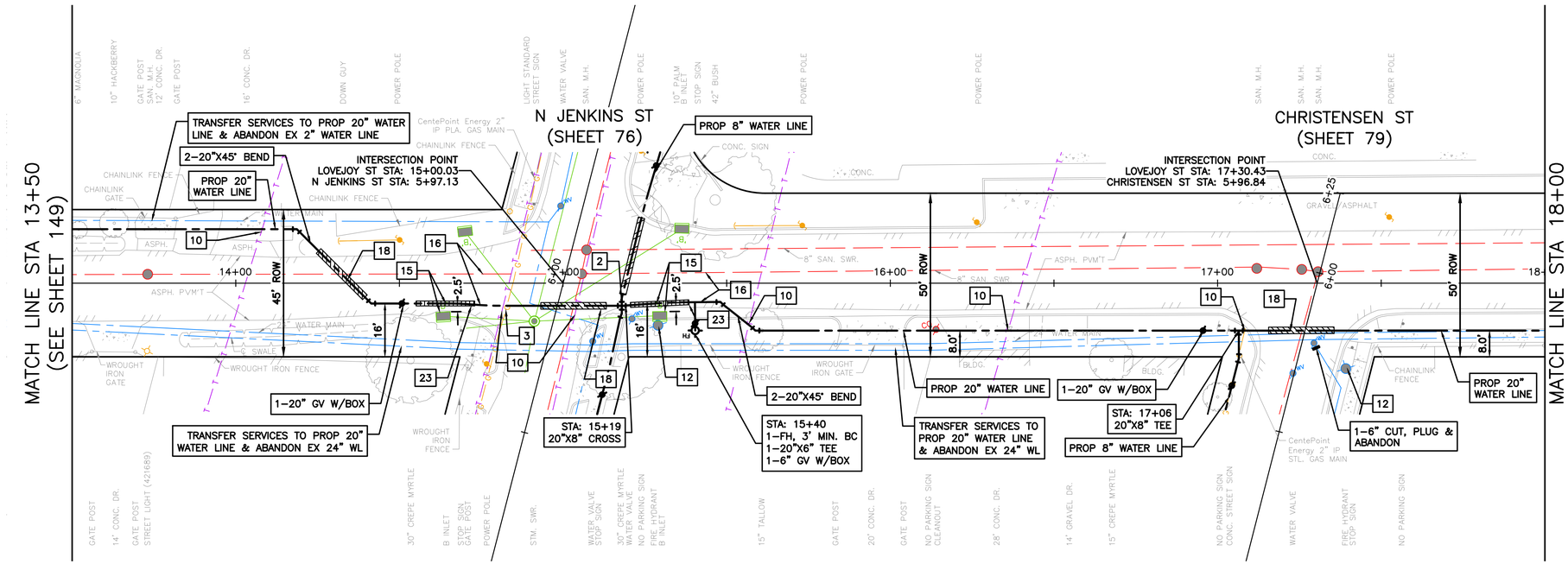
LOVEJOY ST
PLAN & PROFILE
9+00 TO 13+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 149 OF 275	

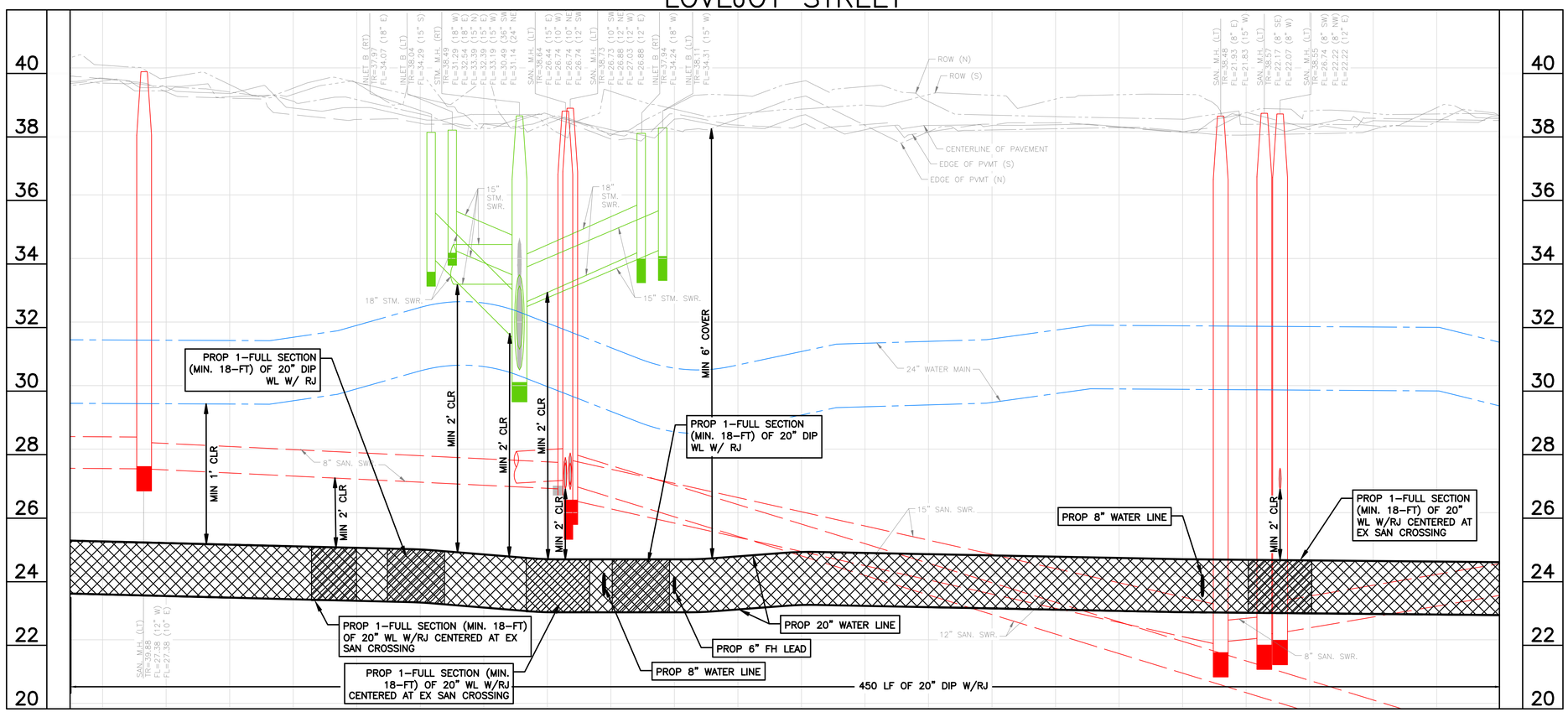
APP. | REVISION | NO. | DATE

90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 11:22 AM



LOVEJOY STREET



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

NO. | DATE | REVISION | APP.

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5) PROPOSED WATER LINES LESS THAN 16–INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3–FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20–INCH WITH A MINIMUM COVER OF 4–FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 10: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF LOVEJOY ST. & N. ESTELLE ST.
STA. 9494.83, 19.7' RT (LOVEJOY ST. BASELINE)
ELEV.=40.84'

NOTICE:
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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

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Signature valid for six months.

Date

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

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

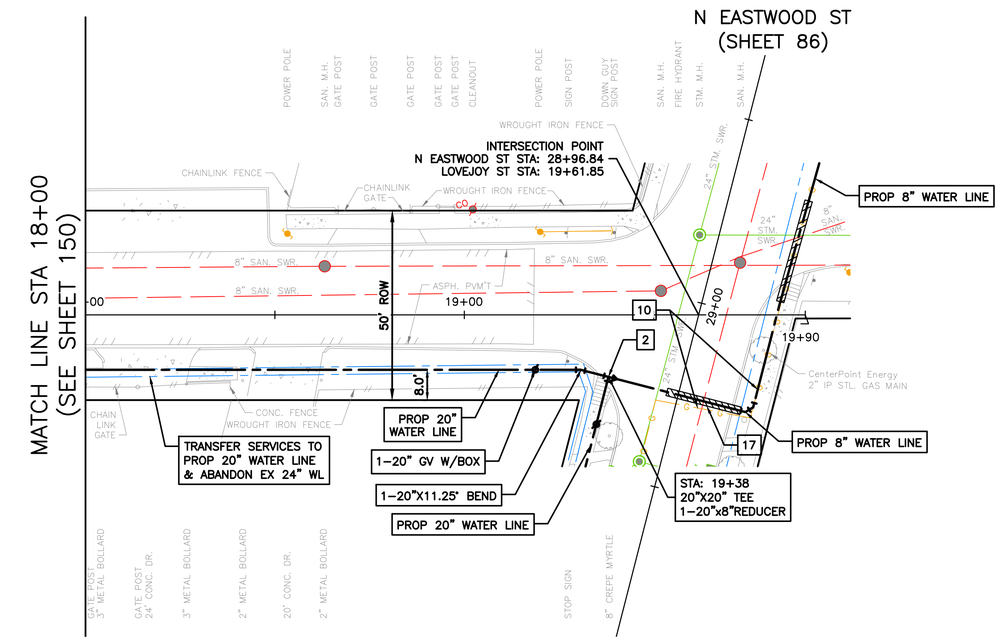
SECONDWARD WATERLINE REPLACEMENT

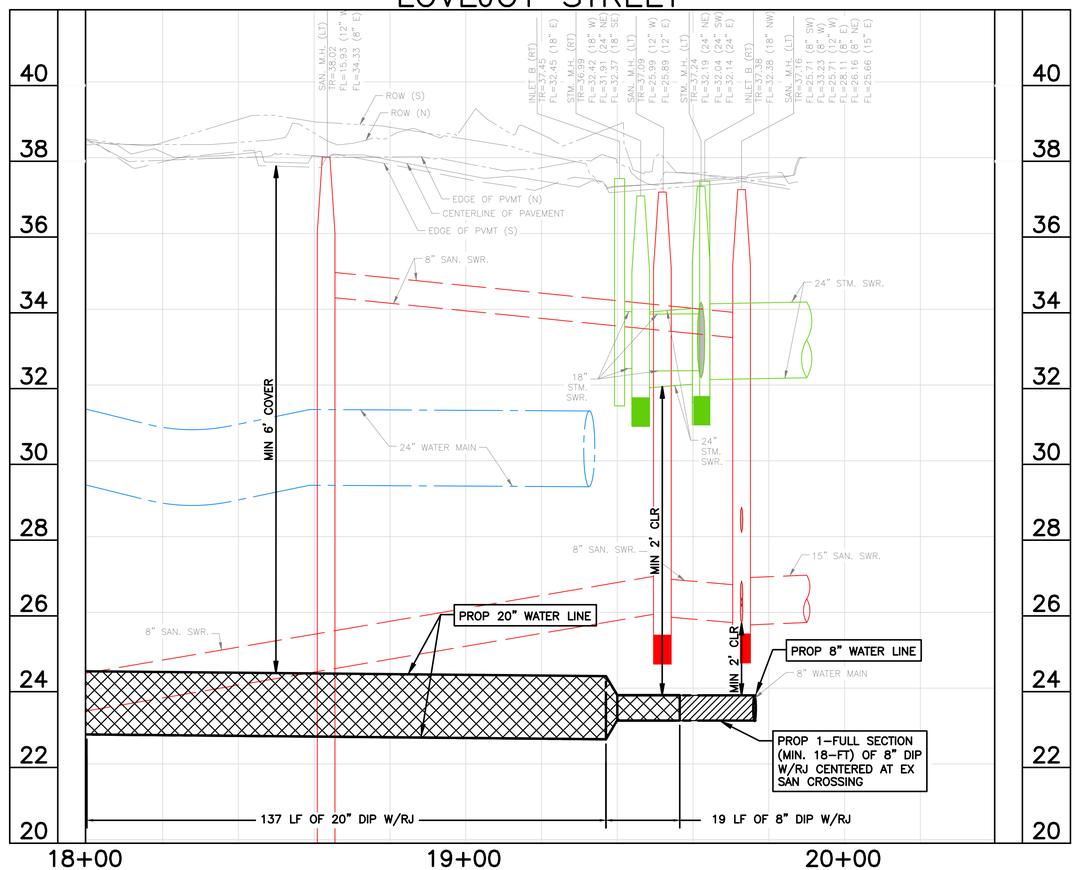
LOVEJOY ST
PLAN & PROFILE
13+50 TO 18+00

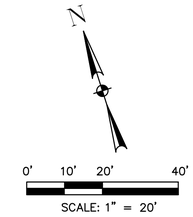
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 150 OF 275	

90% SUBMITTAL

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 8/15/2025 11:22 AM







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 10: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF LOVEJOY ST. & N. ESTELLE ST.
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Date

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

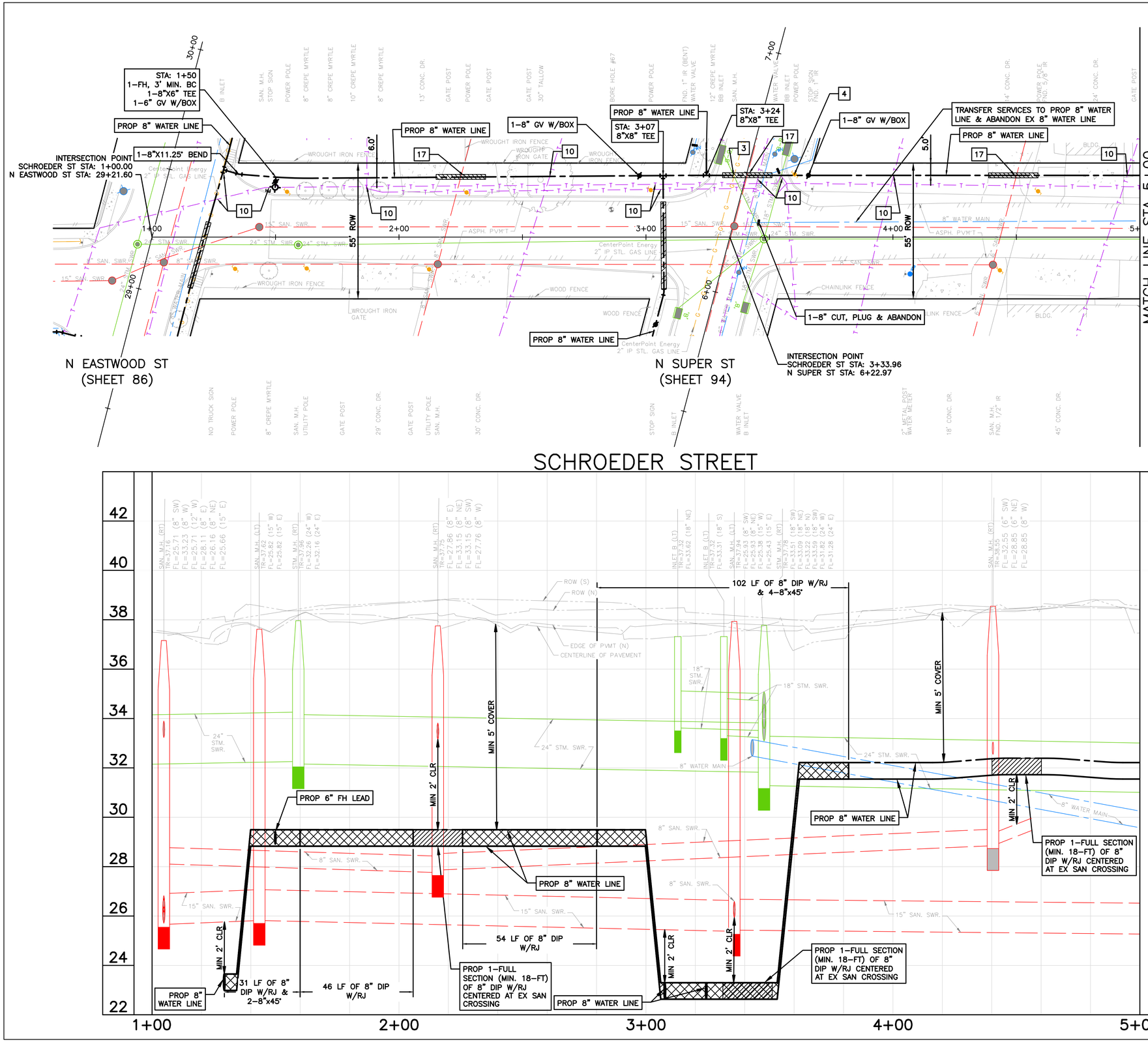
LOVEJOY ST
PLAN & PROFILE
18+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 151 OF 275	

APP. | REVISION | NO. | DATE

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-LOVEJOY STREET.dwg

90% SUBMITTAL



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

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TBM 11: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SCHROEDER ST. & N. EASTWOOD ST. STA. 1+33.99, 42.7' RT (SCHROEDER ST. BASELINE) ELEV.=39.86'

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

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | INDUSTRIAL
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SCHROEDER ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 152 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:23 AM
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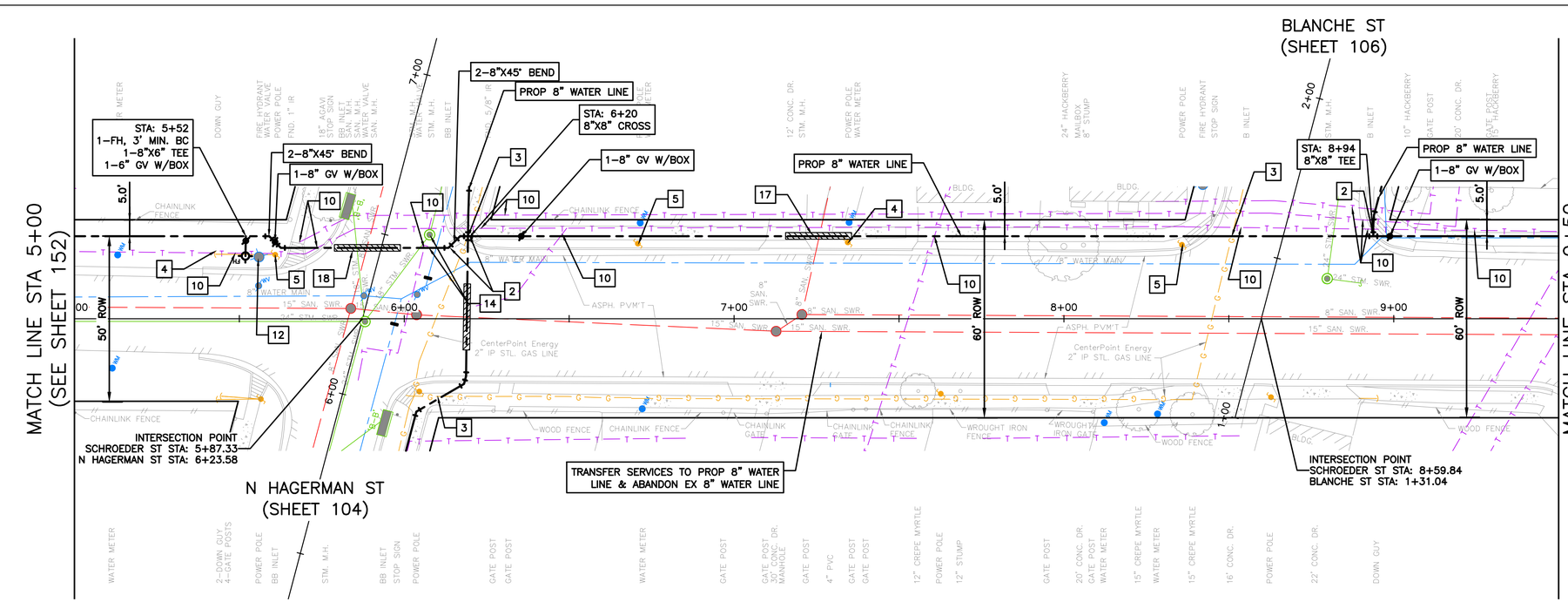
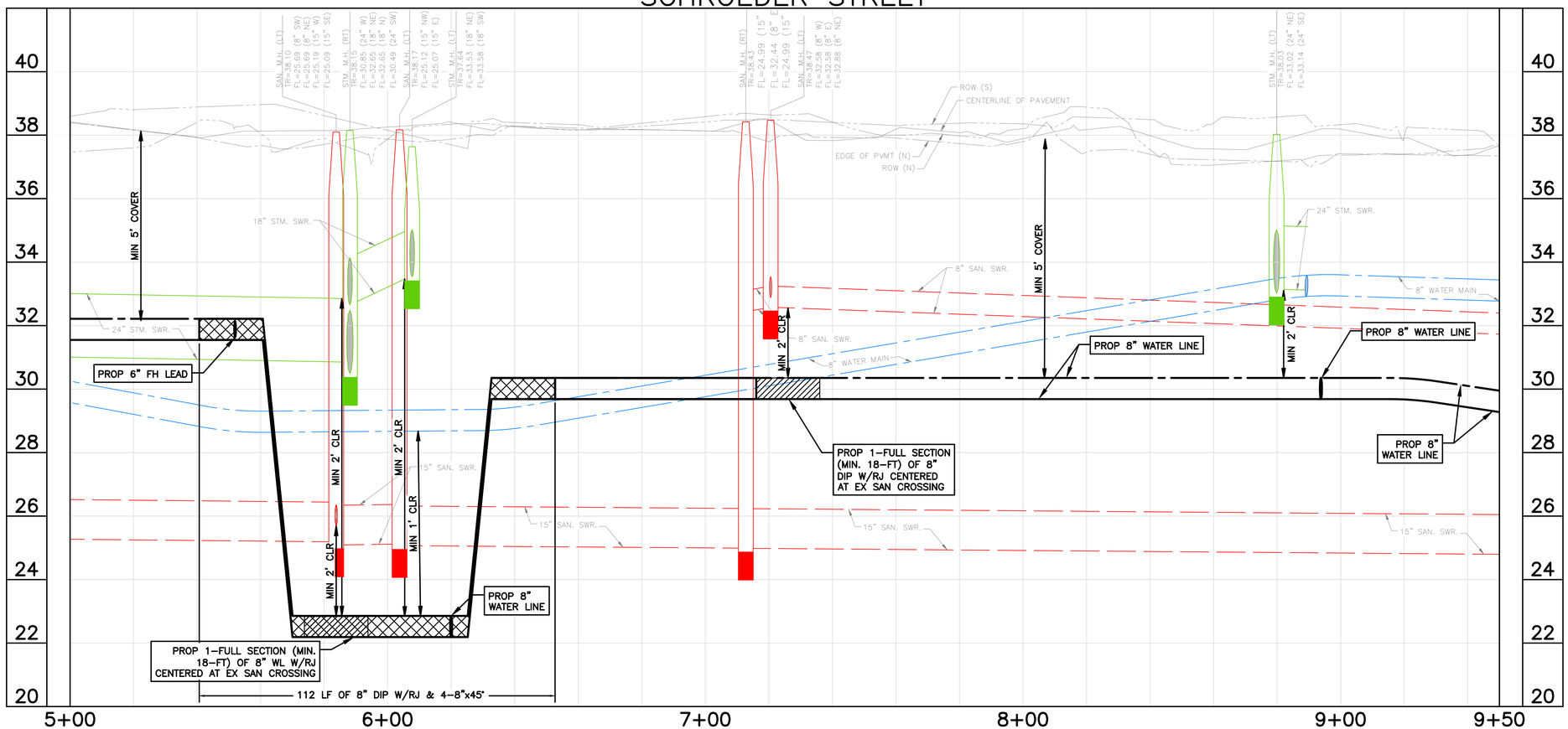
90% SUBMITTAL



SCHROEDER STREET



0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:

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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 12: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SCHROEDER ST. & MAPLEWOOD ST. STA. 9+58.90, 41.97'RT (SCHROEDER ST. BASELINE) ELEV.=39.02'

NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Date

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WOOLPERT
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

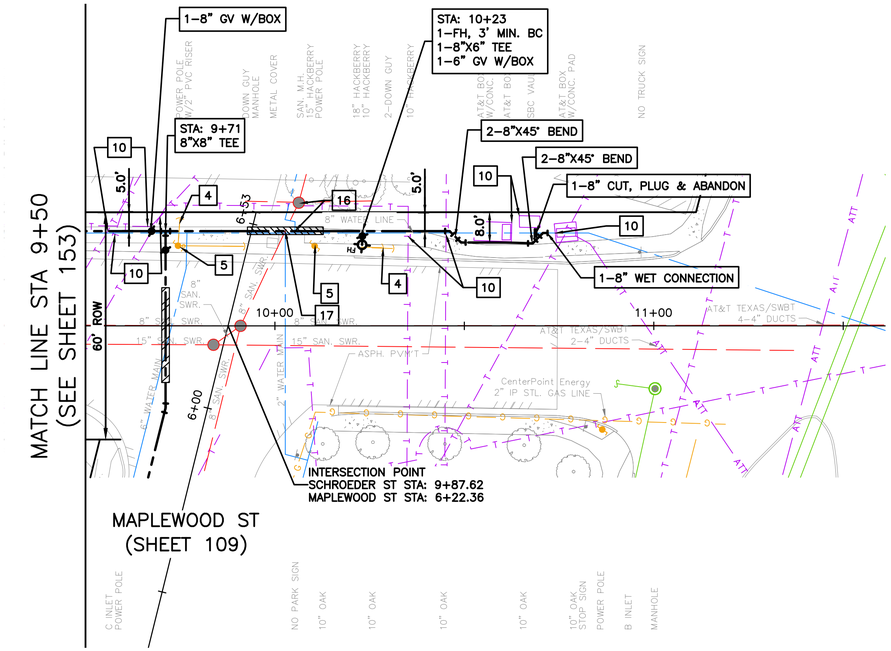
SCHROEDER ST
PLAN & PROFILE
5+00 TO 9+50

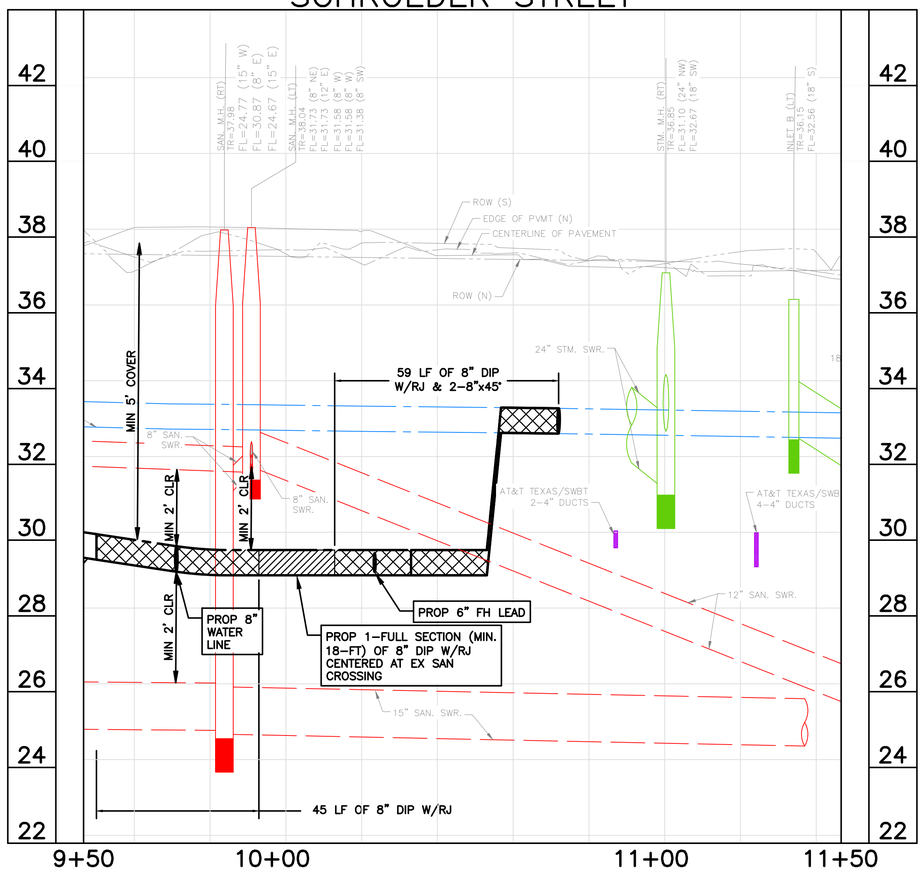
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 153 OF 275	

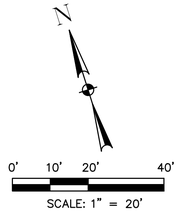
90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:24 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SCHROEDER STREET.dwg







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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

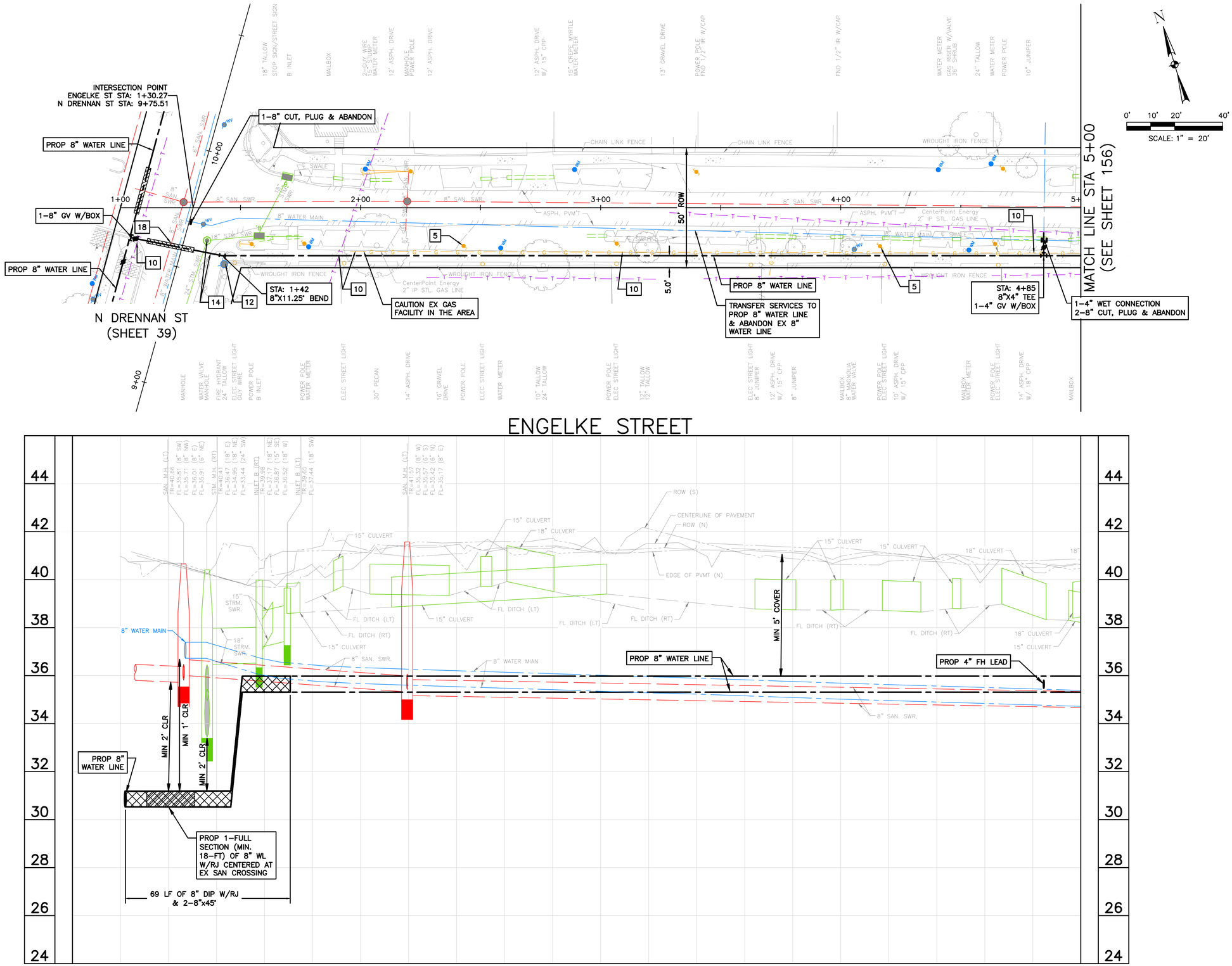
SCHROEDER ST
PLAN & PROFILE
9+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 154 OF 275	

APP. | REVISION | DATE | NO.

90% SUBMITTAL

PLOTTED: 8/15/2025 11:24 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SCHROEDER STREET.dwg



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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

ENGELKE ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 155 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

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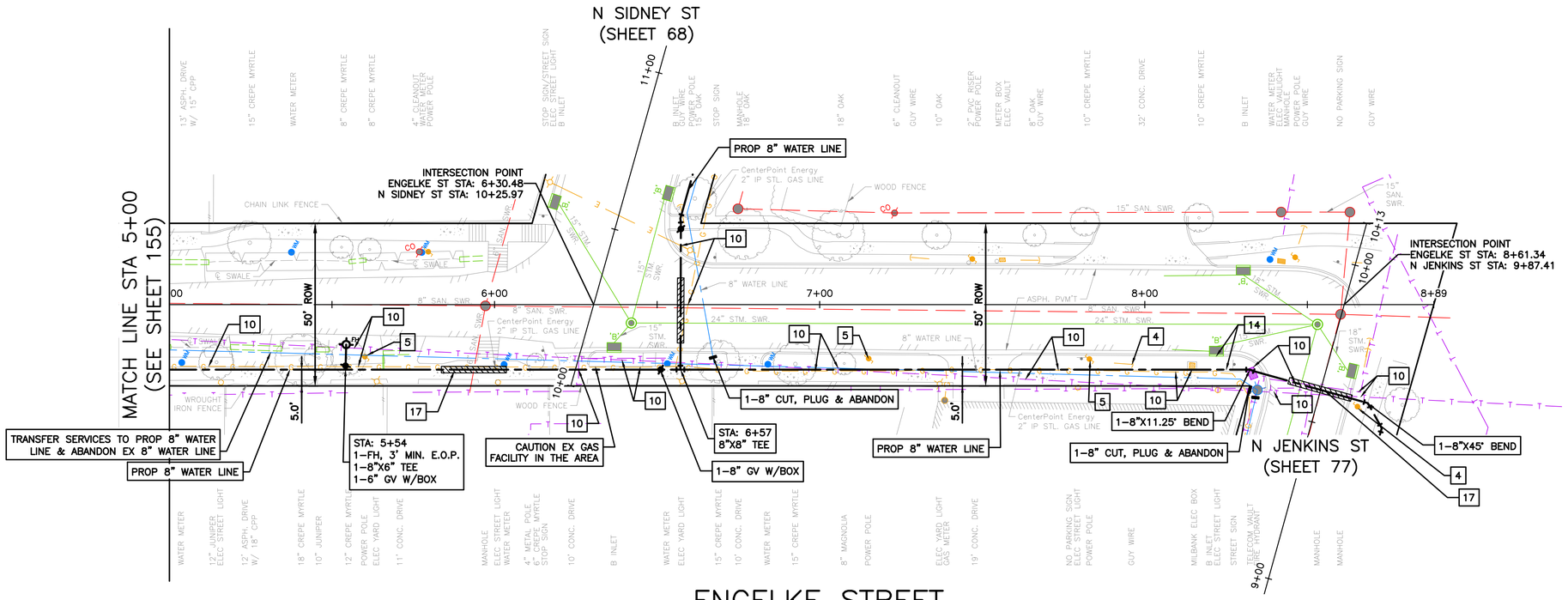
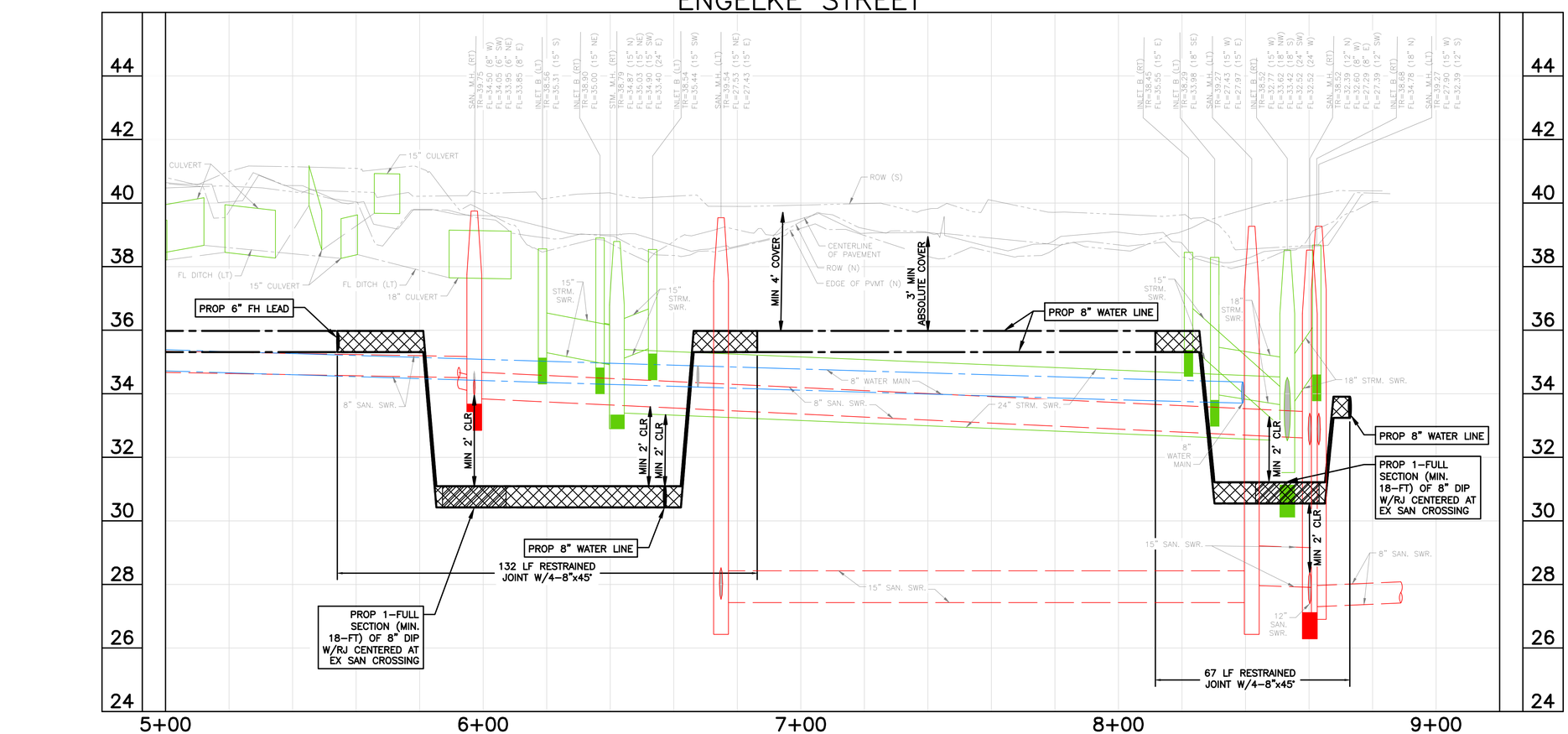
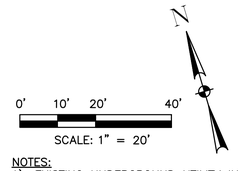
PLOTTED: 8/15/2025 11:26 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-ENGELKE STREET.dwg







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2) PROPOSED WATER LINES SHALL BE INSTALLED BY MEANS OF TRENCHLESS CONSTRUCTION METHOD EXCEPT WHERE NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF PITS IN THE FIELD SUBJECT TO THE CITY ENGINEER'S APPROVAL.
3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
5) PROPOSED WATER LINES LESS THAN 16-INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3-FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20-INCH WITH A MINIMUM COVER OF 4-FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 10: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF LOVEJOY ST. & N. ESTELLE ST. STA. 9494.83, 19.7' RT (LOVEJOY ST. BASELINE) ELEV.=40.84'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.
NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

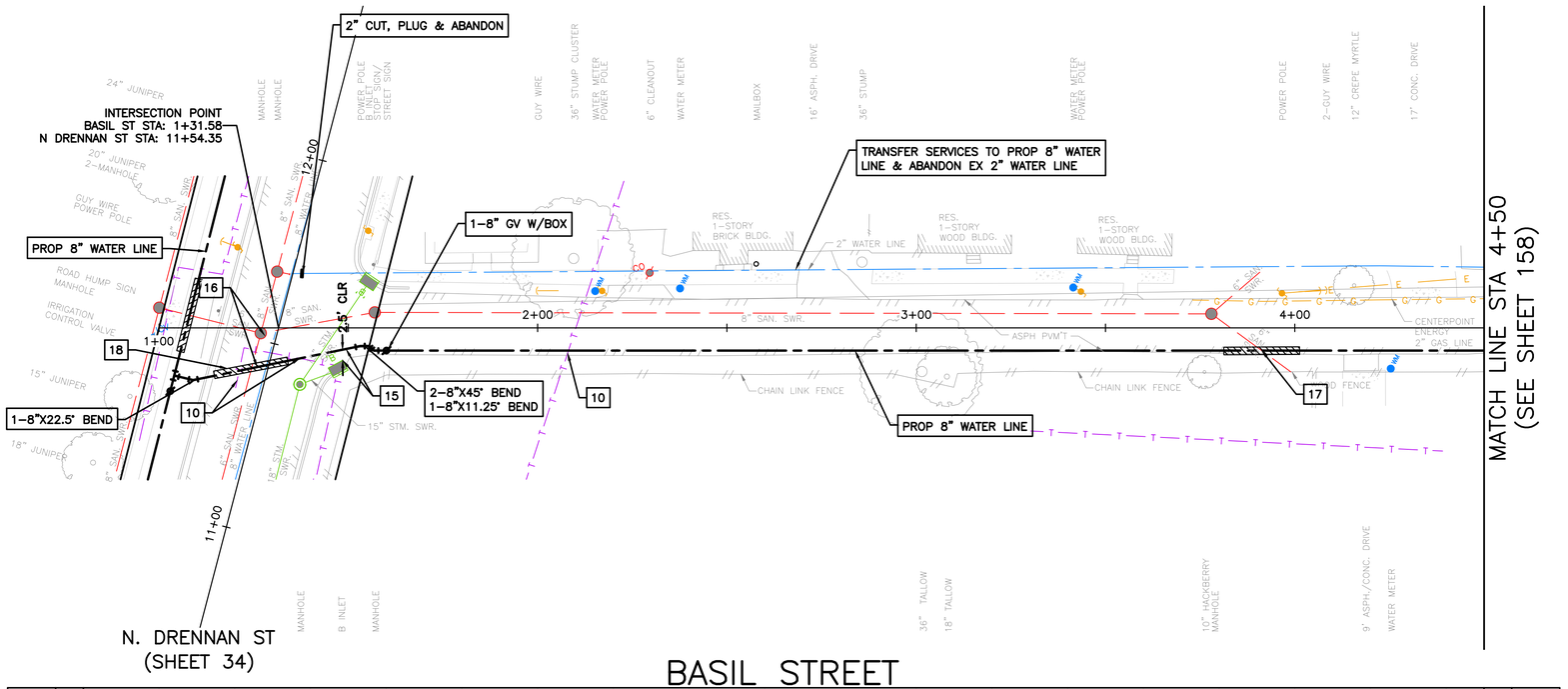
SECONDWARD WATERLINE REPLACEMENT

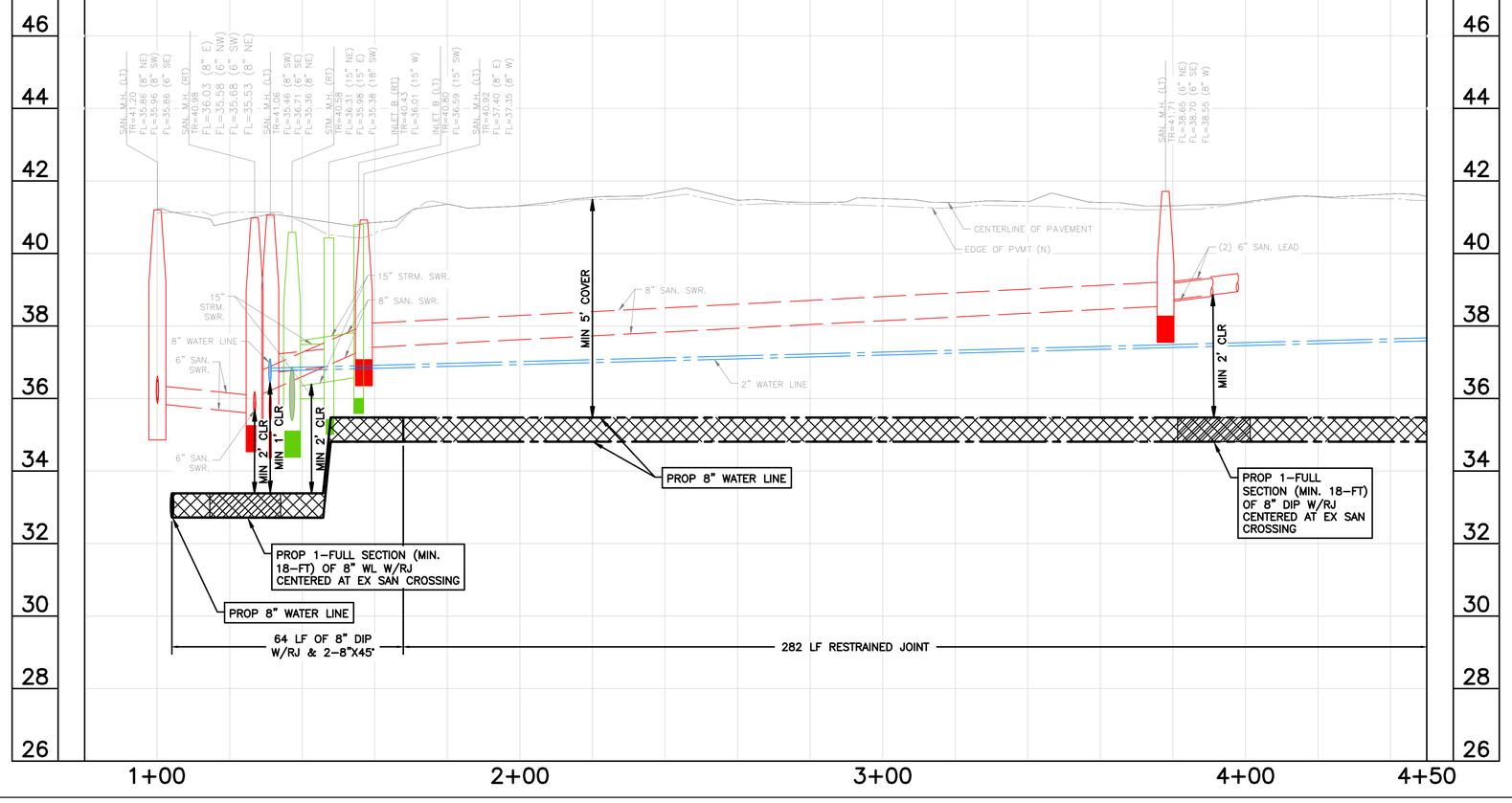
ENGELKE ST
PLAN & PROFILE
5+00 TO END

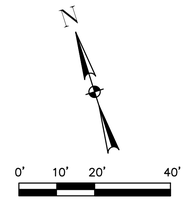
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 156 OF 275	

APP. | REVISION | NO. | DATE

90% SUBMITTAL







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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 14: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF BERING ST. & N. DRENNAN ST. STA. 7+62.73, 20.9' RT (BEARING ST. BASELINE) ELEV.= 42.98'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

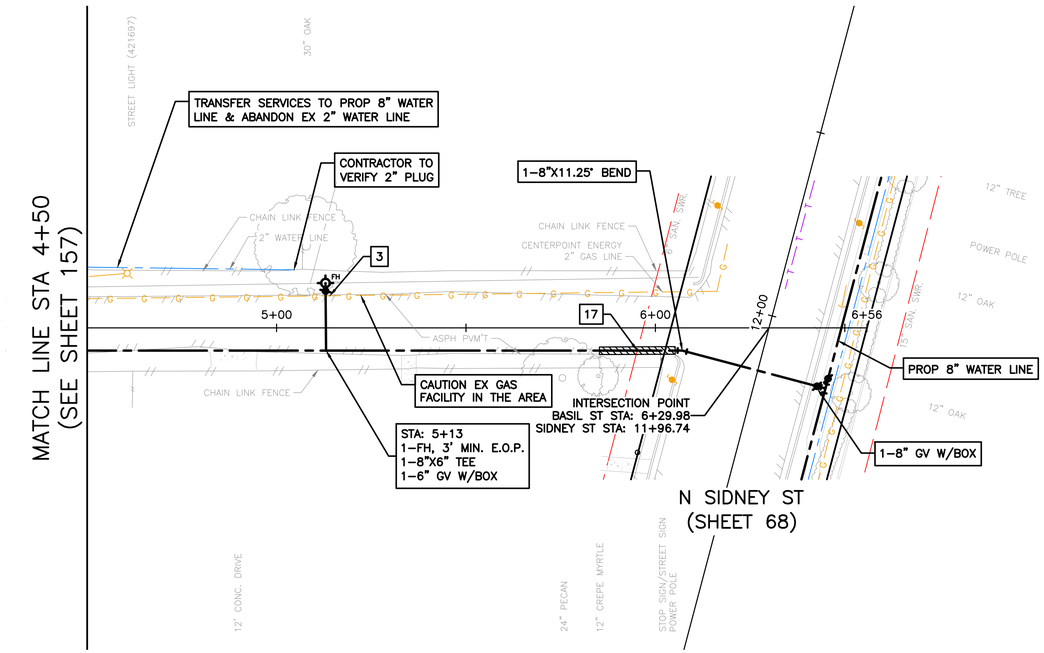
BASIL ST
PLAN & PROFILE
1+00 TO 4+50

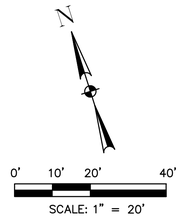
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 157 OF 275	

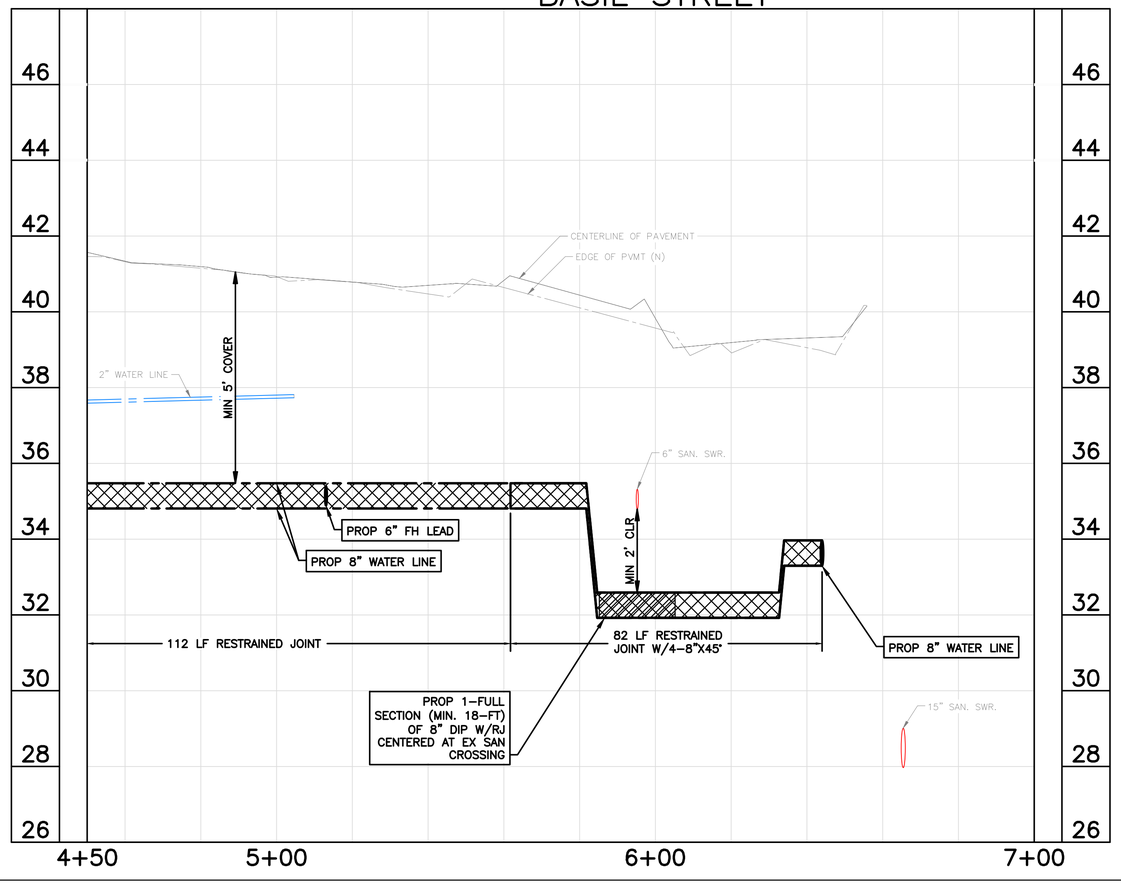
90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:28 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-BASIL STREET.dwg







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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 15: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF BERING ST. & N. SIDNEY ST.
STA. 13+93.81, 22.6' RT (BEARING ST. BASELINE)
ELEV.=42.20'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

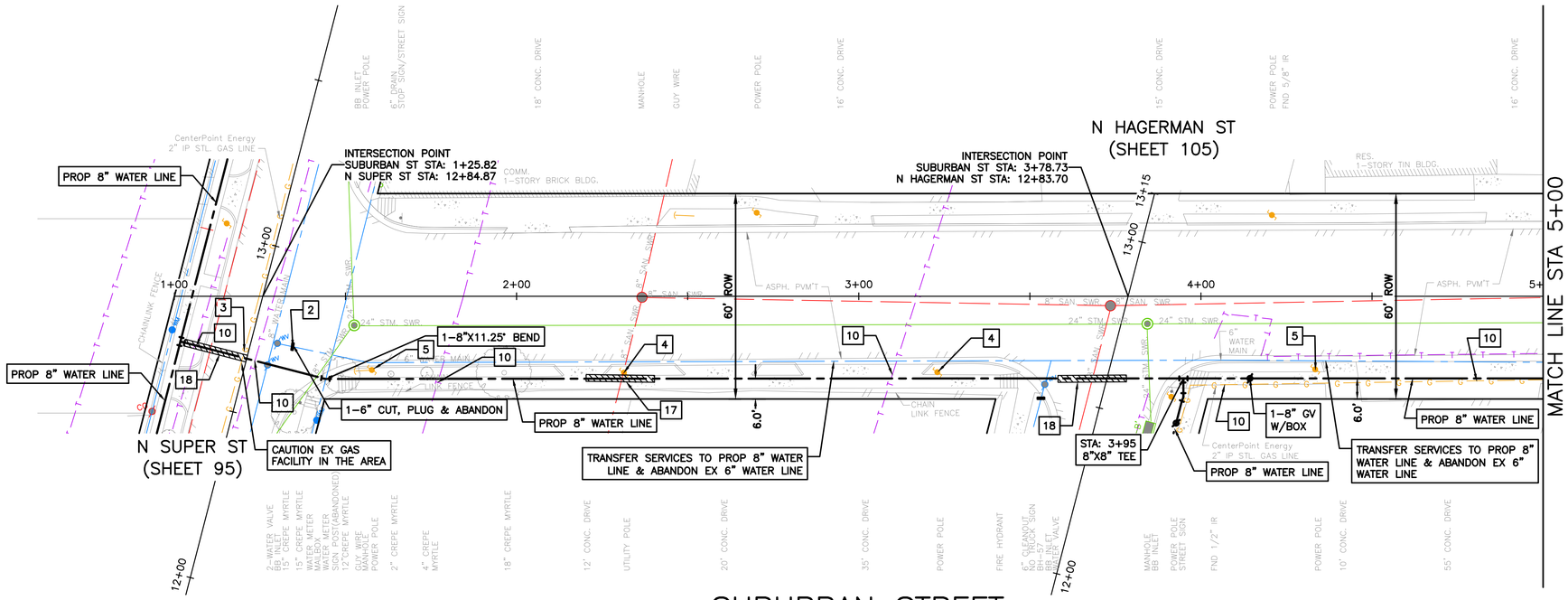
BASIL ST
PLAN & PROFILE
4+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 158 OF 275	

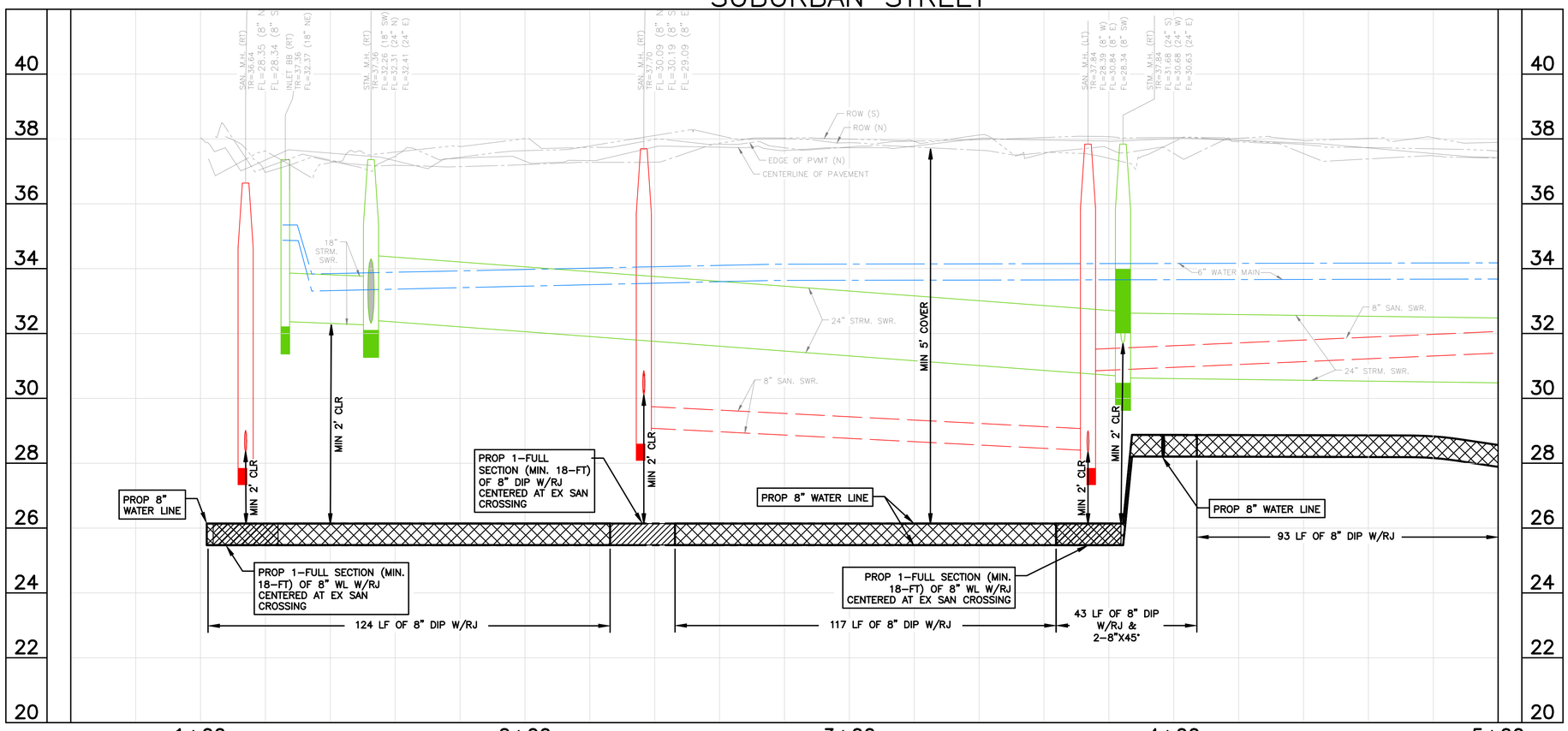
90% SUBMITTAL

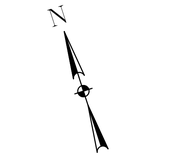
APP. | REVISION | DATE | NO.

PLOTTED: 8/15/2025 11:29 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-BASIL STREET.dwg



SUBURBAN STREET





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 16: SET 60D NAIL IN POWER POLE LOCATED AT THE SE CORNER OF SUBURBAN ST. & N. SUPER ST.
STA. 1+58.04, 21.5' RT (SUBURBAN ST. BASELINE)
ELEV.=38.97'

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

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Signature valid for one year.

WOOLPERT
ARCHITECTURE | ENGINEERING | INNOVATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SUBURBAN ST
PLAN & PROFILE
1+00 TO 5+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 159 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:30 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–SUBURBAN STREET.dwg

PLOTTED: 8/15/2025 11:31 AM

PLOT STYLE: COH.ctb

MATCH LINE STA 5+00
(SEE SHEET 159)

BLANCHE ST
(SHEET 107)

LOCKWOOD DR

INTERSECTION POINT
SUBURBAN ST STA: 6+50.76
BLANCHE ST STA: 7+89.24

SUBURBAN STREET

BB INLET
POWER POLE
22' CONC. DRIVE
21' CONC. DRIVE
FND 3/8" IR
POWER POLE
STOP SIGN (TILTED POST-ABANDONED)
GUY WIRE
MANHOLE
30' CONC. DRIVE
31' CONC. DRIVE
POWER POLE
POWER POLE
ELEC. BOX
UTILITY POLE
MANHOLE
44' CONC. DRIVE
4" PALM
UTILITY POLE
POWER POLE
GUY WIRE
GUY WIRE
GUY WIRE
POWER POLE
WATER METER
POWER POLE
GUY WIRE
MANHOLE
METRO BUS STOP SIGN

CHAIN LINK FENCE
BRICK WALL
ASPH. PVMT
6" WATER MAIN
CenterPoint Energy 2" IP STL. GAS LINE
COMM. 1-STORY BLDG.
24" STRM. SWR.
8" SAN. SWR.
18" STM. SWR.
6" WATER MAIN
12" WATER MAIN

6+00
7+00
8+00
9+00
9+95
8+20
8+00
60' ROW
60' ROW
12.4'
5.0'

PROP 8" WATER LINE
2-8"X45' BEND
TRANSFER SERVICES TO PROP 8" WATER LINE & ABANDON EX 6" WATER LINE
2-8"X45' BEND
STA: 6+67
8"X8" TEE
PROP 8" WATER LINE
STA: 6+92
1-FH, 3' MIN. BC
1-8"X6" TEE
1-6" GV W/BOX
1-8" GV W/BOX
PROP 8" WATER LINE
TRANSFER SERVICES TO PROP 8" WATER LINE & ABANDON EX 6" WATER LINE
1-8"X45' BEND
1-8"X6" REDUCER
1-6" CUT, PLUG & ABANDON
1-6" WET CONNECTION
1-6"X45' BEND

BB INLET
MANHOLE
POWER POLE/
STREET LIGHT
18' CONC.
DRIVE
UTILITY POLE
NO TRUCK
SIGN
WATER VALVE
POWER POLE
MANHOLE
24' CONC. DRIVE
6" CLEANOUT
WATER METER
POWER POLE
UTILITY POLE
20" BUSH
24" PECAN
4" CLEANOUT
90" BUSH
UTILITY POLE
GUY WIRE
BB INLET
STOP SIGN
/STREET SIGN
MANHOLE
UTILITY POLE
WATER VALVE

SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 17: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF SUBURBAN ST. & LOCKWOOD DR. STA. 8+86.58, 24.9' RT (SUBURBAN ST. BASELINE) ELEV.=38.48'

NOTICE:
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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

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Date

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Signature valid for one year.

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SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SUBURBAN ST
PLAN & PROFILE
5+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 160 OF 275	

APP. | REVISION | NO. | DATE

FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-SUBURBAN STREET.dwg

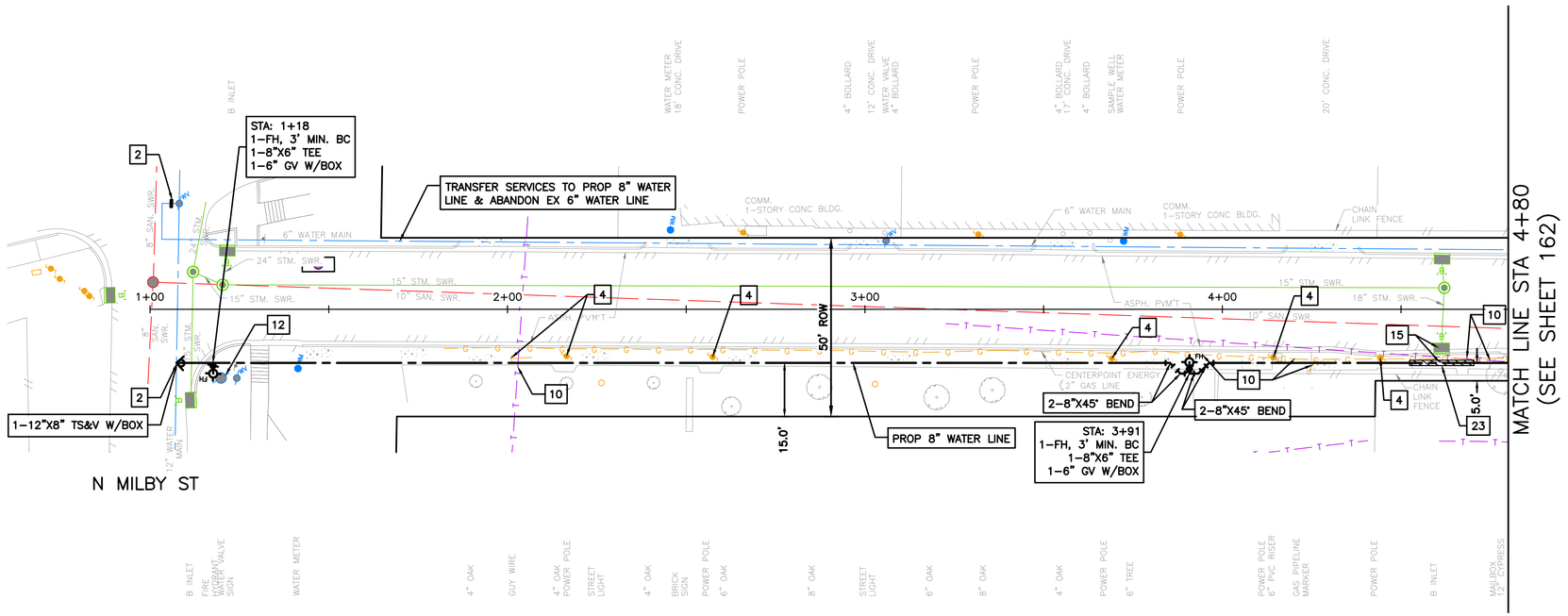
40 38 36 34 32 30 28 26 24 22 20

5+00 6+00 7+00 8+00 9+00 10+00

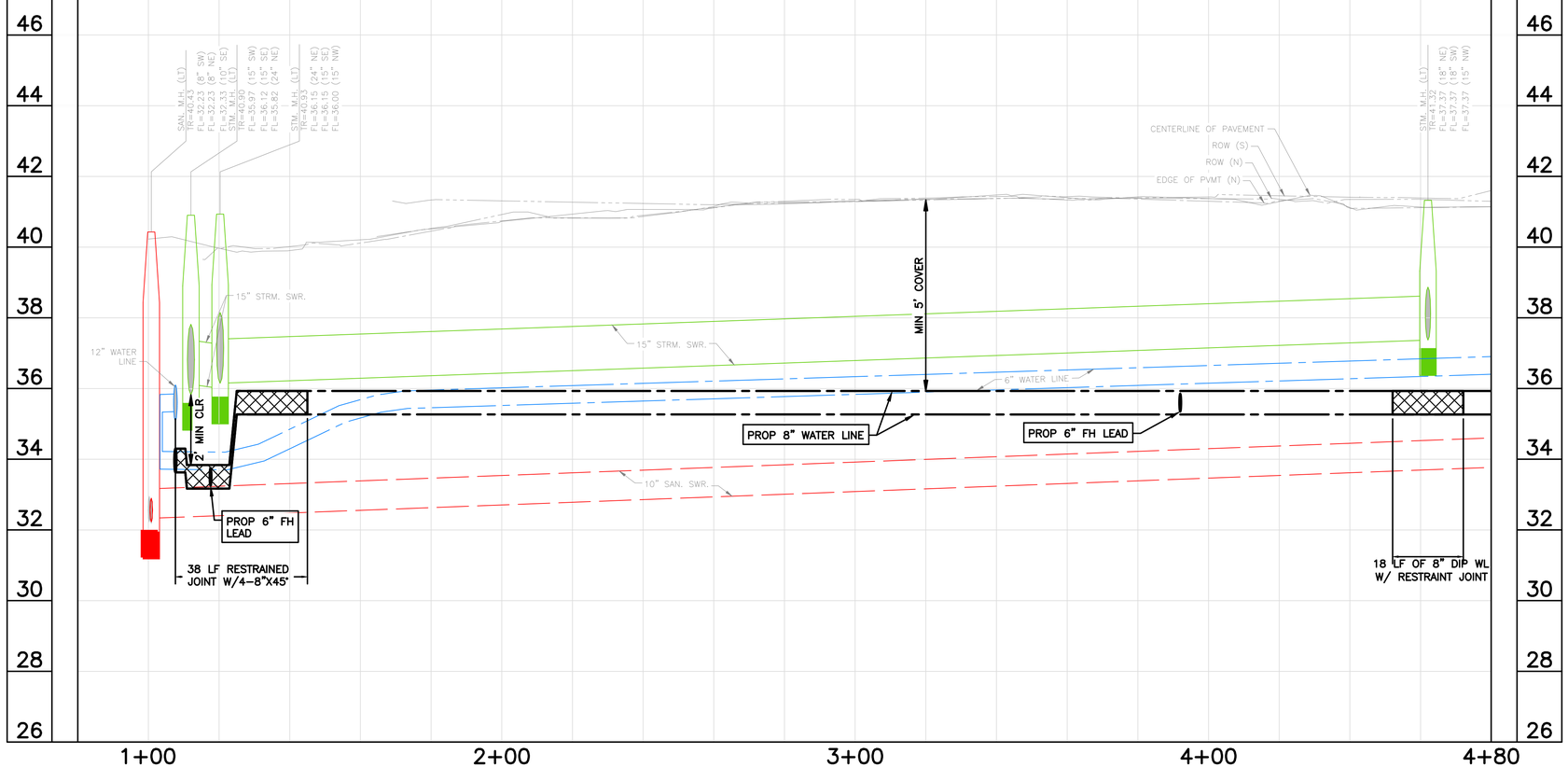
ROW (N)
ROW (S)
EDGE OF PVMT (N)
CENTERLINE OF PAVEMENT

MIN 5' COVER
MIN 2' CLR
24" STRM. SWR.
6" WATER MAIN
PROP 6" FH LEAD
PROP 8" WATER LINE
140 LF OF 8" DIP W/RJ
43 LF OF 8" DIP W/RJ & 2-8"X45°
5 LF RESTRAINED JOINT
27 LF RESTRAINED JOINT W/2-8"X45°
8" SAN. SWR.
10" SAN. SWR.
6" SAN. SWR.
12" WATER MAIN

90% SUBMITTAL



BERING STREET



0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
5) PROPOSED WATER LINES LESS THAN 16–INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3–FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20–INCH WITH A MINIMUM COVER OF 4–FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 13: SET 60D NAIL IN POWER POLE LOCATED ALONG THE SOUTH SIDE OF BERING ST. APPROX. 100' EAST OF MILBY ST. STA. 2+16.85, 13.0' RT (BEARING ST. BASELINE) ELEV.=42.11'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | INNOVATION
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

BERING ST
PLAN & PROFILE
1+00 TO 4+80

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 161 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 8/15/2025 11:32 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP–BERING STREET.dwg

90% SUBMITTAL

PLOTTED: 8/15/2025 11:33 AM
PLOT STYLE: COH.ctb
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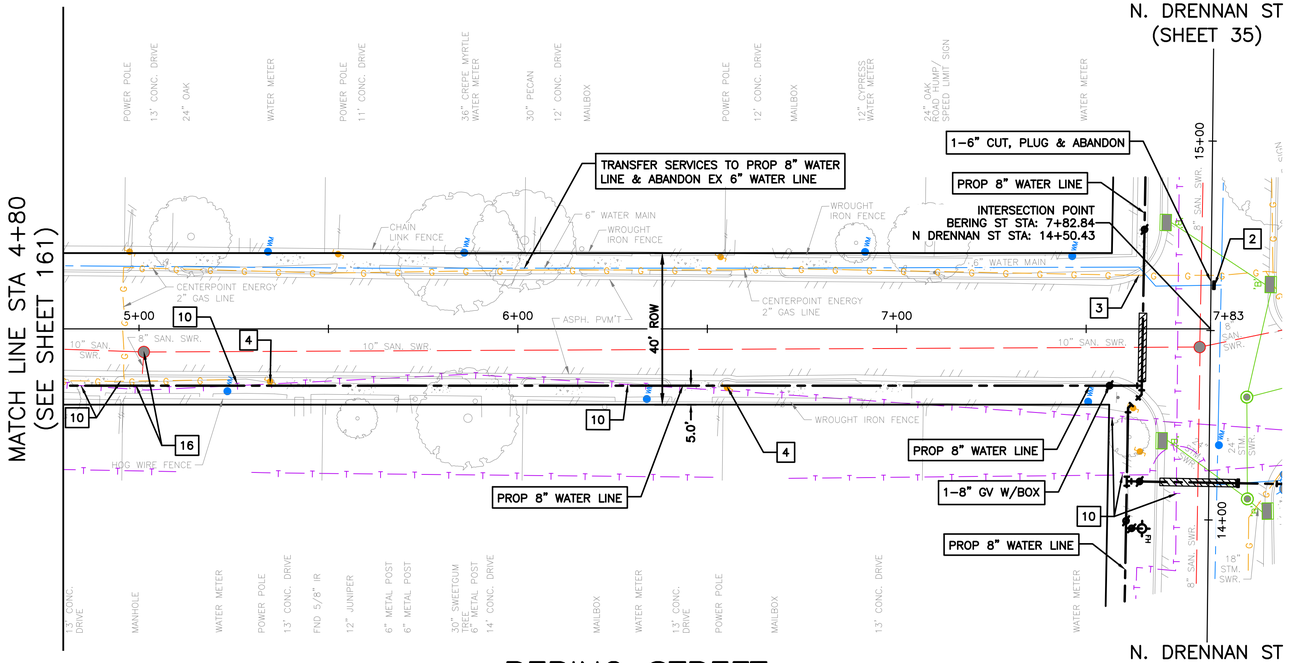

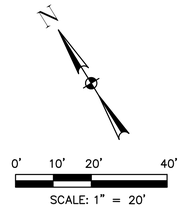

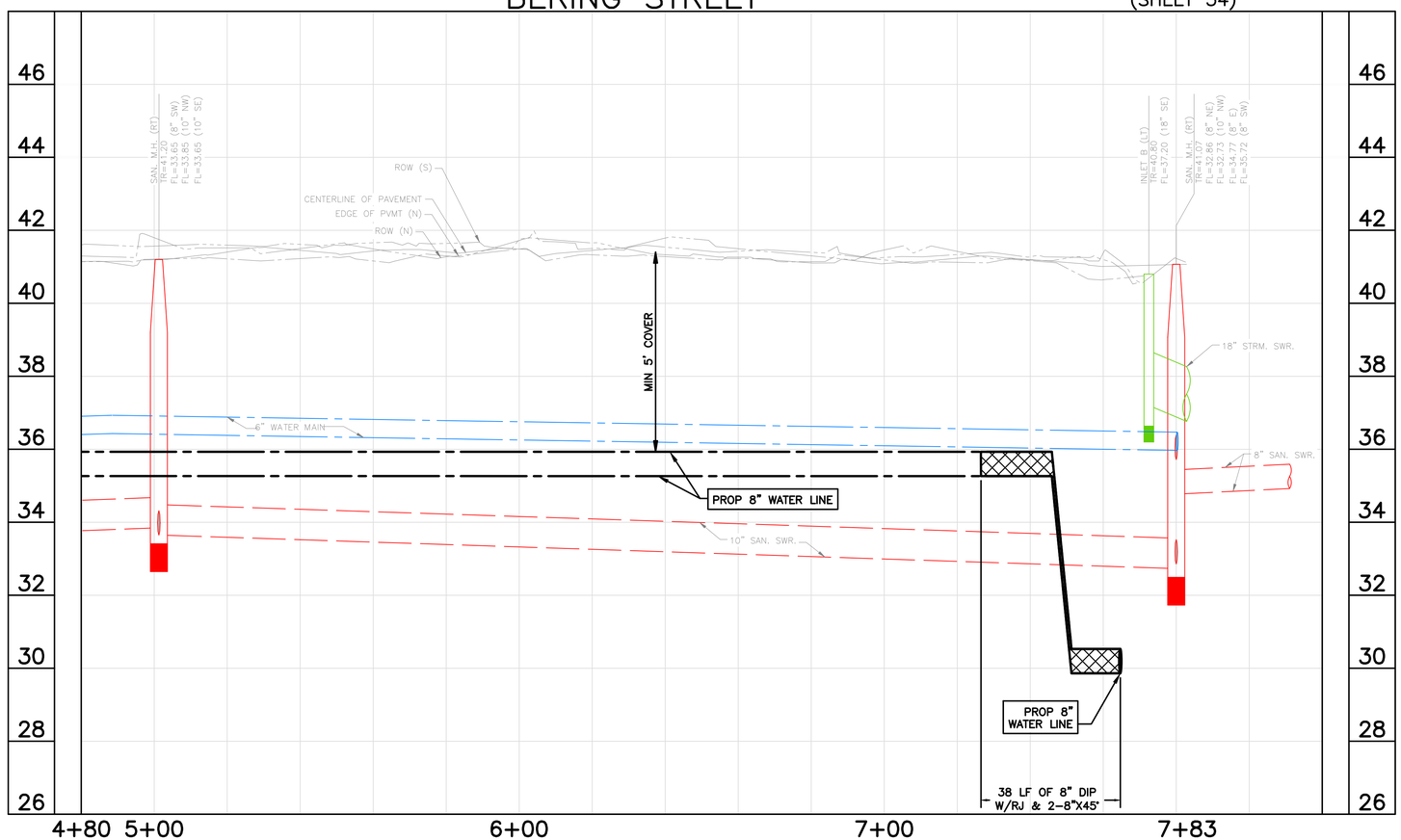

NOTES:
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2) PROPOSED WATER LINES SHALL BE INSTALLED BY MEANS OF TRENCHLESS CONSTRUCTION METHOD EXCEPT WHERE NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF PITS IN THE FIELD SUBJECT TO THE CITY ENGINEER'S APPROVAL.
3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DISCRIPTION.
5) PROPOSED WATER LINES LESS THAN 16-INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3-FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20-INCH WITH A MINIMUM COVER OF 4-FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 14: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF BERING ST. & N. DRENNAN ST. STA. 7+62.73, 20.9' RT (BEARING ST. BASELINE) ELEV.= 42.98'

NOTICE:
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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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

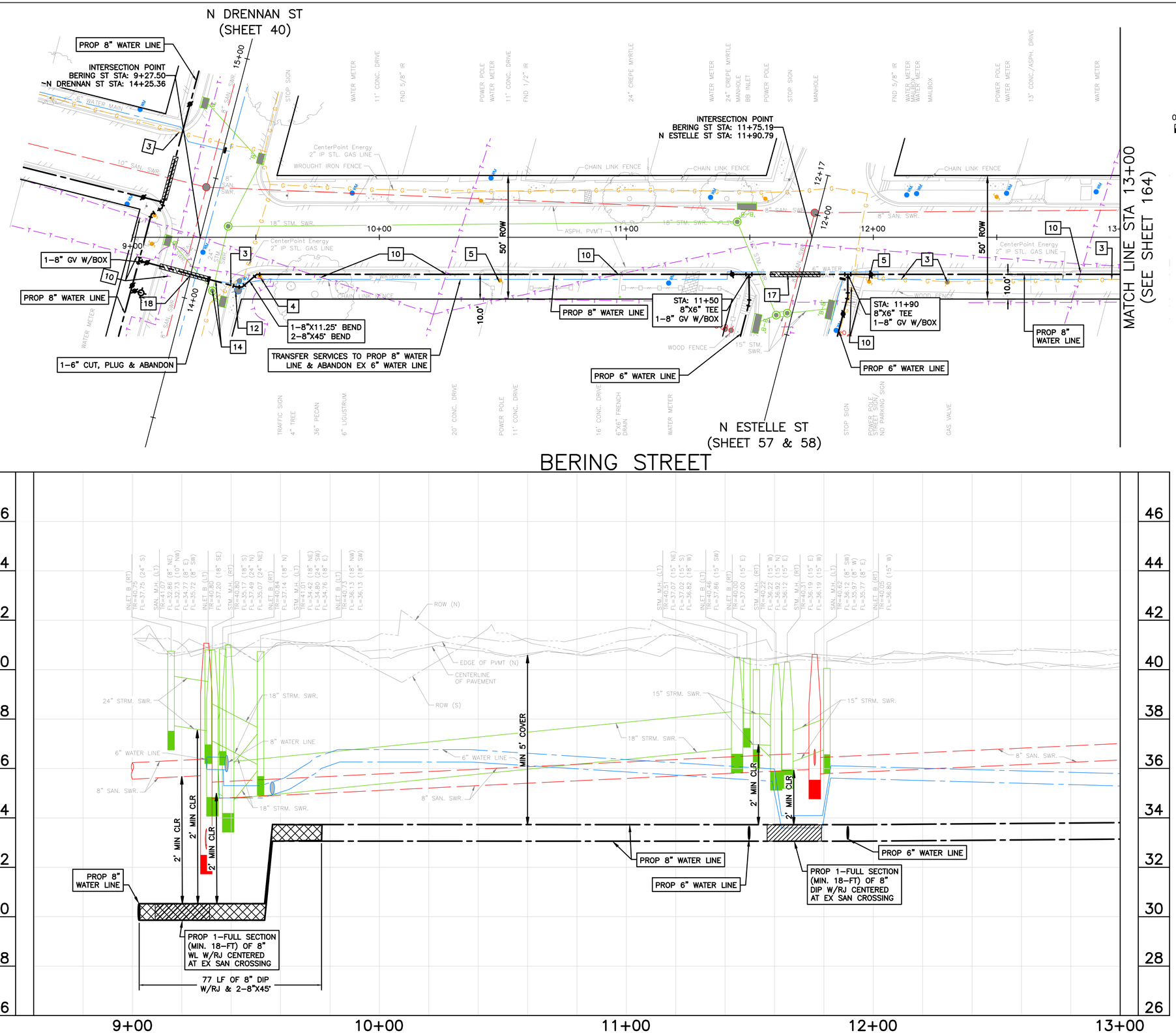
SECONDWARD WATERLINE REPLACEMENT

BERING ST
PLAN & PROFILE
4+80 TO 7+83

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 162 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL



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

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 14: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF BERING ST. & N. DRENNAN ST.
STA. 7+62.73, 20.9' RT (BEARING ST. BASELINE)
ELEV.= 42.98'

NOTICE:
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SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

BERING ST
PLAN & PROFILE
9+00 TO 13+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 163 OF 275	

APP. | REVISION | NO. | DATE

PLOTTED: 8/15/2025 11:33 AM
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90% SUBMITTAL

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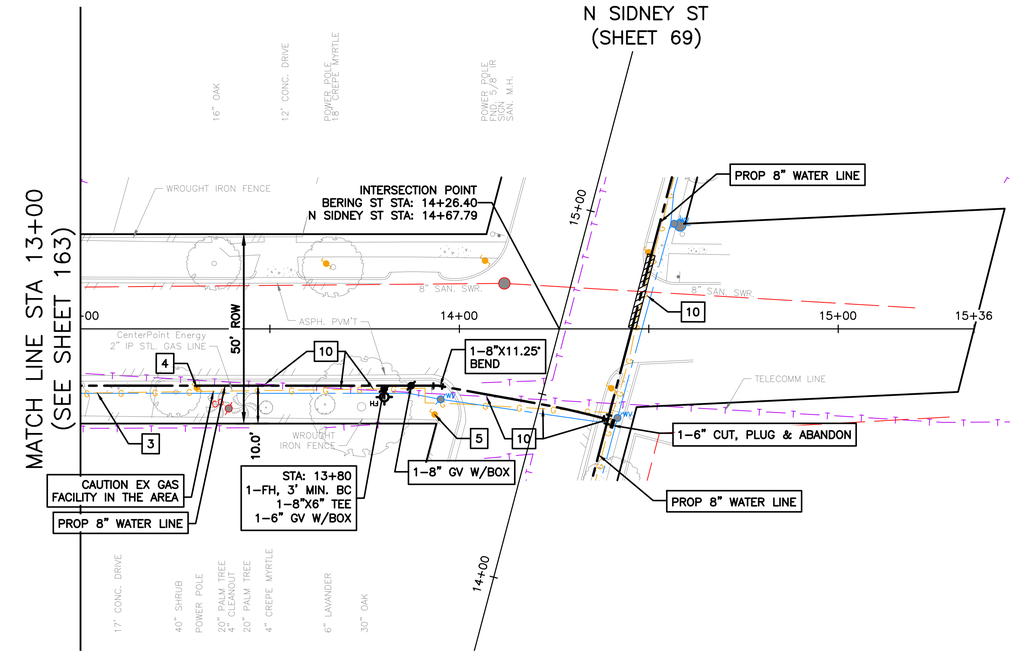

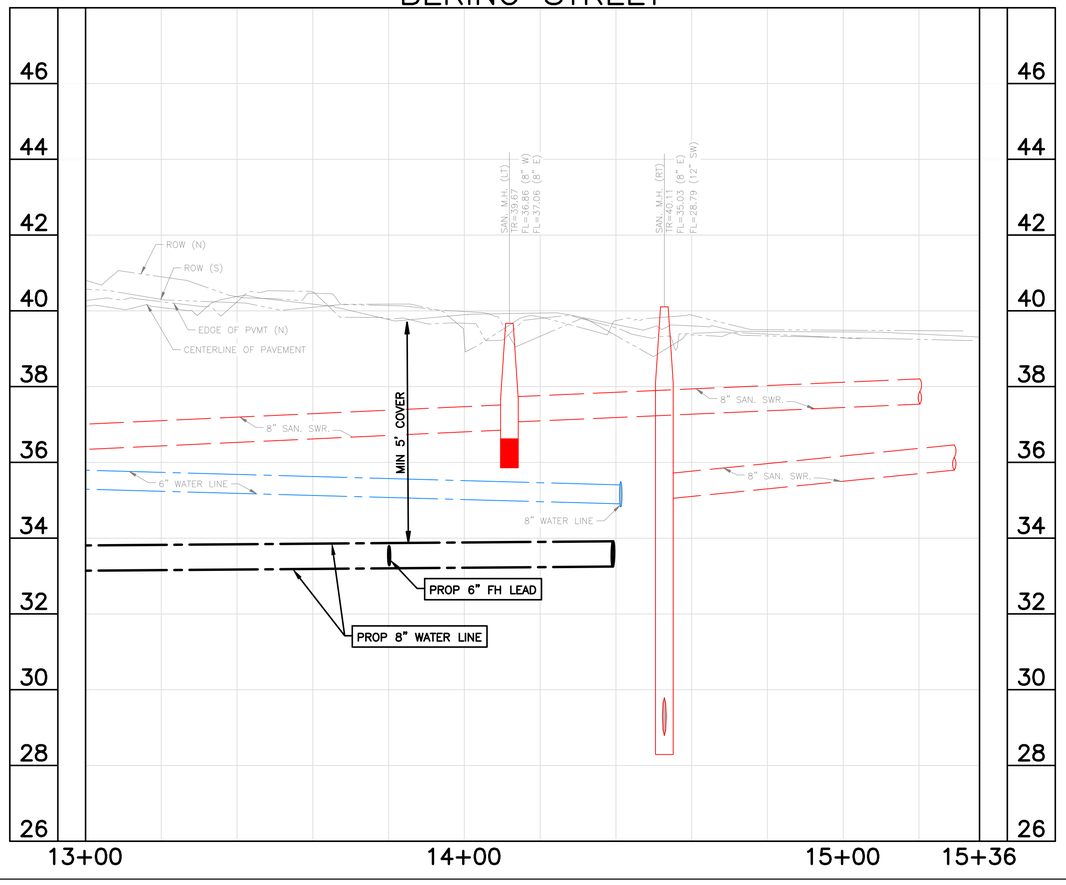

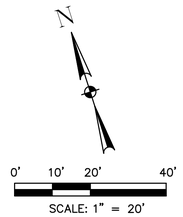

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4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 15: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF BERING ST. & N. SIDNEY ST.
STA. 13+93.81, 20.9' RT (BEARING ST. BASELINE)
ELEV.=42.20'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

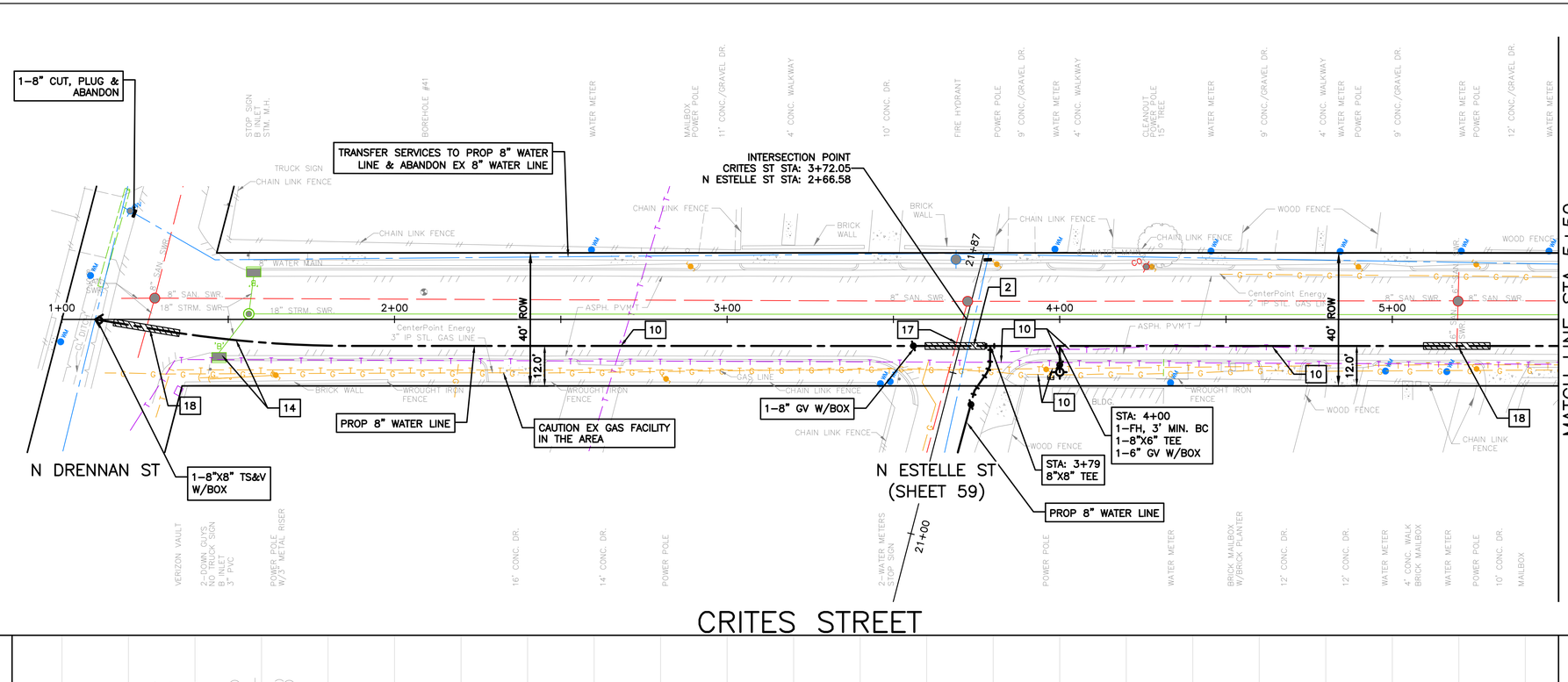
SECONDWARD WATERLINE REPLACEMENT

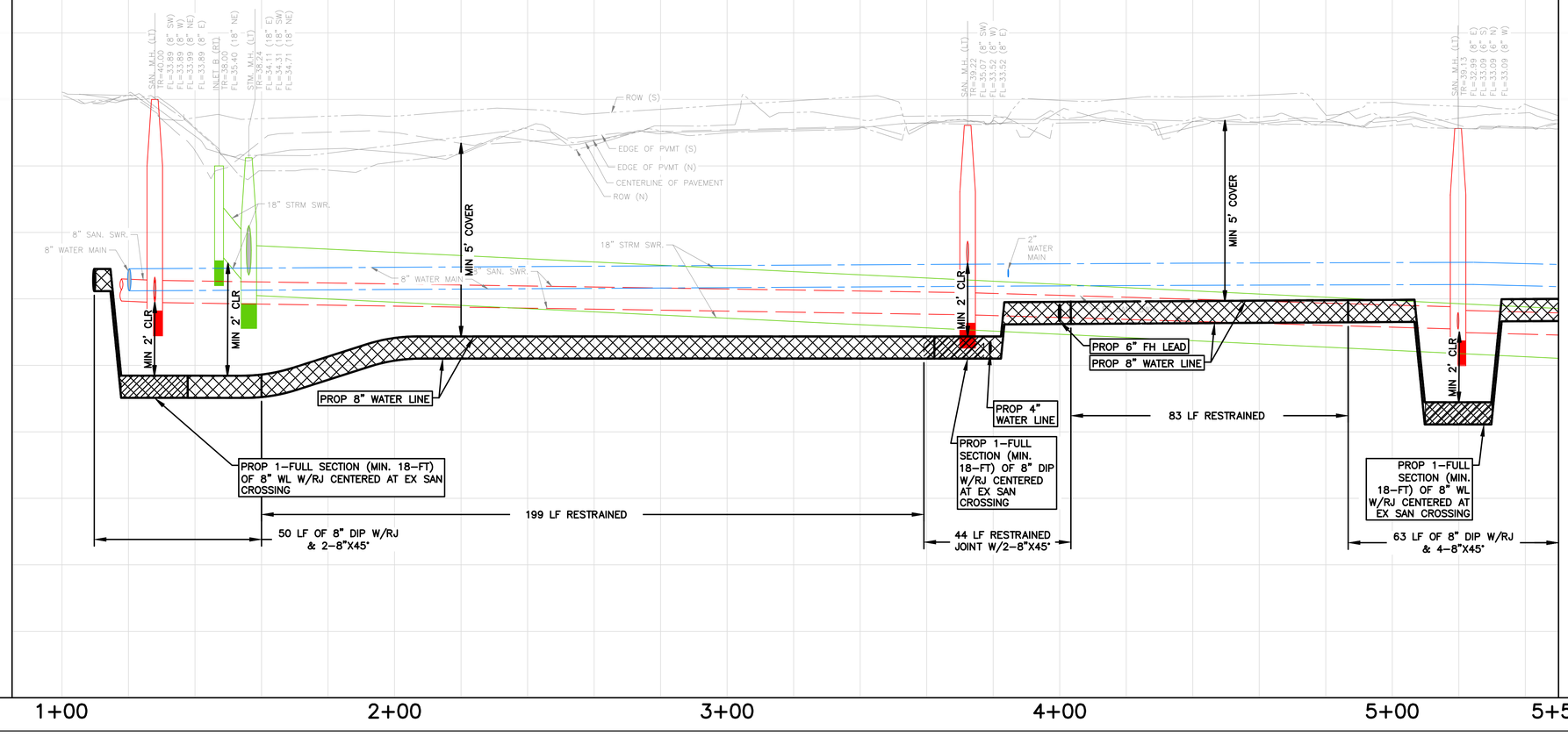
BERING ST
PLAN & PROFILE
13+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 164 OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL





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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 18: SET 60D NAIL IN POWER POLE LOCATED AT CRITES ST. & N. DRENNAN ST. IN FRONT OF ADDRESS 541 N. DRENNAN. STA. 1+00.92, 18.1' RT (CRITES ST. BASELINE) ELEV.=41.78'

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

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Date

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WOOLPERT
ARCHITECTURE | ENGINEERING | INNOVATION
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SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

CRITES ST
PLAN & PROFILE
1+00 TO 5+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 165 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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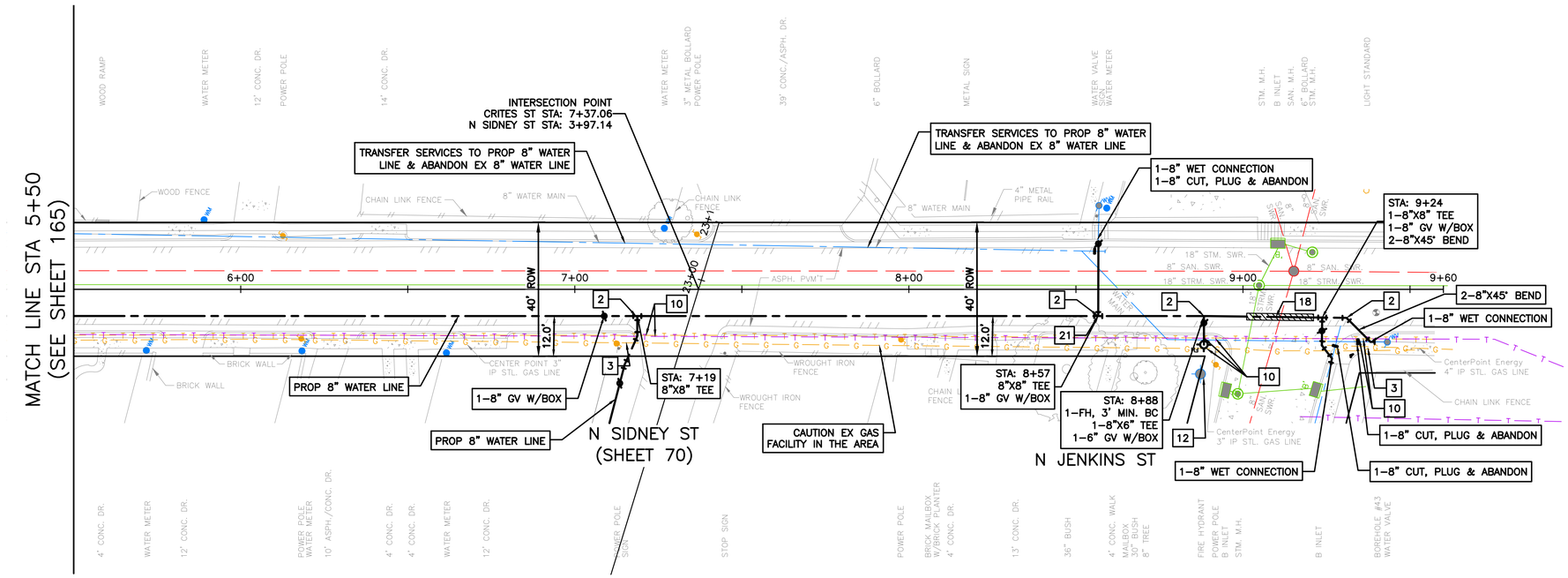

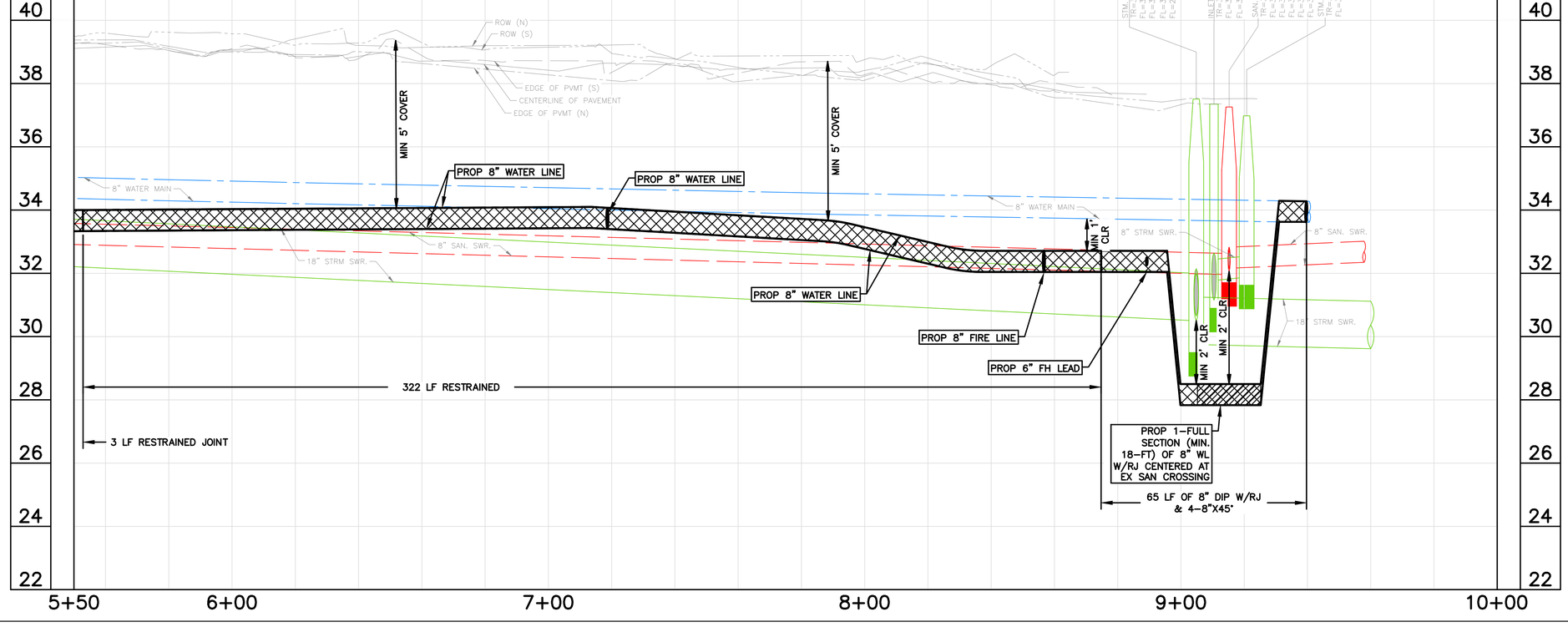

0' 10' 20' 40'
SCALE: 1" = 20'

NOTES:
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BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV. = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 19: SET 60D NAIL IN POWER POLE LOCATED AT THE SW CORNER OF CRITES ST. & N. JENKINS. ST.
STA. 8+94.33, 14.0' RT (CRITES ST. BASELINE)
ELEV.=39.06'

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

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

SURVEYED BY: WGC
FB NO. 10038100

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

CRITES ST
PLAN & PROFILE
5+50 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 166 OF 275	

90% SUBMITTAL

APP. | REVISION | NO. | DATE

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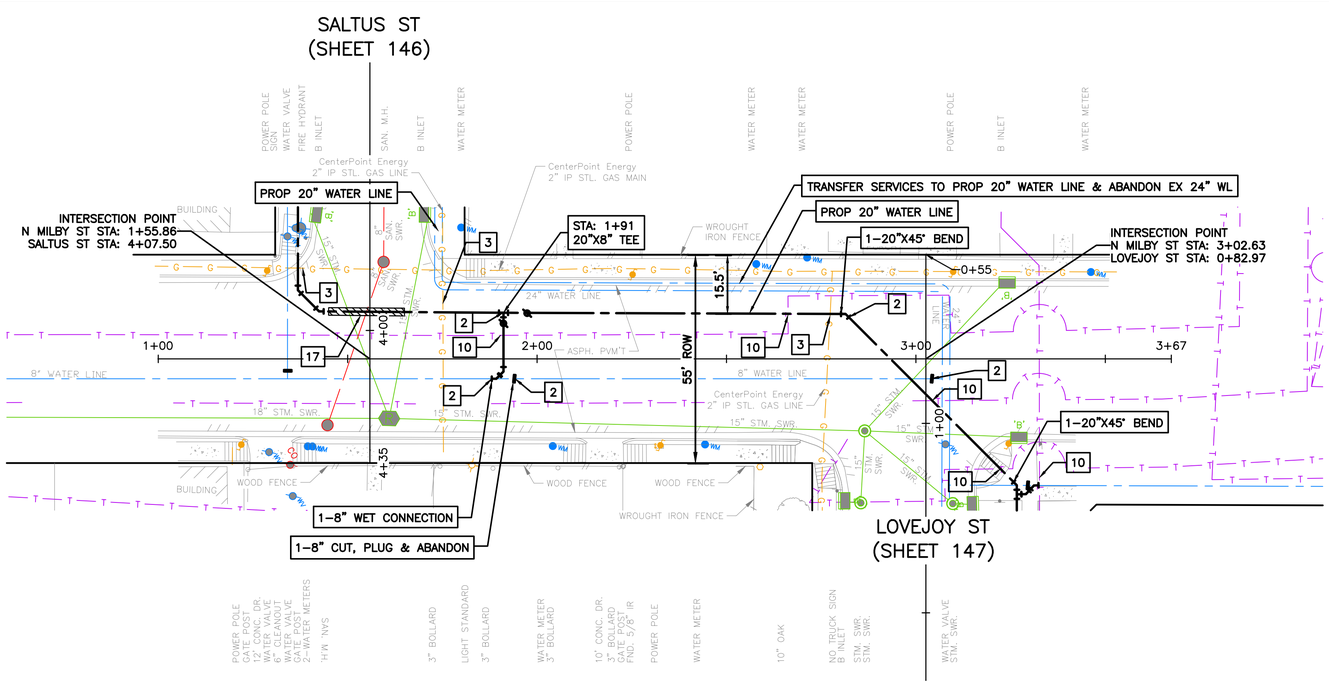
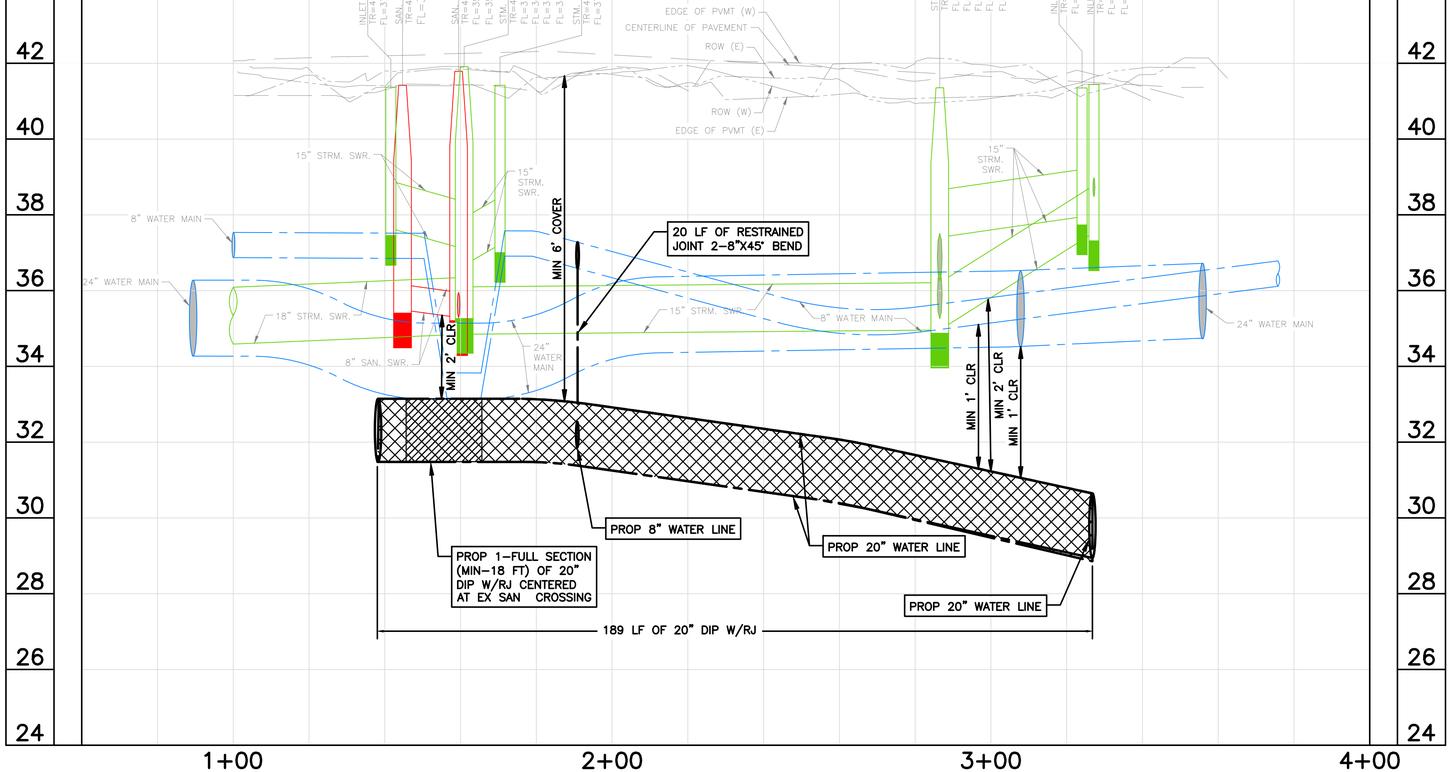
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\PP-CRITES STREET.dwg





0' 10' 20' 40'

SCALE: 1" = 20'

NOTES:
1) EXISTING UNDERGROUND UTILITY INFORMATION IS APPROXIMATE AND IS BASED ON AVAILABLE RECORD DRAWINGS AND FIELD VERIFICATION (WHERE FEASIBLE AND WITHOUT PROBING AND EXCAVATION). NO WARRANTY IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE EXISTING UTILITY LOCATIONS SHOW ON THE DRAWINGS. CAUTION SHOULD BE EXERCISED WHEN EXCAVATING, BORING, OR JACKING IN THE VICINITY OF EXISTING UNDERGROUND UTILITIES. OWNERS OF THE EXISTING UTILITIES SHALL BE NOTIFIED PRIOR TO CONSTRUCTION ACTIVITIES.
2) PROPOSED WATER LINES SHALL BE INSTALLED BY MEANS OF TRENCHLESS CONSTRUCTION METHOD EXCEPT WHERE NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF PITS IN THE FIELD SUBJECT TO THE CITY ENGINEER'S APPROVAL.
3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.
5) PROPOSED WATER LINES LESS THAN 16-INCH SHALL HAVE AN ABSOLUTE MINIMUM COVER OF 3-FT FROM TOP OF CURB. PROPOSED WATER LINES GREATER THAN 20-INCH WITH A MINIMUM COVER OF 4-FT FROM TOP OF CURB SHALL HAVE CEMENT STABILIZED EMBEDMENT.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557-7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD.
ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

TBM 9: SET 60D NAIL IN POWER POLE LOCATED AT THE NE CORNER OF LOVEJOY ST. & MILBY ST.
STA. 1+05.66, 46.3' LT (LOVEJOY ST. BASELINE)
ELEV.=42.92'

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.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

N MILBY ST
PLAN & PROFILE
1+00 TO END

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
HORZ 1:20,VERT 1:2	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 167 OF 275	

APP. | REVISION | NO. | DATE

90% SUBMITTAL

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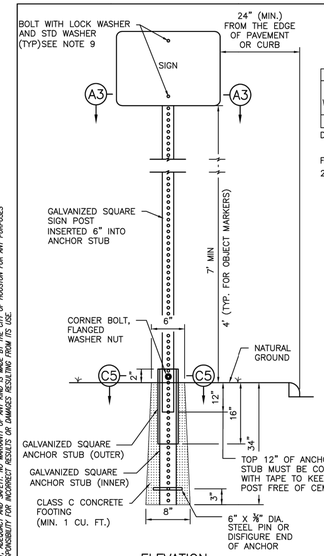
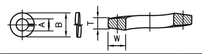


ELEVATION

TYPICAL GROUND SIGN INSTALLATION
PERFORATED SQUARE METAL TUBING

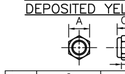
TABLE A	
GALVANIZED SQUARE SIGN POST (PERFORATED)	1-3/4"x-1-3/4" (14 GAUGE)
GALVANIZED SQUARE ANCHOR STUB (PREFORATAED) (INNER)	2"x2"x36" (14 GAUGE)
GALVANIZED SQUARE ANCHOR STUB (PERFORATED) (OUTER)	2 1/4" x 2 1/4" x 18" (14 GAUGE)



NOMINAL WASHER SIZE	A INSIDE DIAMETER MAX	A INSIDE DIAMETER MIN	B OUTSIDE DIAMETER MAX	T MEAN SECTION (THICKNESS)	W SECTION WIDTH
5/16"	0.332"	0.314"	0.583"	0.078"	0.125"

DIMENSIONS: ASME B18.21.1
MATERIAL: ALLOY STEEL PER ASME B18.21.1
FINISH: MECHANICAL ZINC PER ASTM B695, CLASS 5, TYPE 2 (YELLOW)

5/16" SPLIT LOCK WASHER, HIGH ALLOY MECHANICAL DEPOSITED YELLOW SINK



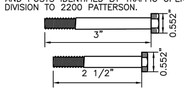
SIZE	C THICKNESS MAX	C THICKNESS MIN	A WIDTH ACROSS FLATS MAX	A WIDTH ACROSS FLATS MIN	D HEX HEIGHT MIN
0.313"	0.359"	0.329"	0.502"	0.489"	0.250"

DIMENSIONS: ASME B18.16.6
MATERIAL: CARBON STEEL, GRADE 8 PER ASME B18.16.6, NYLON ⅝
THREAD REQUIREMENTS: ASME B1.1 UNC & UNF CLASS 2B

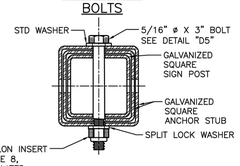
HEX NYLON INSERT LOCKNUTS (NE), GRADE 8, YELLOW ZINC PLATED

NOTES:

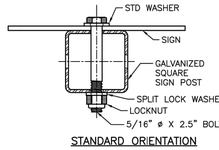
1. THE EXISTING SIGNS LOCATED ON PUBLIC CONSTRUCTION SITE ARE THE PROPERTY OF THE CITY OF HOUSTON. THROUGHOUT THE PERIOD OF THE CONTRACT, THE CONTRACTOR SHALL PROTECT THESE SIGNS SUCH THAT THEY ARE NOT DAMAGED IN THE COURSE OF CONSTRUCTION ACTIVITY. SUCH PROTECTION SHALL INCLUDE THE PERIOD AFTER SIGNS ARE REMOVED FROM INSTALLATION AND STORED BY THE CONTRACTOR OR DELIVERED TO THE TRAFFIC OPERATIONS CENTER (2200 PATTERSON). THE GENERAL TRAFFIC SUPERINTENDENT (832-395-6771) MUST BE NOTIFIED 48 HOURS IN ADVANCE PRIOR TO DELIVERY.
2. AFTER SIGNS ARE REMOVED FROM INSTALLATION AND ARE BEING STORED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE TRAFFIC OPERATIONS DIVISION OF HOUSTON PUBLIC WORKS (832-395-6771) AND ARRANGE FOR A CONVENIENT TIME TO DELIVER ONLY CITY SIGNS AND POSTS IDENTIFIED BY TRAFFIC OPERATIONS DIVISION TO 2200 PATTERSON.
3. PRIOR TO THE START OF CONSTRUCTION, ALL EXISTING SIGNS WITHIN THE AREA OF CONSTRUCTION WILL BE INVENTORIED AND DOCUMENTED JOINTLY BY THE CITY INSPECTOR AND THE CONTRACTOR. THIS DOCUMENT WILL BE JOINTLY SIGNED BY BOTH PARTIES REFLECTING THE SIGN TYPE, SIGN SIZE, SIGN CONDITION, SIGN LOCATION, REFLECTIVITY ADEQUACY, ETC. THE CONTRACTOR IS HELD ACCOUNTABLE FOR THESE SIGNS THROUGHOUT THE PROJECT AND AT THE PROJECTS COMPLETION.
4. ALL GROUND MOUNTED STOP SIGNS, WARNING SIGNS, AND OTHER REGULATORY SIGNS SHALL USE AT A MINIMUM HIGH INTENSITY PRISMATIC REFLECTIVE SHEETING.
5. ALL OVERHEAD SIGNS SHALL USE DIAMOND GRADE REFLECTIVE SHEETING.
6. ALL OTHER SIGNS SHALL USE SUPER ENGINEER GRADE SHEETING.
7. ALL BLANKS TO BE INSTALLED SHALL BE ALUMINUM ALLOY 6061-T-6 OR 5052-H38 IN ACCORDANCE WITH ASTM B209.
8. ALL HOLES SHALL BE ⅜" DIAMETER DRILLED OR PUNCHED AS SHOWN ON EACH BLANK DETAIL AND SHALL BE FREE OF BURRS AND / OR ROUGH EDGES. WHERE NON-STANDARD ORIENTATION OF SIGN IS USED, ENLARGE HOLE IN SIGN POST AT SIGN CONNECTION NOT GREATER THAN 11/16" IN DIAMETER.
9. BOLT SIZE REQUIREMENTS FOR SIGN CONNECTION:
   9.1. STANDARD ORIENTATION = 5/16" DIA X 2 1/2" BOLT
   9.2. NON STANDARD ORIENTATION = 5/16" DIA X 3" BOLT
10. SIGN BLANK CORNERS TO BE ROUNDED AS SHOWN ON EACH DETAIL ON SHEET 01554-06.
11. ALL SIGN BLANKS ARE TO BE ETCHED, DEGREASED, AND HAVE A COATING MEETING THE REQUIREMENTS OF ASTM B449, CLASS 2, OR ASTM B921, CLASS 2. PRIOR TO APPLICATION OF LEGENDS.
12. ALL SIGNS SHALL BE MANUFACTURED AND INSTALLED IN CONFORMANCE TO THE LATEST TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) AND STANDARD HIGHWAY SIGNS LATEST EDITION.



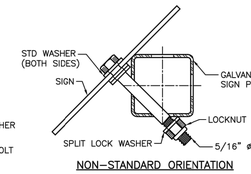
SECTION D5
BOLTS



SECTION C5
CORNER BOLT



STANDARD ORIENTATION



NON-STANDARD ORIENTATION

SECTION A3: SIGN CONNECTION DETAILS

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

GENERAL NOTES AND GROUND MOUNTING SIGN
(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Sulait Kanwar — CITY ENGINEER
DocuSigned by: Thang Nguyen — CITY TRAFFIC ENGINEER
DocuSigned by: Carol Haddock — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 01554-01

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, EOR ASSUMES RESPONSIBILITY FOR PROJECT DESIGN AND ENSURES THAT ALL SAFETY CONCERNS ARE ADDRESSED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS. THE CITY OF HOUSTON (COH) MAKES NO REPRESENTATIONS OR WARRANTIES REGARDING THE CONTENTS OF THIS STANDARD FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

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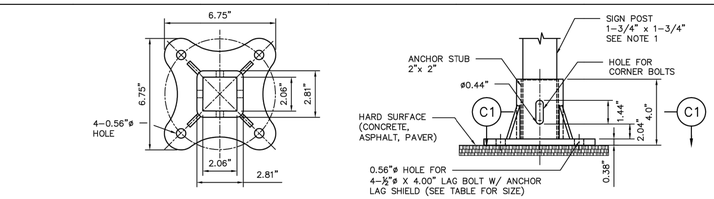


TOP VIEW

SIDE VIEW

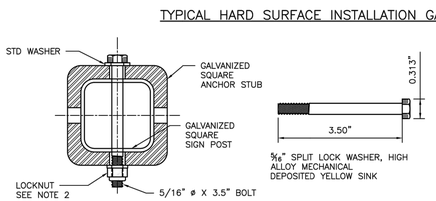
TYPICAL HARD SURFACE INSTALLATION GALVANIZED SIGN BASE

NOTES:

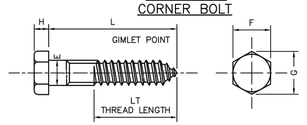
1. REFER TO COH STD DWG 01554-01 FOR SIGN AND POST REQUIREMENTS.
2. REFER TO DETAIL "C5" ON COH STD DWG 01554-01 FOR NUT AND BOLT REQUIREMENTS.

BASE PLATE NOTES:

1. MATERIAL: ASTM A-536 GRADE 65-45-12 DUCTILE IRON
2. HOT DIP GALVANIZE PER ASTM A-153
3. ALL DIMENSIONS ARE IN INCHES



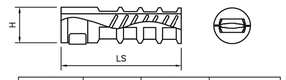
SECTION C1
CORNER BOLT



DIAMETER	E BODY DIAMETER MAX	E BODY DIAMETER MIN	F WIDTH ACROSS FLATS MAX	F WIDTH ACROSS FLATS MIN	G WIDTH ACRSS CORNERS MAX	G WIDTH ACRSS CORNERS MIN	H HEIGHT MAX	H HEIGHT MIN	L LENGTH	LT THREAD LENGTH
1/2"	0.515"	0.482"	0.750"	0.725"	0.866"	0.826"	0.364"	0.302"	4.00"	3.84"

MATERIAL:PER A307 GRADE A
COATING: HOT DIP ZINC PER ASTM F2329 OR IN ACCORDANCE WITH CLASS C OF ASTM A153 AND CLASS D FOR ⅜" DIAMETER AND LESS

4" HEX LAG SCREWS, HOT DIPPED GALVANIZED



TH LAG THREAD SIZE	LS LENGTH OF SHIELD NOMINAL	H DRILLED HOLE SIZE	L BOLT LENGTH REQ
1/2"	3.00"	0.75"	4.00"

ANCHOR LAG SHIELD - ZINC ALLOY

SAE FLAT WASHERS

SIZE	ID BASIC	ID TOLERANCE PLUS	ID TOLERANCE MINUS	OD BASIC	OD TOLERANCE PLUS	OD TOLERANCE MINUS	THICKNESS - TH BASIC	THICKNESS - TH MAX	THICKNESS - TH MIN
1/2"	0.531	0.015"	0.005"	1.062"	0.030"	0.007"	0.95"	0.121"	0.74"

DIMENSIONS: ASME B18.21.1, TYPE A PLAIN WASHERS
MATERIAL: CARBON STEEL
FINISH: Fe/Zn 3AT PER ASTM F1941

1/2" FLAT WASHERS, LOW CARBON, SAE, ZINC PLATED

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

SIGN BASE
HARD SURFACE
MOUNTING DETAILS
(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Sulait Kanwar — CITY ENGINEER
DocuSigned by: Thang Nguyen — CITY TRAFFIC ENGINEER
DocuSigned by: Carol Haddock — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 01554-02

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11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SIGN BASE MOUNTING DETAILS AND GENERAL NOTES

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 168 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

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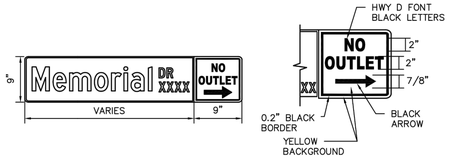
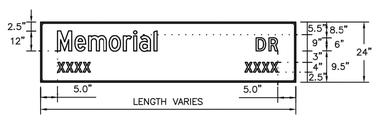
POST MOUNTED STREET NAME SIGN W/ NO OUTLET SIGN



D3 – POST MOUNTED STREET NAME SIGN

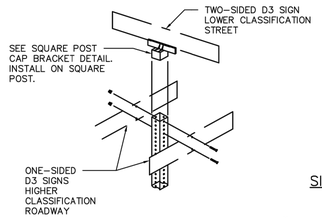
OVERHEAD STREET NAME SIGN DETAIL



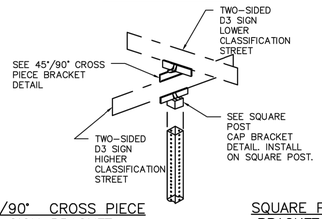
D3 – STREET NAME SIGN

	POST–MOUNTED SIGN	OVERHEAD SIGN
HEIGHT	9"	24"
LENGTH	30" MIN 48" MAX 6" INCREMENTS OF LENGTH	10" MAX 2' INCREMENT OF LENGTH
THICKNESS	0.125"	0.080"
SUBSTREATE	ALLUMINUM ALLOY, 5052–H38 (ASTM B–209)	
SIGN FACE MATERIALS	GREEN FILM OVER DIAMOND GRADE VIP SHEETING	
LEGENDS AND SYMBOLS	HIGHWAY GOTHIC SERIES D (USUAL) HIGHWAY GOTHIC SERIES C OR B FOR MAXIMUM LENGTH SIGN BLACK	
COLOR	LETTERS–WHITE REFLECTIVE BORDER–WHITE REFLECTIVE BACKGROUND–GREEN REFLECTIVE	

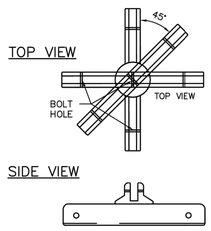
D3 SIGNS GREATER THAN 42" PLATES IN LENGTH



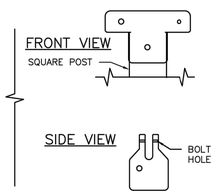
D3 SIGNS LESS THAN OR EQUAL TO 42" PLATES IN LENGTH



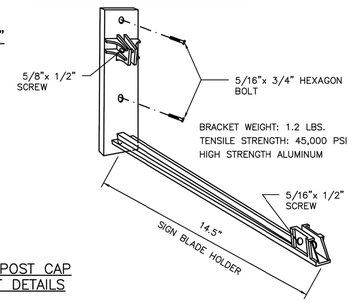
45°/90° CROSS PIECE SIGN BRACKET



SQUARE POST CAP BRACKET DETAILS



SIGNAL POLE MOUNTING DETAIL



NOTES:

1. TYPICAL SIGN PLATE SHOULD BE 30" MAX.
2. LONGER SIGN PLATE MUST BE APPROVED BY THE CITY TRAFFIC ENGINEER.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

STREET NAME SIGN AND SIGN MOUNTING

(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Suhail Kanwar — CITY ENGINEER

DocuSigned by: Carol Haddock — DIRECTOR OF HPW

DocuSigned by: Kelly Nguyen — CITY TRAFFIC ENGINEER

EFF DATE: NOV–27–2023 | DWG NO: 01554–03

DISCLAIMER:
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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

STREET NAME SIGN AND MOUNTING DETAILS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 169 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

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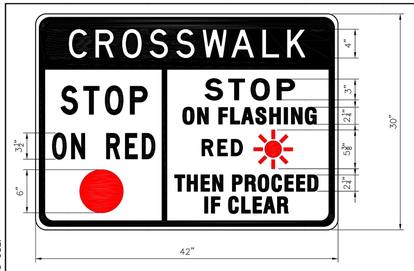
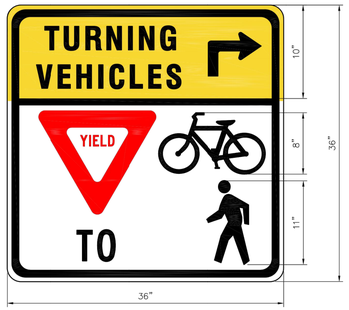
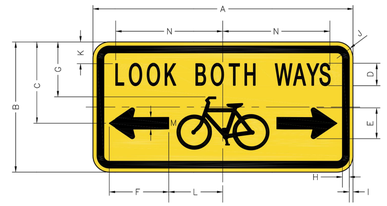


R10 – 23 (COH)

R1–5PB



R10 – 15PB



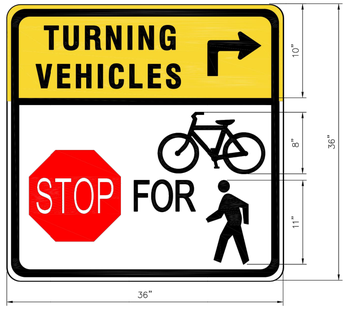
W4–4Pa (BIKE)

A	B	C	D	E	F	G	H	I	J	K	L	M	N
24	12	7.5	2.0	2.5	5.5	5.13	0.6	0.4	1.5	2.0	6.0	1.0	10.0
36	18	11.25	3.0	3.75	8.25	7.75	0.75	0.50	2.25	3.0	7.63	1.50	15.00

BACKGROUND – YELLOW (RETROFLECTIVE)
LEGEND, BORDER – BLACK

W11 – 2 (HAWK)
FLUORESCENT YELLOW/GREEN

R1–5PBb

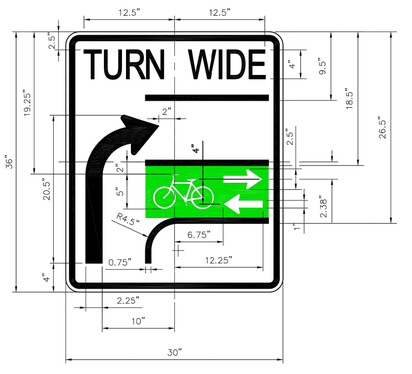


R10 – 15PBa

R9–8 (CoH)

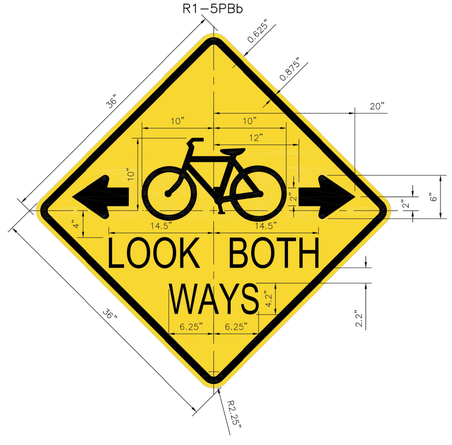
NOTES:

1. USE OF CUSTOM SIGNS MUST BE PRE–APPROVED BY THE CITY TRAFFIC ENGINEER.
2. ALL DIMENSIONS ARE IN INCHES.

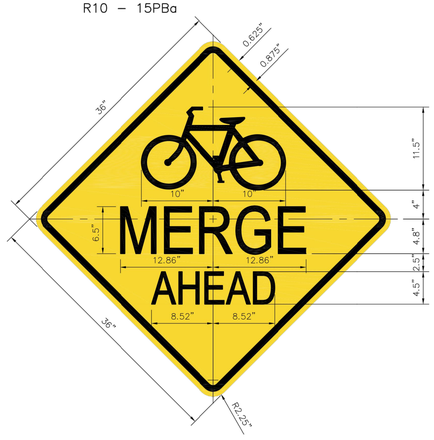


R3–8 (BIKE)

BACKGROUND – WHITE (RETROFLECTIVE)
SYMBOL – GREEN (RETROFLECTIVE)
LEGEND, BORDER – BLACK



W4–4Pb (BIKE)
BACKGROUND – YELLOW (RETROFLECTIVE)
LEGEND, BORDER – BLACK



W11–1 (MERGE)
BACKGROUND – YELLOW (RETROFLECTIVE)
LEGEND, BORDER – BLACK

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukul kanwar	DocuSigned by: KHANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 01554–04

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

CUSTOM SIGNS

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

CUSTOM SIGNS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 170 OF 275	

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PLOTTED: 8/15/2025 8:38 AM
FILE PATH: O:\2019\395062\Drawings\SHEETS\COH CROSSWALK DETAILS.dwg

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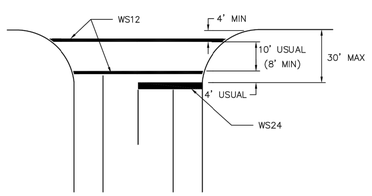
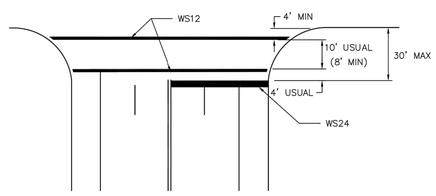
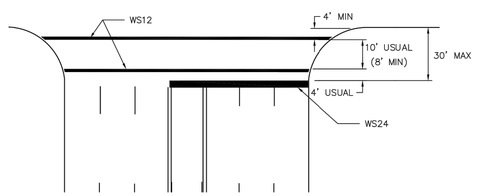
TWO LANES WITH SHOULDERS



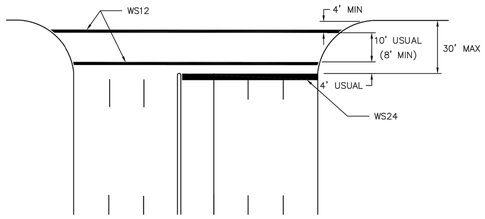
FOUR LANES WITH SHOULDERS



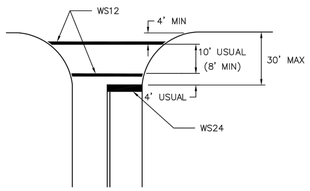
MULTI – LANES



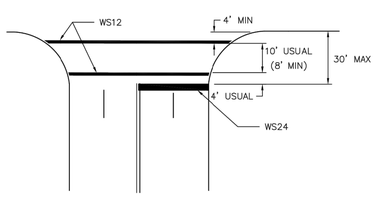
MULTI – LANE WITH MEDIAN



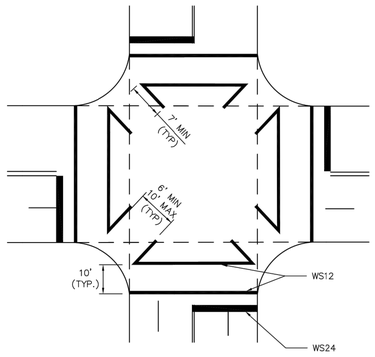
TWO LANES



FOUR LANES



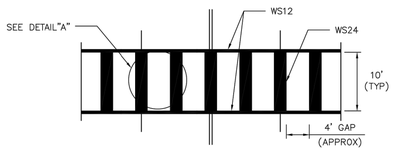
EXCLUSIVE PEDESTRIAN PHASE



NOTES:

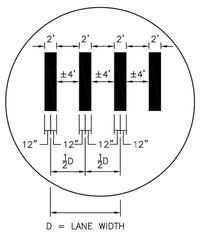
1. CROSSWALKS AND STOP LINES SHALL BE WHITE.
2. "D" IS EQUAL TO ONE HALF THE WIDTH OF TRAVEL LANE.

HIGH VISIBILITY CROSSWALK DETAIL

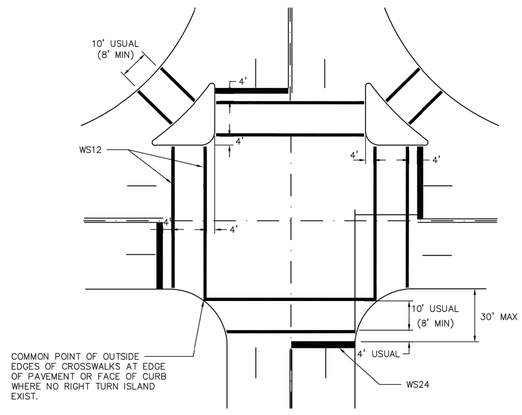


TYPICALLY USED AT SIGNALIZED AND NON–SIGNALIZED CROSSINGS ON COLLECTOR AND ARTERIAL ROADWAYS AND AT LOCATIONS REQUIRING EXTRA EMPHASIS.

DETAIL "A"



INTERSECTION WITH RIGHT – TURN ISLANDS



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CITY ENGINEER	CITY TRAFFIC ENGINEER

APPROVED BY:
DocuSigned by: Carol Haddock A80C4105728249A5...
DIRECTOR OF HOUSTON PUBLIC WORKS

EFF DATE: NOV–27–2023	DWG NO: 02760–12

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TYPICAL CROSSWALK DETAILS

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TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TYPICAL CROSSWALK DETAILS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 171 OF 275	

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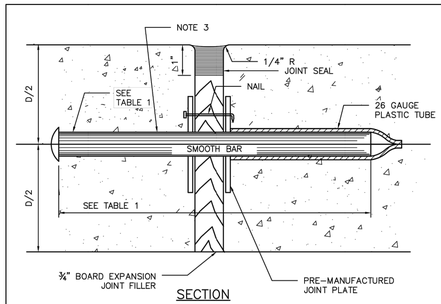
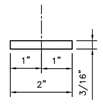


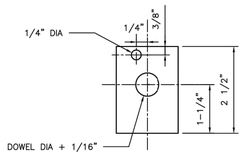
SECTION

DOWEL TYPE EXPANSION JOINT



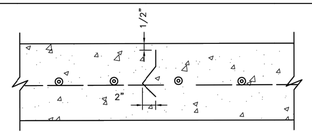
PLAN VIEW

JOINT PLATE



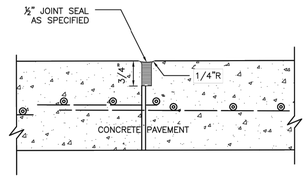
ELEVATION VIEW

JOINT PLATE



SECTION

DEFORMED METAL STRIP



SECTION

CONSTRUCTION JOINT SEAL

TABLE 1

PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
6	3/4	18	12
7	1	18	12
8	1	18	12
9	1 1/4	18	12
10	1 1/4	18	12
11	1 1/4	18	12
12	1 1/4	18	12

NOTES:

1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. UNITS TO BE SPACED 12" CENTER ON CENTER.
2. EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS.
3. CENTER DOWEL HORIZONTALLY ON JOINT.
4. CENTER DOWEL VERTICALLY IN CONCRETE BASE. EXTEND THICKENED CONCRETE AS NEEDED TO MAINTAIN 3" MIN COVER.
5. CITY OF HOUSTON APPROVED PRODUCTS MAY BE USED AS JOINT PLATE ALTERNATIVE.

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD
PAVEMENT EXPANSION AND CONSTRUCTION JOINT DETAILS
(SCALE: NOT TO SCALE)
APPROVED BY:
DocuSigned by: Suhail Kanwar — CITY ENGINEER
DocuSigned by: Carl Haddock — DIRECTOR OF HPW
DocuSigned by: HUNG NGUYEN — CITY TRAFFIC ENGINEER
EFF DATE: NOV-27-2023 — DWG NO: 02752-01

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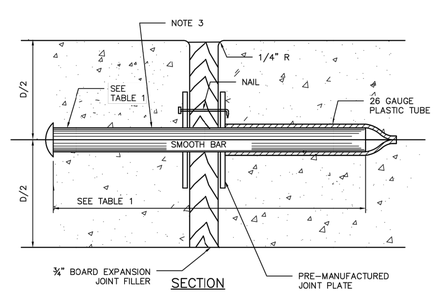
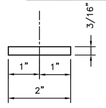


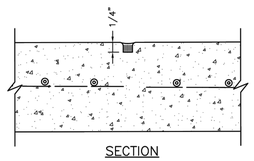
SECTION

DOWEL TYPE EXPANSION JOINT



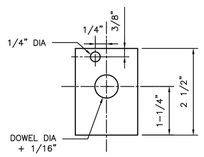
PLAN VIEW

JOINT PLATE



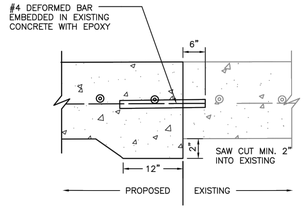
SECTION

CONTROL JOINT



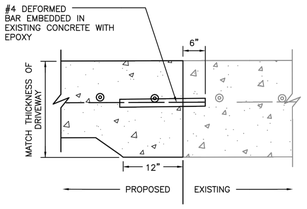
ELEVATION VIEW

JOINT PLATE



SECTION

SIDEWALK TO EXISTING SIDEWALK



SECTION

SIDEWALK TO EXISTING DRIVEWAY

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

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.

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HOUSTON PUBLIC WORKS STANDARD
SIDEWALK EXPANSION AND CONSTRUCTION JOINT DETAILS
(SCALE: NOT TO SCALE)
APPROVED BY:
DocuSigned by: Suhail Kanwar — CITY ENGINEER
DocuSigned by: Carl Haddock — DIRECTOR OF HPW
DocuSigned by: HUNG NGUYEN — CITY TRAFFIC ENGINEER
EFF DATE: NOV-27-2023 — DWG NO: 02752-02

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TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS (1 OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 172 OF 275	

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NO.	DATE	REVISION	APP.

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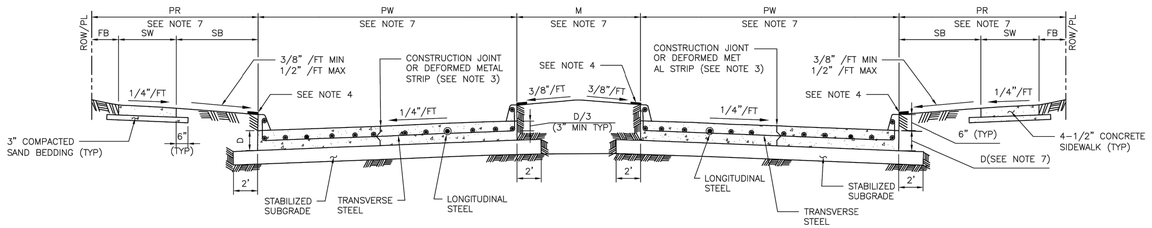
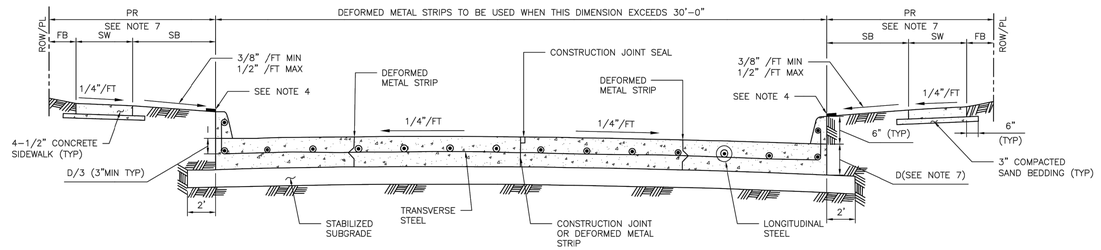


TYPICAL DOUBLE ROADWAY SECTION FOR CONCRETE PAVEMENT WITH CURBS



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
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11	45	49	11.125	3.00	31	17.75	4.0	22	25.50	3	24	36	36
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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.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukut Iranwar	DocuSigned by: Kirong Nguyen
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carol Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02751–01

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

CONCRETE PAVEMENT DETAILS

DRAWING SCALE
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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(2 OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 173 OF 275	

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NO.	DATE	REVISION	APP.

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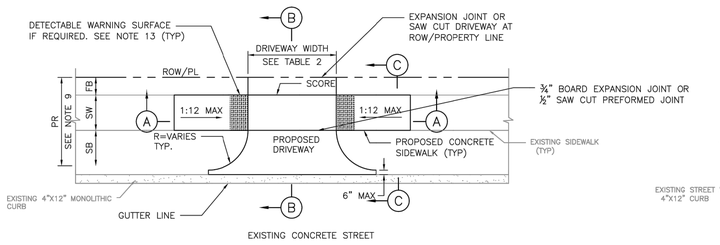
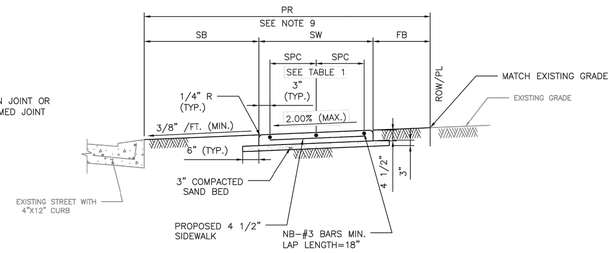
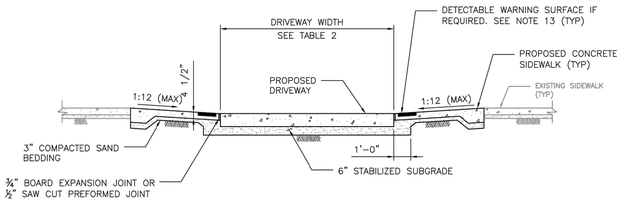


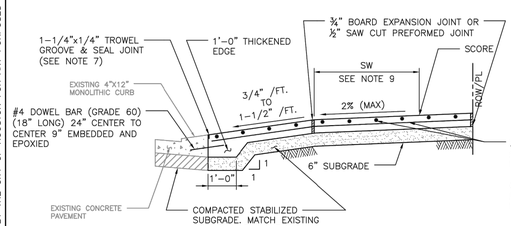
PLAN VIEW
DRIVEWAY



SECTION C–C
TYPICAL SIDEWALK SECTION



SECTION A–A
PROPOSED SIDEWALK, THROUGH DRIVEWAY WITH
EXCESSIVE GRADES



SECTION B–B
TYPICAL DRIVEWAY SECTION

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.

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 ARTICLES 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: Sukai Kanwar 6EF8B0C6A1F94A7A...	DocuSigned by: Bathing Nguyen 80A3B5FDA7564CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haldeth A8BC41697293453...	
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

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NO.	DATE	REVISION	APP.

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ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(3 OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 174 OF 275	

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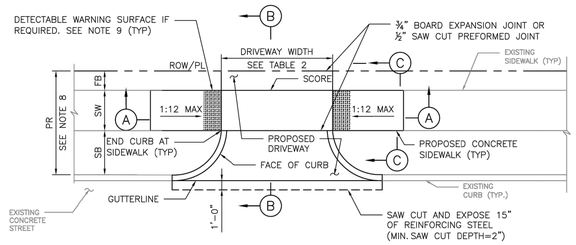
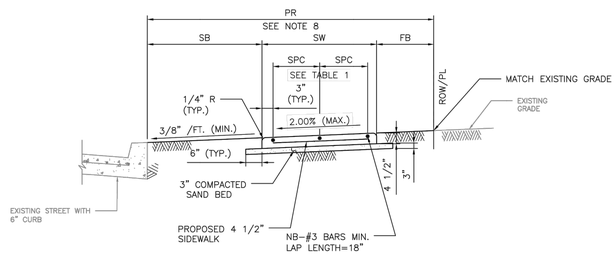
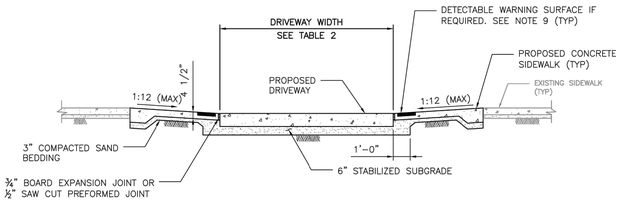


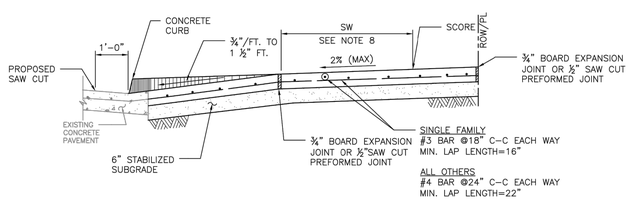
PLAN VIEW
DRIVEWAY



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 ARTICLES 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: Sukait Tesfaiwar	DocuSigned by: Linling 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

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11750 Katy Freeway, Suite 1260
Houston, TX 77079
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TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(4 OF 10)

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DRAWING SCALE	
NONE	
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SHEET NO. 175 OF 275	

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NO.	DATE	REVISION	APP.

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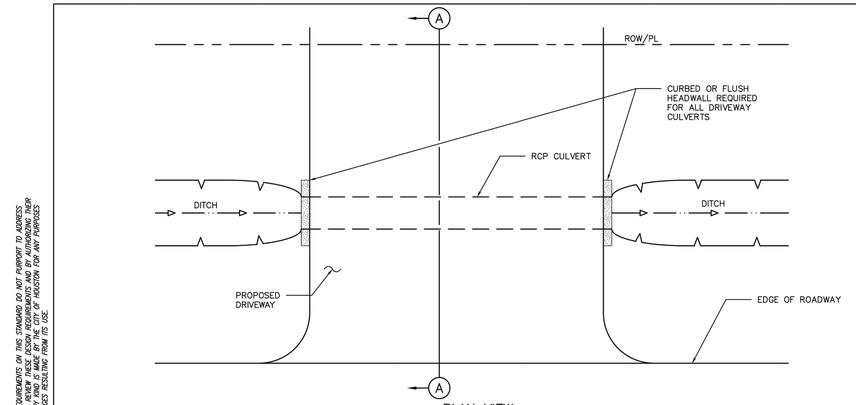
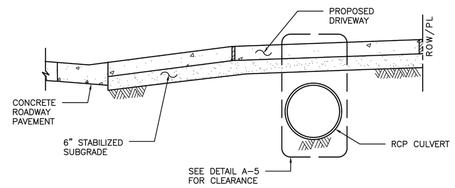
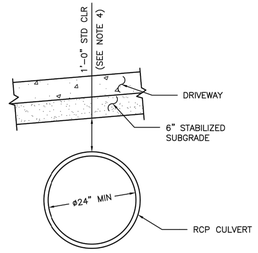


PLAN VIEW
STANDARD OPEN DITCH DRIVEWAY



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.
2. RCP 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. WHERE STANDARD 1'–0" CLEARANCE IS NOT FEASIBLE, MINIMUM CLEARANCE OF 6" IS ALLOWED WHEN APPROVED BY THE OFFICE OF THE CITY ENGINEER (OCE).
5. 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:

DocuSigned by: Suhail Kanwar — CITY ENGINEER
DocuSigned by: KHANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carl Hallebach — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 02754-02

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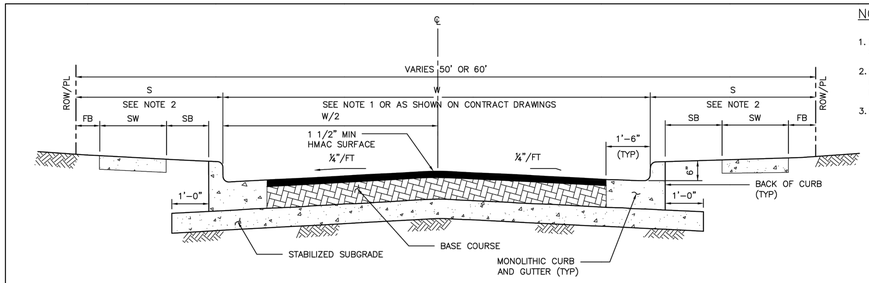
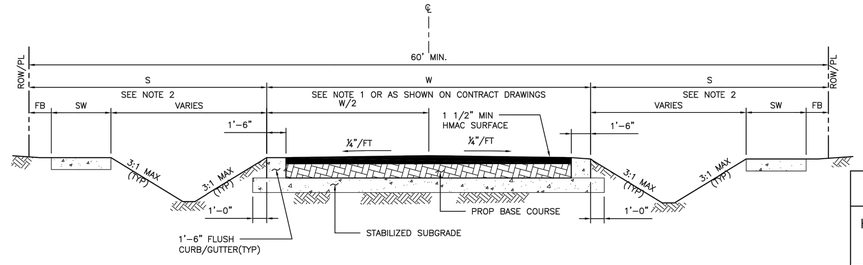


HMAC PAVEMENT – CURB & GUTTER SECTION

(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: Suhail Kanwar — CITY ENGINEER
DocuSigned by: KHANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carl Hallebach — DIRECTOR OF HPW

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ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
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800.414.1045

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(4A OF 10)

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DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 175A OF 275	

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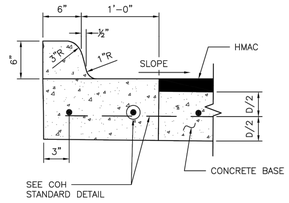
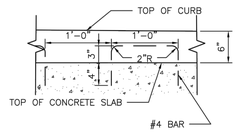
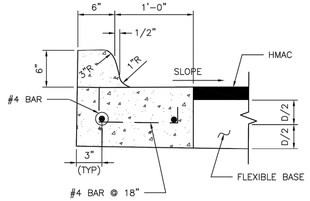


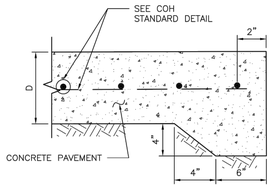
ESPLANADE CURB CONNECTED TO CONCRETE BASE



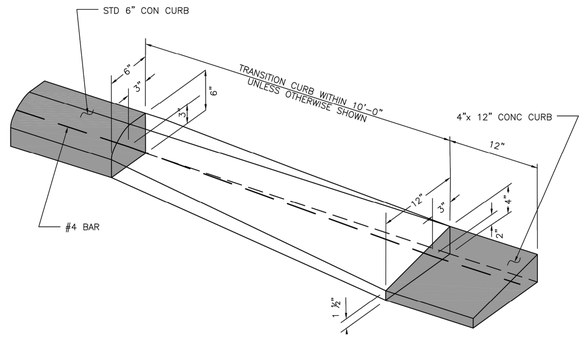
ALTERNATE CONCRETE CURB REINFORCEMENT



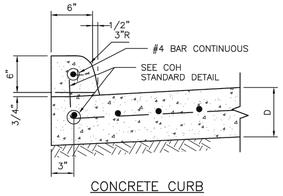
ESPLANADE CURB CONNECTED TO FLEXIBLE BASE



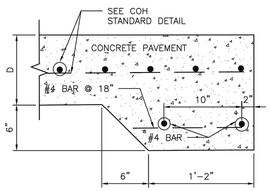
STANDARD CONCRETE PAVING HEADER



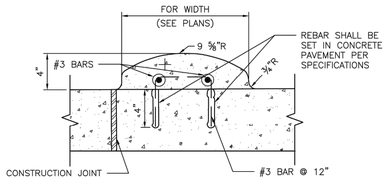
CURB TRANSITION
(SEE NOTES)



CONCRETE CURB

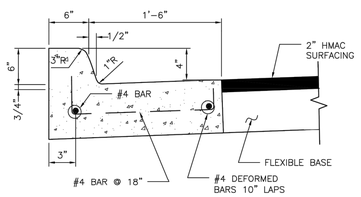


STANDARD RAILROAD HEADER

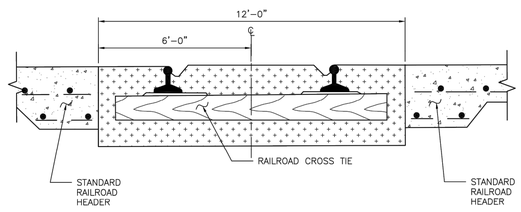


MOUNTABLE CURB

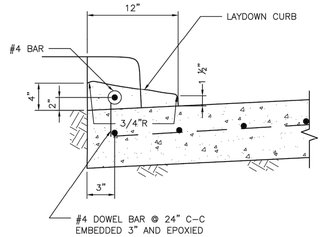
WHEN CONCRETE CURB IS TO BE PLACED EXISTING CONCRETE USE BASE #4 BAR @ 18x10" LONG, DOWELED AND SET IN EPOXY GROUT. SET #4 DOWEL BARS, 25" LONG AT 12" C-C WHEN PAVEMENT SECTION POURED.



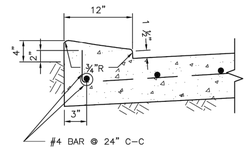
MONOLITHIC CURB AND GUTTER



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.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulad Kunwar	DocuSigned by: LaTonia McAllen
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carol Haddock	
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

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TX P.E. NO. 136610
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

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(5 OF 10)

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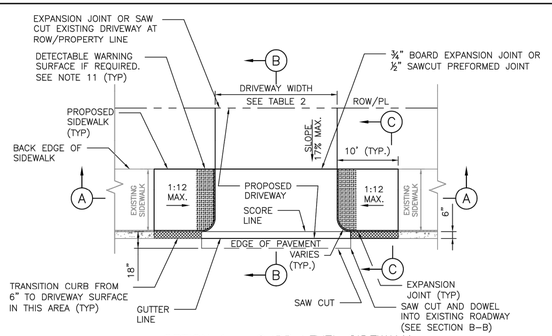
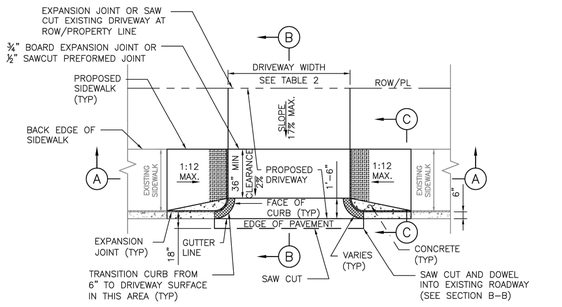
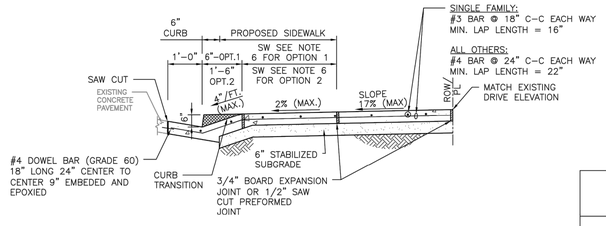


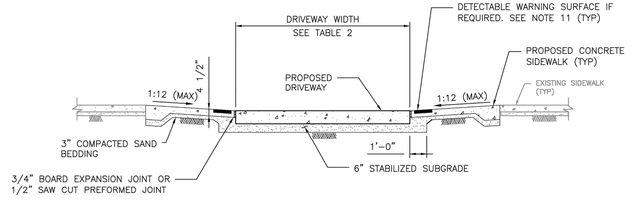
OPTION 1 – CURB LEVEL SIDEWALK
PLAN VIEW – DRIVEWAY WITHOUT CURB AT CURB RETURN



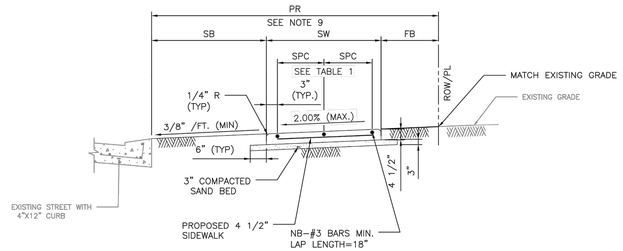
OPTION 2 – CURB LEVEL SIDEWALK
PLAN VIEW – DRIVEWAY WITH CURB AT CURB RETURN



SECTION B–B
TYPICAL DRIVEWAY SECTION THROUGH DRIVEWAY



SECTION A–A
PROPOSED SIDEWALK THROUGH DRIVEWAY



SECTION C–C
TYPICAL SIDEWALK 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 #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.

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: Sukut Iruvwar 5EFB8DC641F9478...	DocuSigned by: KHANG NGUYEN 95A2262FDA75B4CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carol Haddock 46DC41EB7283483...	
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	
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Houston, TX 77079
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TX P.E. NO. 136610
DATE: 08/15/2025
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(6 OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 177 OF 275	

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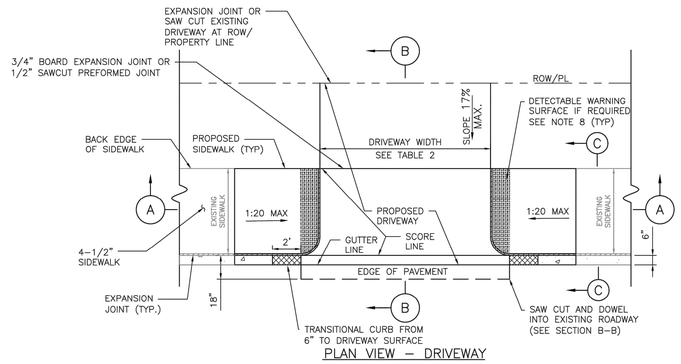
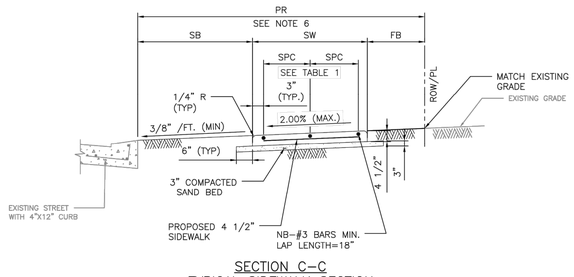
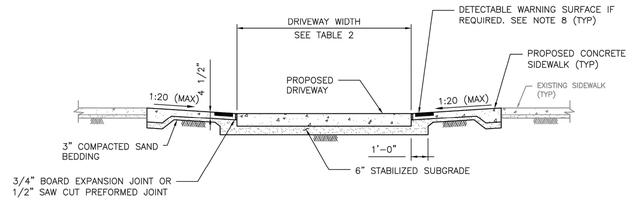


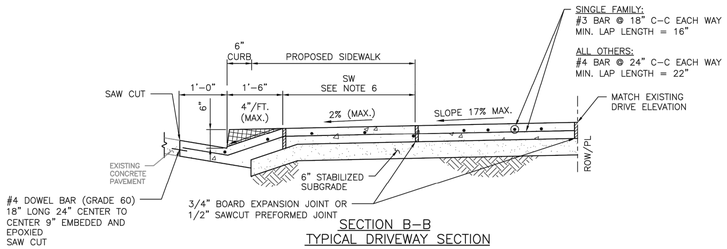
PLAN VIEW – DRIVEWAY



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			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 ARTICLES 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: Sukai Kanwar	DocuSigned by: LETHENG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carol Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02754–04

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

PROPOSED SIDEWALK THROUGH DRIVEWAY WITH MINIMAL ELEVATION DIFFERENCE

DRAWING SCALE
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11750 Katy Freeway, Suite 1260
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(6A OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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NONE	
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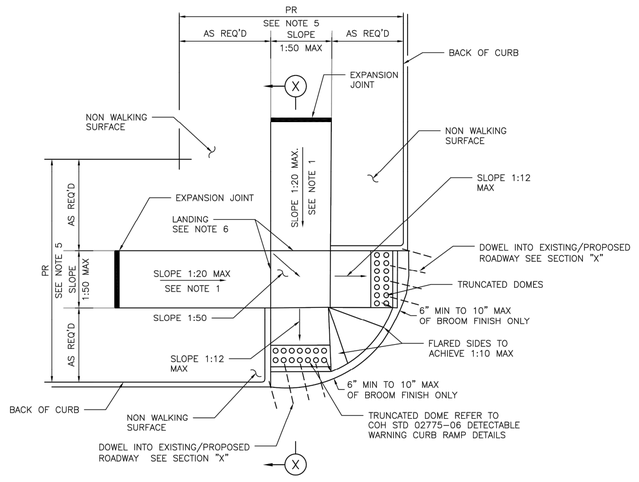
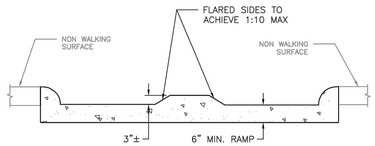
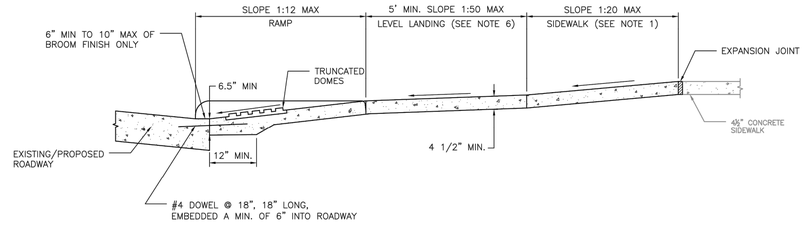


STREETS WITH NON– WALKING SURFACE BEHIND CURB
SEE NOTE–7



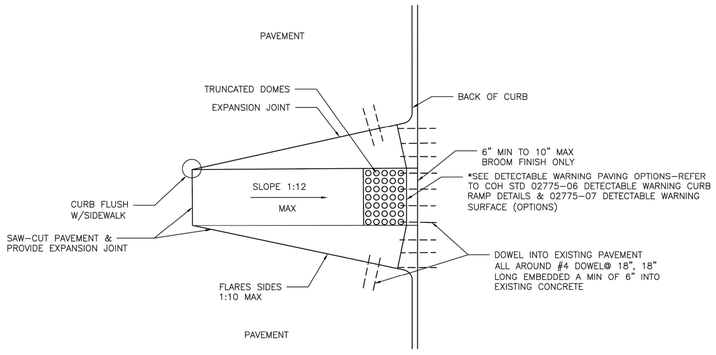
ELEVATION
LOOKING UP RAMP



SECTION X–X

NOTES:

1. REPLACE EXISTING SIDEWALK FROM LEVEL LANDING AS NECESSARY TO ACHIEVE 1:20 SLOPE
2. BROOM FINISH IS MEASURED FROM FACE OF CURB.
3. 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.
4. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON UNLESS NOTED OTHERWISE.
5. REFER TO CONTRACT DRAWINGS FOR PEDESTRIAN REALM (PR) WIDTH.
6. MINIMUM 5'x5' LANDING PAD ACCORDING TO ADA REQUIREMENTS. WHEN THE APPROACHING SIDEWALK IS WIDER THAN 5', THE LANDING PAD AND RAMP WIDTH MUST MATCH THE SIDEWALK WIDTH.
7. FOR STREETS WITH WALKABLE SURFACES IMMEDIATELY BEHIND THE CURB A FLARE IS REQUIRED ON BOTH SIDES OF THE RAMP.



CURB RAMP CONSTRUCTION FOR EXISTING PAVEMENT

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DocuSigned by: Sulad Kunwar	DocuSigned by: KHANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Stadlbauer	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02775–02

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TYPICAL CURB RAMP DETAILS

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TX P.E. NO. 136610

DATE: 08/15/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(7 OF 10)

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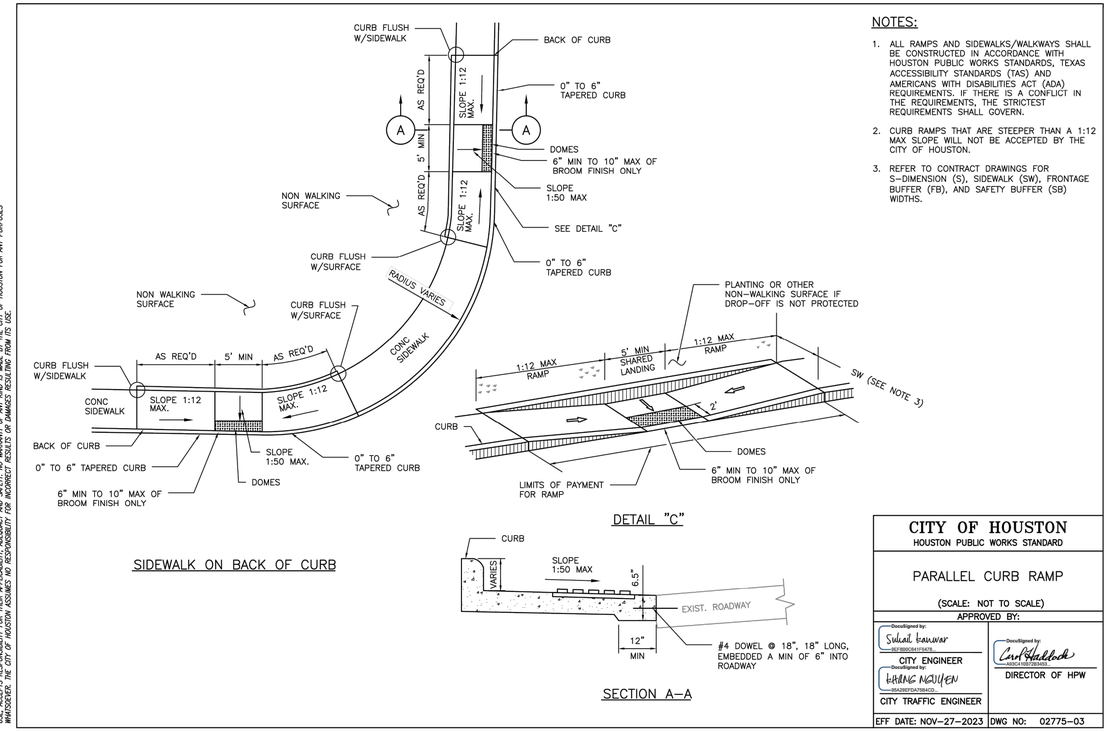

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

PARALLEL CURB RAMP

(SCALE: NOT TO SCALE)

APPROVED BY:

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DocuSigned by: LONG NGUYEN — CITY TRAFFIC ENGINEER	
EFF DATE: NOV-27-2023	DWG NO: 02775-03

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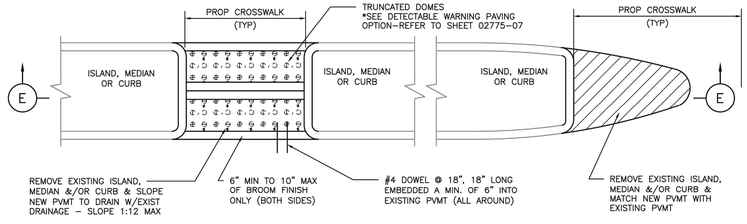

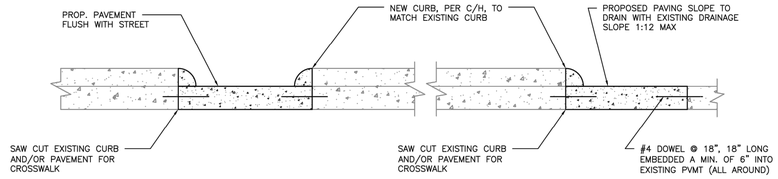

SECTION E-E
FOR ISLAND, MEDIAN, OR CURB MODIFICATIONS FOR CROSSWALKS

NOTES:

1. SEE COH STANDARD DETAIL FOR PAVEMENT MARKING DETAILS.
2. 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.
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

CURB MODIFICATION FOR CURB RAMPS & CROSSWALKS

(SCALE: NOT TO SCALE)

APPROVED BY:

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DocuSigned by: LONG NGUYEN — CITY TRAFFIC ENGINEER	
EFF DATE: NOV-27-2023	DWG NO: 02775-04

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(8 OF 10)

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CITY OF HOUSTON PM	
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SHEET NO. 179 OF 275	

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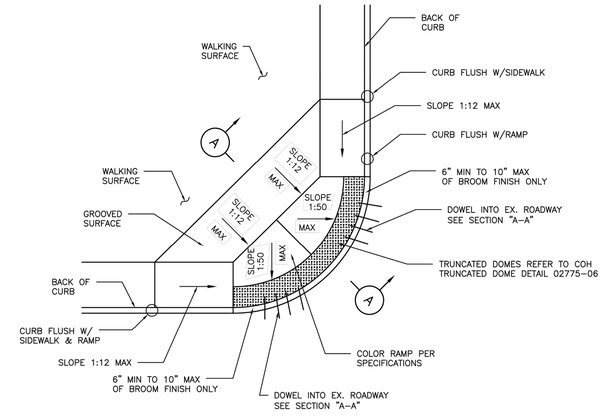

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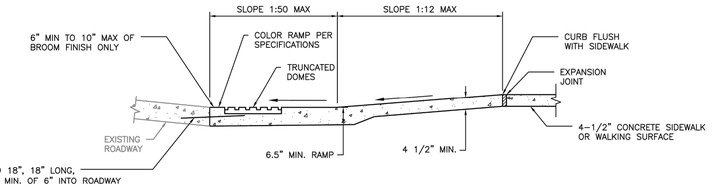

SECTION A–A

NOTES:

1. 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.
2. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.
3. THIS STANDARD DETAIL SHALL BE USED ONLY IF THE ROADWAY GEOMETRIC DOESN'T ALLOW STANDARD DETAILS 02775–02, 02775–03, AND 02775–09 TO BE USED.
4. THIS STANDARD DETAIL SHALL NOT BE USED IN LIEU OF STANDARD DETAILS 02775–02, 02775–03, AND 02775–09 UNLESS APPROVED BY THE CITY.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

COMMERCIAL & HIGH DENSITY CONDITIONS CURB RAMP DETAILS

(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Sukut Kanwar — CITY ENGINEER
DocuSigned by: HANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carl Haddock — DIRECTOR OF HPW

EFF DATE: NOV–27–2023 | DWG NO: 02775–05

DISCLAIMER:
IN USE OF THE STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE CITY OF HOUSTON REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH ITS 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.

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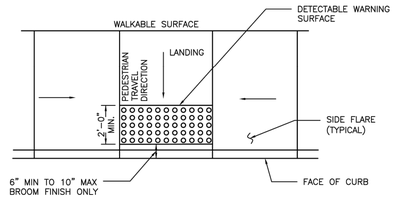
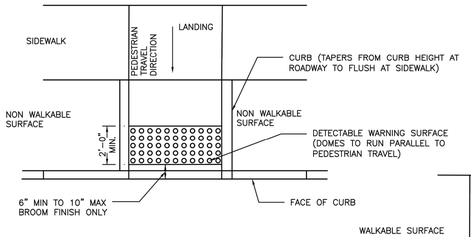
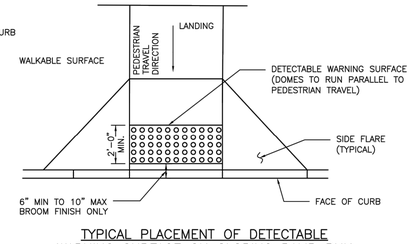


TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE





TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN

GENERAL NOTES FOR DETECTABLE WARNINGS:

1. DETECTABLE WARNING SURFACES MUST BE FULLY ADA COMPLIANT.
2. ALL NEW CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSISTS OF RAISED TRUNCATED DOMES. THE SURFACE MUST CONTRAST VISUALLY WITH ADJOINING SURFACE, INCLUDING SIDE FLARES. FURNISH DARK BROWN OR DARK RED DETECTABLE WARNING SURFACE ADJACENT TO UNCOLORED CONCRETE, UNLESS SPECIFIED ELSEWHERE IN THE PLANS.
3. DETECTABLE WARNING SURFACES MUST MAINTAIN A SLIP RESISTANCE WITH FA–VALUE OF EQUAL TO OR GREATER THAN 0.8.
4. DETECTABLE WARNING SURFACES MUST MAINTAIN A WATER ABSORPTION RATE OF LESS THAN 1%, DETECTABLE WARNING SHALL NOT ALLOW WATER TO ACCUMULATE.
5. DETECTABLE WARNINGS INSTALLED INTO FRESH CONCRETE SHALL BE WITHOUT VOIDS AND UTILIZING AN ACCEPTABLE ANCHORING SYSTEM.
6. ALIGN TRUNCATED DOMES IN THE DIRECTION OF PEDESTRIAN TRAVEL WHEN ENTERING THE STREET.
7. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING WHERE THE PEDESTRIAN ACCESS ROUTE ENTERS THE STREET.
8. DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6" MIN TO 10" MAX FROM THE DETECTABLE WARNING SURFACES MAY BE CURVED ALONG THE CORNER RADIUS.
9. 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.
10. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

DETECTABLE WARNING CURB RAMP DETAILS

(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Sukut Kanwar — CITY ENGINEER
DocuSigned by: HANG NGUYEN — CITY TRAFFIC ENGINEER
DocuSigned by: Carl Haddock — DIRECTOR OF HPW

EFF DATE: NOV–27–2023 | DWG NO: 02775–06

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SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS (8A OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 179A OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

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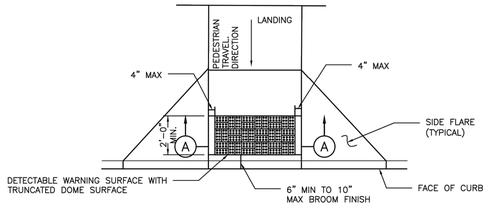
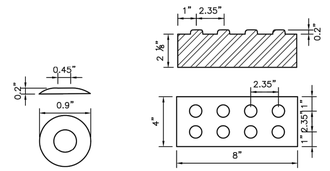


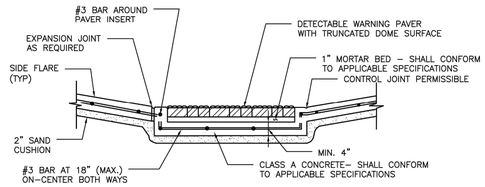
PLAN VIEW

DETECTABLE WARNING SURFACE



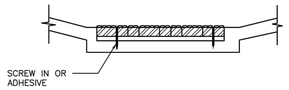
DETAIL

DETECTABLE WARNING PAVER



SECTION A–A

PAVER



DETAIL A–5

NOTES:

GENERAL NOTES

1. 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.
2. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.

PAVERS

1. FURNISH DETECTABLE WARNING SURFACE UNITS MEETING ALL REQUIREMENTS OF ASTM C–936, C–33. LAY IN A TWO BY TWO UNIT BASKET WEAVE PATTERN OR AS DIRECTED.
2. LAY FULL–SIZE UNITS FIRST FOLLOWED BY CLOSURE UNITS CONSISTING OF AT LEAST 25 PERCENT OF A FULL UNIT. CUT DETECTABLE WARNING POWER UNITS USING A POWER SAW.

POLYMER CONCRETE

1. DETECTABLE WARNING TILES SHALL BE MADE OF POLYMER CONCRETE MATERIALS.
2. DETECTABLE WARNING TILES SHALL BE INSTALLED INTO FRESH CONCRETE (CAST–IN–PLACE) UTILIZING AN ANCHORING SYSTEM.
3. DETECTABLE WARNING TILES SHALL BE OF TERRACOTTA (BRICK–RED) COLOR AND COLORED THROUGHOUT TO GUARANTEE THE ADA REQUIRED COLOR CONTRAST.
4. DETECTABLE WARNING TILES SHALL MEET OR EXCEED THE FOLLOWING ASTM–BASED "STANDARDS" FOR CONCRETE MATERIALS.
   A. COMPRESSION STRENGTH > 12,500 PSI PER ASTM C 39–04
   B. WATER ABSORPTION < 0.25% PER ASTM C 97–09

PADS

1. FURNISH REQUIREMENTS OF ADAAG (MARCH 2003).
2. OTHER MATERIALS MAY BE USED IF APPROVED BY THE CITY ENGINEER

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

DETECTABLE WARNING SURFACE (OPTIONS)

(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Sulaul Kauwar — CITY ENGINEER	DocuSigned by: Carl Haddock — DIRECTOR OF HPW
DocuSigned by: HANG NGUYEN — CITY TRAFFIC ENGINEER	
EFF DATE: NOV–27–2023	DWG NO: 02775–07

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 SITE SPECIFIC DESIGN ISSUES WHICH ARE THE RESPONSIBILITY OF THE ENGINEER OF RECORD. ANY ENGINEER WHO ELECTS TO USE THIS STANDARD IN WHOLE OR IN PART IN THE PREPARATION OF CONSTRUCTION PLANS FOR PUBLIC USE, ACCEPTS RESPONSIBILITY FOR HIS/HER 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.

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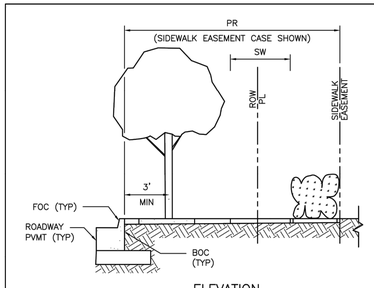
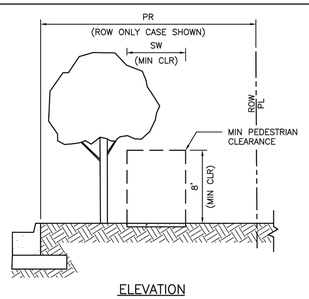
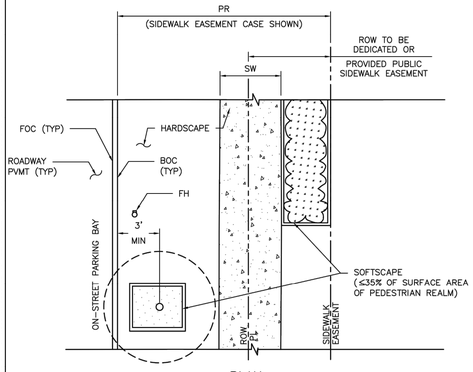


ELEVATION

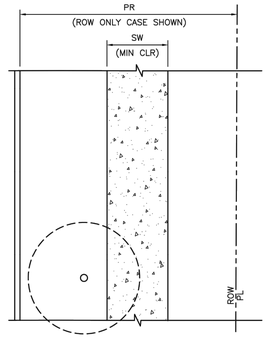


ELEVATION



PLAN

PEDESTRIAN REALM PERFORMANCE STANDARD



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: Sulaul Kauwar — CITY ENGINEER	DocuSigned by: Carl Haddock — DIRECTOR OF HPW
DocuSigned by: HANG NGUYEN — CITY TRAFFIC ENGINEER	
EFF DATE: NOV–27–2023	DWG NO: 02775–08

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS (8B OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
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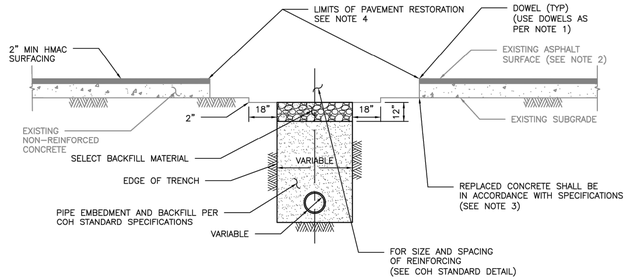
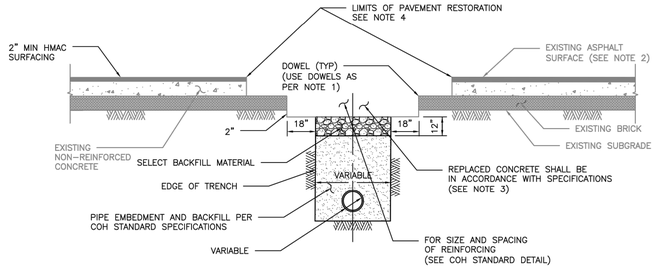


ELEVATION C
REPAIR OF NON-REINFORCED CONCRETE PAVEMENT



ELEVATION D
REPAIR OF NON-REINFORCED CONCRETE PAVEMENT WITH BRICK

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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: Sukut Kanwar — CITY ENGINEER
DocuSigned by: Khang Nguyen — CITY TRAFFIC ENGINEER
DocuSigned by: Carl Haddock — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 02951-05

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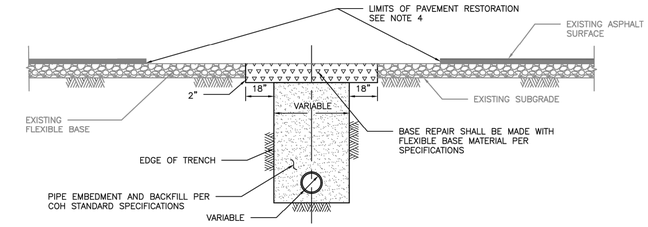
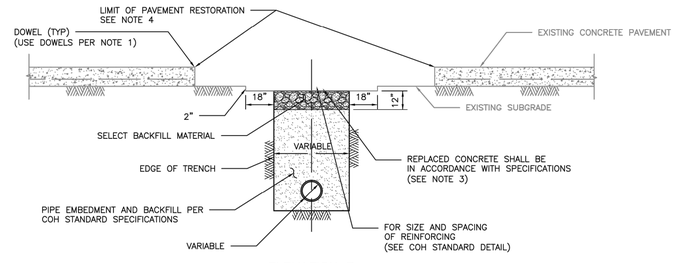


ELEVATION A
REPAIR OF FLEXIBLE BASE PAVEMENT



ELEVATION B
REPAIR OF REINFORCED CONCRETE PAVEMENT

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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: Sukut Kanwar — CITY ENGINEER
DocuSigned by: Khang Nguyen — CITY TRAFFIC ENGINEER
DocuSigned by: Carl Haddock — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 02951-04

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SURVEYED BY: WGC
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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(9 OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 180 OF 275	

NO.	DATE	REVISION	APP.

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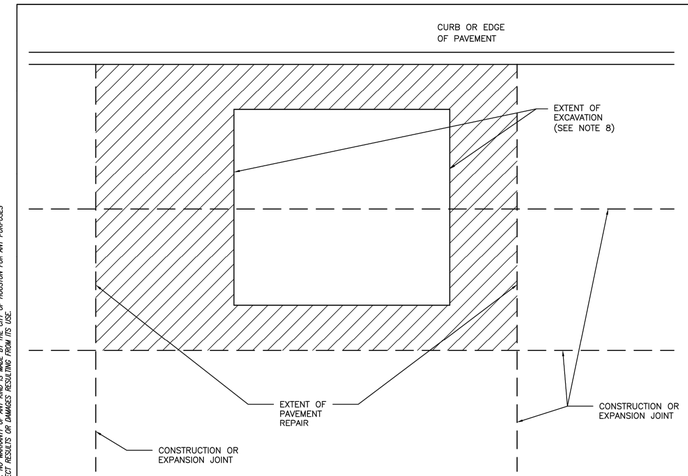

NOTES:

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).

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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: Sukat Kanwar CITY ENGINEER	DocuSigned by: Carl Haddock DIRECTOR OF HPW
DocuSigned by: HUNG NGUYEN CITY TRAFFIC ENGINEER	
EFF DATE: NOV–27–2023	DWG NO: 02951–01

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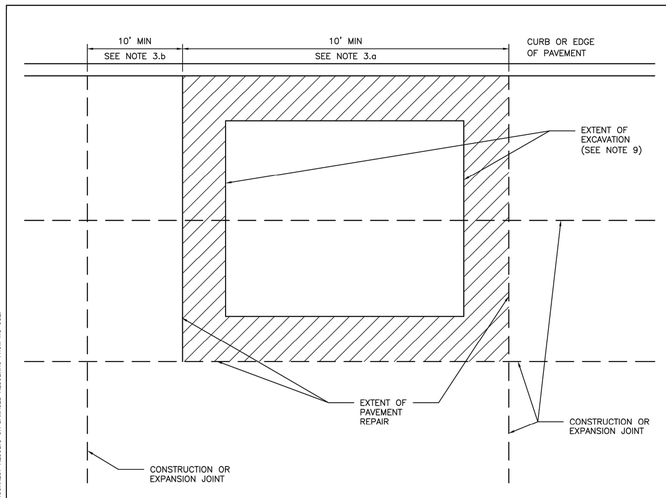

NOTES:

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 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 AND WARRANTS THAT THE USE OF THESE DESIGN REQUIREMENTS COMPLIES WITH THE CONTRACT DOCUMENTS. IN NO EVENT SHALL THE CITY OF HOUSTON BE LIABLE FOR ANY DAMAGES RESULTING FROM ITS USE, 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: Sukat Kanwar CITY ENGINEER	DocuSigned by: Carl Haddock DIRECTOR OF HPW
DocuSigned by: HUNG NGUYEN CITY TRAFFIC ENGINEER	
EFF DATE: NOV–27–2023	DWG NO: 02951–02

NO.	DATE	REVISION	APP.

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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS (9A OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 180A OF 275	

90% SUBMITTAL

PLOT STYLE: COH.ctb
PLOTTED: 8/15/2025 8:39 AM
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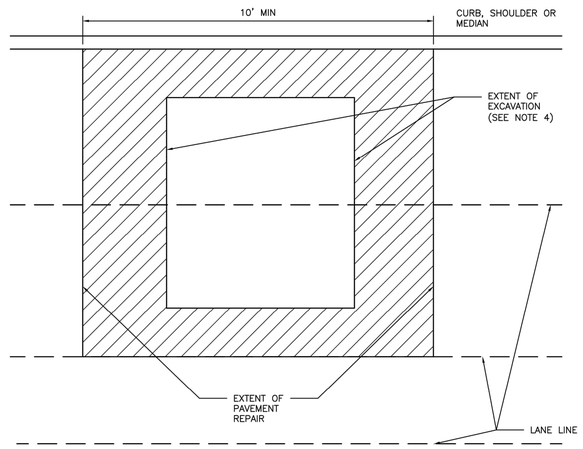

NOTES:

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.

DISCLAIMER:
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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: Sukut Kalavar — CITY ENGINEER	DocuSigned by: Carl Haddock — DIRECTOR OF HPW
DocuSigned by: HANG NGUYEN — CITY TRAFFIC ENGINEER	
EFF DATE: NOV–27–2023	DWG NO: 02951–03

NO.	DATE	REVISION	APP.

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Houston, TX 77079
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SURVEYED BY: WGC
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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH PAVEMENT DETAILS
(10 OF 10)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 181 OF 275	

90% SUBMITTAL

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PLOT STYLE: COH.ctb
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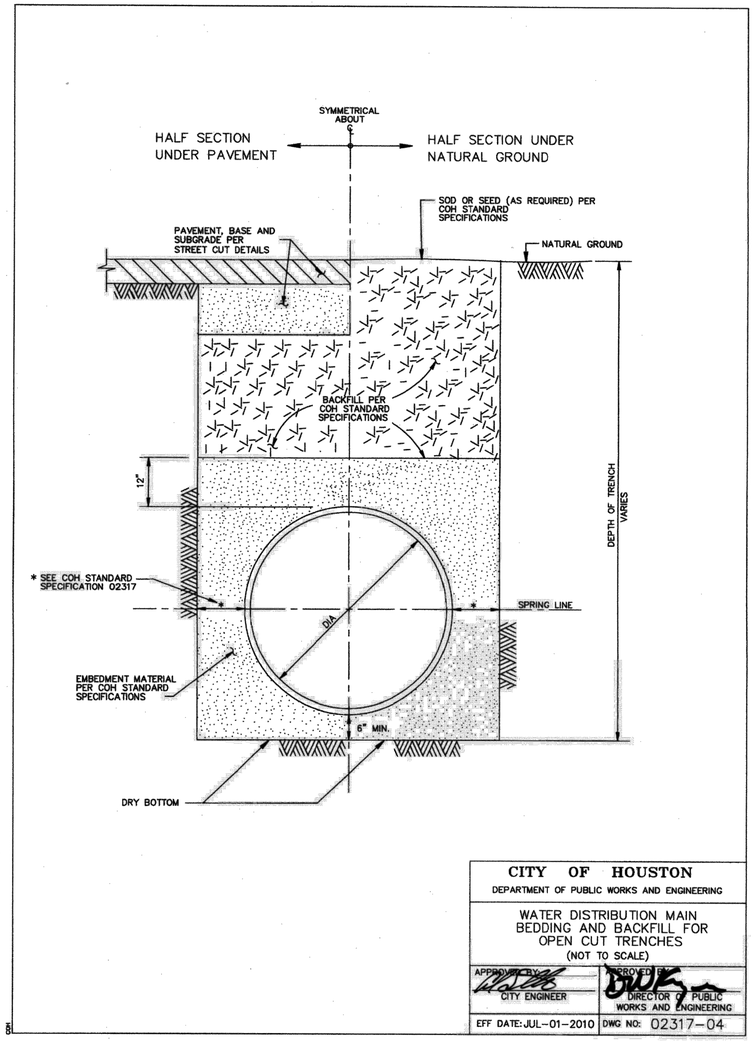
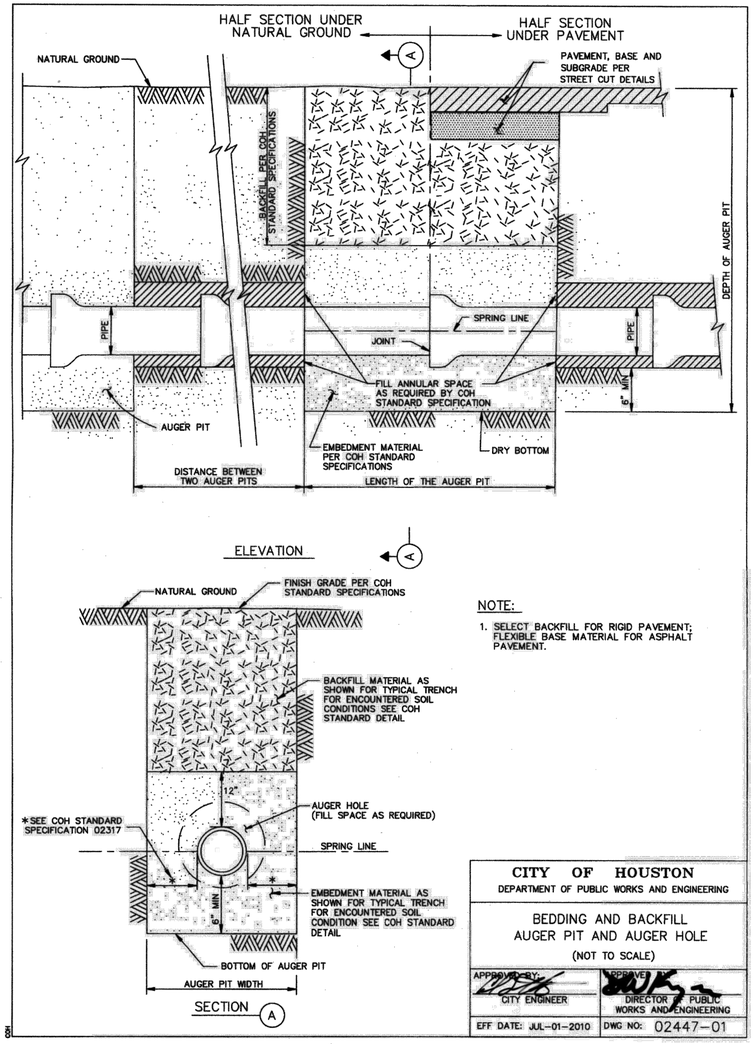
NO.	DATE	REVISION	APP.



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: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2010
DWG NO: 02317-04



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: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2010
DWG NO: 02447-01

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610
DATE: 08/15/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

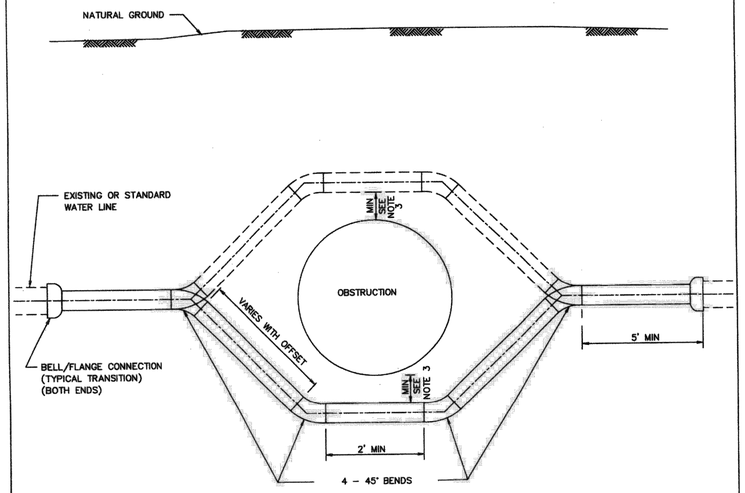
COH WATER LINE DETAILS (1 OF 6)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 182 OF 275	

90% SUBMITTAL

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

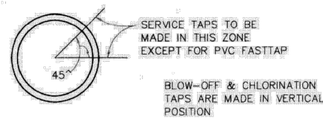
1. DUCTILE IRON PIPE PRESSURE 250 PSI WITH APPROVED RESTRAINED JOINTS.
2. PVC PIPE WITH INTEGRAL RESTRAINED JOINT SYSTEM, OR DUCTILE – IRON RESTRINED JOINT FITTINGS, EPOXY LINED AND COATED. USE 250 PSI AWWA C900 DR 14 FOR PVC RESTRAINED JOINTS.
3. PVC NOT ALLOWED FOR GREATER THAN 20 FT OF COVER OR FOR 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 BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2010	DWG NO: 02511-01

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



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

NO.	DATE	REVISION	APP.

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH WATER LINE DETAILS
(2 OF 6)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 183 OF 275	

90% SUBMITTAL

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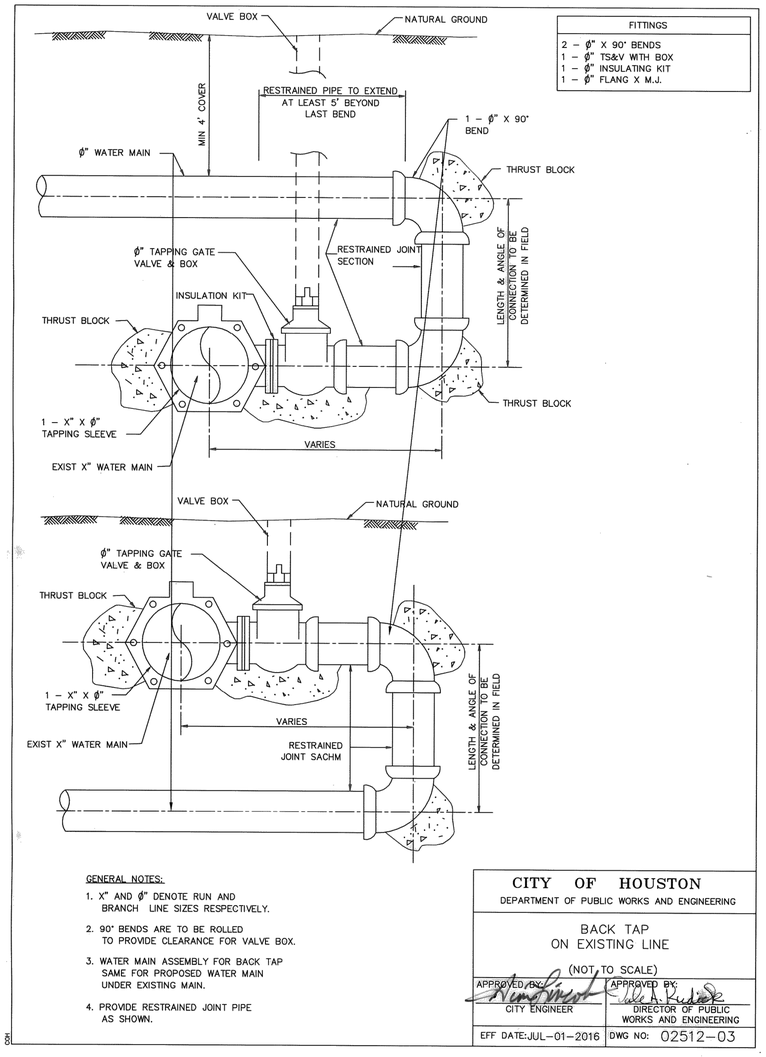


FITTINGS
2 – ϕ" X 90° BENDS
1 – ϕ" TS&V WITH BOX
1 – ϕ" INSULATING KIT
1 – ϕ" FLANG X M.J.

GENERAL NOTES:

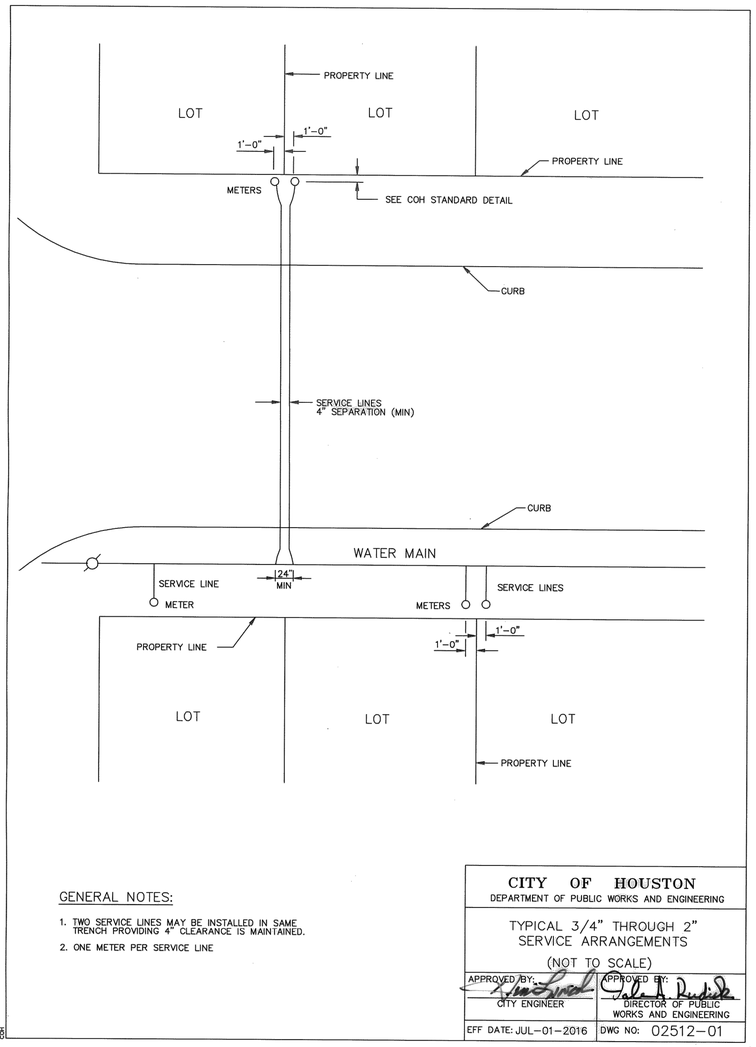
1. X" AND ϕ" DENOTE RUN AND BRANCH LINE SIZES RESPECTIVELY.
2. 90° BENDS ARE TO BE ROLLED TO PROVIDE CLEARANCE FOR VALVE BOX.
3. WATER MAIN ASSEMBLY FOR BACK TAP SAME FOR PROPOSED WATER MAIN UNDER EXISTING MAIN.
4. PROVIDE RESTRAINED JOINT PIPE AS SHOWN.

COH

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

BACK TAP
ON EXISTING LINE
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL–01–2016	DWG NO: 02512–03



GENERAL NOTES:

1. TWO SERVICE LINES MAY BE INSTALLED IN SAME TRENCH PROVIDING 4" CLEARANCE IS MAINTAINED.
2. ONE METER PER SERVICE LINE

COH

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

NO.	DATE	REVISION	APP.

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH WATER LINE DETAILS (3 OF 6)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 184 OF 275	

90% SUBMITTAL

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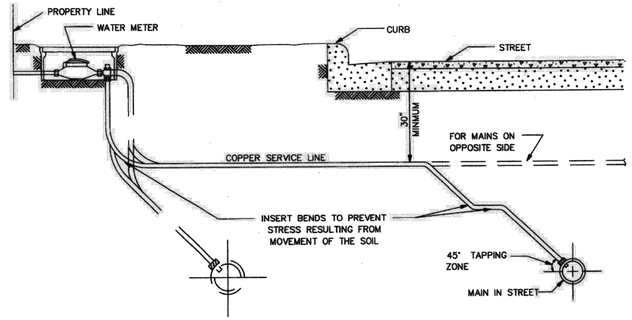
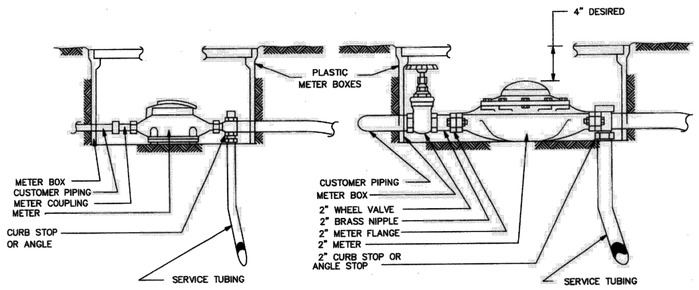
NOTES:

1 1/2" METER SET IS SAME AS 2" EXCEPT WHEEL VALVE IS NOT REQUIRED.



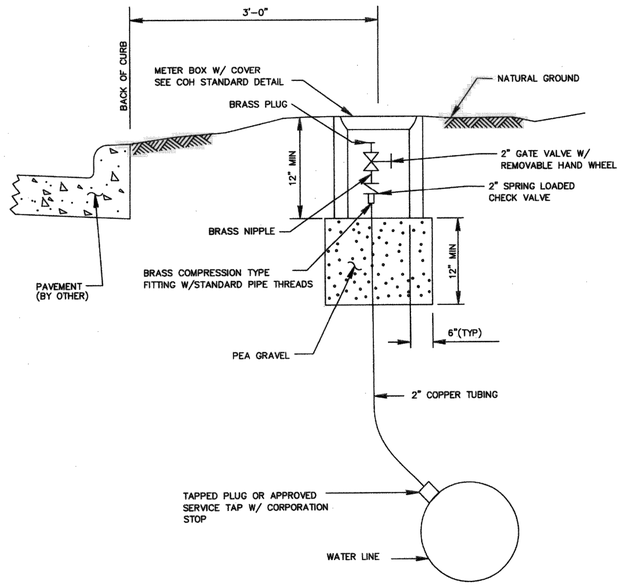
TYPICAL SECTION SERVICE LINE



5/8", 3/4" AND 1" METER SET

2" METER SET

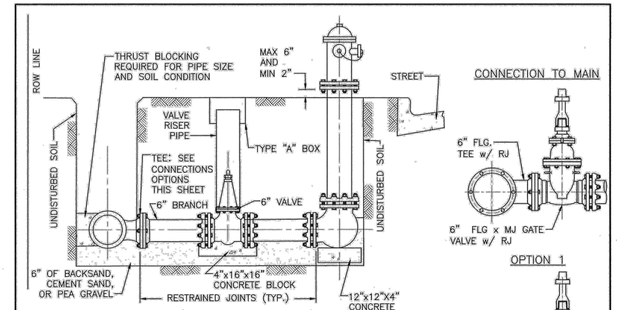
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
TYPICAL METER SETTINGS (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2010	DWG NO: 02526-01



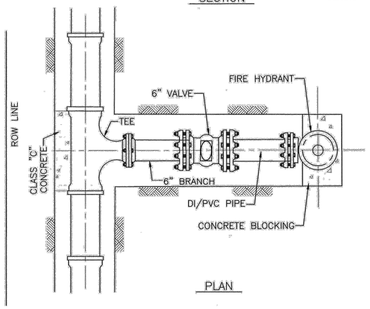
GENERAL NOTES:

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



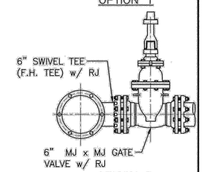
SECTION



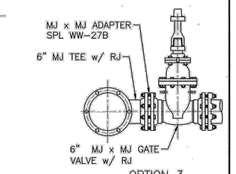
PLAN

CONNECTION TO MAIN

OPTION 1



OPTION 2



OPTION 3

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: CITY ENGINEER	APPROVED BY: DIRECTOR OF HOUSTON PUBLIC WORKS
EFF DATE: JUL-01-2021	DWG NO: 02520-01

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TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH WATER LINE DETAILS
(4 OF 6)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 185 OF 275	

90% SUBMITTAL

NO.	DATE	REVISION	APP.

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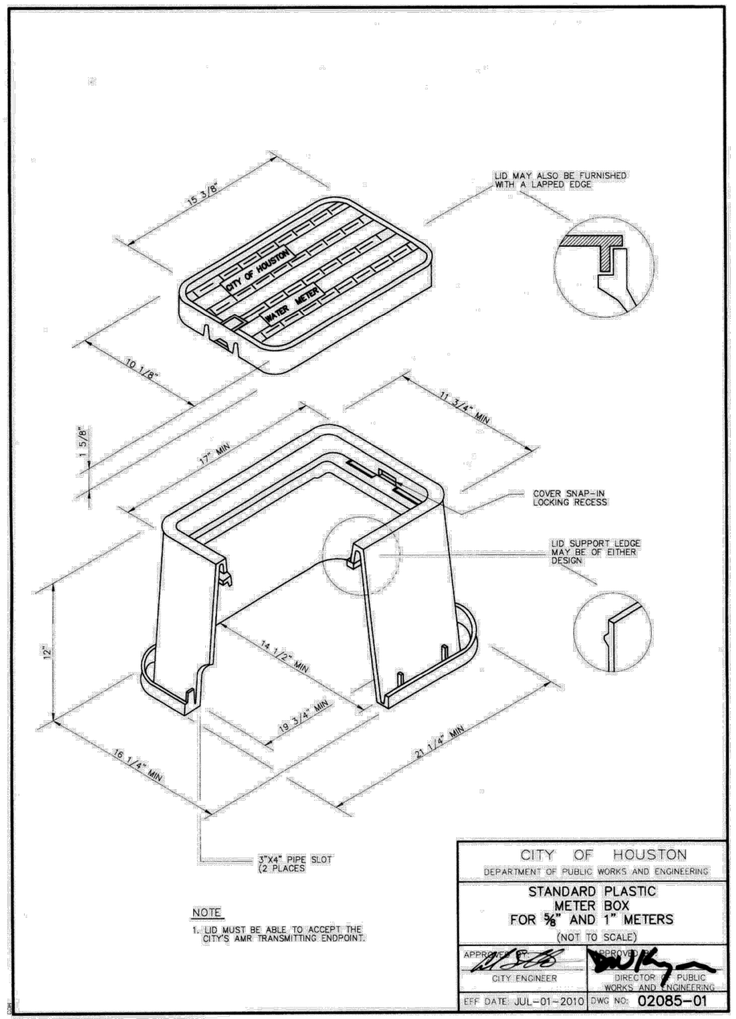
PLOT STYLE: COH.ctb
PLOTTED: 8/15/2025 8:40 AM
FILE PATH: O:\2019\395062\Drawings\SHEETS\COH WATER LINE DETAILS.dwg

NO.	DATE	REVISION	APP.



NOTE

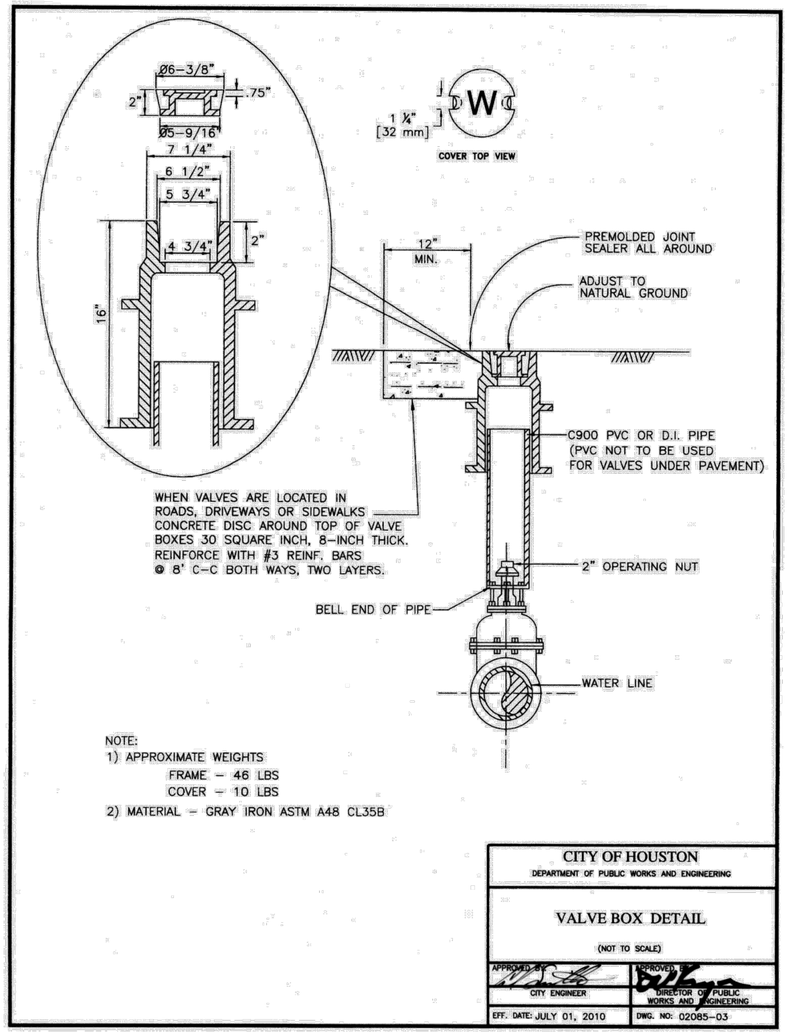
1. LID MUST BE ABLE TO ACCEPT THE CITY'S AMR TRANSMITTING ENDPOINT.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STANDARD PLASTIC METER BOX FOR 5/8" 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



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

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

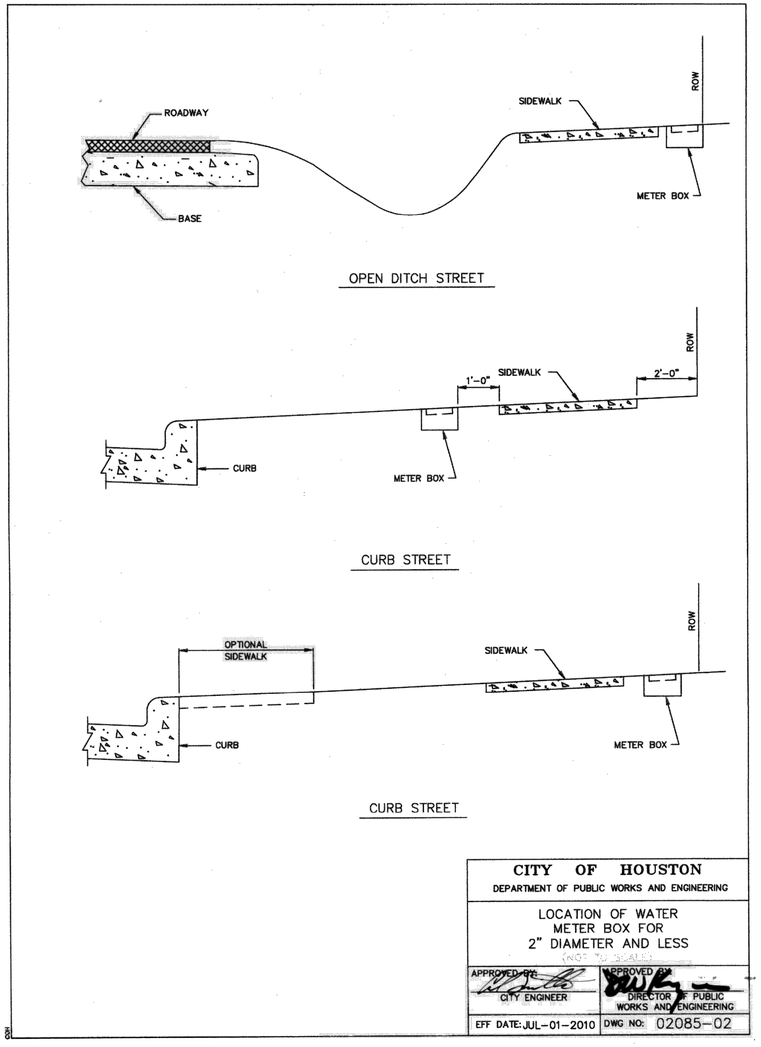
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH WATER LINE DETAILS
(5 OF 6)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 186 OF 275	

90% SUBMITTAL



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

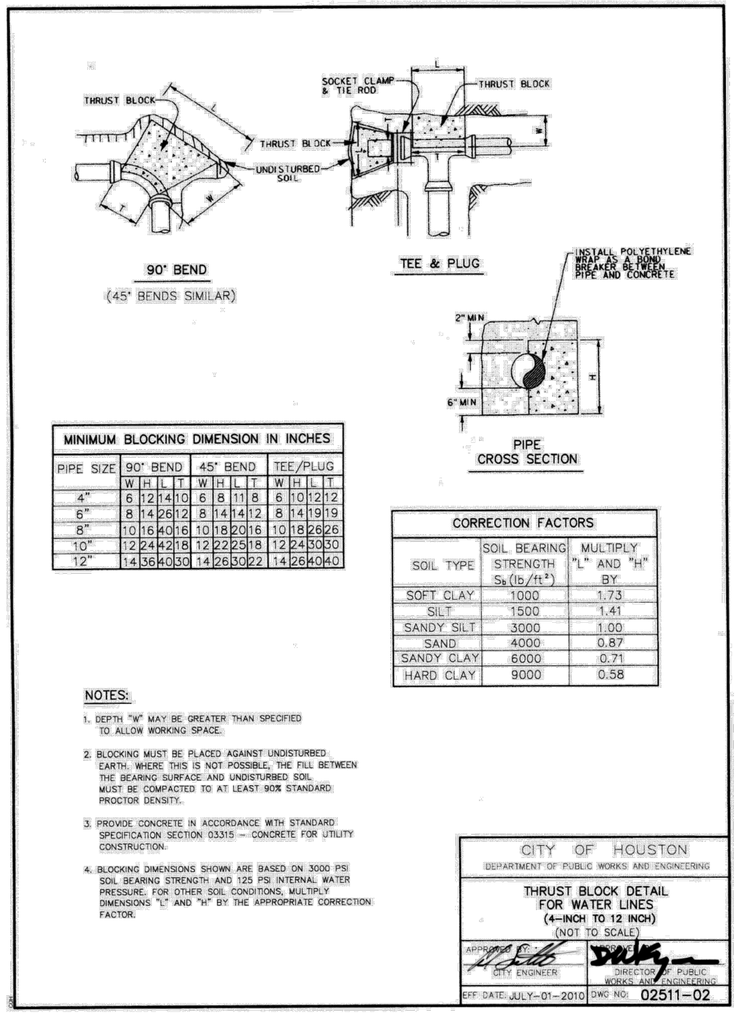
LOCATION OF WATER METER BOX FOR 2" DIAMETER AND LESS

(NOT TO SCALE)

APPROVED BY: CITY ENGINEER

APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JUL-01-2010 DWG NO: 02085-02



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

NO.	DATE	REVISION	APP.

WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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NATHAN A. WILSON, P.E.
TX P.E. NO. 136610

DATE: 08/15/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

COH WATER LINE DETAILS (6 OF 6)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
VICTOR AMAVI, P.E.	
SHEET NO. 187 OF 275	

90% SUBMITTAL

PLOTTED: 8/15/2025 8:40 AM
PLOT STYLE: COH.ctb
FILE PATH: O:\2019\395062\Drawings\SHEETS\COH WATER LINE DETAILS.dwg

MATCH LINE A2-B1 (SEE SHEET 2 OF 4)

MATCHLINE A1-B1 (SEE SHEET 3 OF 4)

KENDALL STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+17.78 TO
STA 09+15.34)

DRENNAN STREET
PROPOSED WATERLINE
12-INCH PVC
(STA 01+27.88 TO
STA 20+37.84)

HUNT STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+43.78 TO
STA 19+55.53)

ESTELLE STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+33.26 TO
STA 19+20.70)

SIDNEY STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+41.80 TO
STA 19+27.74)

GRACE STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+11.00 TO
STA 10+77.00)

SHERMAN STREET
PROPOSED WATERLINE
12-INCH PVC
(STA 01+52.27 TO
STA 30+64.63)

MENARD STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+51.82 TO
STA 06+60.84)

GARROW STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+48.07 TO
STA 29+96.62)

WILMER STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 01+37.83 TO
STA 10+81.76)

WLMER STREET
PROPOSED WATERLINE
08-INCH PVC
(STA 18+09.52 TO
STA 21+94.24)

Commerce Alignment
Kendall Alignment
Drennan 2 Alignment
Hunt Alignment
Estelle Alignment
Sidney Alignment
Sherman Alignment
Menard Alignment
Grace Alignment
Garrow Alignment
Wilmer Alignment
Harrisburg Alignment

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 100' 200'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

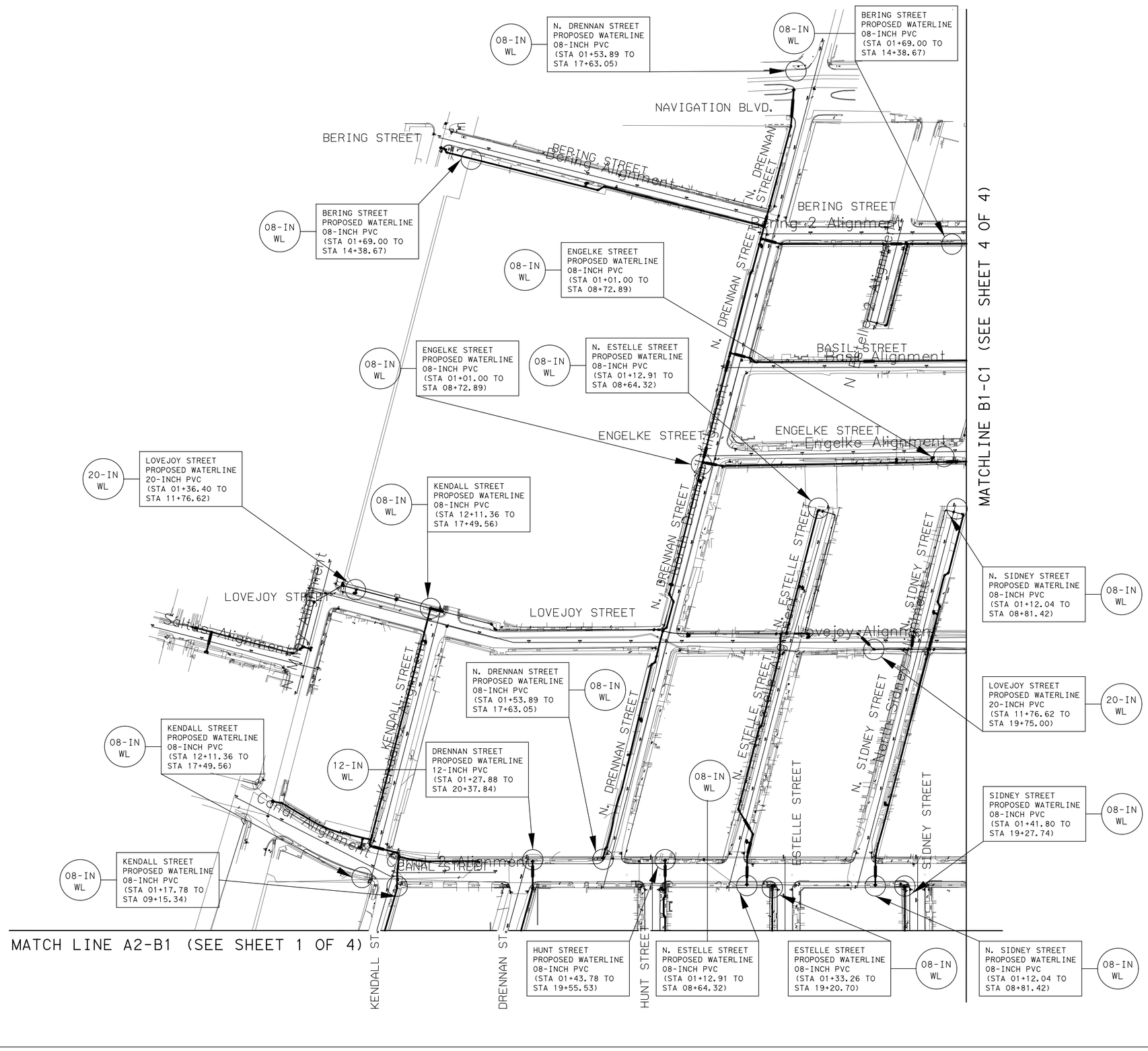
CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
OVERALL PLAN VIEW

SHEET 1 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 188 OF 275	



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
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A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
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F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 100' 200'
SCALE IN FEET

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333
DATE: 07/28/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
OVERALL PLAN VIEW

SHEET 2 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 189 OF 275	

90% SUBMITTAL REV

MATCH LINE B1-C1 (SEE SHEET 4 OF 4)

MATCHLINE A1-B1 (SEE SHEET 1 OF 4)

JENKINS STREET PROPOSED WATERLINE 08-INCH PVC (STA 01+52.00 TO STA 13+74.23)

BRADY STREET PROPOSED WATERLINE 20-INCH PVC (STA 01+18.85 TO STA 10+71.63)

EASTWOOD STREET PROPOSED WATERLINE 20-INCH PVC (STA 18+49.00 TO STA 22+80.56)

SUPER STREET PROPOSED WATERLINE 08-INCH PVC (STA 10+05.00 TO STA 22+55.66)

HAGERMAN STREET PROPOSED WATERLINE 08-INCH PVC (STA 01+45.27 TO STA 14+54.02)

BRADY STREET PROPOSED WATERLINE 20-INCH PVC (STA 01+18.85 TO STA 10+71.63)

SHERMAN STREET PROPOSED WATERLINE 12-INCH PVC (STA 01+52.27 TO STA 30+64.63)

EASTWOOD STREET PROPOSED WATERLINE 08-INCH PVC (STA 07+58.14 TO STA 18+49.00)

SUPER STREET PROPOSED WATERLINE 08-INCH PVC (STA 10+05.00 TO STA 22+55.66)

JENKINS STREET PROPOSED WATERLINE 08-INCH PVC (STA 01+52.00 TO STA 13+74.23)

GARROW STREET PROPOSED WATERLINE 08-INCH PVC (STA 21+94.93 TO STA 29+96.62)

WLMER STREET PROPOSED WATERLINE 08-INCH PVC (STA 18+09.52 TO STA 21+94.24)

EASTWOOD STREET PROPOSED WATERLINE 08-INCH PVC (STA 01+56.23 TO STA 07+37.53)

SUPER STREET PROPOSED WATERLINE 08-INCH PVC (STA 01+23.34 TO STA 06+63.56)

BOB STREET PROPOSED WATERLINE 08-INCH PVC (STA 01+30.54 TO STA 06+52.75)

GARROW STREET PROPOSED WATERLINE 08-INCH PVC (STA 21+94.93 TO STA 29+96.62)

HAGERMAN STREET PROPOSED WATERLINE 08-INCH PVC (STA 01+45.27 TO STA 14+54.02)

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
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APP. | REVISION | NO. | DATE

0 100' 200'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

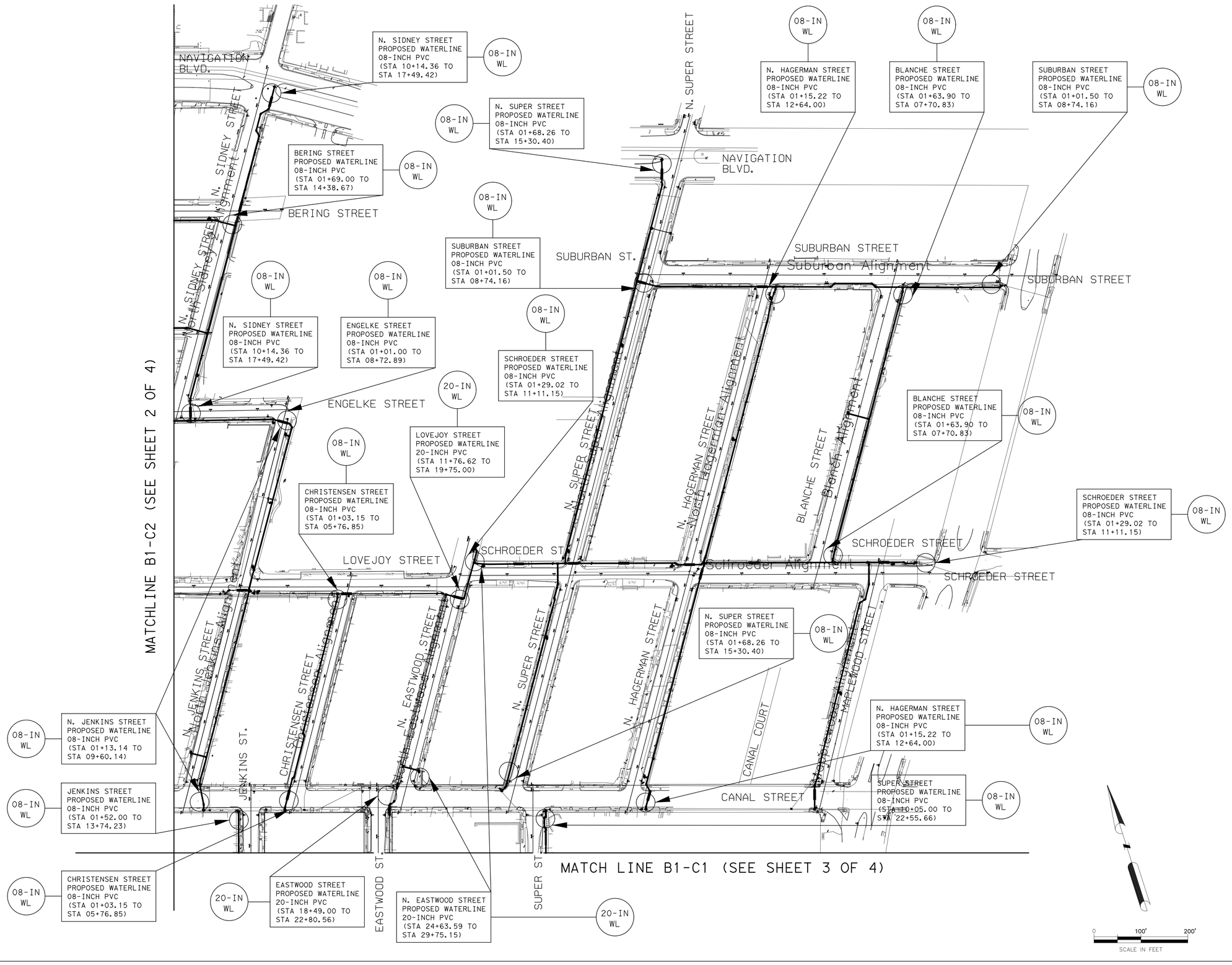
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
OVERALL PLAN VIEW

SHEET 3 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 190 OF 275	



TCP LEGEND:

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APP. | REVISION | NO. | DATE

Progressive Traffic & Transportation
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281-206-7495
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
OVERALL PLAN VIEW

SHEET 4 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 191 OF 275	

90% SUBMITTAL REV

2ND WARD TRAFFIC CONTROL PLAN NARRATIVE

WILMER STREET
(STA 01+00 TO STA 07+00 & STA 18+00 TO STA 22+00) (08-IN PROPOSED WL):

-CONTRACTOR TO APPLY STANDARD DETIAL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR WILMER STREET DETAILED TCP, REFER TO LAYOUT SHEETS 189 OF 266.

GARROW STREET
(STA 15+00 TO STA 29+71) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR GARROW STREET DETAILED TCP, REFER TO LAYOUT SHEET 190 & 191 OF 266.

MENARD STREET
(STA 01+00 TO STA 06+75) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR MENARD STREET DETAILED TCP, REFER TO LAYOUT SHEET 192 OF 266.

SHERMAN STREET
(STA 01+00 TO STA 06+50) (12-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR SHERMAN STREET DETAILED TCP, REFER TO LAYOUT SHEETS 193 OF 266 THRU 196 OF 266.

COMMERCE STREET
(STA 01+00 TO STA 04+85) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR COMMERCE STREET DETAILED TCP, REFER TO LAYOUT SHEETS 197A OF 266.

BRADY STREET
(STA 01+00 TO STA 10+72) (20-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR BRADY STREET DETAILED TCP, REFER TO LAYOUT SHEETS 197 OF 266 & 198 OF 266.

CANAL STREET
(STA 01+00 TO STA 08+00) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR CANAL STREET DETAILED TCP, REFER TO LAYOUT SHEET 199A OF 266.

SALTUS STREET
(STA 01+00 TO STA 04+35) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR SALTUS STREET DETAILED TCP, REFER TO LAYOUT SHEET 199B OF 266.

LOVEJOY STREET
(STA 08+00 TO STA 19+62) (20-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR LOVEJOY STREET DETAILED TCP, REFER TO LAYOUT SHEETS 199 OF 266 THRU 202 OF 266.

SCHROEDER STREET
(STA 01+00 TO STA 05+50) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR SCHROEDER STREET DETAILED TCP, REFER TO LAYOUT SHEET 203 OF 266.

ENGELKE STREET
(STA 01+00 TO STA 08+89) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR ENGELKE STREET DETAILED TCP, REFER TO LAYOUT SHEET 204 OF 266.

SUBURBAN STREET
(STA 01+00 TO ST 09+00) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR SUBURBAN STREET DETAILED TCP, REFER TO LAYOUT SHEET 205 OF 266.

BERING STREET
(STA 01+00 TO ST 15+36) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR BERING STREET DETAILED TCP, REFER TO LAYOUT SHEET 206 OF 266.

MAPLEWOOD STREET
(STA 01+00 TO ST 06+33) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR MAPLEWOOD STREET DETAILED TCP, REFER TO LAYOUT SHEET 207A OF 266.

BLANCHE STREET
(STA 01+00 TO ST 08+20) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR BLANCHE STREET DETAILED TCP, REFER TO LAYOUT SHEET 207 OF 266.

HAGERMAN STREET
(STA 01+00 TO STA 15+08) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR HAGERMAN STREET DETAILED TCP, REFER TO LAYOUT SHEETS 208 OF 266 THRU 209 OF 266.

BOB STREET
(STA 01+00 TO STA 07+00) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR BOB STREET DETAILED TCP, REFER TO LAYOUT SHEET 210 OF 266.

SUPER STREET
(STA 10+00 TO STA 22+50) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR SUPER STREET DETAILED TCP, REFER TO LAYOUT SHEETS 211 OF 266 & 212 OF 266.

EASTWOOD STREET
(STA 01+00 TO STA 22+00) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR EASTWOOD STREET DETAILED TCP, REFER TO LAYOUT SHEET 213 OF 266

N. EASTWOOD STREET
(STA 24+00 TO STA 30+00) (20-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR N. EASTWOOD STREET DETAILED TCP, REFER TO LAYOUT SHEET 214 OF 266.

CHRISTENSEN STREET
(STA 01+00 TO STA 06+25) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR CHRSTENSEN STREET DETAILED TCP, REFER TO LAYOUT SHEET 215 OF 266.

N. JENKINS STREET
(STA 01+00 TO STA 10+00) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR N. JENKINS STREET DETAILED TCP, REFER TO LAYOUT SHEETS 217 OF 266.

SIDNEY STREET
(STA 01+00 TO STA 11+50) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR SIDNEY STREET DETAILED TCP, REFER TO LAYOUT SHEET 218 OF 266.

N. SIDNEY STREET
(STA 01+00 TO STA 08+75) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR N. SIDNEY STREET DETAILED TCP, REFER TO LAYOUT SHEET 219 OF 266.

ESTELLE STREET
(STA 14+00 TO STA 15+75) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR ESTELLE STREET DETAILED TCP, REFER TO LAYOUT SHEET 220 OF 266.

N. ESTELLE STREET
(STA 01+00 TO STA 8+72) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR N. ESTELLE STREET DETAILED TCP, REFER TO LAYOUT SHEET 221 OF 266.

HUNT STREET
(STA 01+00 TO STA 19+20) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR HUNT STREET DETAILED TCP, REFER TO LAYOUT SHEET 222 OF 266.

GRACE STREET
(STA 01+00 TO STA 3+45) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR GRACE STREET DETAILED TCP, REFER TO LAYOUT SHEET 223 OF 266.

DRENNAN STREET
(STA 01+00 TO STA 20+00) (12-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR DRENNAN STREET DETAILED TCP, REFER TO LAYOUT SHEET 224 OF 266 & 225 OF 266.

N. DRENNAN STREET
(STA 01+00 TO STA 14+35) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR N. DRENNAN STREET DETAILED TCP, REFER TO LAYOUT SHEET 226 OF 266.

KENDALL STREET
(STA 01+00 TO STA 9+81 & STA 12+00 TO 17+00) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR KENDALL STREET DETAILED TCP, REFER TO LAYOUT SHEETS 227 OF 266.

MILBY STREET
(STA 01+00 TO STA 03+47) (08-IN PROPOSED WL)

-CONTRACTOR TO APPLY STANDARD DETAIL TWO BLOCK DETOUR PLAN-1/PLAN-2
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR MILBY STREET DETAILED TCP, REFER TO LAYOUT SHEETS 228 OF 266.

HARRISBURG BOULEVARD
(STA 1+00 TO STA 36+00) (08-IN PROPOSED WL)

-CONTRACTOR SHALL APPLY TRAFFIC CONTROL AND ALLOW CONSTRUCTION IN TWO BLOCK SEGMENTS FOR THE PROPOSED WATERLINE ALONG HARRISBURG BOULEVARD.
-CONTRACTOR TO ALSO APPLY CITY OF HOUSTON STANDARD DETAILS
(DWG 01512-09 THRU DWG 01512-12) AS REQUIRED AT INTERSECTION CROSSINGS.
-FOR ESTELLE STREET DETAILED TCP, REFER TO LAYOUT SHEET 229 OF 266 AND SHEET 230 OF 266.

SPECIAL TCP NOTES:

1-CONTRACTOR SHALL APPLY THE TWO BLOCK DETOUR PLAN-1/PLAN-2 FOR THE PROPOSED WATERLINE CONSTRUCTION ALONG A LOCAL STREET MAINTAINING ONE-WAY TRAFFIC. NO MORE THAN TWO BLOCK CONSTRUCTION IS ALLOWED AT A TIME ALONG ANY LOCAL STREET.

2-CONSTRUCTION IS NOT ALLOWED ON PARALELL STREETS.

3-CONSTRUCTION IS ALLOWED DURING 9:00 AM THRU 4:00 PM DURING WEEKDAYS ONLY UNLESS AUTHORIZED BY THE CITY OF HOUSTON

4-CONTRACTOR IS REQUIRED TO FOLLOW THE TRAFFIC CONTROL PLAN GUIDELINES GIVEN IN CHAPTER 6 OF THE LATEST TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).

5-THE CONTRACTOR SHALL APPLY TYPICAL APPLICATIONS 28 AND 29, SIDEWALK CLOSURE DETAILS, OF THE TEXAS MANUAL OF ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD, LATEST EDITION) IN ACCORDANCE WITH THE TMUTCD REQUIREMENTS.

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FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

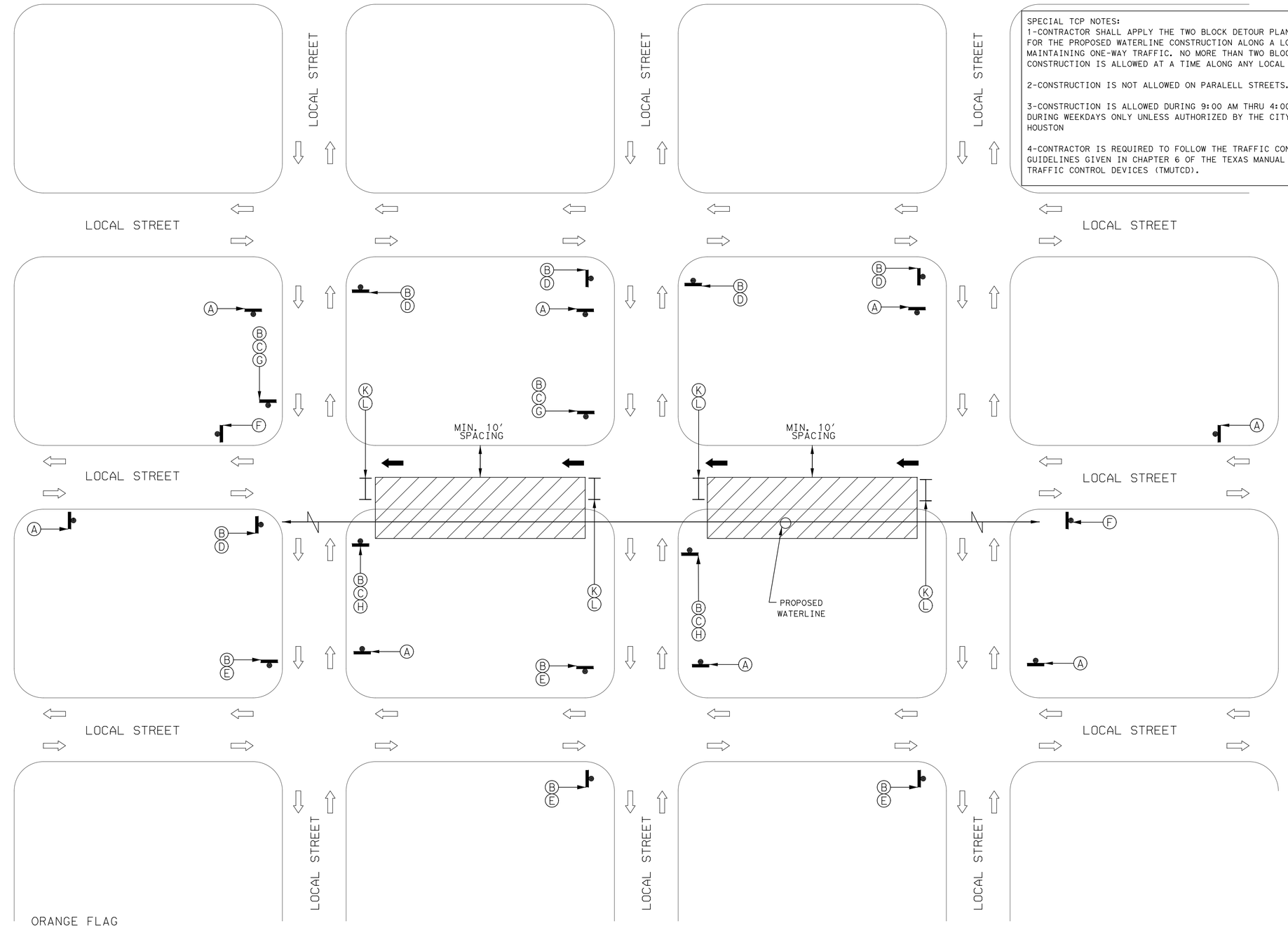
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
NARRATIVE

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 192 OF 275	

90% SUBMITTAL REV



SPECIAL TCP NOTES:
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4-CONTRACTOR IS REQUIRED TO FOLLOW THE TRAFFIC CONTROL PLAN GUIDELINES GIVEN IN CHAPTER 6 OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

ORANGE FLAG (TYPICAL)

A	B	C	D	E	F	G	H	J	K	L	M
ROAD WORK AHEAD	Xxxxxx St	DETOUR	DETOUR	DETOUR	END ROAD WORK			R1-2 YIELD (30 X30 X30) TO ONCOMMING TRAFFIC	DO NOT ENTER	ROAD CLOSED	ROAD CLOSED TO THRU TRAFFIC
CW20-1D (36x36)	M4-12T (VAR X 12)	CM4-9S (30x24)	CM4-9R (30x24)	M4-9L (30x24)	G20-2a (36 X 18)	R3-2 (24x24)	R3-1 (24x24)	R1-2a (24x18)	R5-1 (30x30)	R11-2 (48x30)	R11-4 (60x30)

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Houston, Texas, 77084
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281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

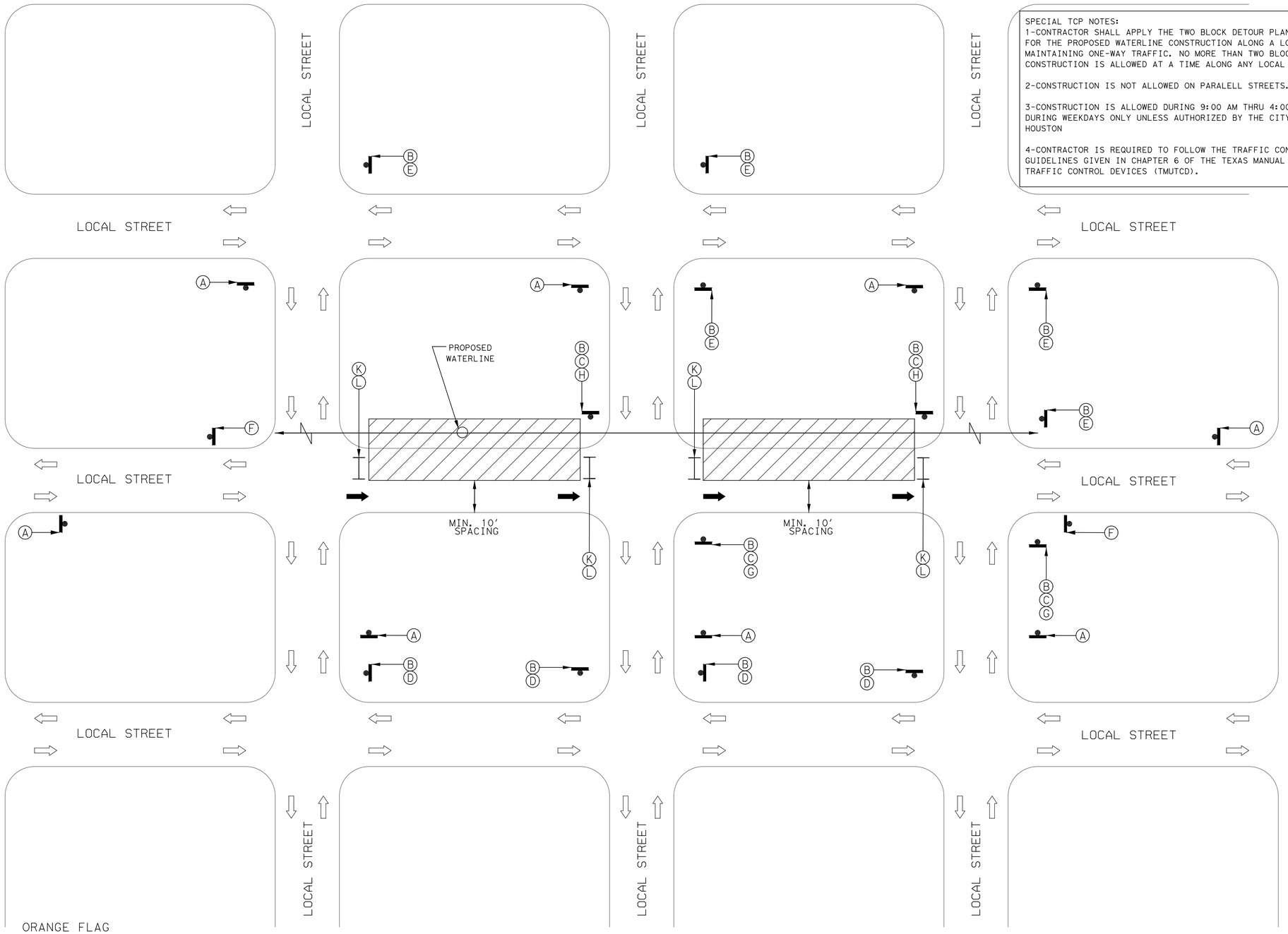
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
TWO BLOCK TYPICAL DETOUR PLAN-1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 193 OF 275	

90% SUBMITTAL REV



SPECIAL TCP NOTES:
1-CONTRACTOR SHALL APPLY THE TWO BLOCK DETOUR PLAN-1/PLAN-2 FOR THE PROPOSED WATERLINE CONSTRUCTION ALONG A LOCAL STREET MAINTAINING ONE-WAY TRAFFIC. NO MORE THAN TWO BLOCK CONSTRUCTION IS ALLOWED AT A TIME ALONG ANY LOCAL STREET.

2-CONSTRUCTION IS NOT ALLOWED ON PARALELL STREETS.

3-CONSTRUCTION IS ALLOWED DURING 9:00 AM THRU 4:00 PM DURING WEEKDAYS ONLY UNLESS AUTHORIZED BY THE CITY OF HOUSTON

4-CONTRACTOR IS REQUIRED TO FOLLOW THE TRAFFIC CONTROL PLAN GUIDELINES GIVEN IN CHAPTER 6 OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

ORANGE FLAG (TYPICAL)

A	B	C	D	E	F	G	H	J	K	L	M
ROAD WORK AHEAD	Xxxxxx St	DETOUR	DETOUR	DETOUR	END ROAD WORK			R1-2 YIELD (30 X30 X30) TO ONCOMMING TRAFFIC	DO NOT ENTER	ROAD CLOSED	ROAD CLOSED TO THRU TRAFFIC
CW20-1D (36x36)	M4-12T (VAR X 12)	CM4-9S (30x24)	CM4-9R (30x24)	M4-9L (30x24)	G20-2a (36 X 18)	R3-2 (24x24)	R3-1 (24x24)	R1-2a (24x18)	R5-1 (30x30)	R11-2 (48x30)	R11-4 (60x30)

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TX P.E. NO. 89333

DATE: 07/28/2025
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
TWO BLOCK TYPICAL DETOUR PLAN-2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 194 OF 275	

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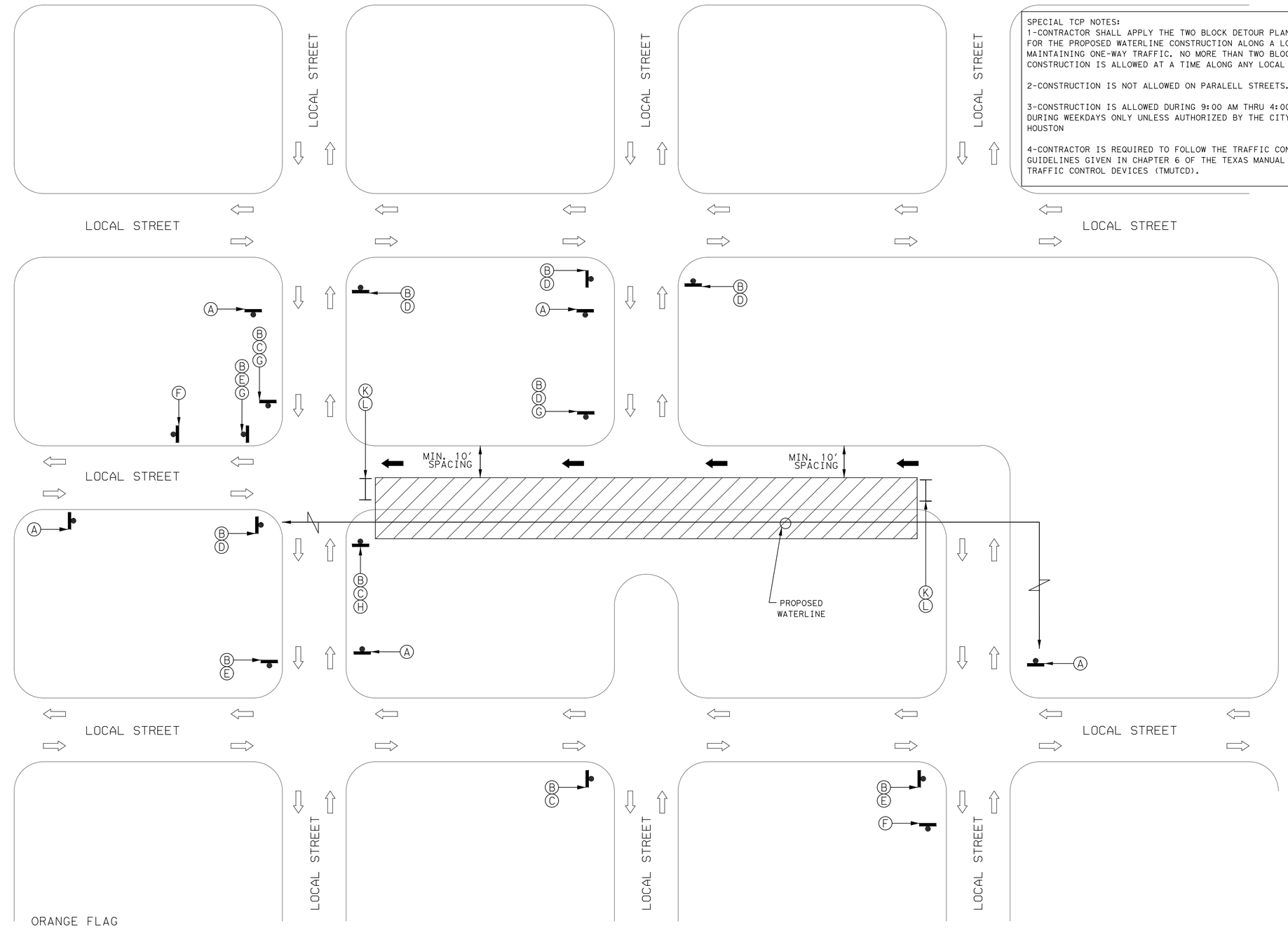

SPECIAL TCP NOTES:
1-CONTRACTOR SHALL APPLY THE TWO BLOCK DETOUR PLAN-1/PLAN-2 FOR THE PROPOSED WATERLINE CONSTRUCTION ALONG A LOCAL STREET MAINTAINING ONE-WAY TRAFFIC. NO MORE THAN TWO BLOCK CONSTRUCTION IS ALLOWED AT A TIME ALONG ANY LOCAL STREET.

2-CONSTRUCTION IS NOT ALLOWED ON PARALELL STREETS.

3-CONSTRUCTION IS ALLOWED DURING 9:00 AM THRU 4:00 PM DURING WEEKDAYS ONLY UNLESS AUTHORIZED BY THE CITY OF HOUSTON

4-CONTRACTOR IS REQUIRED TO FOLLOW THE TRAFFIC CONTROL PLAN GUIDELINES GIVEN IN CHAPTER 6 OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

ORANGE FLAG (TYPICAL)

A	B	C	D	E	F	G	H	J	K	L	M
ROAD WORK AHEAD	Xxxxxx St	DETOUR	DETOUR	DETOUR	END ROAD WORK			R1-2 YIELD TO ONCOMMING TRAFFIC (30 x30 X30)	DO NOT ENTER	ROAD CLOSED	ROAD CLOSED TO THRU TRAFFIC
CW20-1D (36x36)	M4-12T (VAR X 12)	CM4-9S (30x24)	CM4-9R (30x24)	CM4-9L (30x24)	G20-2a (36 X 18)	R3-2 (24x24)	R3-1 (24x24)	R1-2a (24x18)	R5-1 (30x30)	R11-2 (48x30)	R11-4 (60x30)

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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

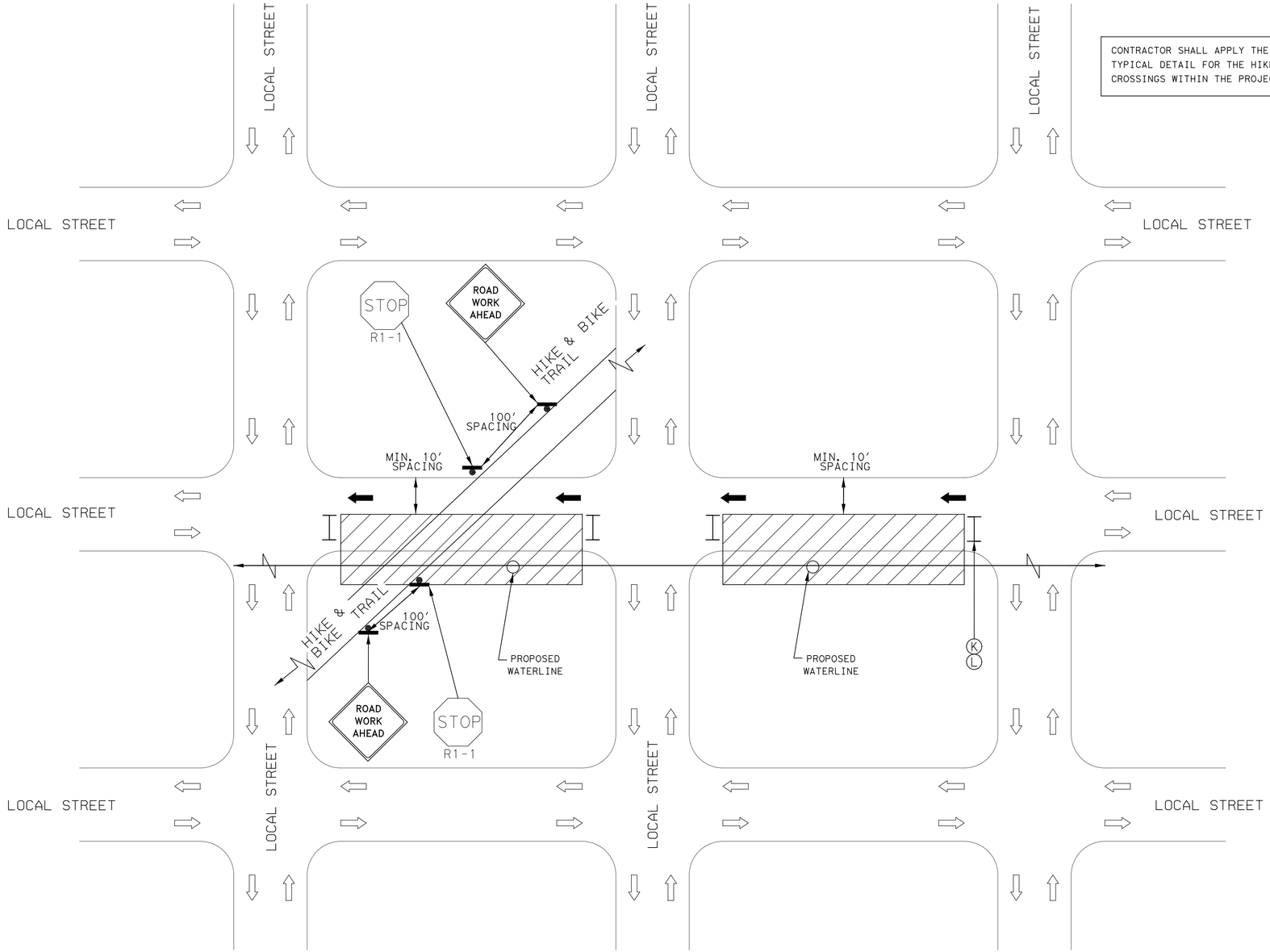
SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

TWO BLOCK TYPICAL DETOUR PLAN-1 W/ONE T-INTERSECTION FOR ENGELKE STREET

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 195 OF 275	

90% SUBMITTAL REV



CONTRACTOR SHALL APPLY THE FOLLOWING TYPICAL DETAIL FOR THE HIKE & BIKE TRAIL CROSSINGS WITHIN THE PROJECT LIMIT.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

ORANGE FLAG (TYPICAL)

A	B	C	D	E	F	G	H	J	K	L	M
ROAD WORK AHEAD	Xxxxxx St	DETOUR	DETOUR	DETOUR	END ROAD WORK			R1-2 YIELD TO ONCOMMING TRAFFIC (30 x30 x30)	DO NOT ENTER	ROAD CLOSED	ROAD CLOSED TO THRU TRAFFIC
CW20-1D (36x36)	M4-12T (VAR X 12)	CM4-9S (30x24)	CM4-9R (30x24)	M4-9L (30x24)	G20-2a (36 X 18)	R3-2 (24x24)	R3-1 (24x24)	R1-2a (24x18)	R5-1 (30x30)	R11-2 (48x30)	R11-4 (60x30)

APP.	REVISION	NO.	DATE

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Engineer, Planners & Managers
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TX P.E. NO. 89333

DATE: 07/28/2025

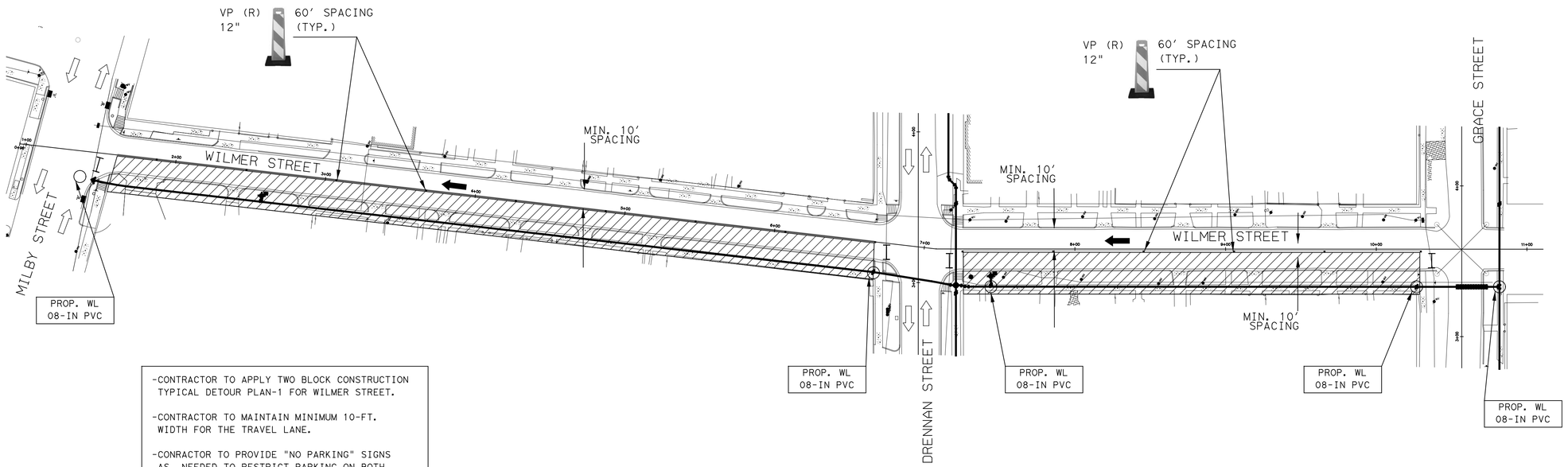
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
TWO BLOCK TYPICAL DETOUR PLAN–1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 195A OF 275	

90% SUBMITTAL REV



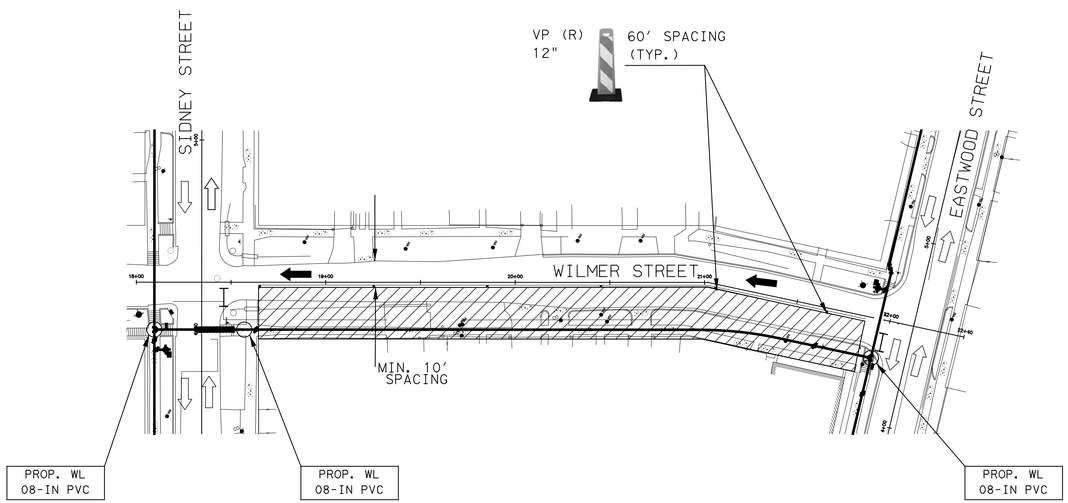
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR WILMER STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT WILMER STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

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0 40' 80'
SCALE IN FEET

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FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

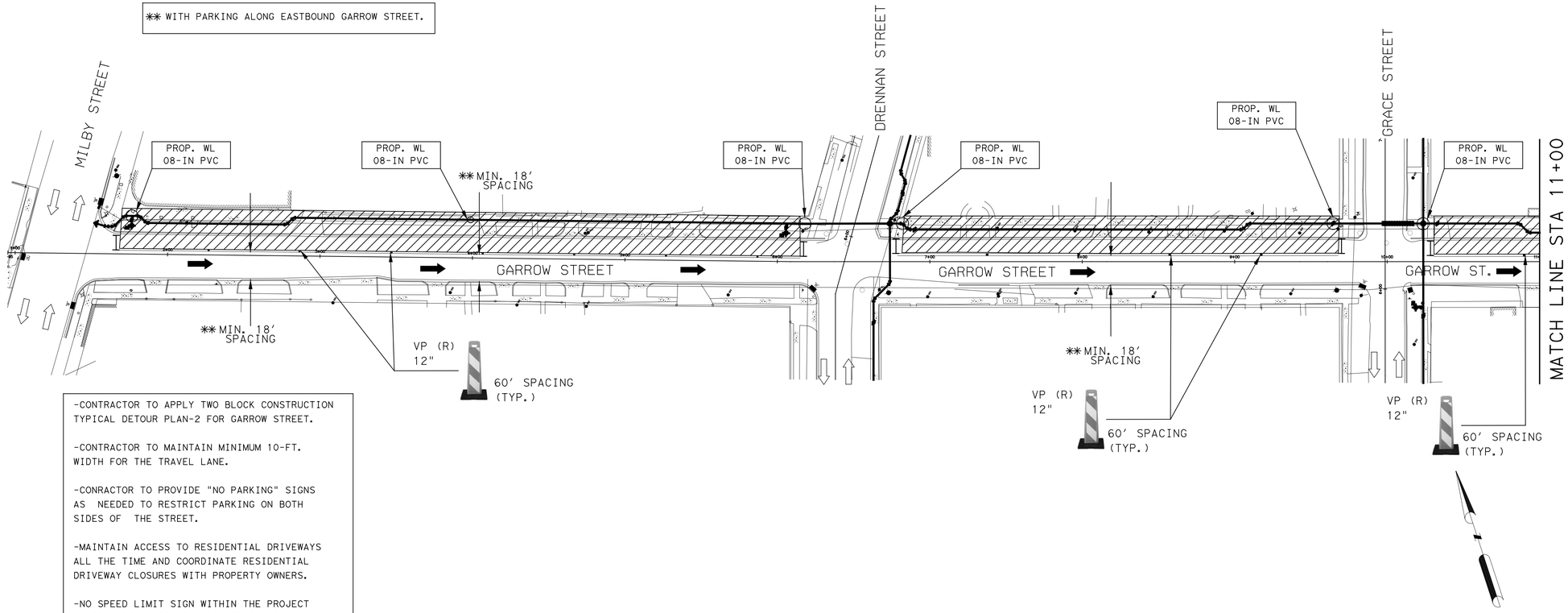
SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
WILMER STREET STA 1+00 TO 11+00
& STA 18+00 TO 22+40

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 196 OF 275	

90% SUBMITTAL REV

** WITH PARKING ALONG EASTBOUND GARROW STREET.



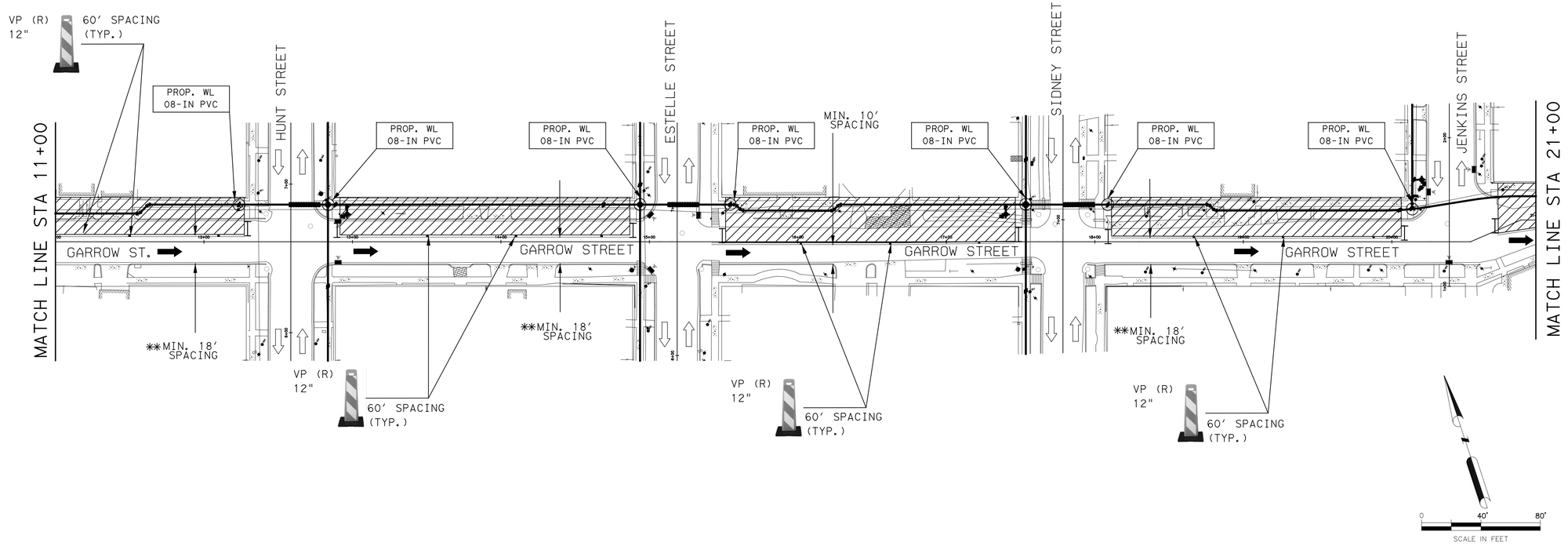
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR GARROW STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT GARROW STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- (#) TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 Fx
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

GARROW STREET

STA 1+00 TO 21+00

SHEET 1 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 197 OF 275	

90% SUBMITTAL REV

-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR GARROW STREET FROM STA 22+50 TO STA 29+71 IN A SEPERATE CONSTRUCTION STEP AFTER COMPLETING THE CONSTRUCTION FROM STA 1+00 TO STA 22+00

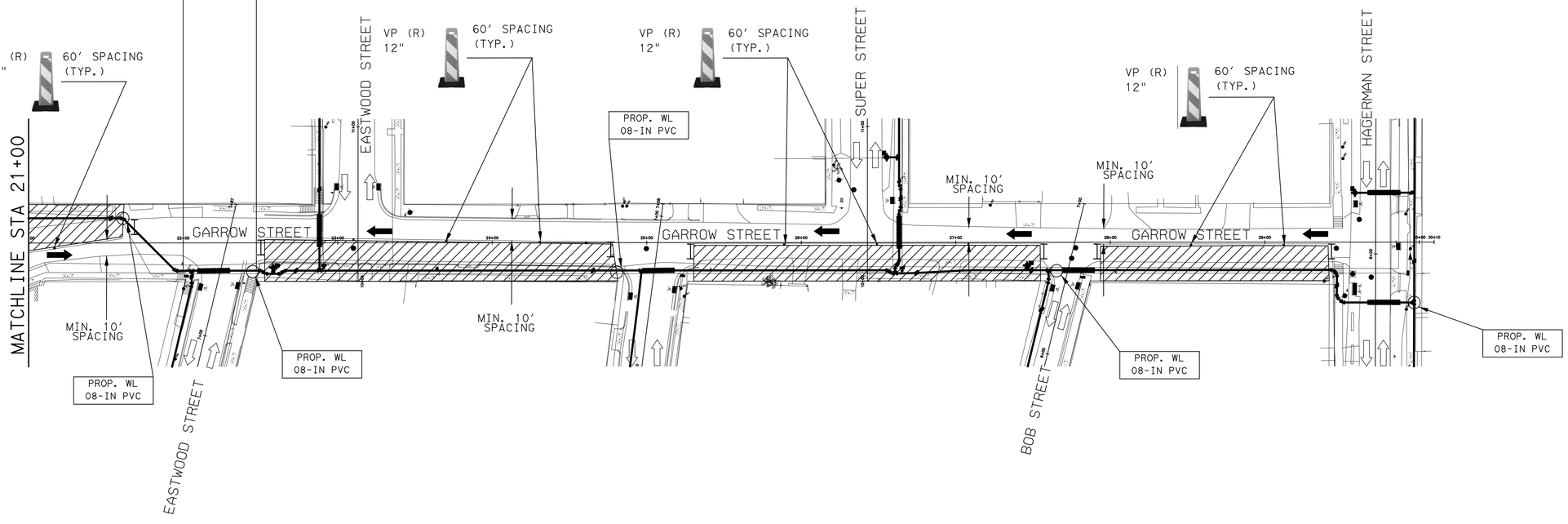
-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT GARROW STREET. ASSUMED 30 MPH.

CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR GARROW STREET FROM STA 1+00 TO STA 22+00.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A — ORANGE FLAG (TYPICAL); ROAD WORK AHEAD; CW20-D; 36" X 36"

B — RIGHT LANE CLOSED AHEAD; CW-5a (R); 36" X 36"

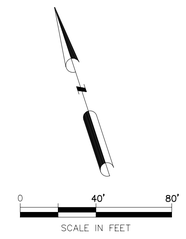
C — LEFT LANE CLOSED AHEAD; CW-5a (L); 36" X 36"

D — ROAD CLOSED; R11-2; 48" X 30"

E — DO NOT ENTER; R5-1; 30" X 30"

F — END ROAD WORK; G20-2a; 48" X 24"

APP. | REVISION | NO. | DATE



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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

GARROW STREET

STA 21+00 TO 29+71

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 198 OF 275	

90% SUBMITTAL REV

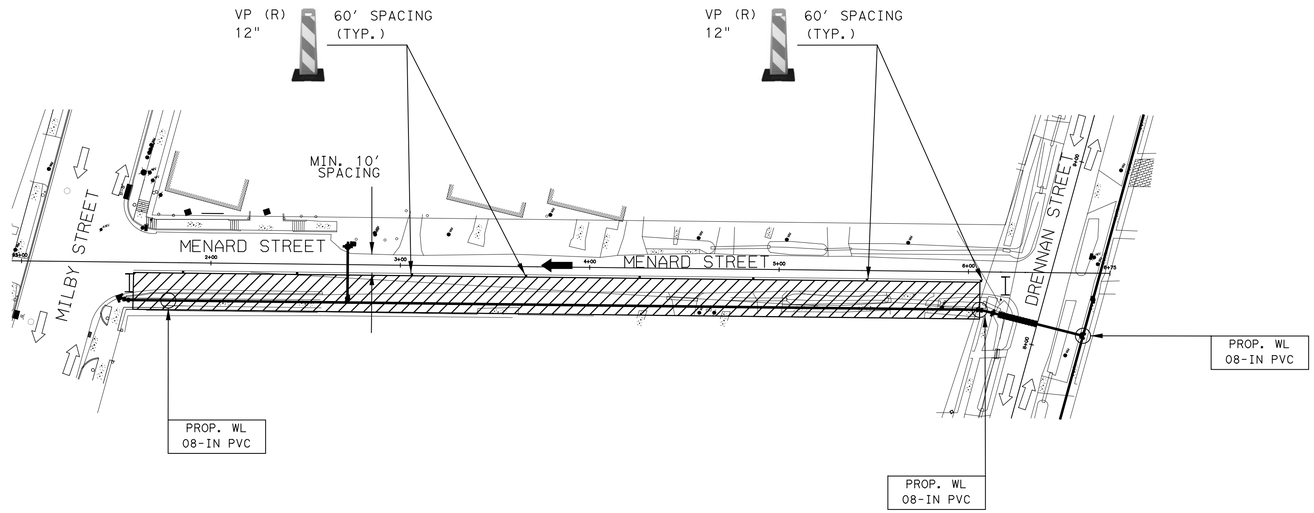
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR MENARD STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT MENARD STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

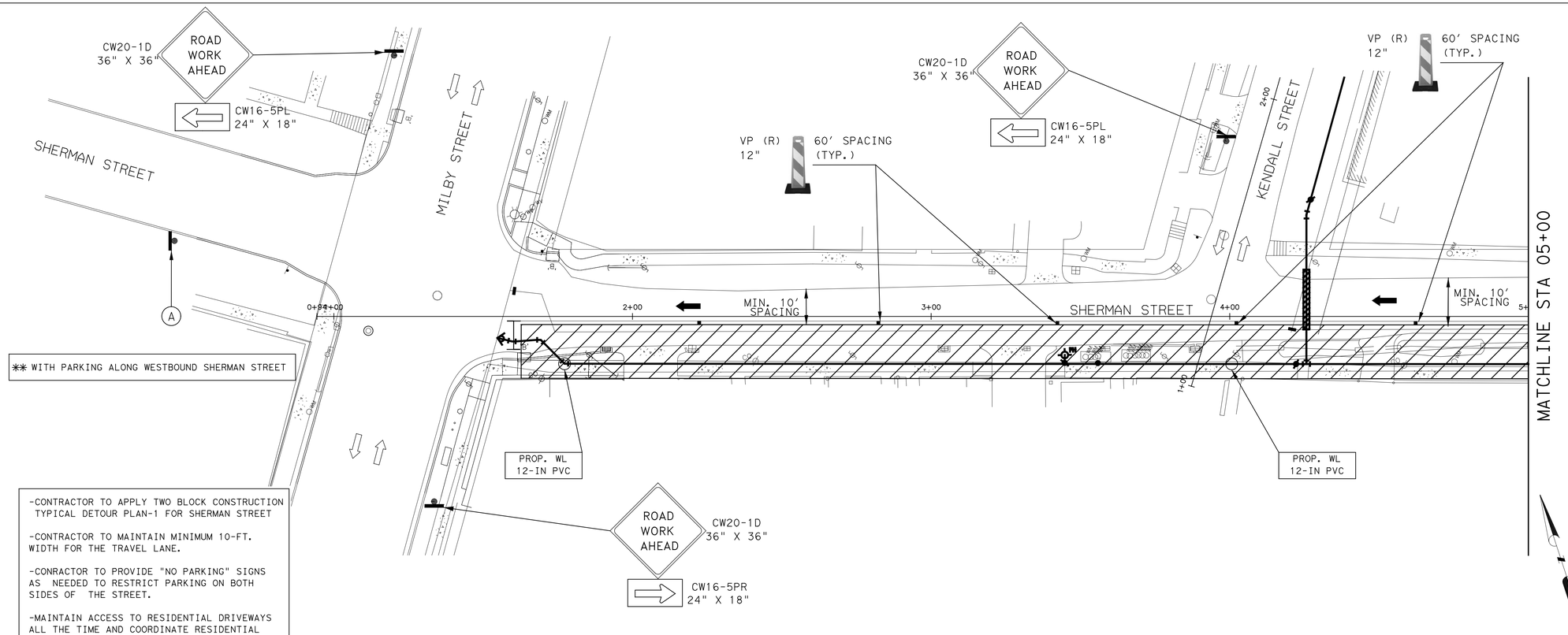
MENARD STREET

STA 01+00 TO 06+75

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 199 OF 275	

90% SUBMITTAL REV



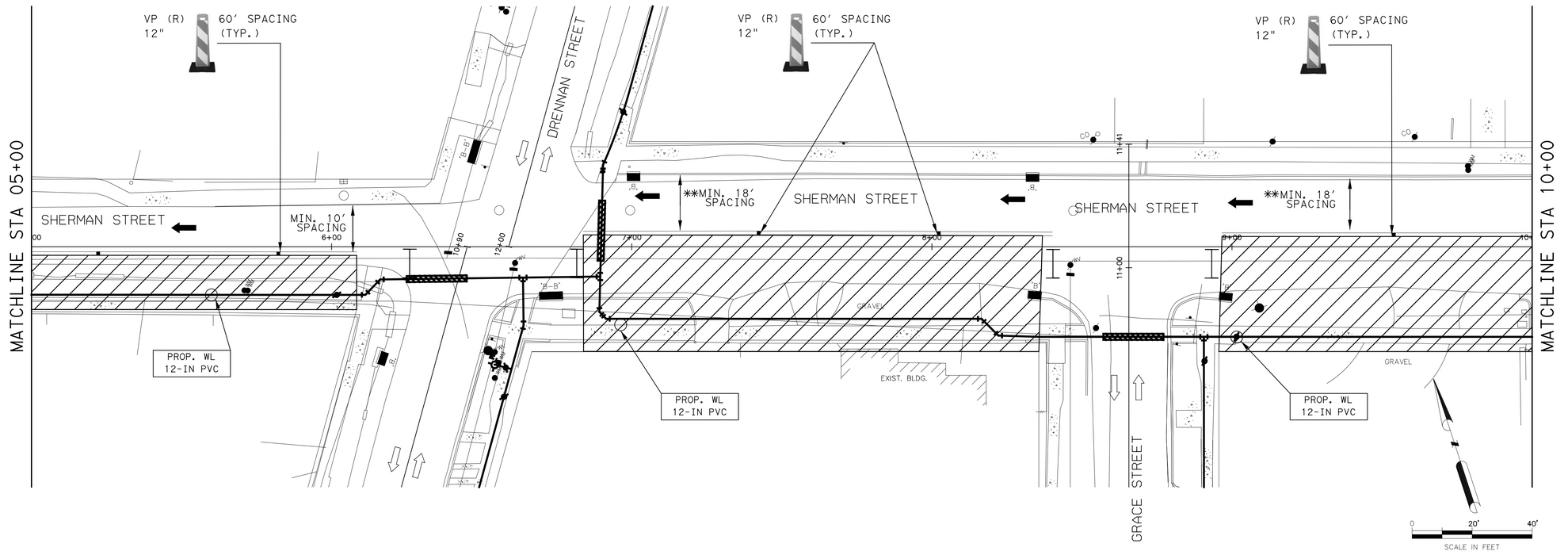
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SHERMAN STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SHERMAN STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- (#) TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL)	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

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Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 Fx
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

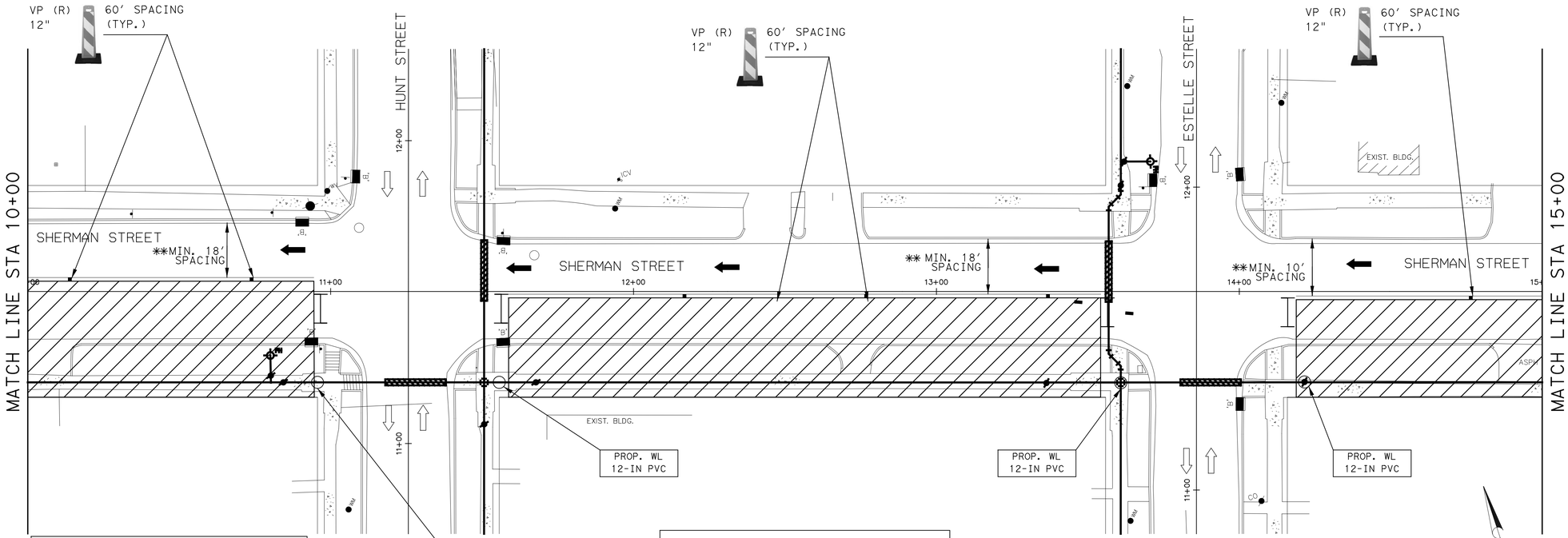
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
SHERMAN STREET
STA 1+00 TO 10+00

SHEET 1 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 200 OF 275	

90% SUBMITTAL REV

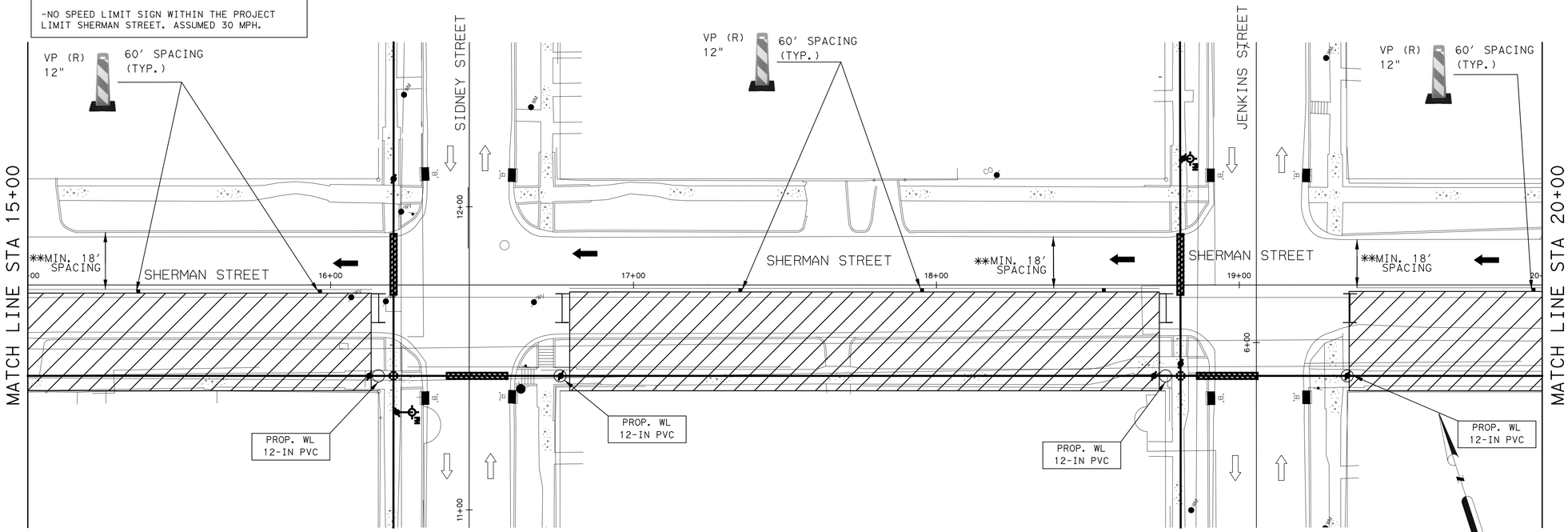


-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SHERMAN STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SHERMAN STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- (#) TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

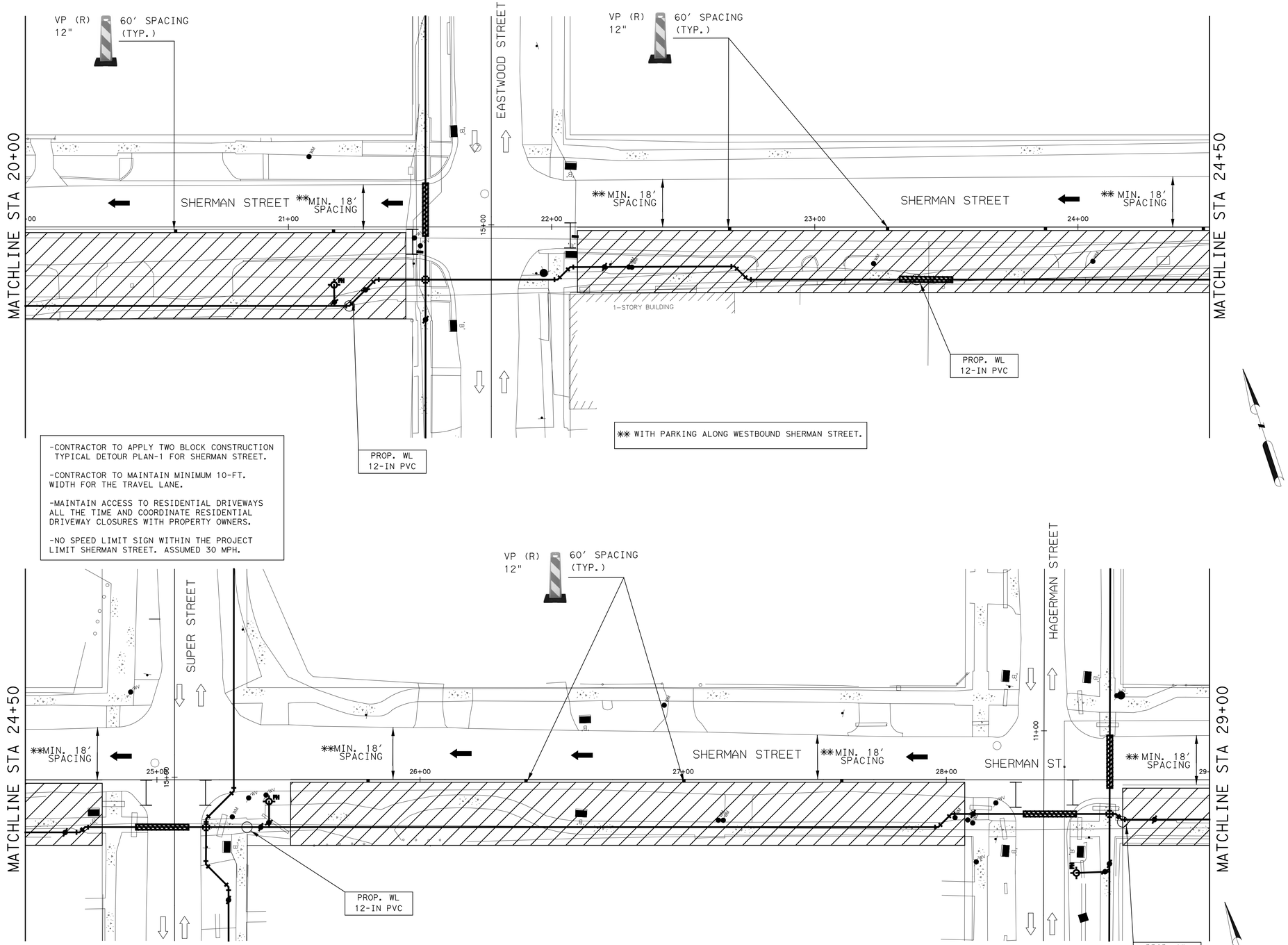
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
SHERMAN STREET
STA 10+00 TO 20+00

SHEET 2 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 201 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SHERMAN STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SHERMAN STREET. ASSUMED 30 MPH.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

SHERMAN STREET

STA 20+00 TO 29+00

SHEET 3 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 202 OF 275	

90% SUBMITTAL REV

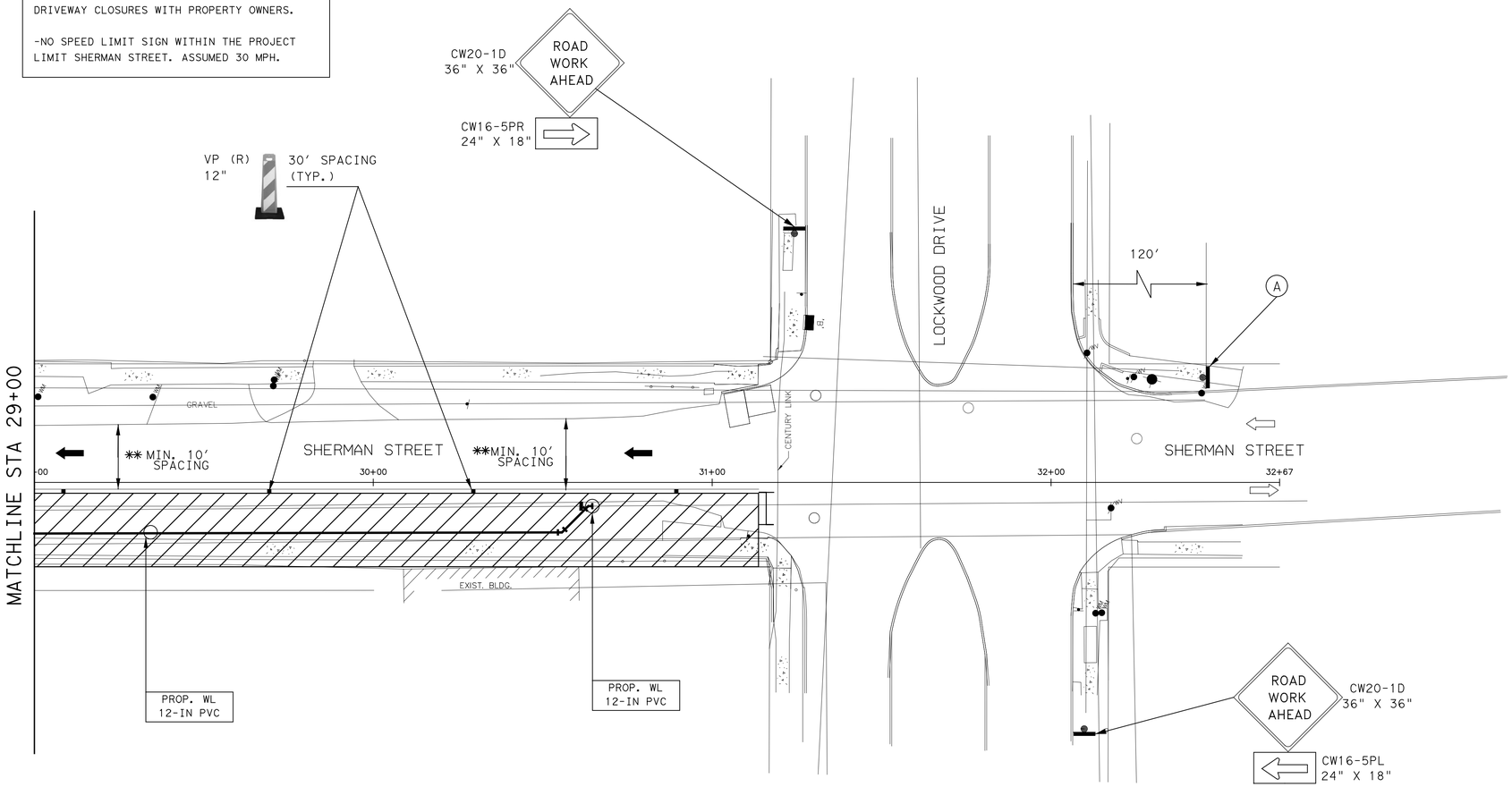
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SHERMAN STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SHERMAN STREET. ASSUMED 30 MPH.

** WITH PARKING ALONG WESTBOUND SHERMAN STREET.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- (#) TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

(A) ORANGE FLAG (TYPICAL)
ROAD WORK AHEAD
CW20-D
36" X 36"

(B) RIGHT LANE CLOSED AHEAD
CW-5a (R)
36" X 36"

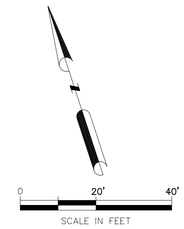
(C) LEFT LANE CLOSED AHEAD
CW-5a (L)
36" X 36"

(D) ROAD CLOSED
R11-2
48" X 30"

(E) DO NOT ENTER
R5-1
30" X 30"

(F) END ROAD WORK
G20-2a
48" X 24"

APP. | REVISION | NO. | DATE



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Engineers, Planners & Managers
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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
SHERMAN STREET
STA 29+00 TO 31+50

SHEET 4 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 203 OF 275	

90% SUBMITTAL REV

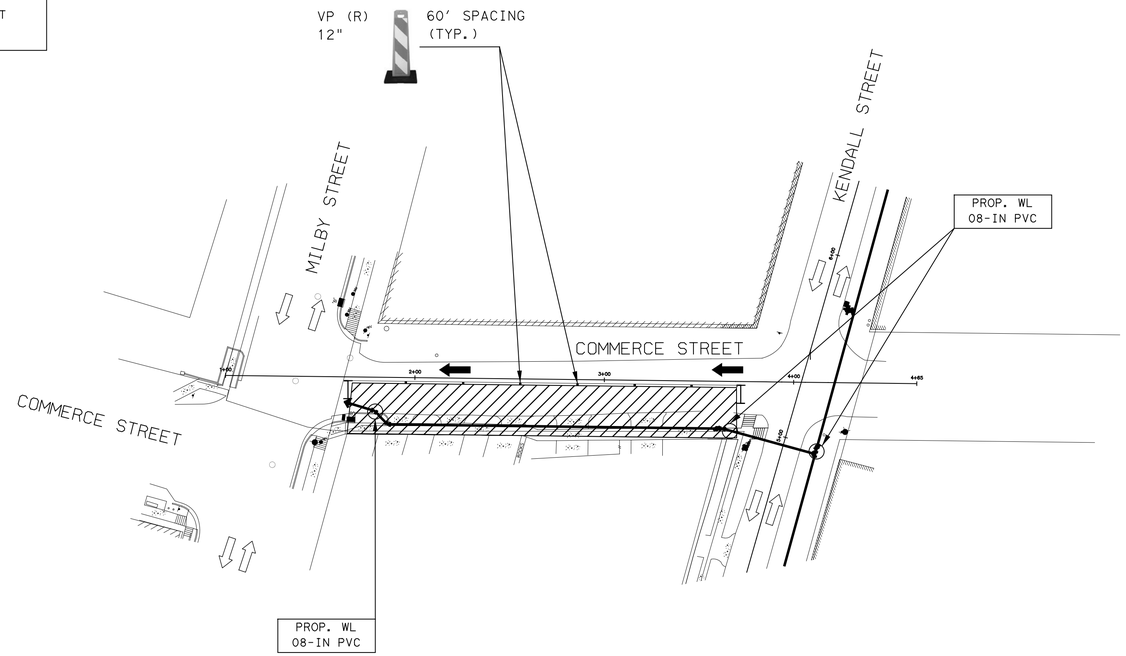
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR COMMERCE STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT COMMERCE STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A. ORANGE FLAG (TYPICAL)
ROAD WORK AHEAD
CW20-D
36" X 36"

B. RIGHT LANE CLOSED AHEAD
CW-5a (R)
36" X 36"

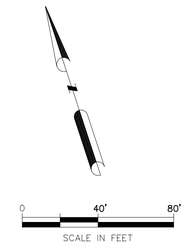
C. LEFT LANE CLOSED AHEAD
CW-5a (L)
36" X 36"

D. ROAD CLOSED
R11-2
48" X 30"

E. DO NOT ENTER
R5-1
30" X 30"

F. END ROAD WORK
G20-2a
48" X 24"

APP. | REVISION | NO. | DATE



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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

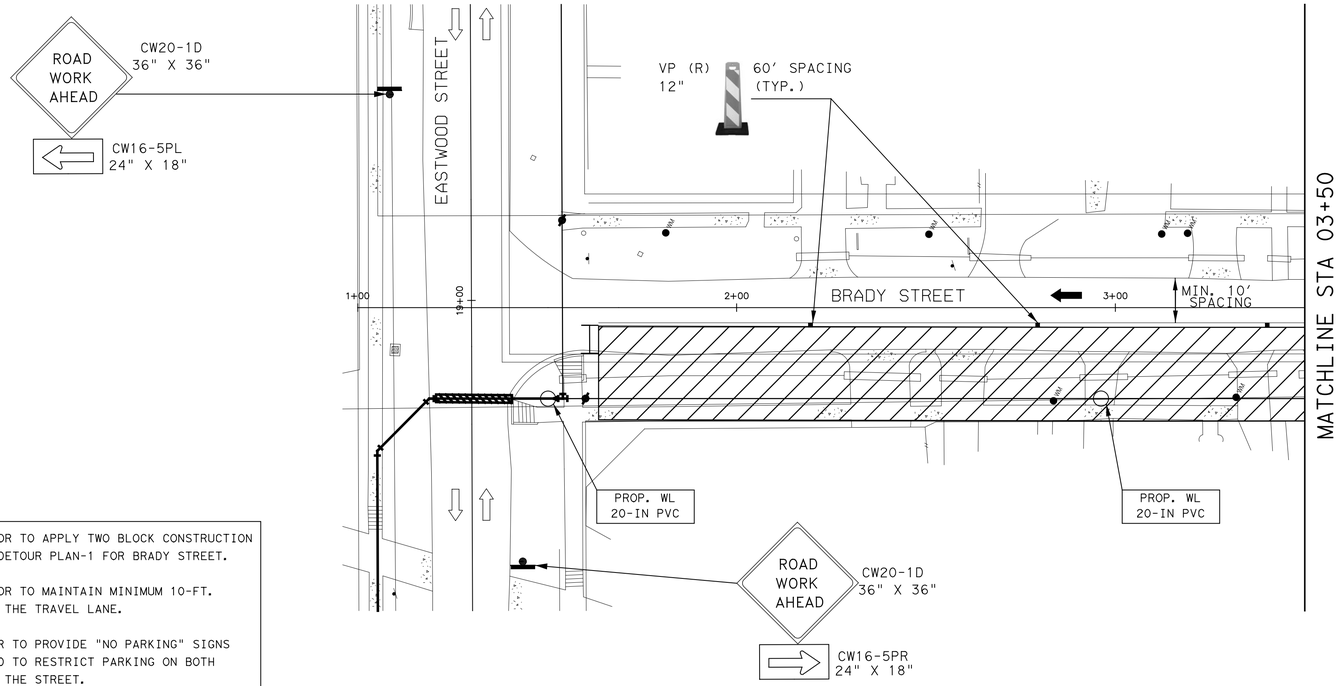
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
COMMERCE STREET
STA 1+00 TO 4+65

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 203A OF 275	

90% SUBMITTAL REV



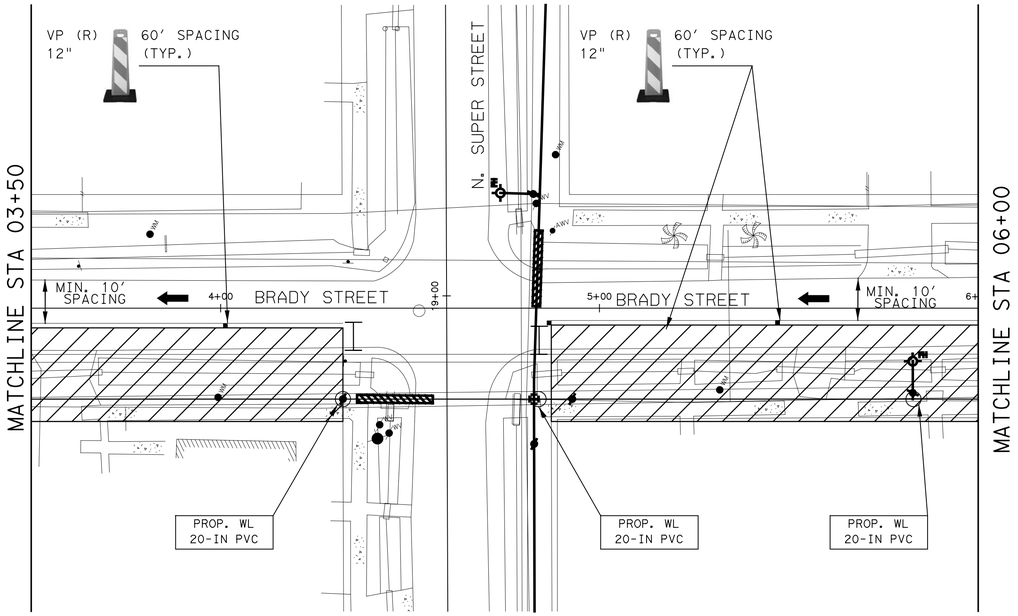
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR BRADY STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

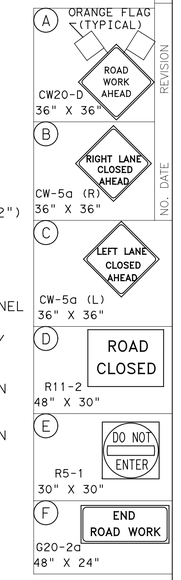
-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT BRADY STREET. ASSUMED 30 MPH.

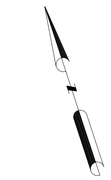


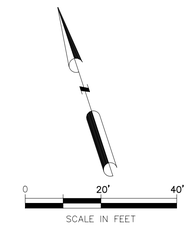
TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL



APP. | REVISION | NO. | DATE





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Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
BRADY STREET
STA 01+00 TO 06+00

SHEET 1 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 204 OF 275	

90% SUBMITTAL REV

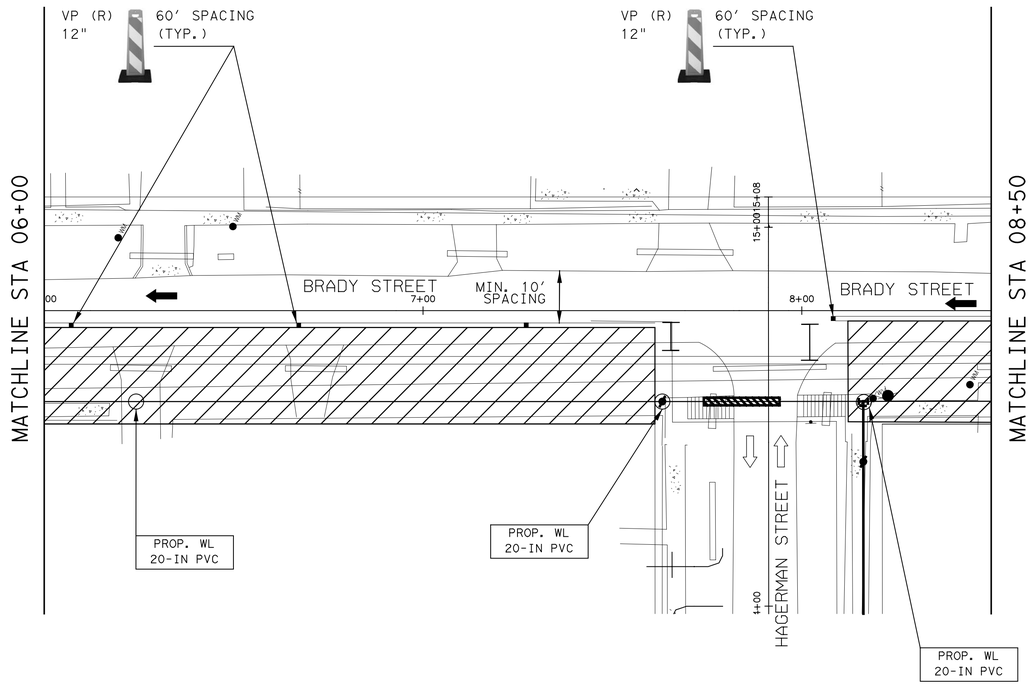
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR BRADY STREET.

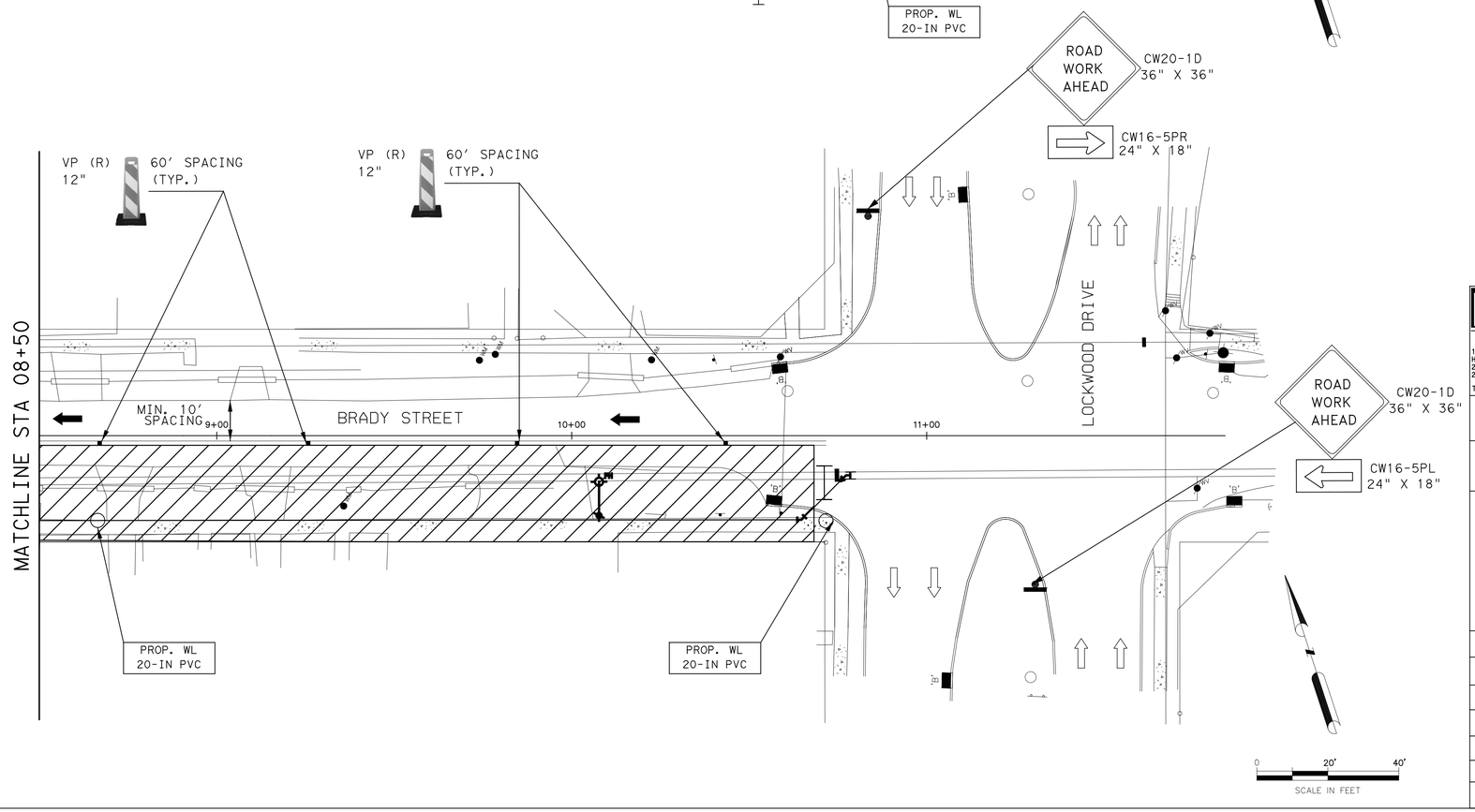
-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT BRADY STREET. ASSUMED 30 MPH.





TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
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SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
BRADY STREET
STA 06+00 TO 10+72

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 205 OF 275	

90% SUBMITTAL REV

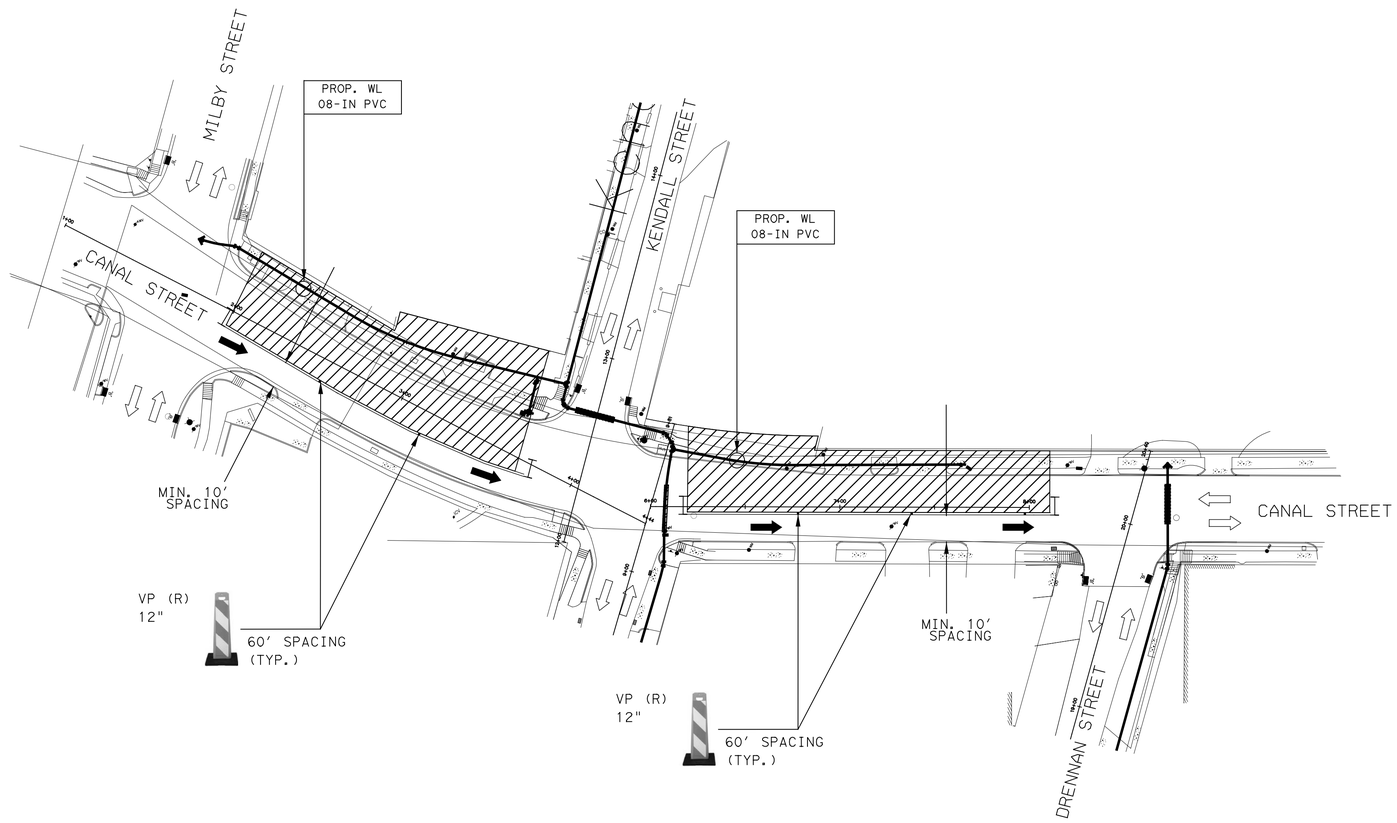
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR CANAL STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT CANAL STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
CANAL STREET
STA 1+00 TO 8+00

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 205A OF 275	

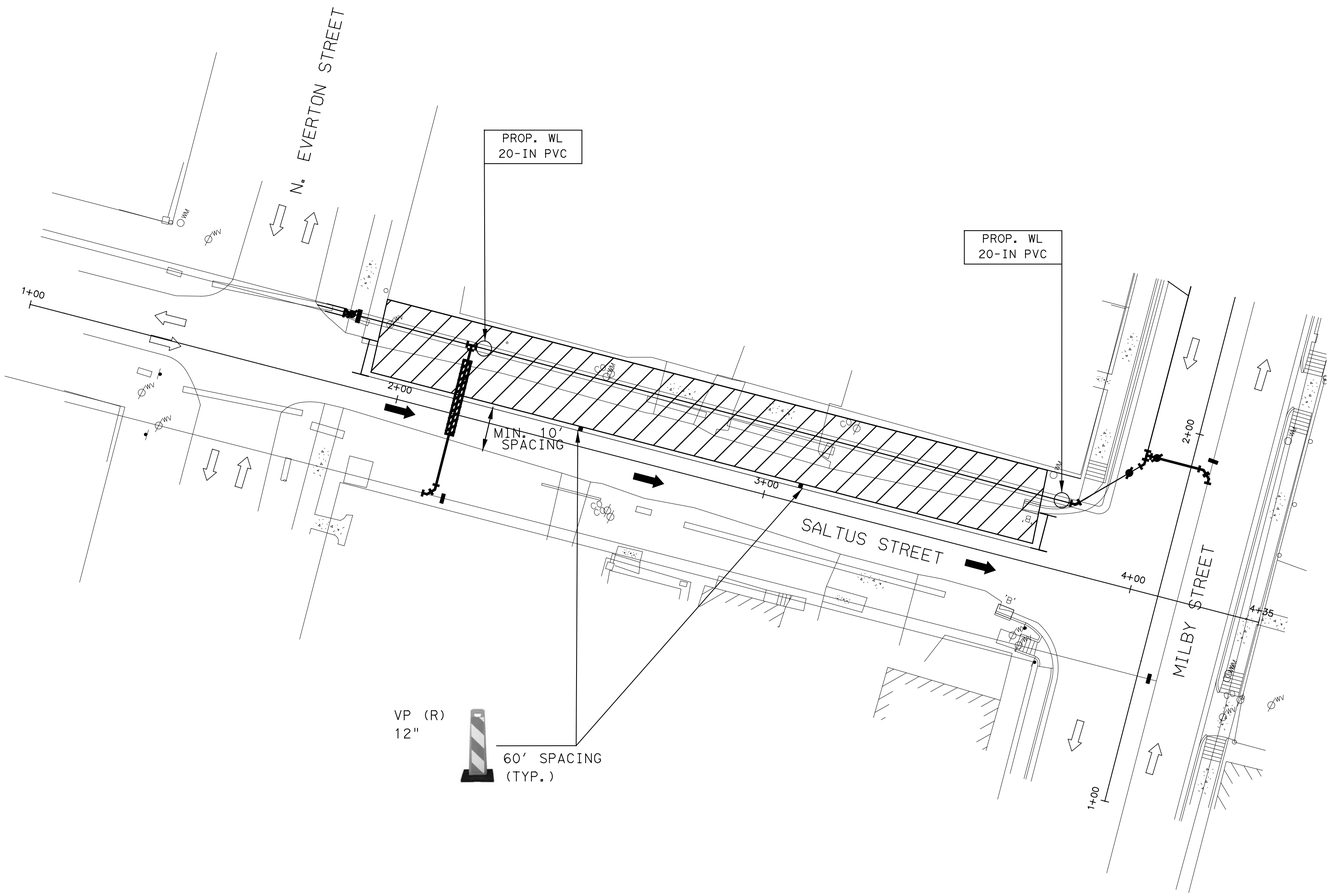
90% SUBMITTAL REV

-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR SALTUS STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SALTUS STREET. ASSUMED 30 MPH.

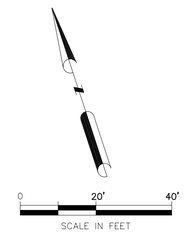


TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE



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281-206-7494 FX
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SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

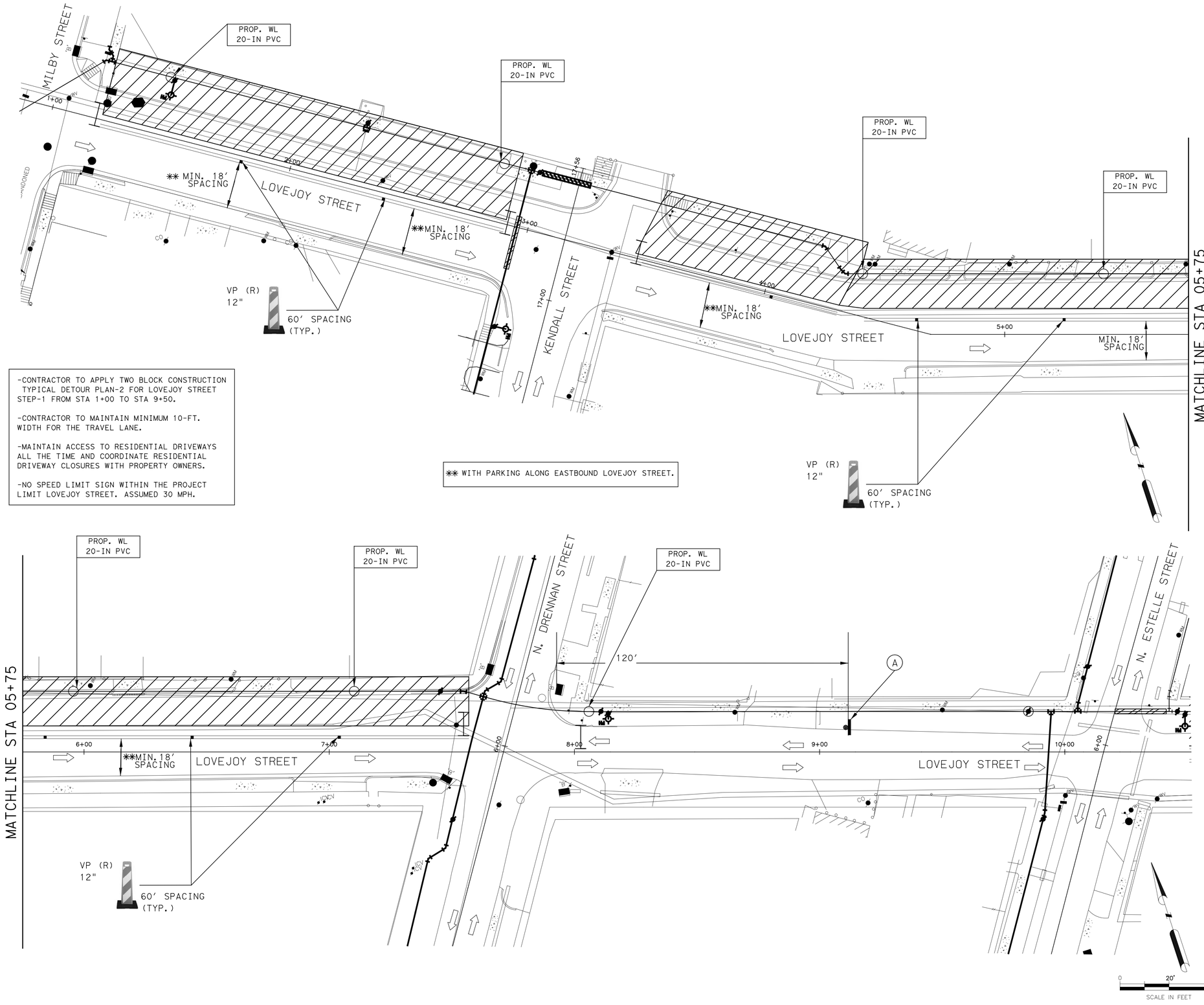
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
SALTUS STREET
STA 1+00 TO 4+35

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 205B OF 275	

90% SUBMITTAL REV



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

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Engineers, Planners & Managers
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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

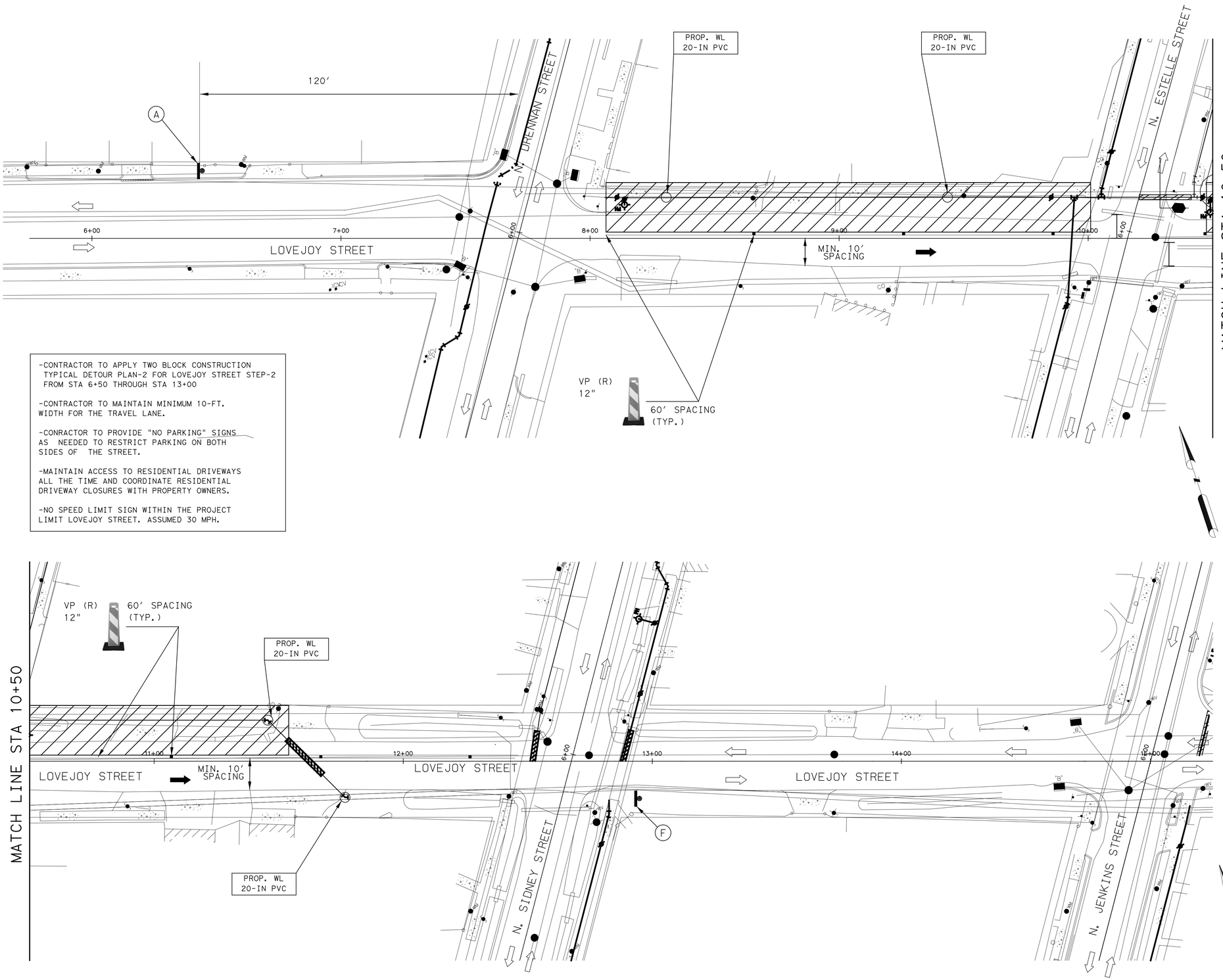
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
LOVEJOY STREET STEP-1
STA 01+00 TO 10+50

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 206 OF 275	

90% SUBMITTAL REV



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- (#) TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

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TBPE FIRM REGISTRATION #F-9492

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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

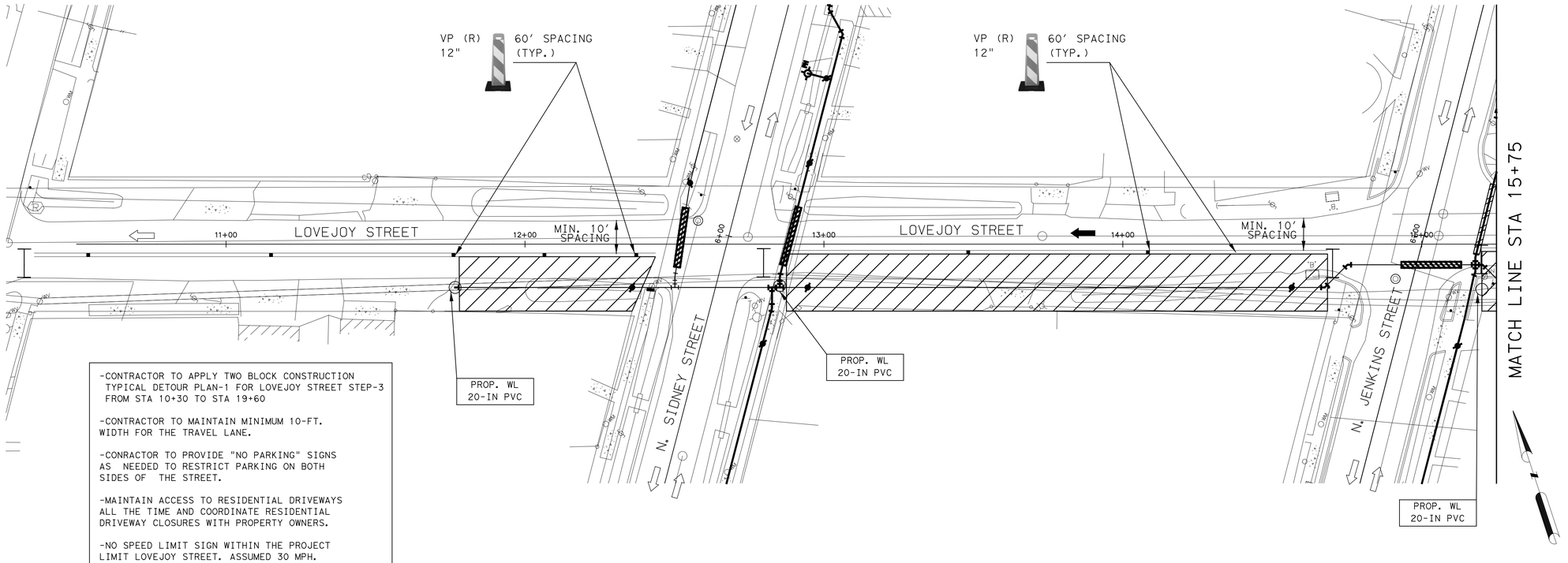
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
LOVEJOY STREET STEP-2
STA 08+06 TO 11+78

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 207 OF 275	

90% SUBMITTAL REV



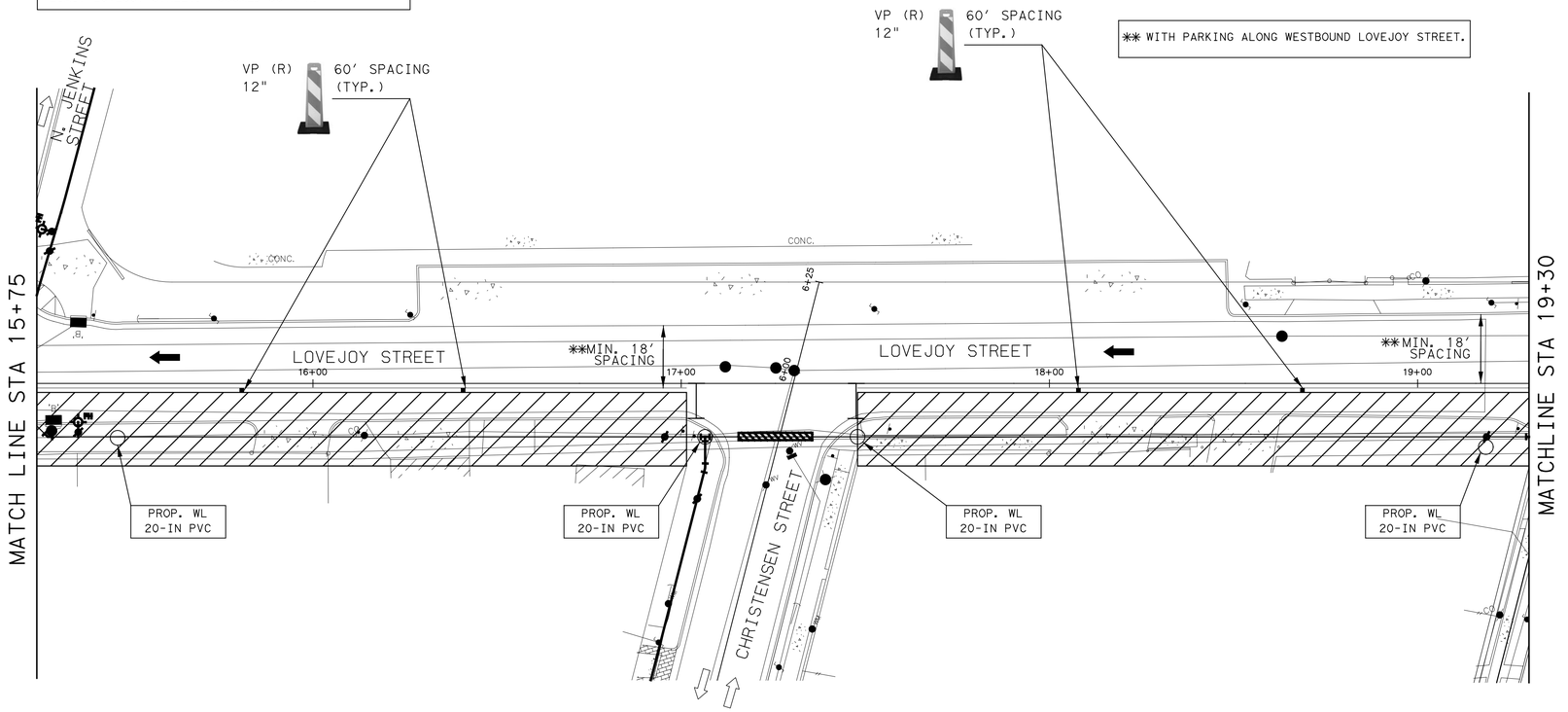
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR LOVEJOY STREET STEP-3 FROM STA 10+30 TO STA 19+60

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT LOVEJOY STREET. ASSUMED 30 MPH.



** WITH PARKING ALONG WESTBOUND LOVEJOY STREET.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A. ORANGE FLAG (TYPICAL) — ROAD WORK AHEAD — CW20-D 36" X 36"

B. RIGHT LANE CLOSED AHEAD — CW-5a (R) 36" X 36"

C. LEFT LANE CLOSED AHEAD — CW-5a (L) 36" X 36"

D. ROAD CLOSED — R11-2 48" X 30"

E. DO NOT ENTER — R5-1 30" X 30"

F. END ROAD WORK — G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 20' 40'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
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Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
LOVEJOY STREET SETP-3A
STA 11+78 TO 19+62

SHEET 1 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 208 OF 275	

90% SUBMITTAL REV

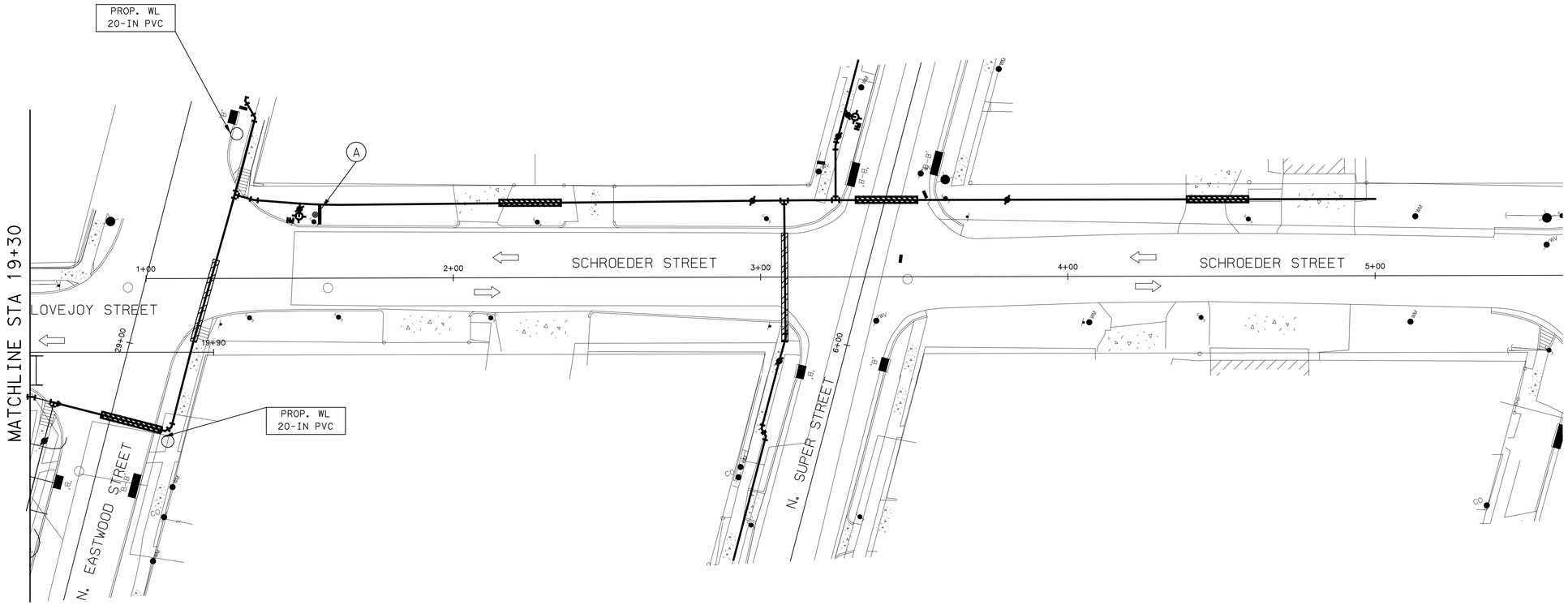
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR LOVEJOY STREET STEP-3 FROM STA 10+30 TO STA 19+60.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT LOVEJOY STREET. ASSUMED 30 MPH.

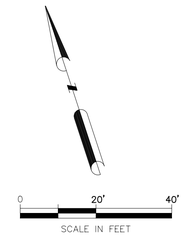


TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE



Progressive Traffic & Transportation
Engineers, Planners & Managers
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281-206-7495
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TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

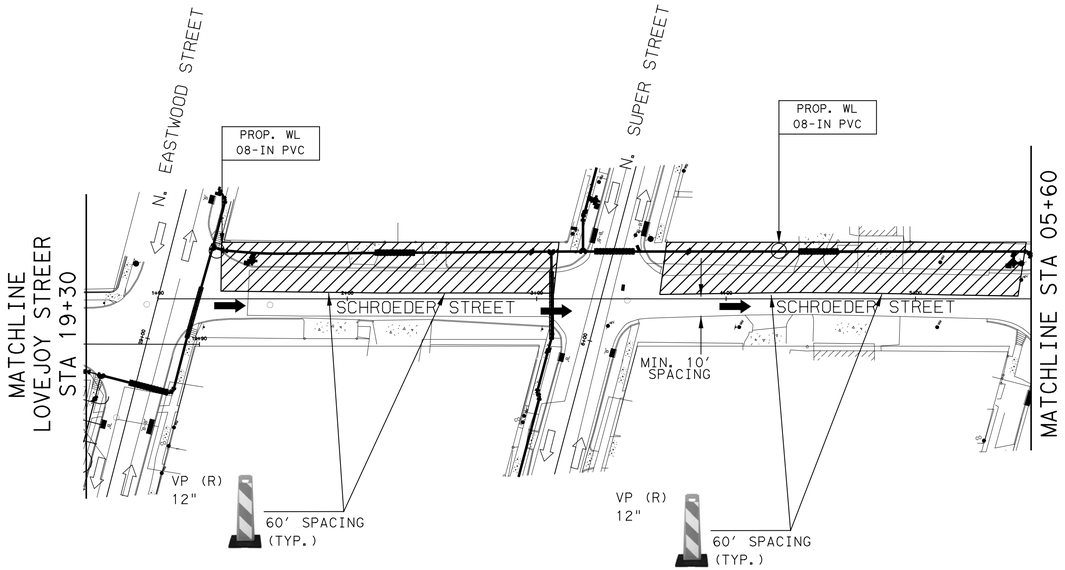
LOVEJOY STREET STEP-3B

STA 19+29 TO 19+63

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 209 OF 275	

90% SUBMITTAL REV



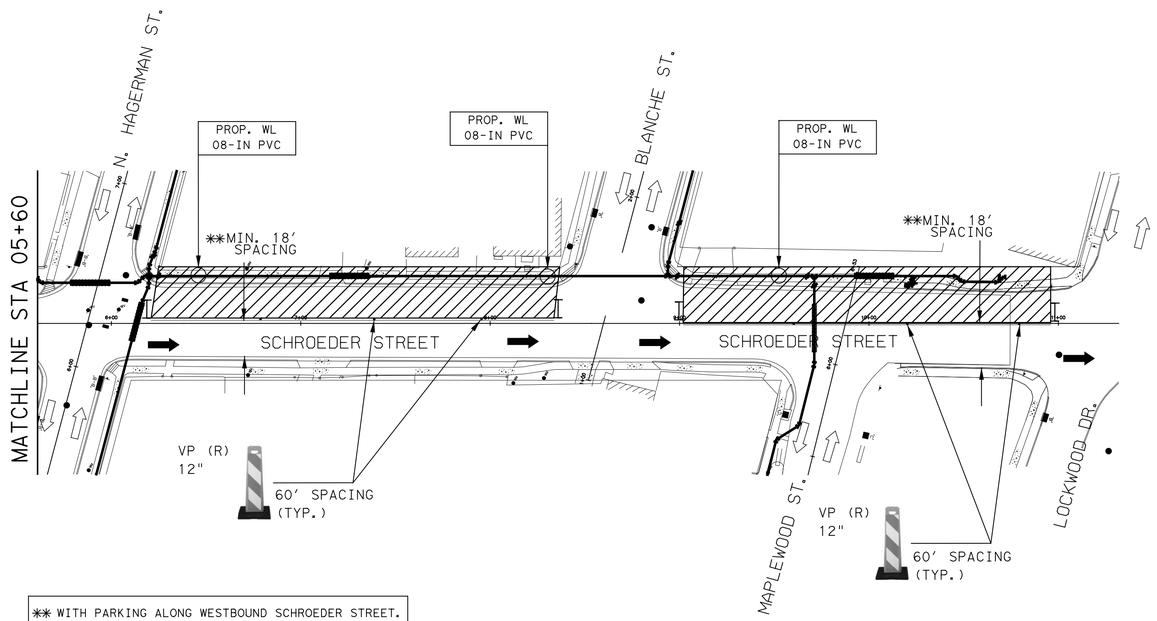
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR SCHROEDER STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SCHROEDER STREET. ASSUMED 30 MPH.



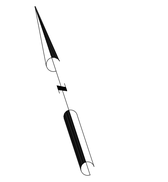
** WITH PARKING ALONG WESTBOUND SCHROEDER STREET.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE



0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
SCHROEDER STREET
STA 1+00 TO 11+27

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 210 OF 275	

90% SUBMITTAL REV

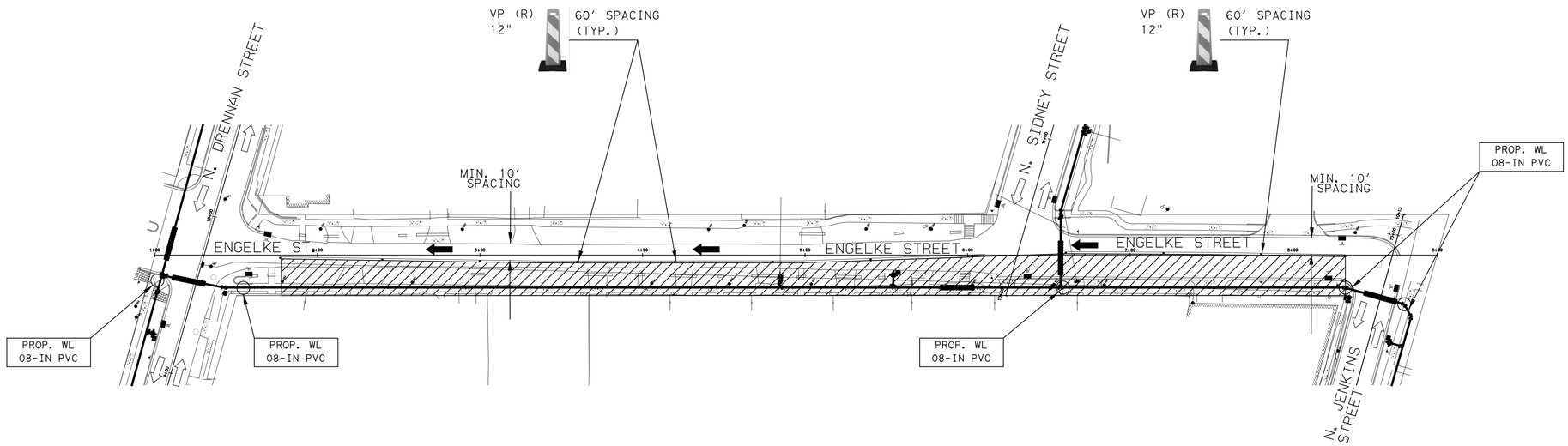
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 W/1 T-INTERSECTION FOR ENGELKE STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT ENGELKE STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

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FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

ENGELKE STREET

STA 01+00 TO 08+89

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 211 OF 275	

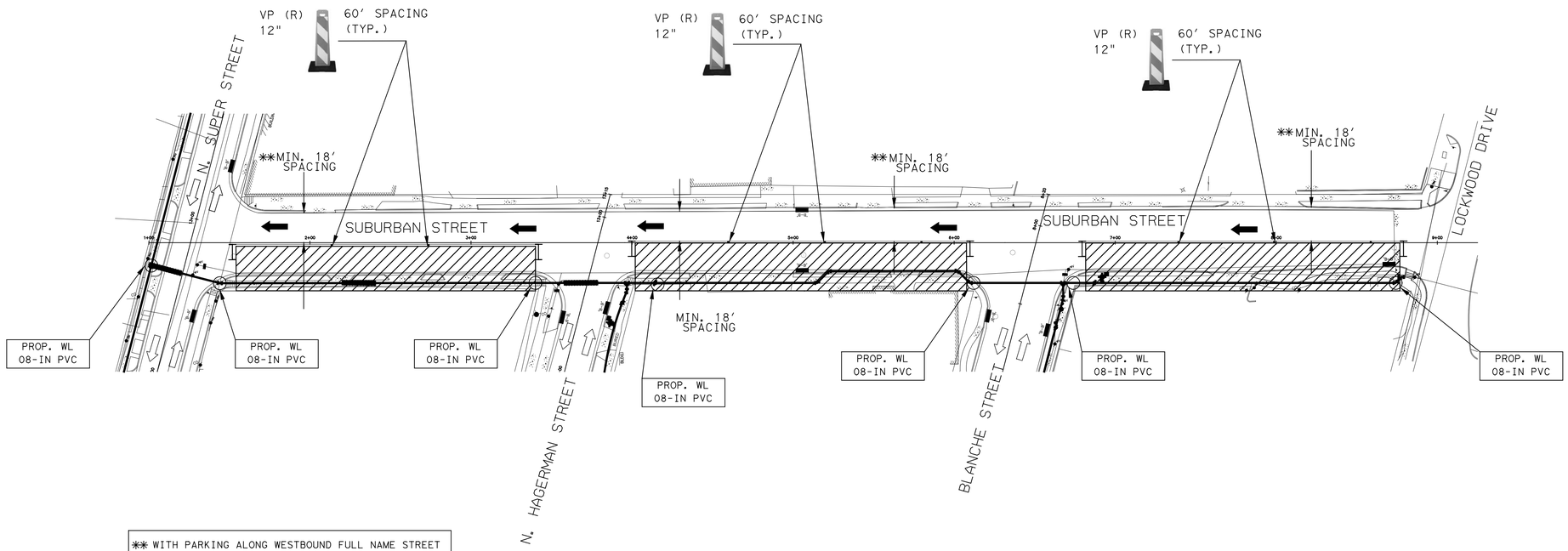
90% SUBMITTAL REV

-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SUBURBAN STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SUBURBAN STREET. ASSUMED 30 MPH.



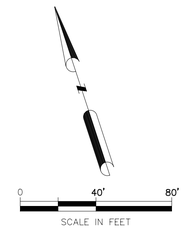
** WITH PARKING ALONG WESTBOUND FULL NAME STREET

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE



Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

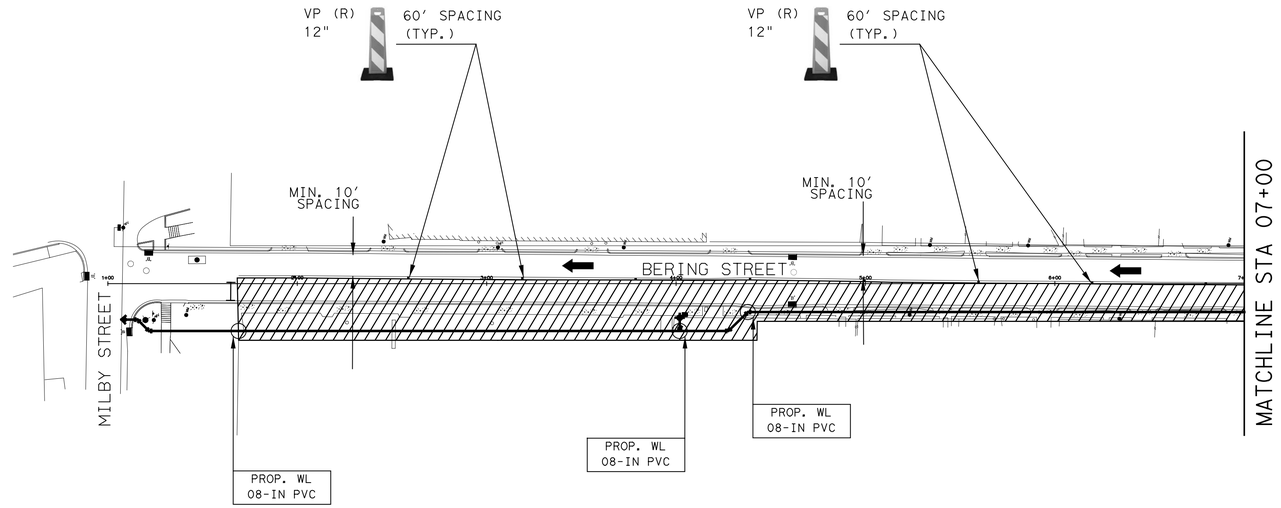
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
SUBURBAN STREET
STA 01+00 TO 09+00

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 212 OF 275	

90% SUBMITTAL REV



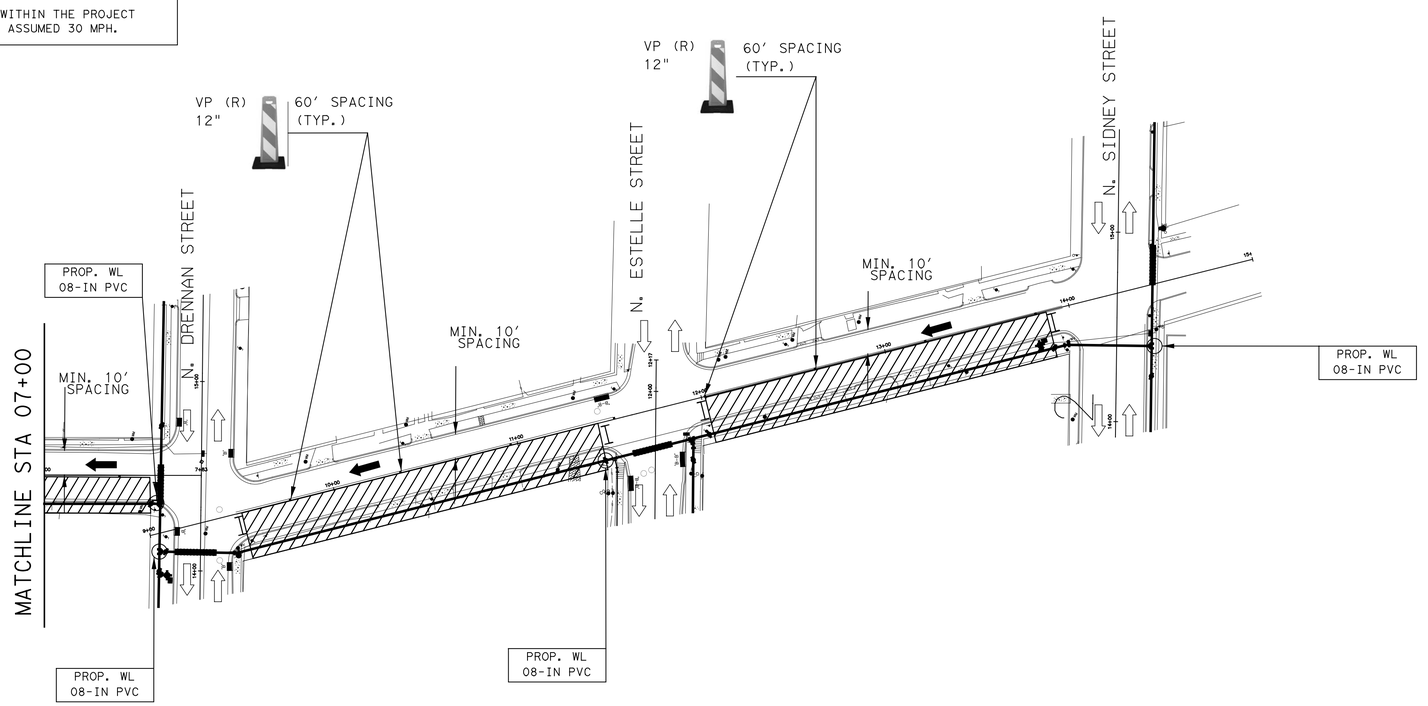
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR BERING STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT BERING STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A. ORANGE FLAG (TYPICAL)
CW20-D
36" X 36"

B. RIGHT LANE CLOSED AHEAD
CW-5a (R)
36" X 36"

C. LEFT LANE CLOSED AHEAD
CW-5a (L)
36" X 36"

D. ROAD CLOSED
R11-2
48" X 30"

E. DO NOT ENTER
R5-1
30" X 30"

F. END ROAD WORK
G20-2a
48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation Engineers, Planners & Managers 16360 Park Ten Place, Suite 106 Houston, Texas, 77084 281-206-7495 281-206-7494 FX TBPE FIRM REGISTRATION #F-9492	THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES. MOHAMMAD IRFAN, P. E. TX P.E. NO. 89333 DATE: 07/28/2025 90% SUBMITTAL
SURVEYED BY: WGC FB NO. 10038100	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

BERING STREET

STA 1+00 TO 15+00

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 213 OF 275	

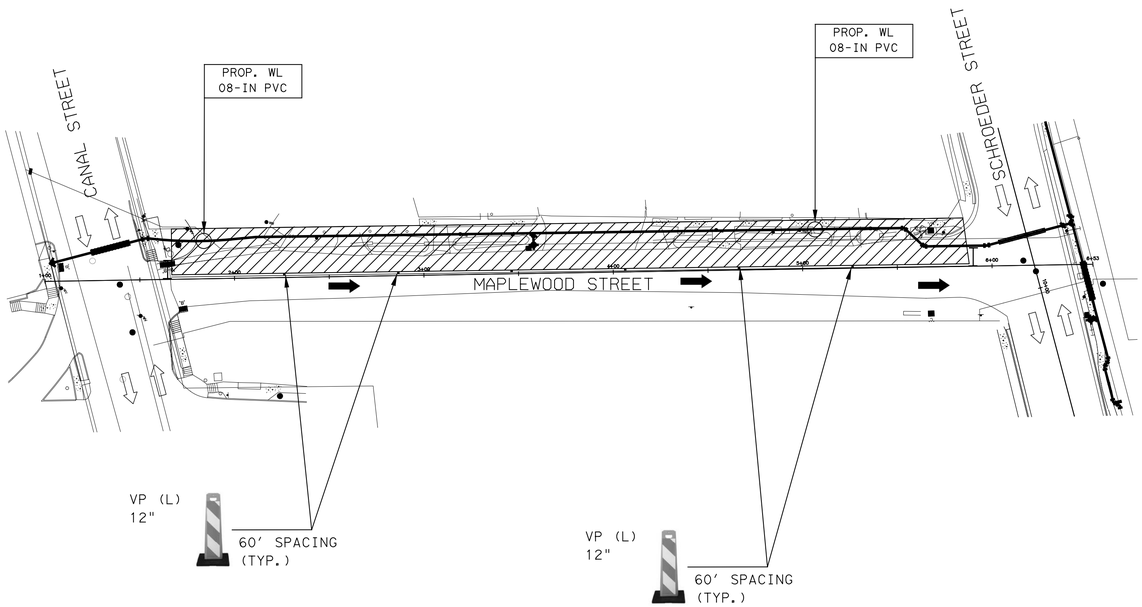
90% SUBMITTAL REV

- CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR MAPLEWOOD STREET

- CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

- MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

- NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT MAPLEWOOD STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
MAPLEWOOD STREET
STA 01+00 TO 06+53

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 213A OF 275	

90% SUBMITTAL REV

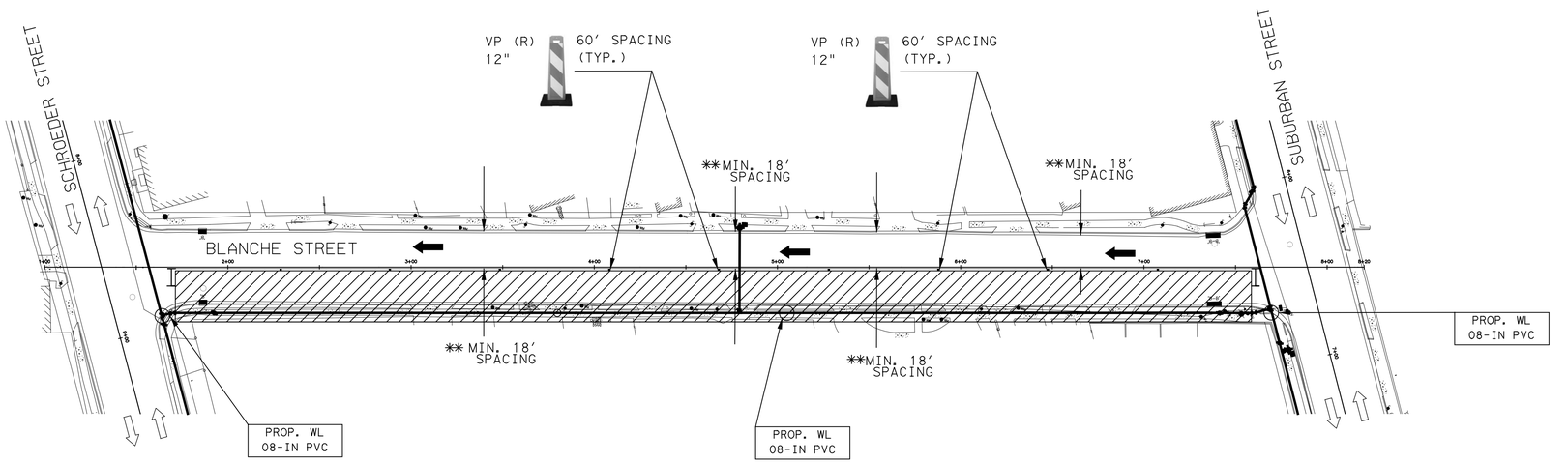
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR BLANCHE STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT BLANCHE STREET. ASSUMED 30 MPH.

** WITH PARKING ALONG SOUTHBOUND BLANCHE STREET.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

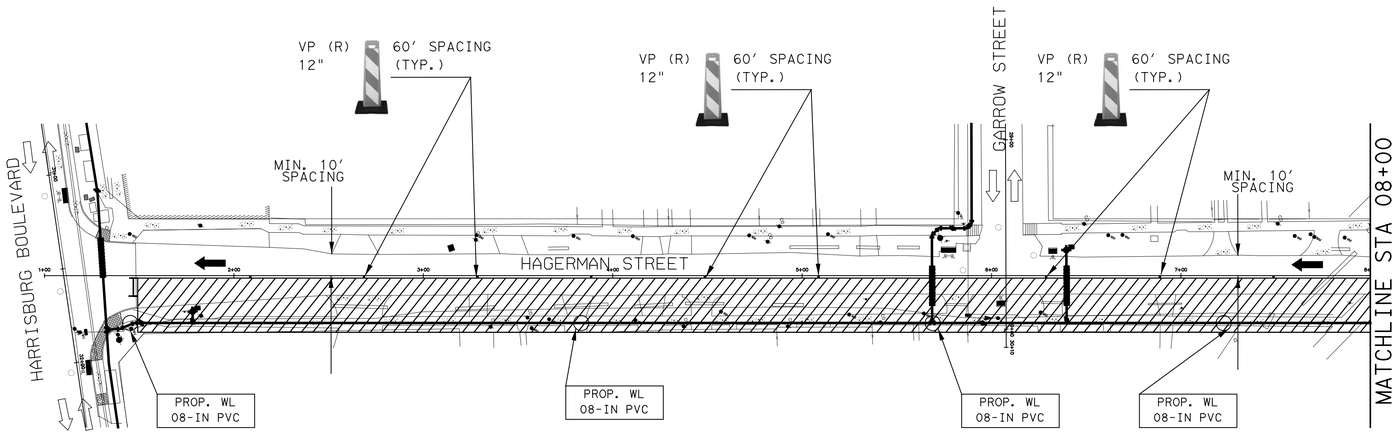
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
BLANCHE STREET
STA 01+00 TO 08+20

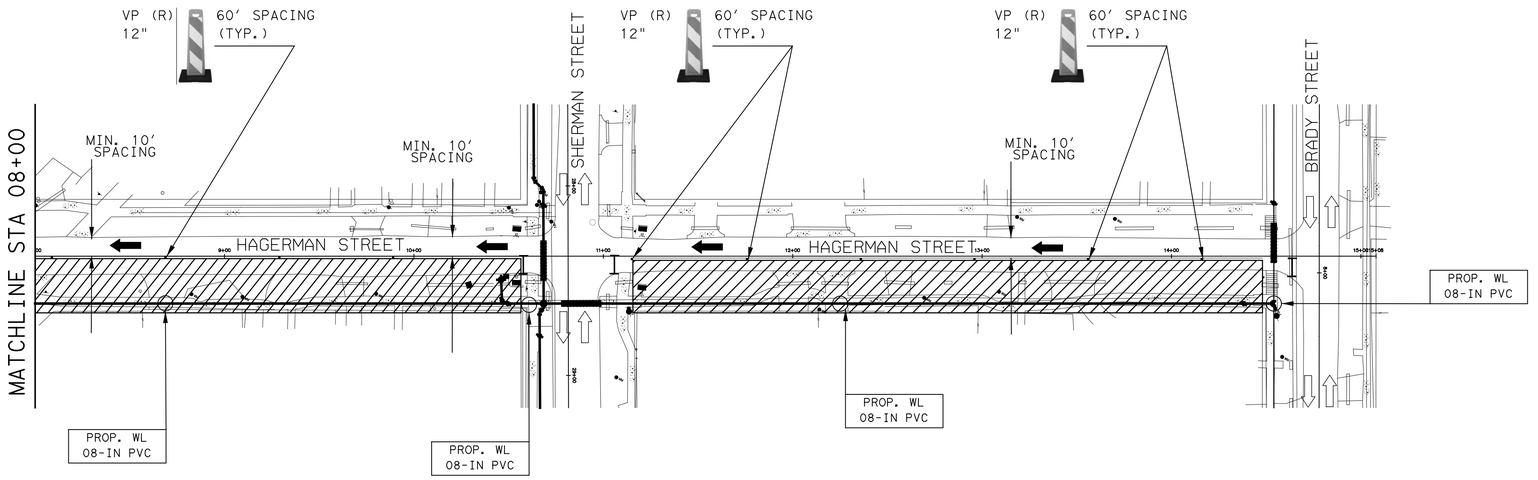
SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 214 OF 275	

90% SUBMITTAL REV



- -CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR HAGERMAN STREET
- -CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.
- -CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.
- -MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.
- -NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT HEGERMAN STREET. ASSUMED 30 MPH



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7496
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

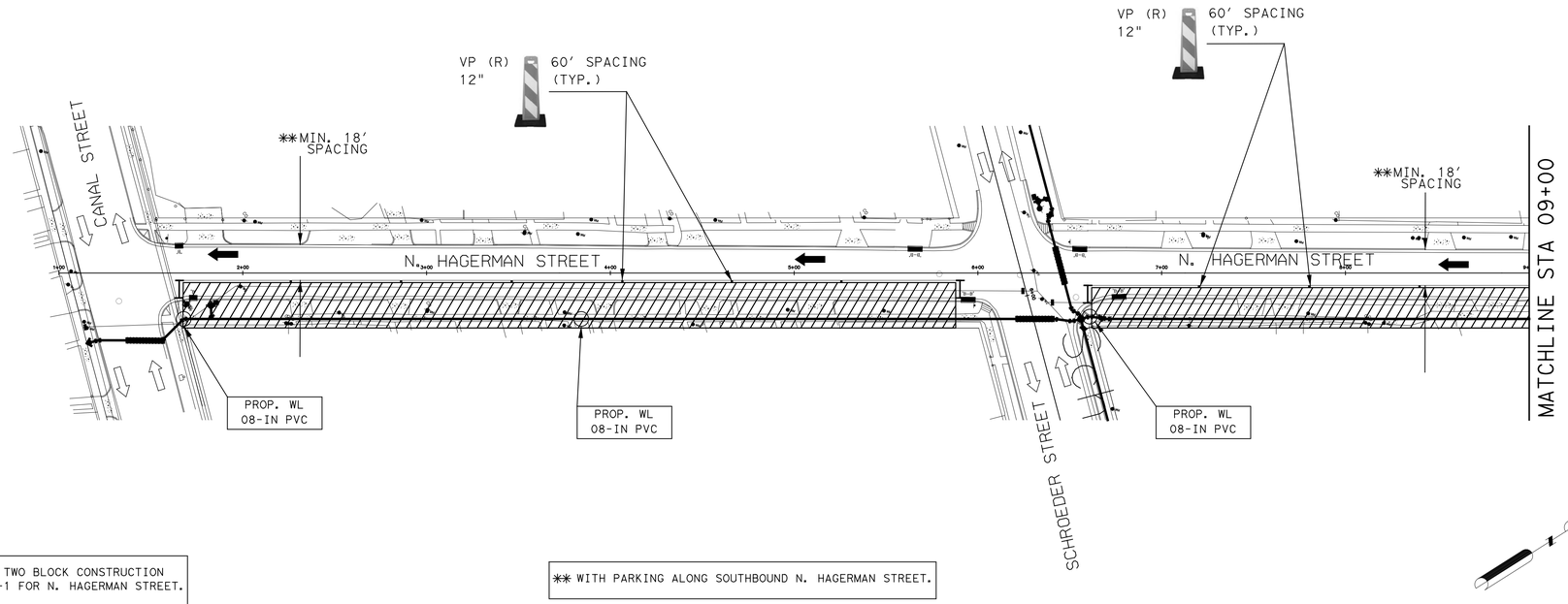
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
HAGERMAN STREET
STA 1+00 TO 15+08

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 215 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR N. HAGERMAN STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT N. HAGERMAN STREET. ASSUMED 30 MPH.

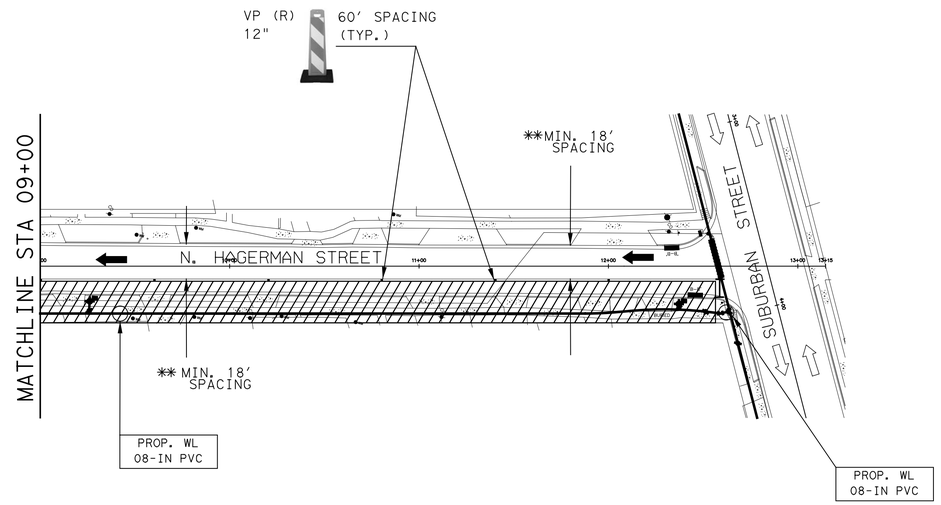
** WITH PARKING ALONG SOUTHBOUND N. HAGERMAN STREET.

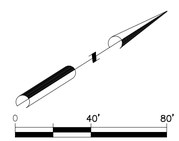
TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE





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Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
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281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

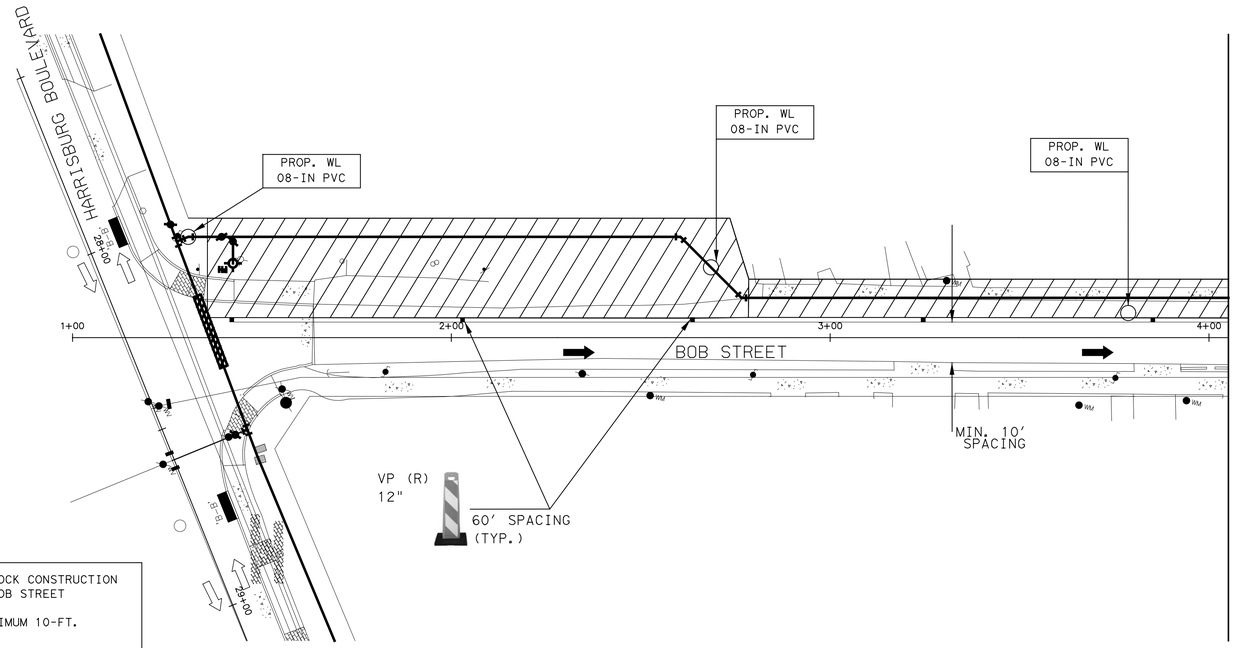
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
N. HAGERMAN STREET
STA 1+00 TO 13+15

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 216 OF 275	

90% SUBMITTAL REV



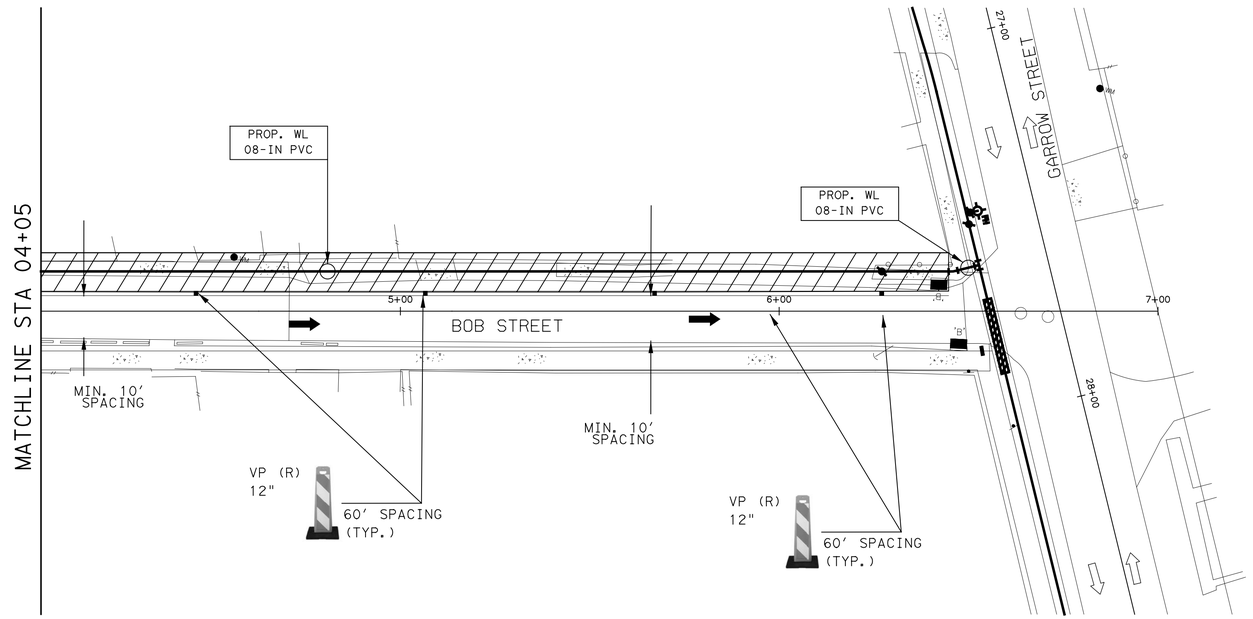
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR BOB STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

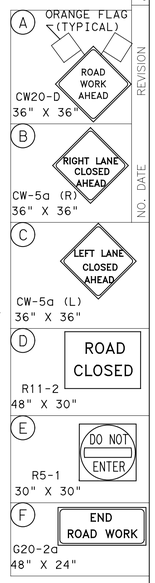
-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT BOB STREET. ASSUMED 30 MPH.

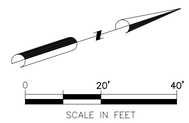


TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL



APP. | REVISION | NO. | DATE



Progressive Traffic & Transportation
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

BOB STREET

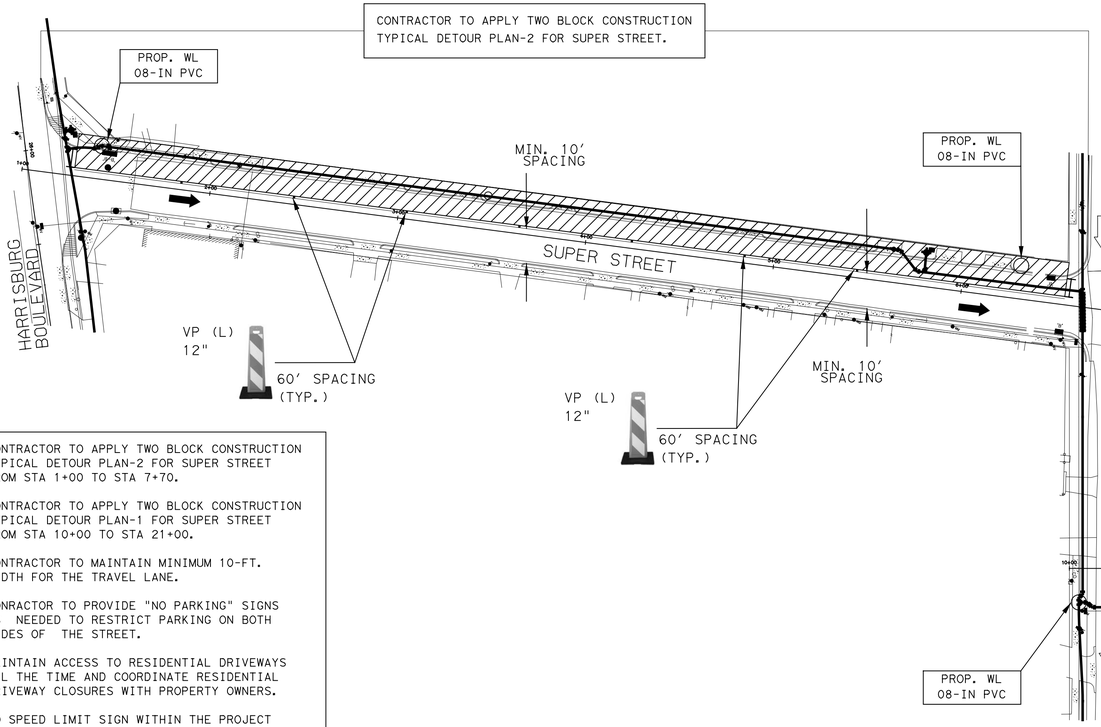
STA 1+00 TO 7+00

SHEET 1 OF 1

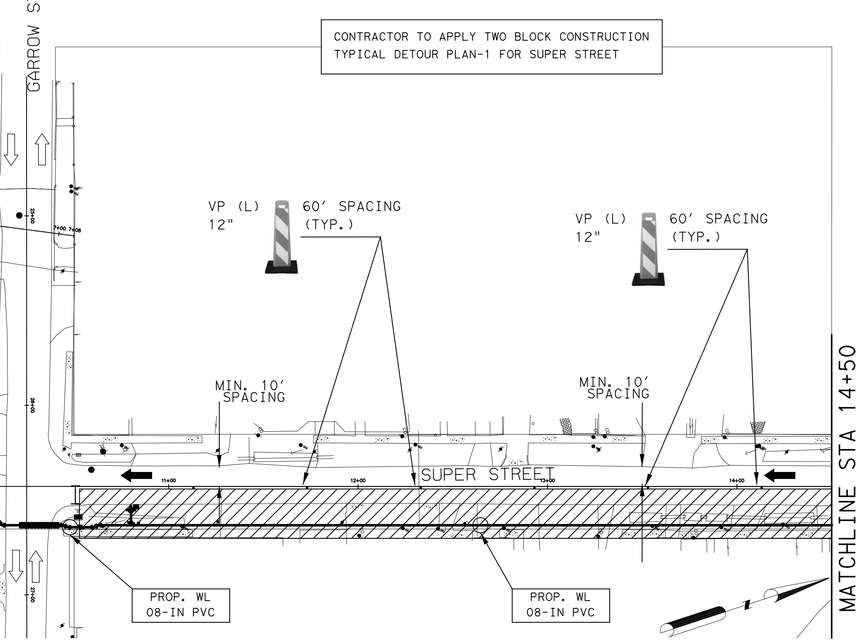
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 217 OF 275	

90% SUBMITTAL REV

CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR SUPER STREET.



CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SUPER STREET



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR SUPER STREET FROM STA 1+00 TO STA 7+70.

-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SUPER STREET FROM STA 10+00 TO STA 21+00.

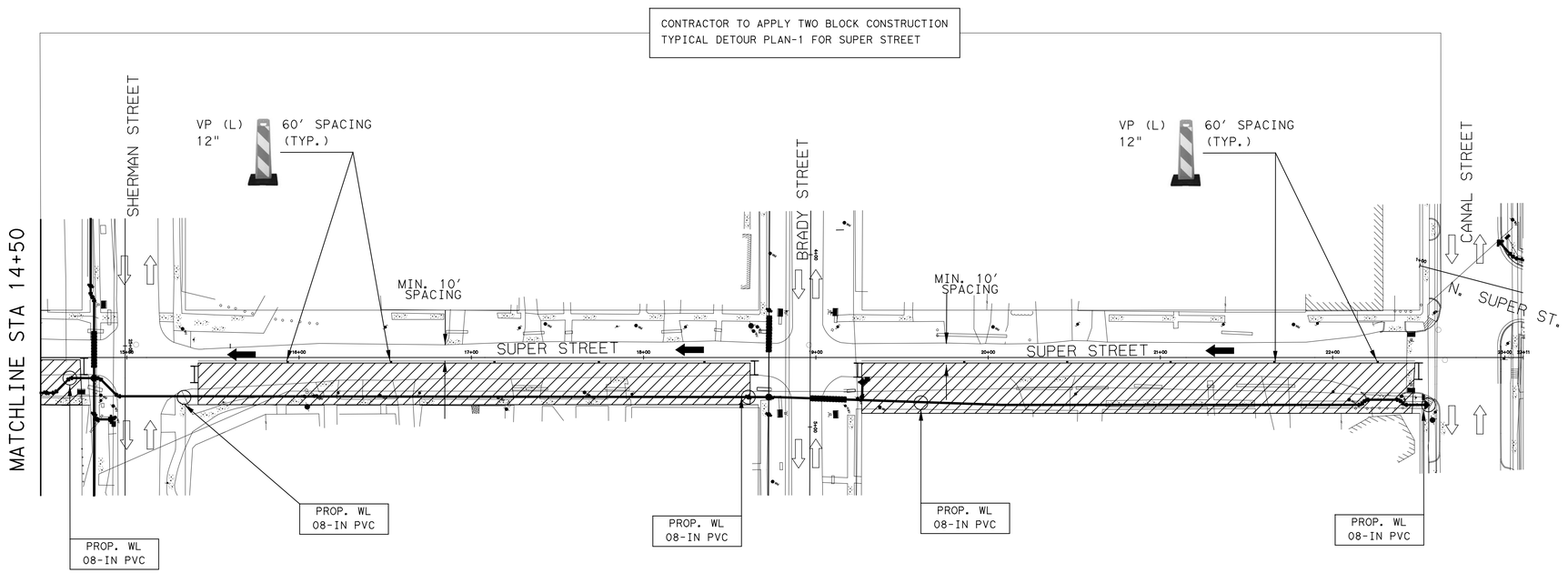
-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SUPER STREET. ASSUMED 30 MPH.

CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR SUPER STREET

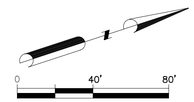


TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD CW20-D 36" X 36"	
B	RIGHT LANE CLOSED AHEAD CW-5a (R) 36" X 36"	
C	LEFT LANE CLOSED AHEAD CW-5a (L) 36" X 36"	
D	ROAD CLOSED R11-2 48" X 30"	
E	DO NOT ENTER R5-1 30" X 30"	
F	END ROAD WORK G20-2a 48" X 24"	

APP. | REVISION | NO. | DATE



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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

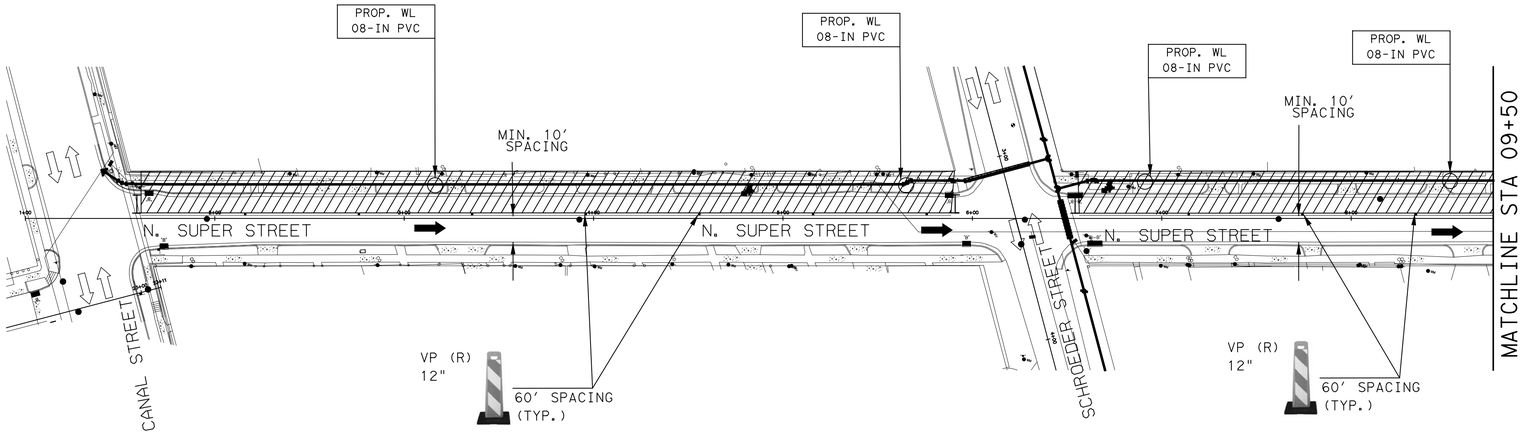
SUPER STREET

STA 1+00 TO STA 23+11

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 218 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 N. SUPER STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

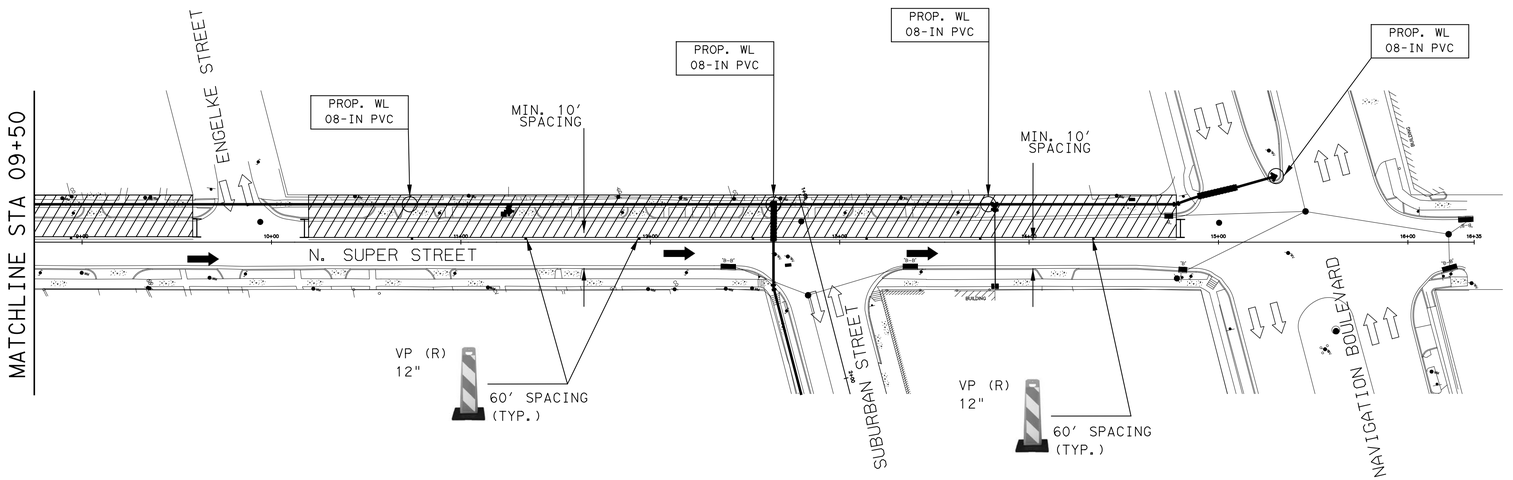
-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT N. SUPER STREET. ASSUMED 30 MPH.

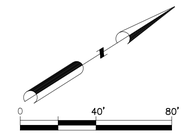
TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE





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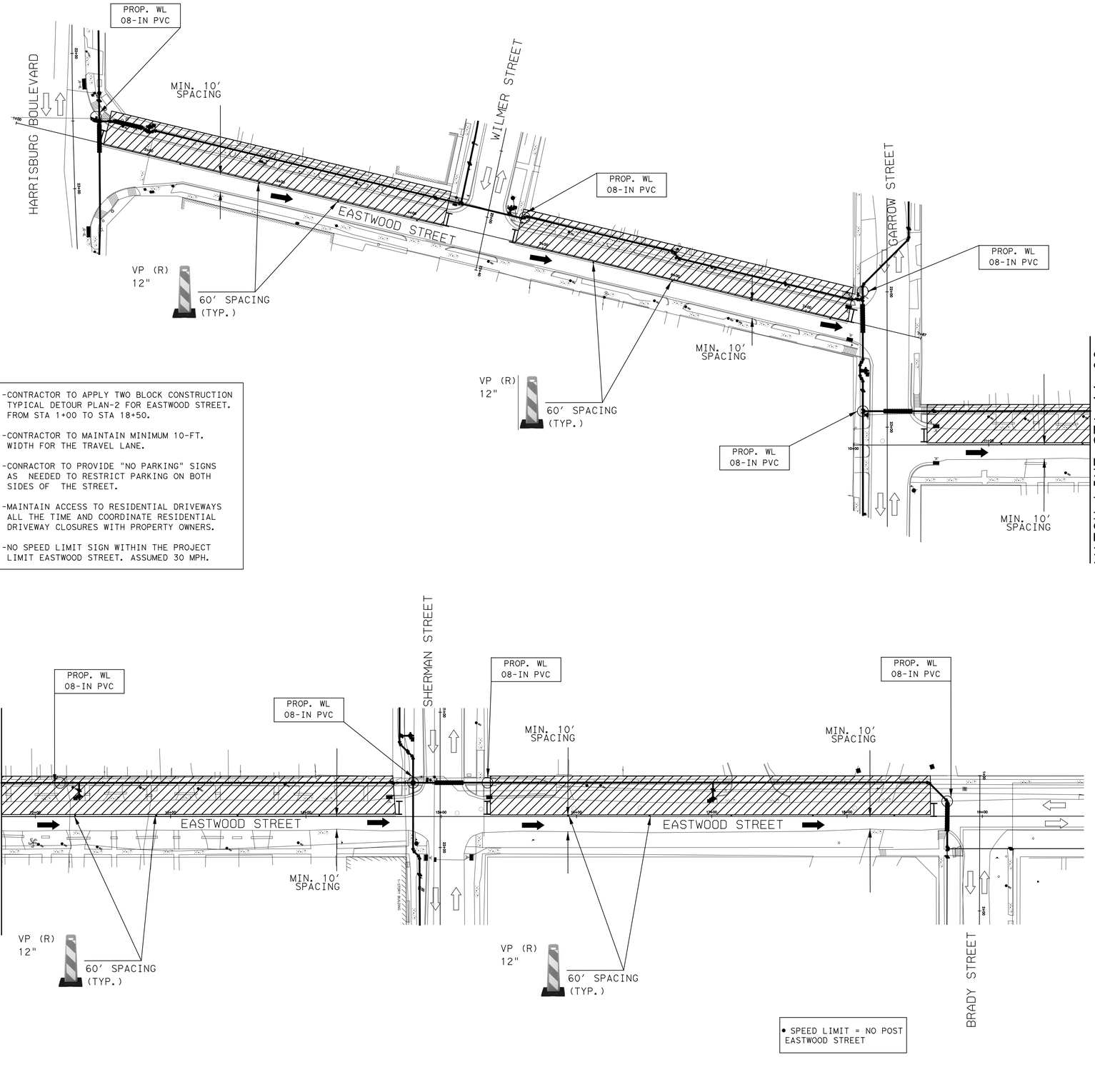
CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
N. SUPER STREET
STA 01+00 TO 16+35

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 219 OF 275	



- CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR EASTWOOD STREET. FROM STA 1+00 TO STA 18+50.
- CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.
- CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.
- MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.
- NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT EASTWOOD STREET. ASSUMED 30 MPH.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

• SPEED LIMIT = NO POST EASTWOOD STREET

0 40' 80'
SCALE IN FEET

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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

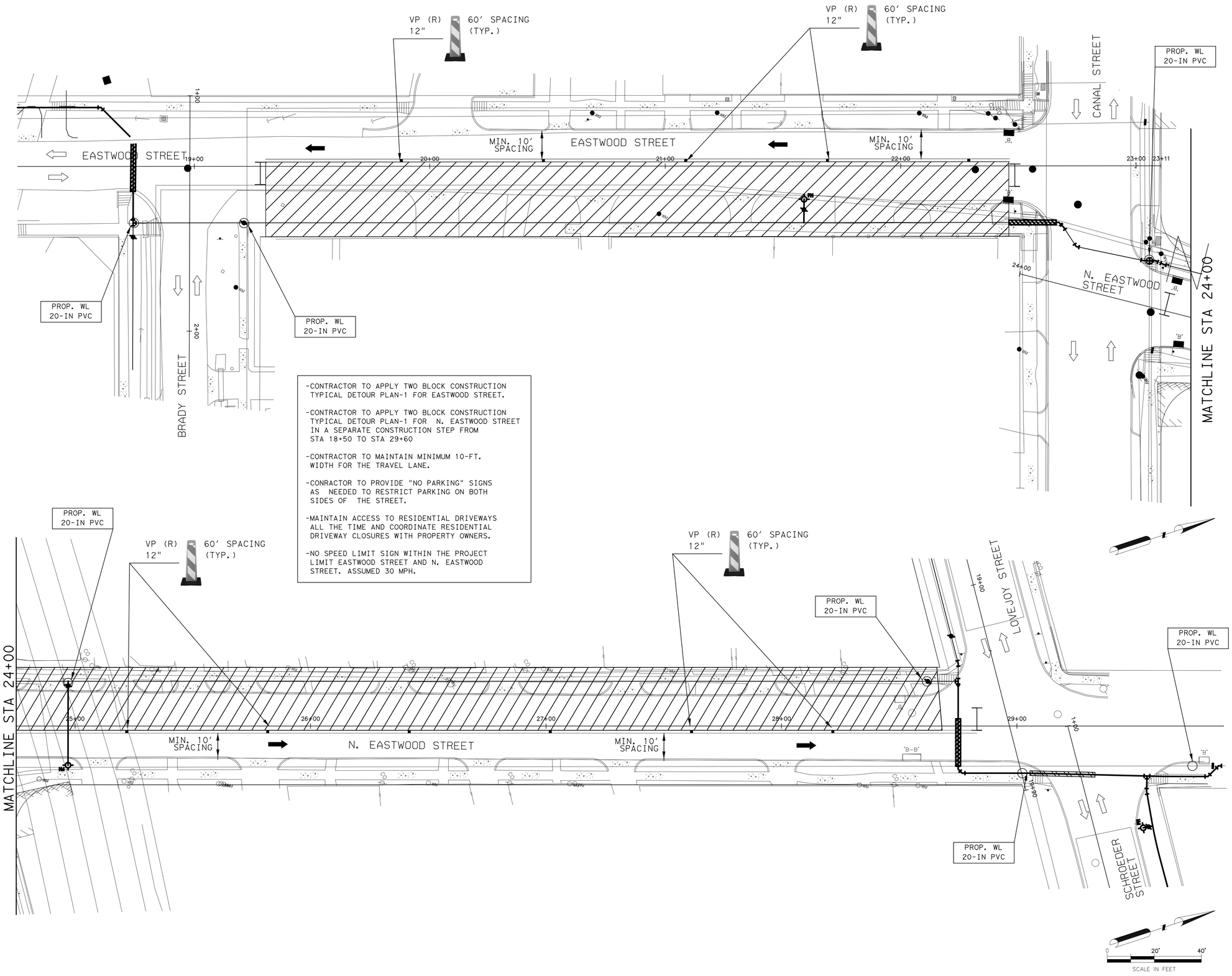
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
EASTWOOD STREET (STEP-1)
STA 1+00 TO 19+50

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 220 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR EASTWOOD STREET.

-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR N. EASTWOOD STREET IN A SEPARATE CONSTRUCTION STEP FROM STA 18+50 TO STA 29+60

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT EASTWOOD STREET AND N. EASTWOOD STREET. ASSUMED 30 MPH.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

Progressive Traffic & Transportation
Engineers, Planners & Managers
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

EASTWOOD STREET STA 18+00 TO

N. EASTWOOD STREET STA 29+75

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 221 OF 275	

90% SUBMITTAL REV

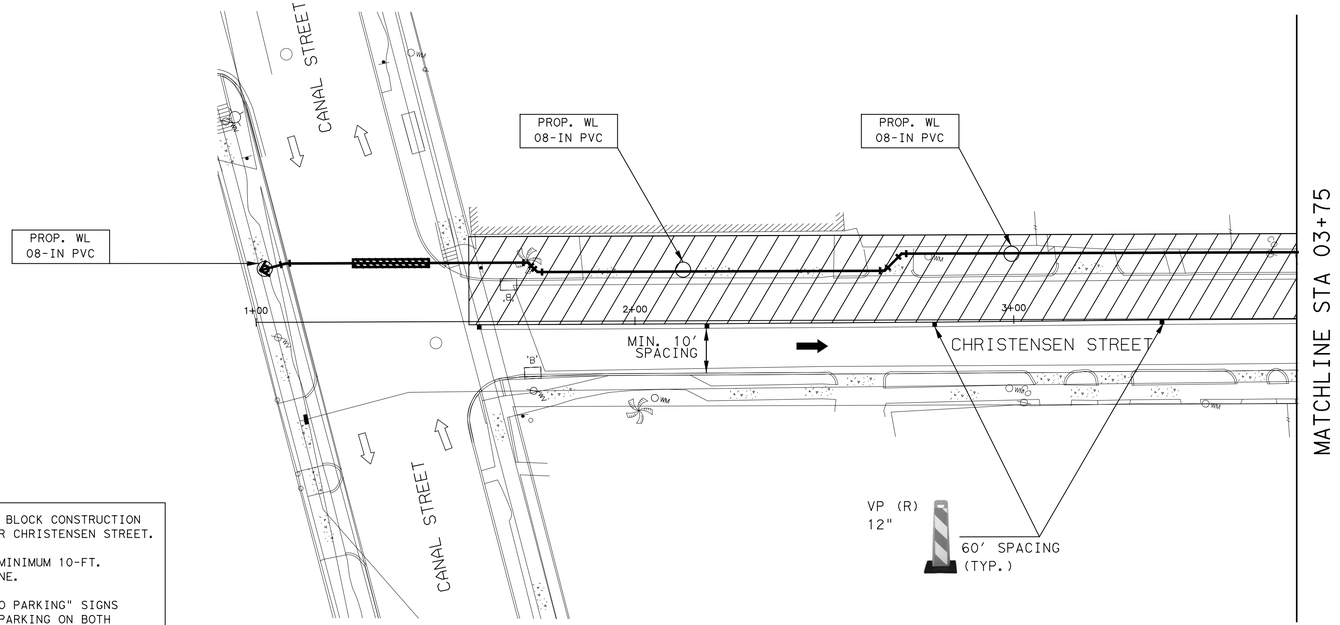
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR CHRISTENSEN STREET.

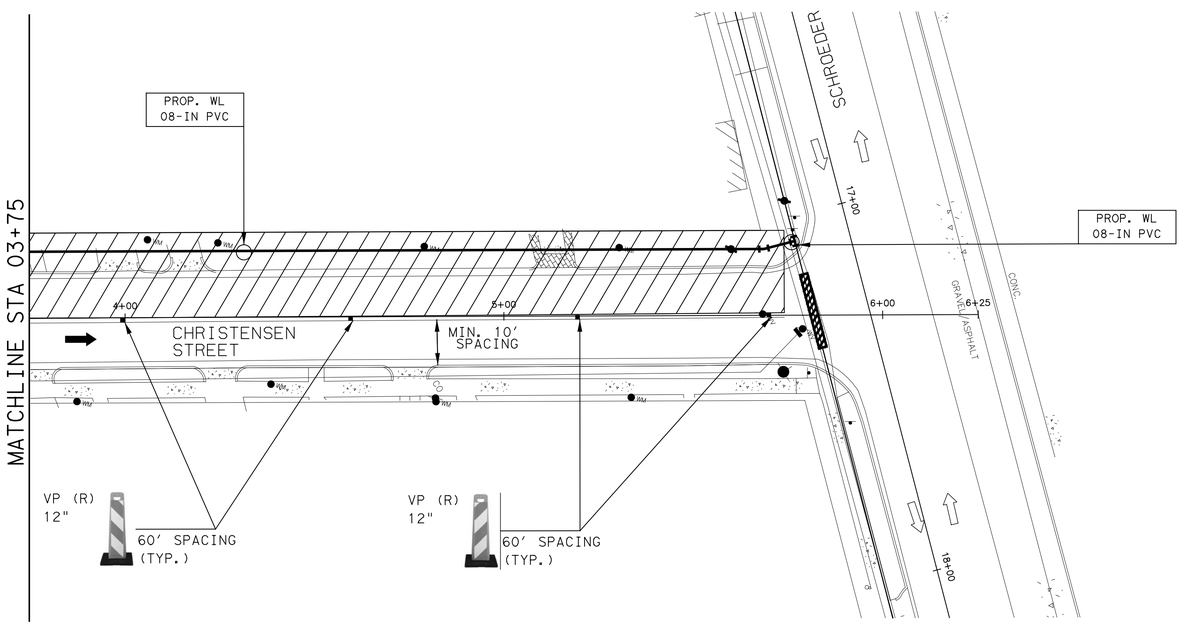
-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT CHRISTENSENT STREET. ASSUMED 30 MPH.





TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A. ORANGE FLAG (TYPICAL)
ROAD WORK AHEAD
CW20-D
36" X 36"

B. RIGHT LANE CLOSED AHEAD
CW-5a (R)
36" X 36"

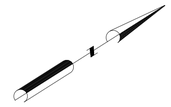
C. LEFT LANE CLOSED AHEAD
CW-5a (L)
36" X 36"

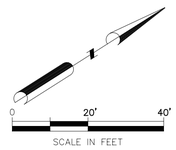
D. ROAD CLOSED
R11-2
48" X 30"

E. DO NOT ENTER
R5-1
30" X 30"

F. END ROAD WORK
G20-2a
48" X 24"

APP. | REVISION | NO. | DATE





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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

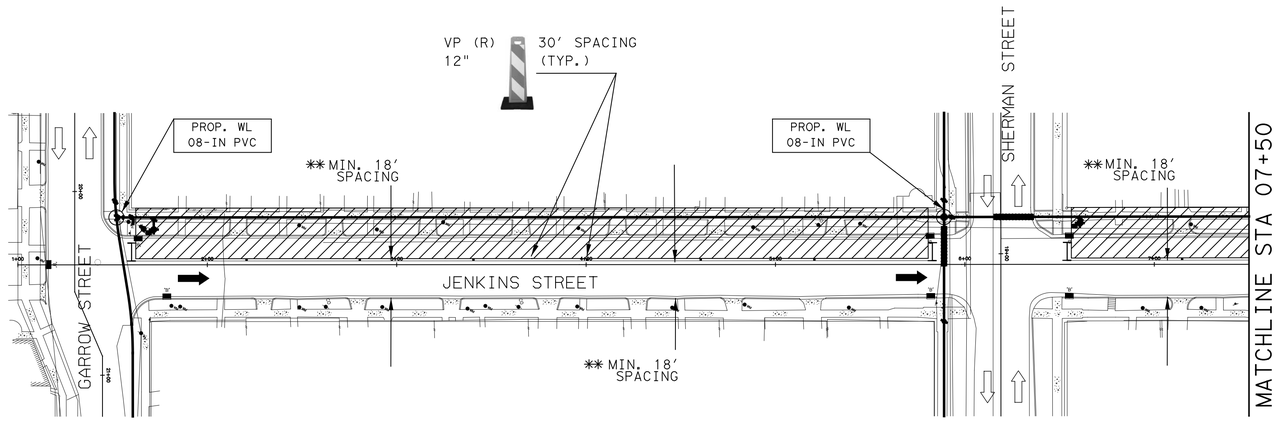
CHRISTENSEN STREET

STA 1+00 TO 06+25

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 222 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR JENKINS STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT JENKINS STREET. ASSUMED 30 MPH.

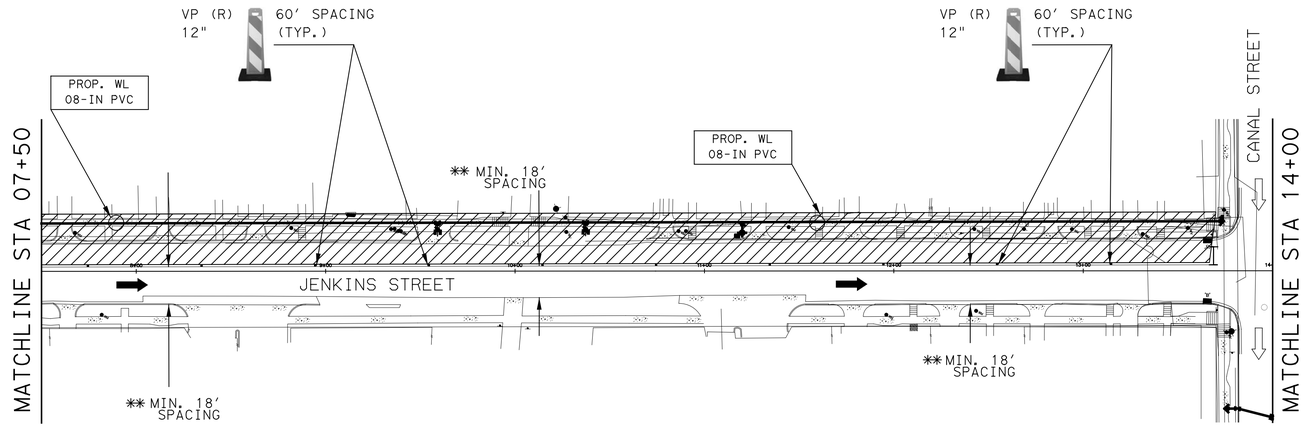
** WITH PARKING ALONG NORTHBOUND JENKINS STREET.

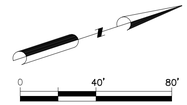
TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE





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HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

JENKINS STREET

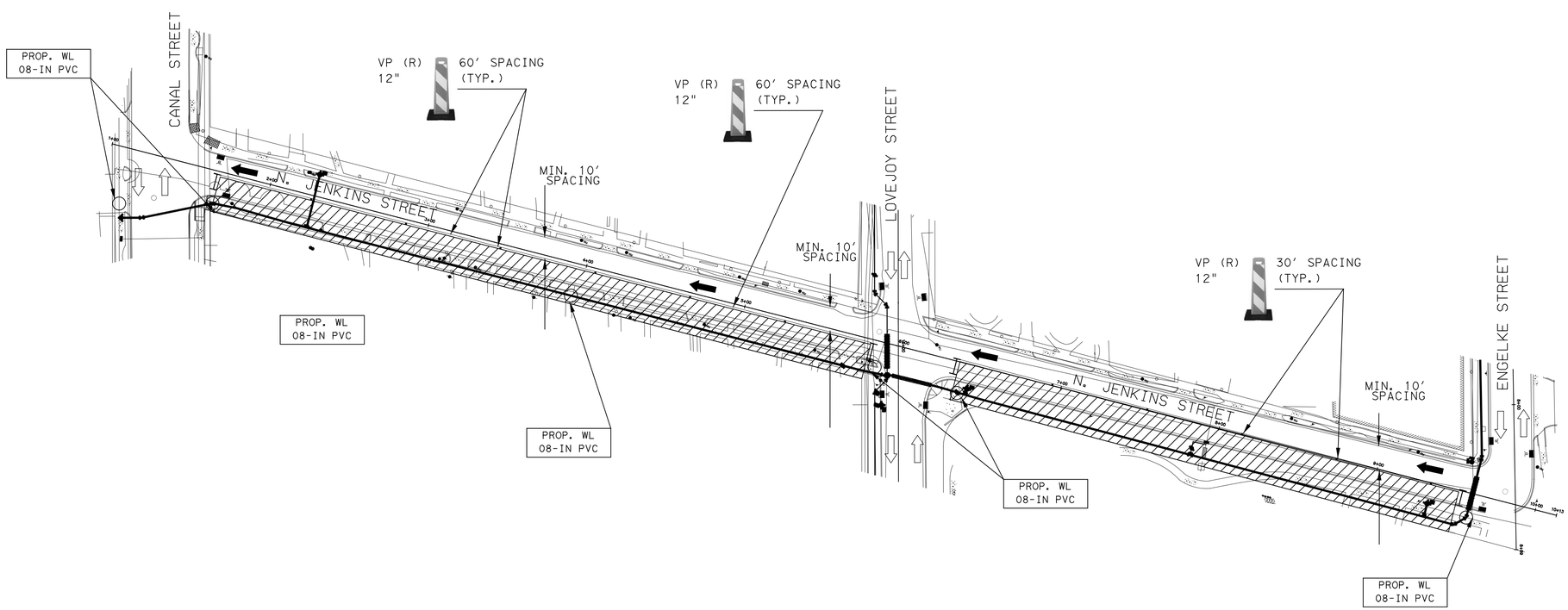
STA 1+00 TO 14+00

SHEET 1 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 223 OF 275	

90% SUBMITTAL REV

- CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR N. JENKINS STREET.
- CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.
- CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.
- MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.
- NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT N JENKINS STREET. ASSUMED 30 MPH.

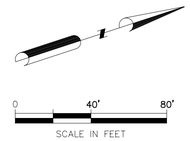


TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE



Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

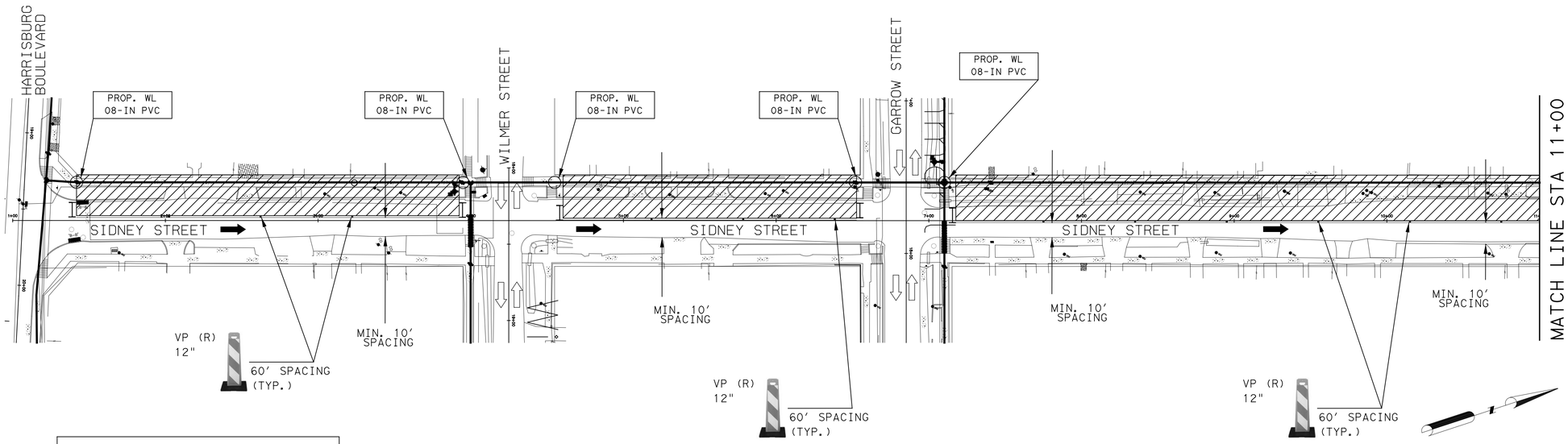
CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
JENKINS STREET STA 12+00 TO
N. JENKINS STREET STA 10+00

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 224 OF 275	



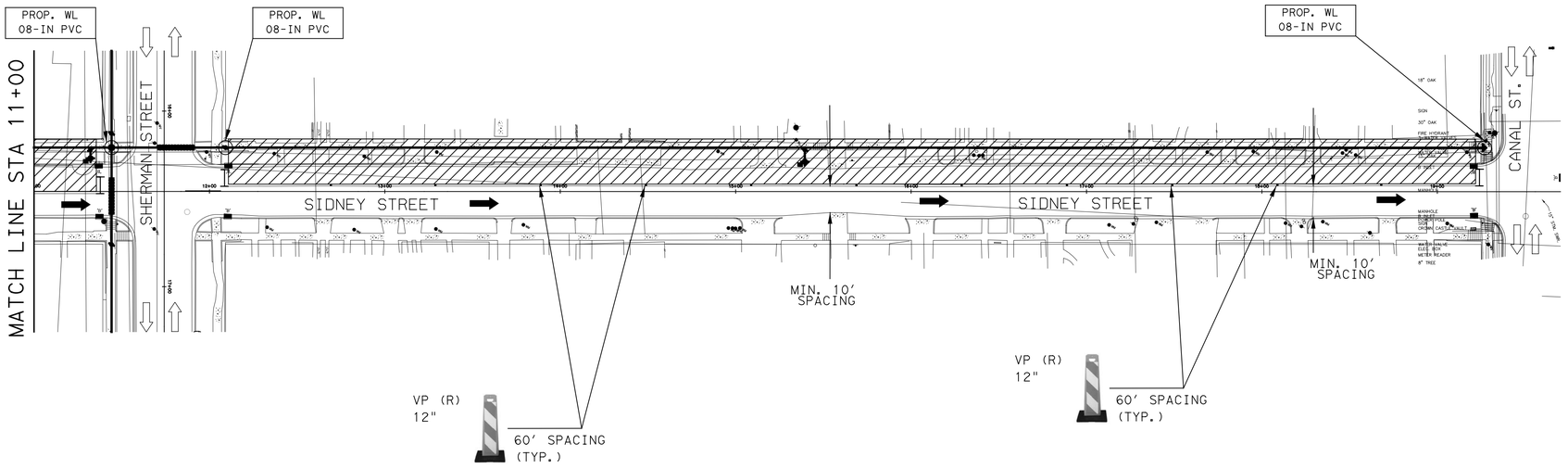
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR SIDNEY STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT SIDNEY STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

SCALE IN FEET
0 40' 80'

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
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281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

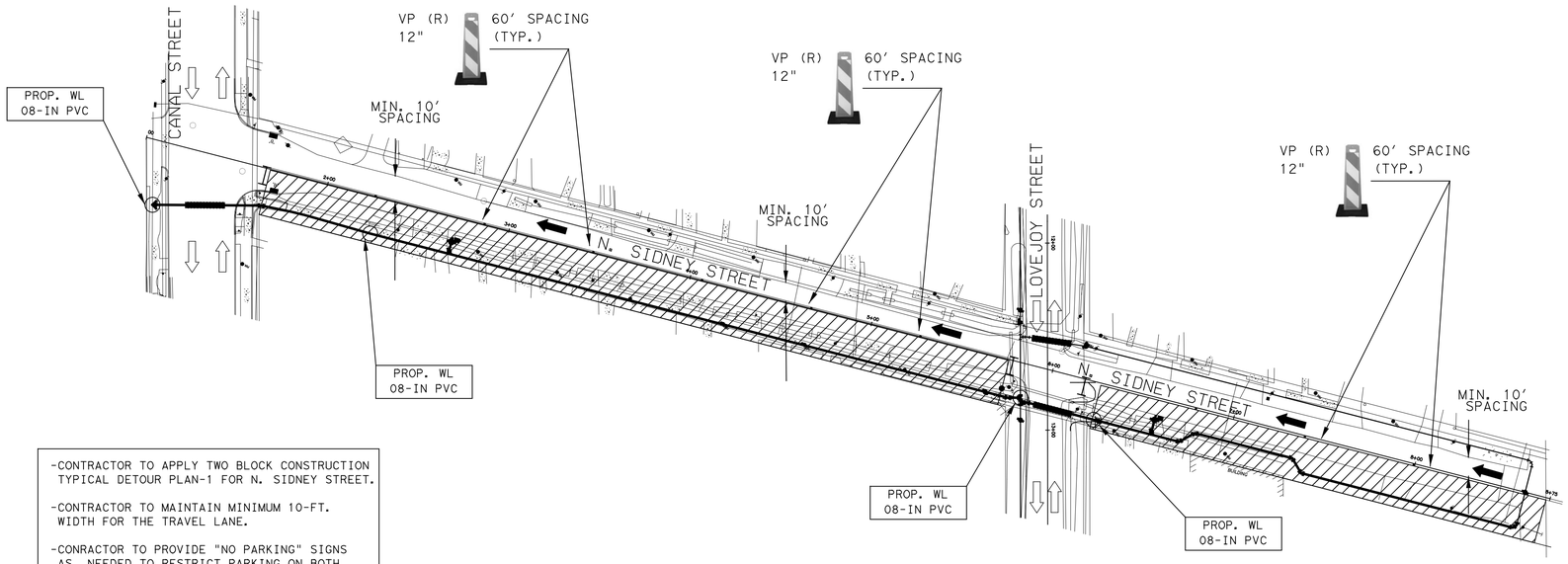
SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
SIDNEY STREET STA 01+00 TO N. SIDNEY STREET STA 02+00

SHEET 1 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 225 OF 275	

90% SUBMITTAL REV

FILE PATH: O:\2019\395061\Correspondence\DataOut\PCE Houston-Traffic\2021-08-18 (Title Block)\TBD-COH_TB_22x34_Subs-obseg1vn.dwg PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 5/21/2019 1:28 PM



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR N. SIDNEY STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

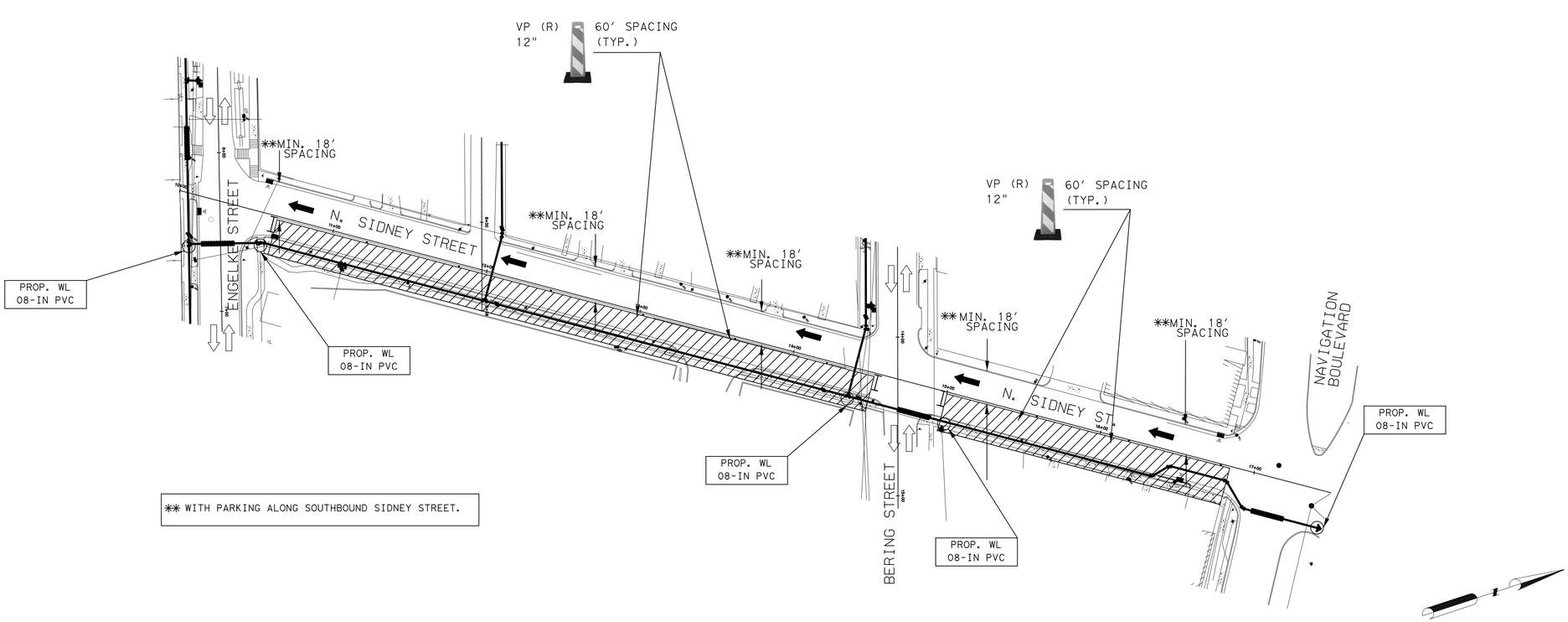
-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT N. SIDNEY STREET. ASSUMED 30 MPH.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE



** WITH PARKING ALONG SOUTHBOUND SIDNEY STREET.

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FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

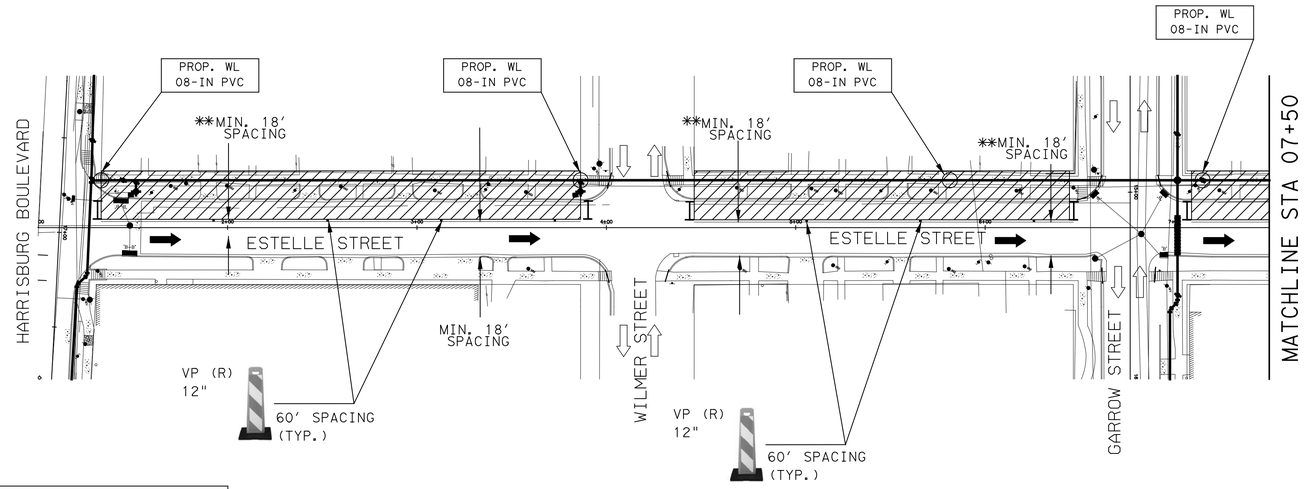
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
N. SIDNEY STREET
STA 01+00 TO 16+84

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 226 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR ESTELLE STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT ESTELLE STREET. ASSUMED 30 MPH.

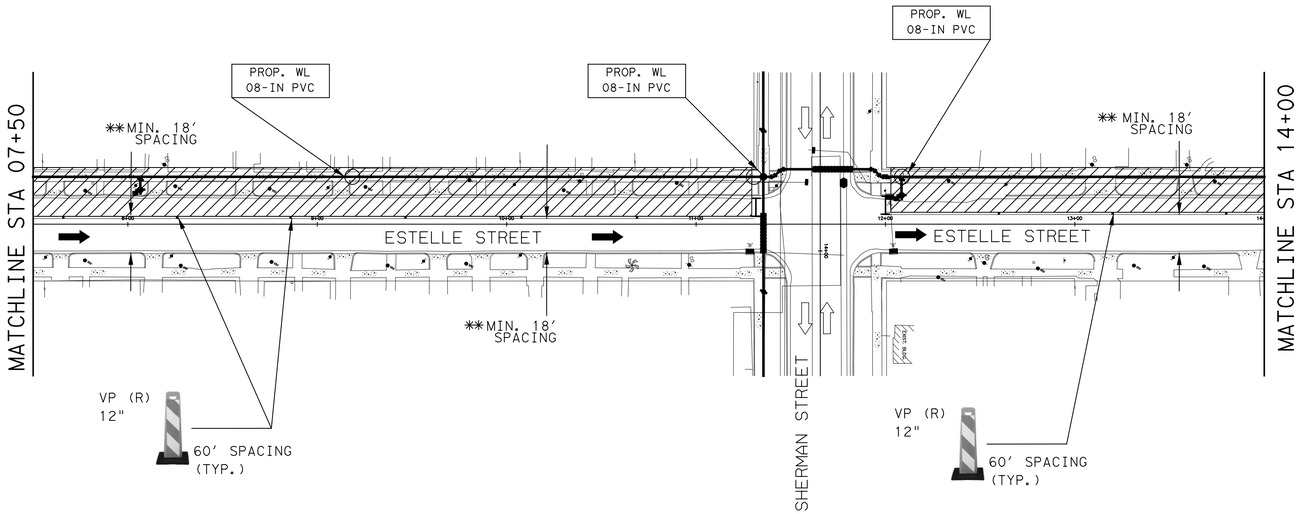
** WITH PARKING ALONG NORTHBOUND ESTELLE STREET.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD CW20-D 36" X 36"	
B	RIGHT LANE CLOSED AHEAD CW-5a (R) 36" X 36"	
C	LEFT LANE CLOSED AHEAD CW-5a (L) 36" X 36"	
D	ROAD CLOSED R11-2 48" X 30"	
E	DO NOT ENTER R5-1 30" X 30"	
F	END ROAD WORK G20-2a 48" X 24"	

APP. | REVISION | NO. | DATE



SCALE IN FEET
40' 80'

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

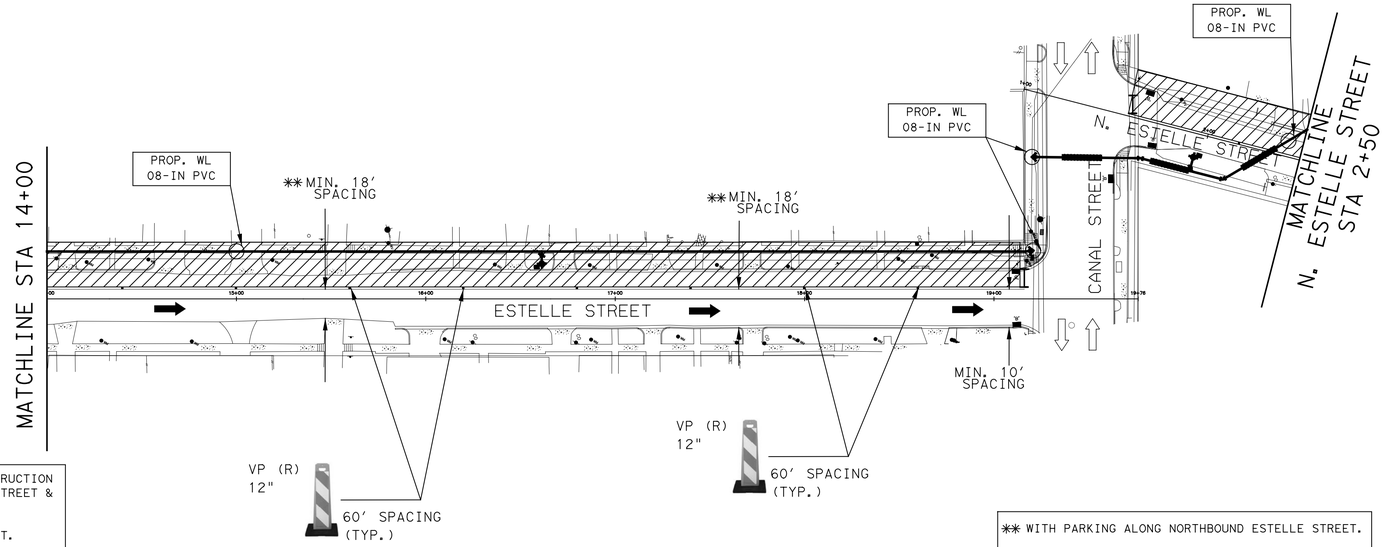
SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
ESTELLE STREET
STA 1+00 TO 14+00

SHEET 1 OF 2

WBS NUMBER
S-000035-0270-4
DRAWING SCALE
AS NOTED
CITY OF HOUSTON PM
NUPUR KRISHNAN, P.E.
SHEET NO. 227 OF 275

FOR CITY OF HOUSTON USE ONLY

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR ESTELLE STREET & N. ESTELLE STREET.

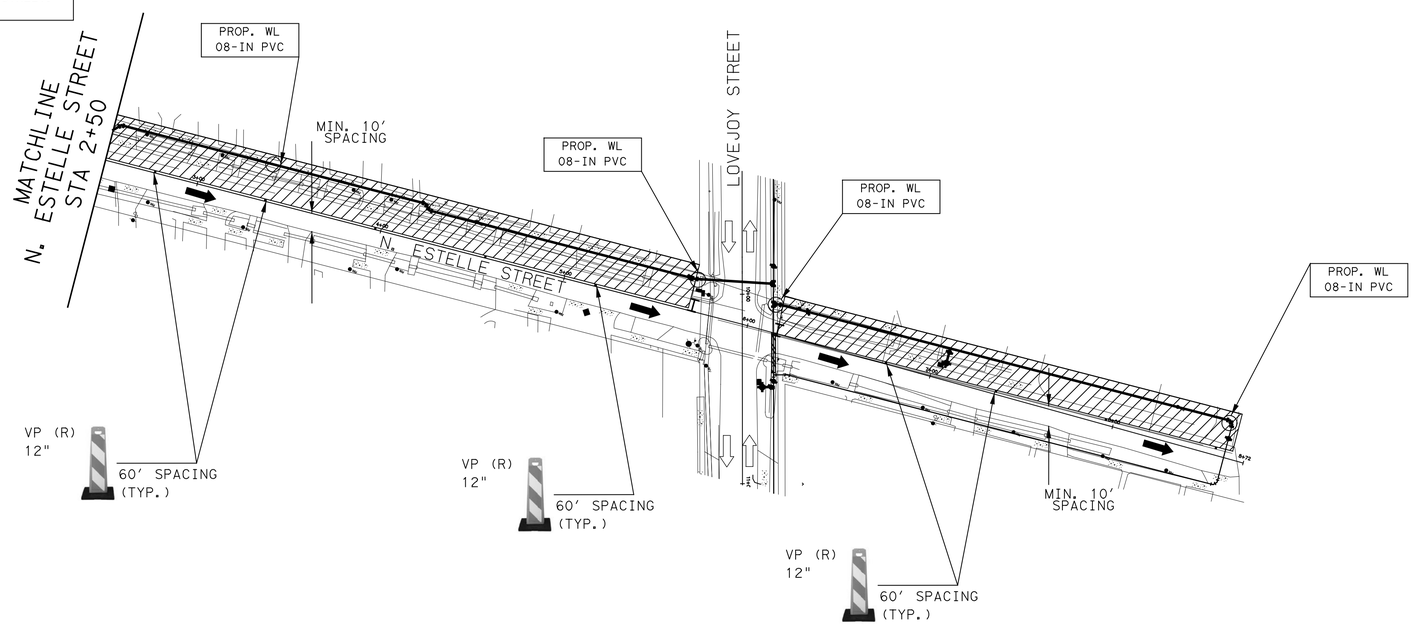
-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT ESTELLE STREET & N. ESTELLE STREET. ASSUMED 30 MPH.

** WITH PARKING ALONG NORTHBOUND ESTELLE STREET.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 Fx
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

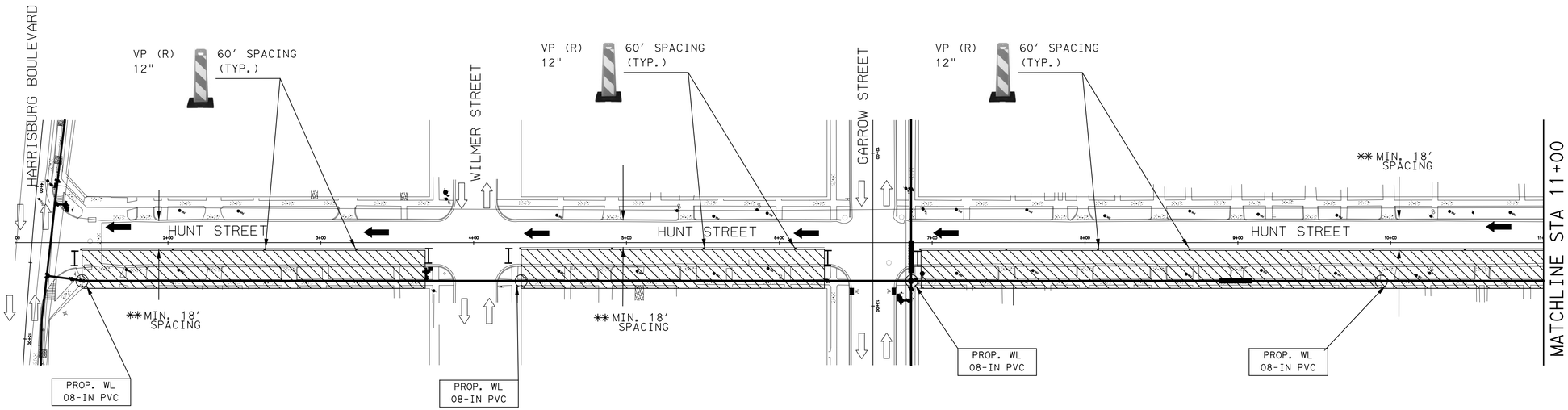
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
ESTELLE STREET STA 14+00 TO
N. ESTELLE STREET STA 08+72
SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 228 OF 275	

90% SUBMITTAL REV



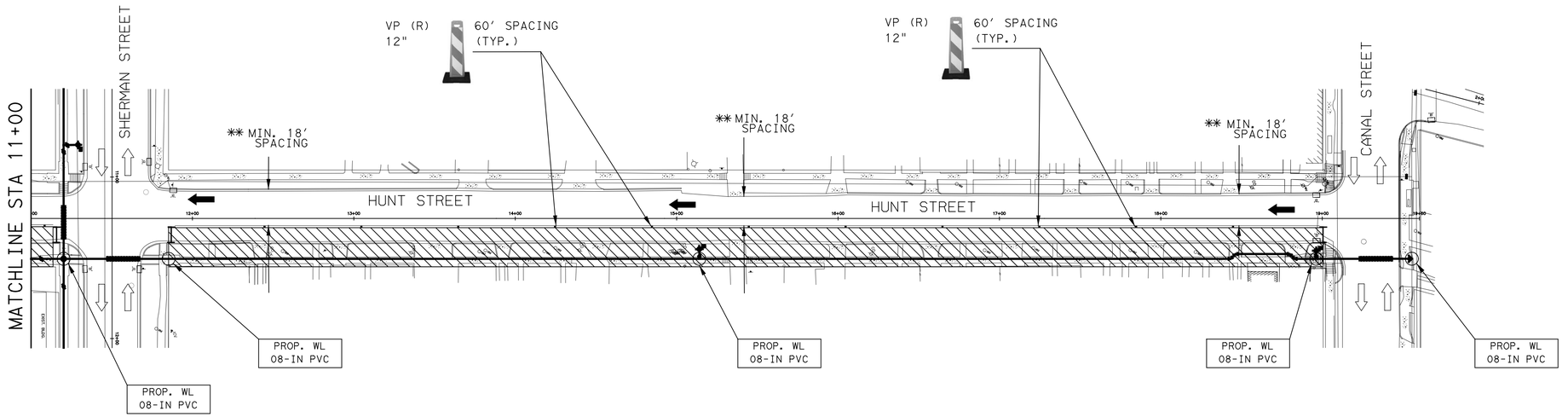
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR HUNT STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT HUNT STREET. ASSUMED 30 MPH.

** WITH PARKING ALONG NORTHBOUND HUNT STREET.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A — ORANGE FLAG (TYPICAL); ROAD WORK AHEAD; CW20-D 36" X 36"

B — RIGHT LANE CLOSED AHEAD; CW-5a (R) 36" X 36"

C — LEFT LANE CLOSED AHEAD; CW-5a (L) 36" X 36"

D — ROAD CLOSED; R11-2 48" X 30"

E — DO NOT ENTER; R5-1 30" X 30"

F — END ROAD WORK; G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

HUNT STREET

STA 1+00 TO 19+60

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 229 OF 275	

90% SUBMITTAL REV

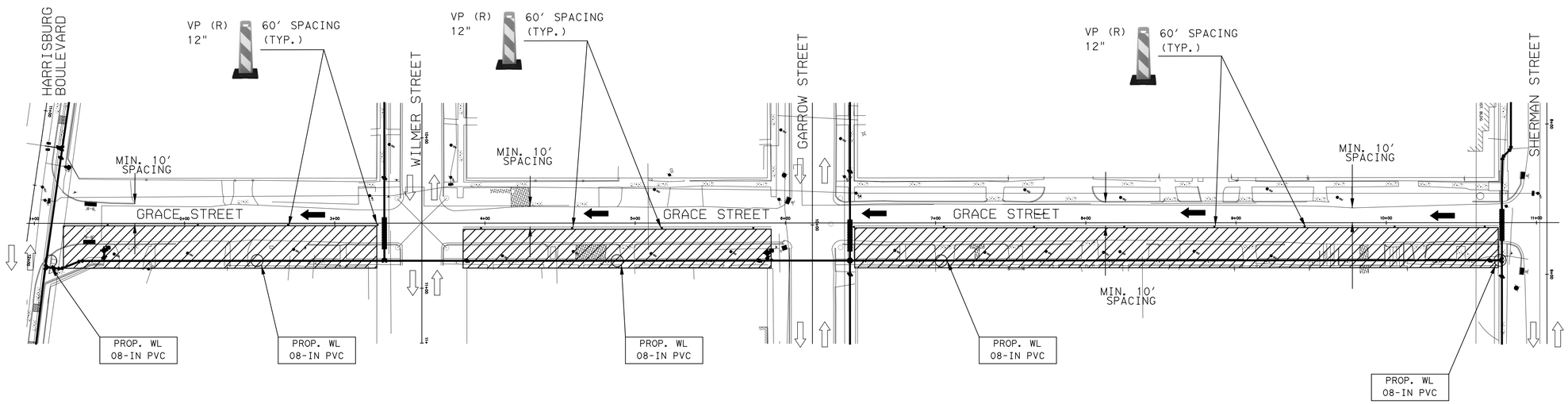
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR GRACE STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT GRACE STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL) ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
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Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

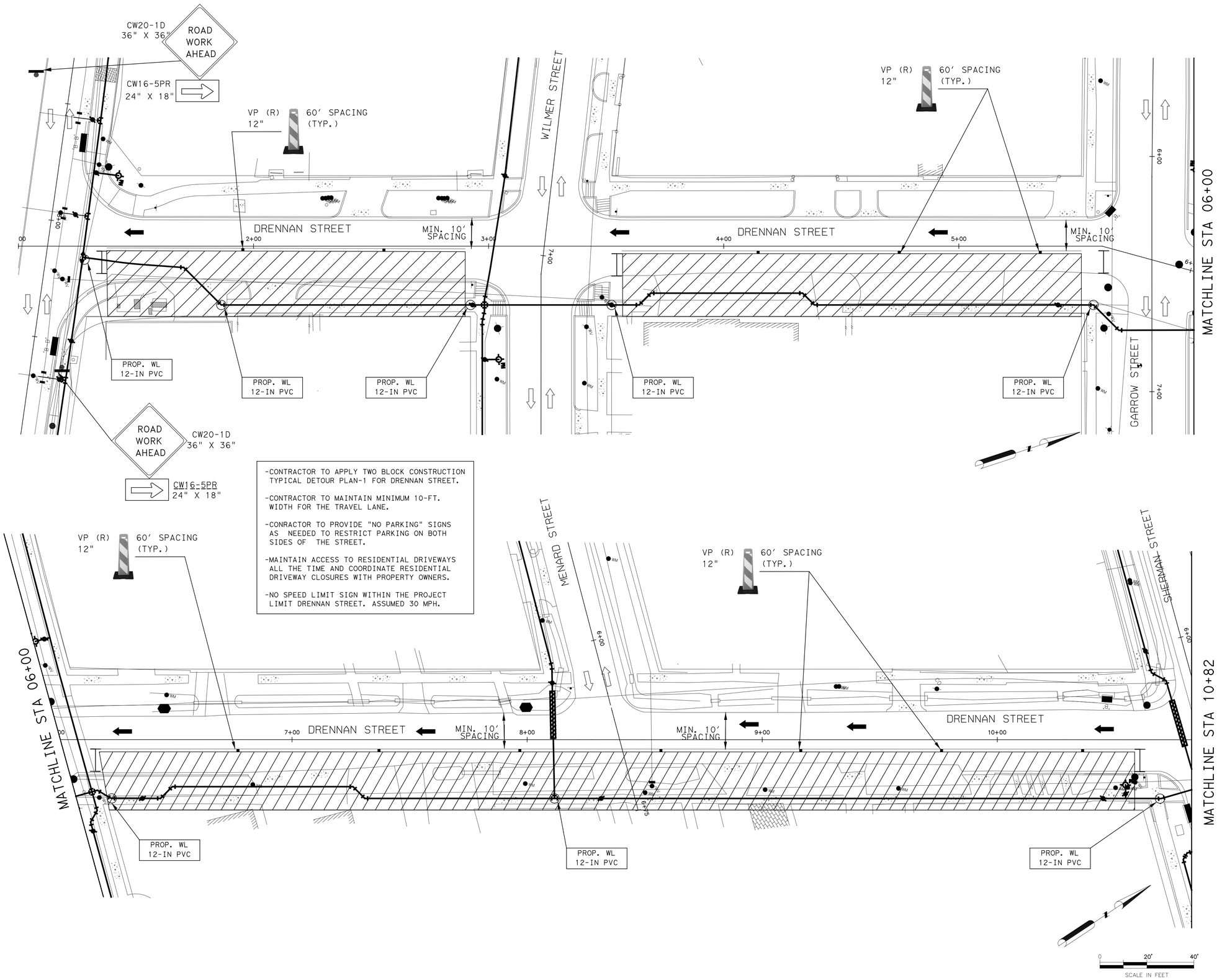
GRACE STREET

STA 1+00 TO 11+00

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 230 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR DRENNAN STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT DRENNAN STREET. ASSUMED 30 MPH.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL)	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

0 20' 40'
SCALE IN FEET

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
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281-206-7495
281-206-7494 FX
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SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

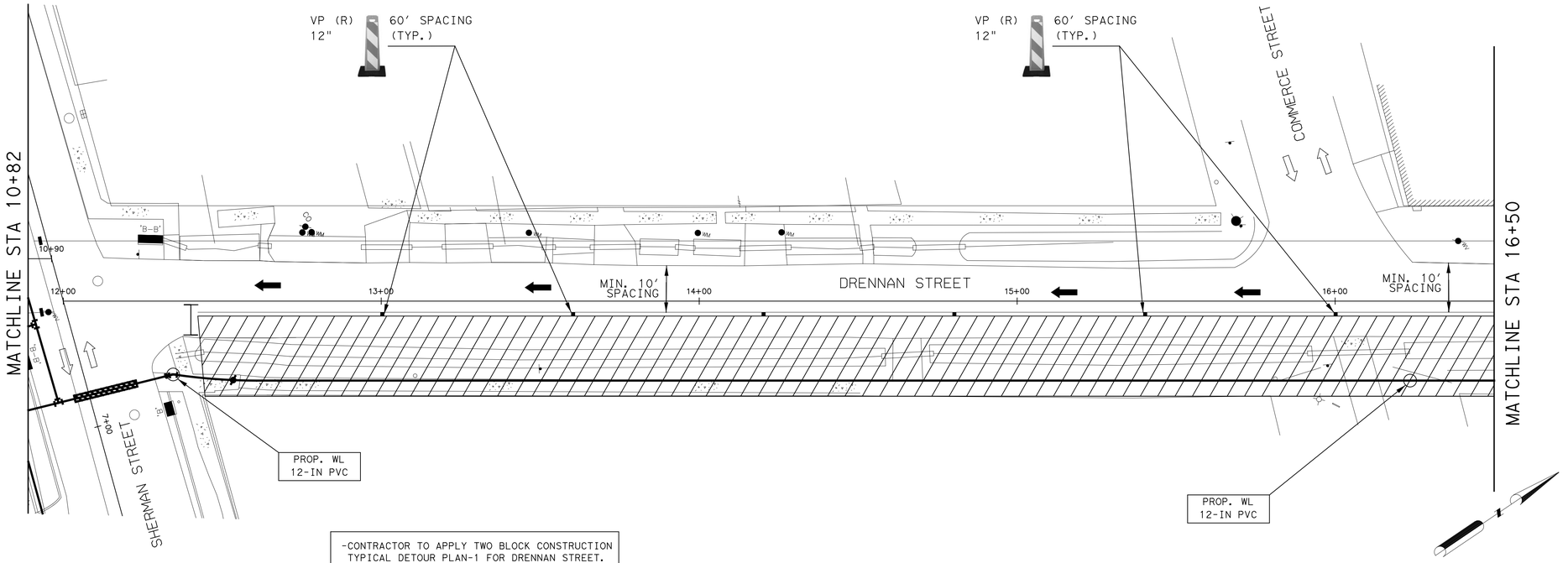
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
DRENNAN STREET
STA 01+00 TO 10+82

SHEET 1 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 231 OF 275	

90% SUBMITTAL REV



-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR DRENNAN STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT DRENNAN STREET. ASSUMED 30 MPH.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A. ORANGE FLAG (TYPICAL)
CW20-D 36" X 36" — ROAD WORK AHEAD

B. RIGHT LANE CLOSED AHEAD
CW-5a (R) 36" X 36"

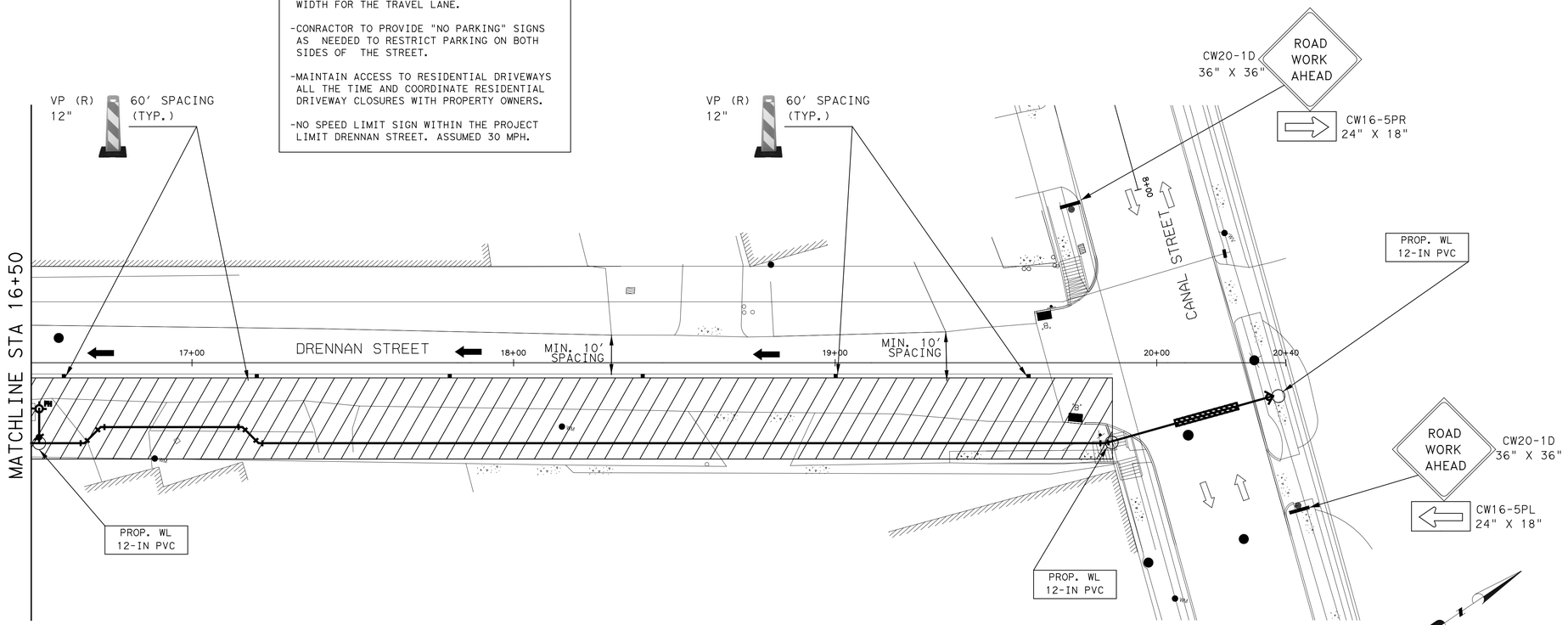
C. LEFT LANE CLOSED AHEAD
CW-5a (L) 36" X 36"

D. ROAD CLOSED
R11-2 48" X 30"

E. DO NOT ENTER
R5-1 30" X 30"

F. END ROAD WORK
G20-2a 48" X 24"

APP. | REVISION | NO. | DATE



Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

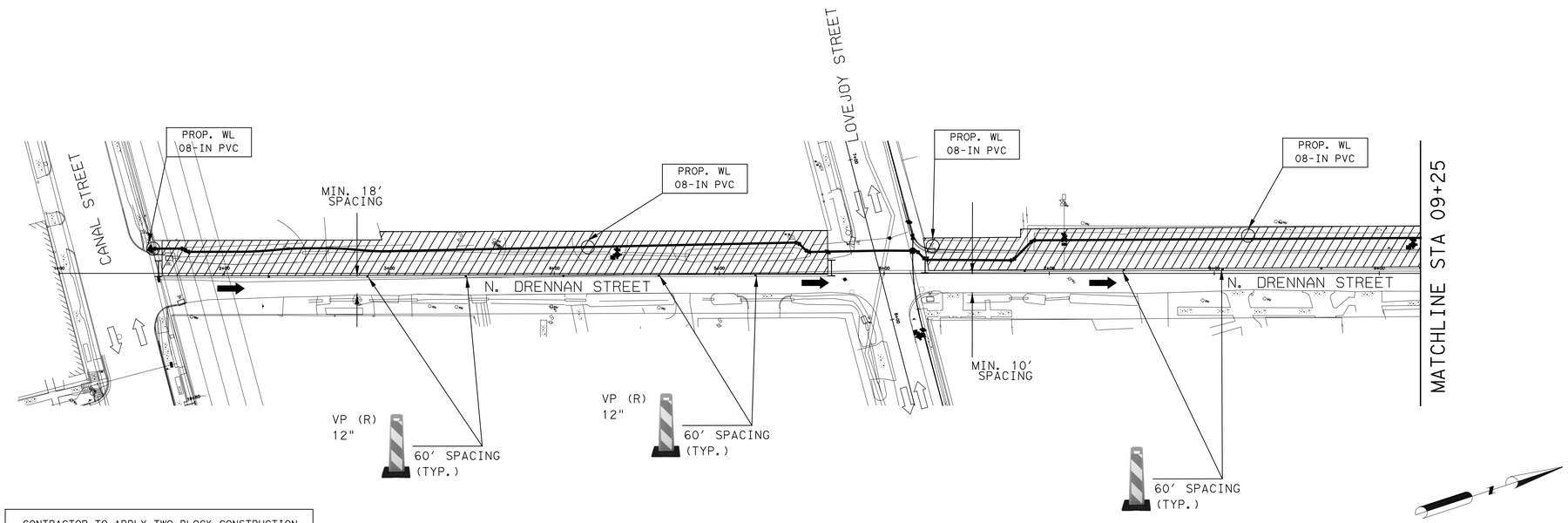
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
DRENNAN STREET
STA 10+82 TO 20+40

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 232 OF 275	

90% SUBMITTAL REV



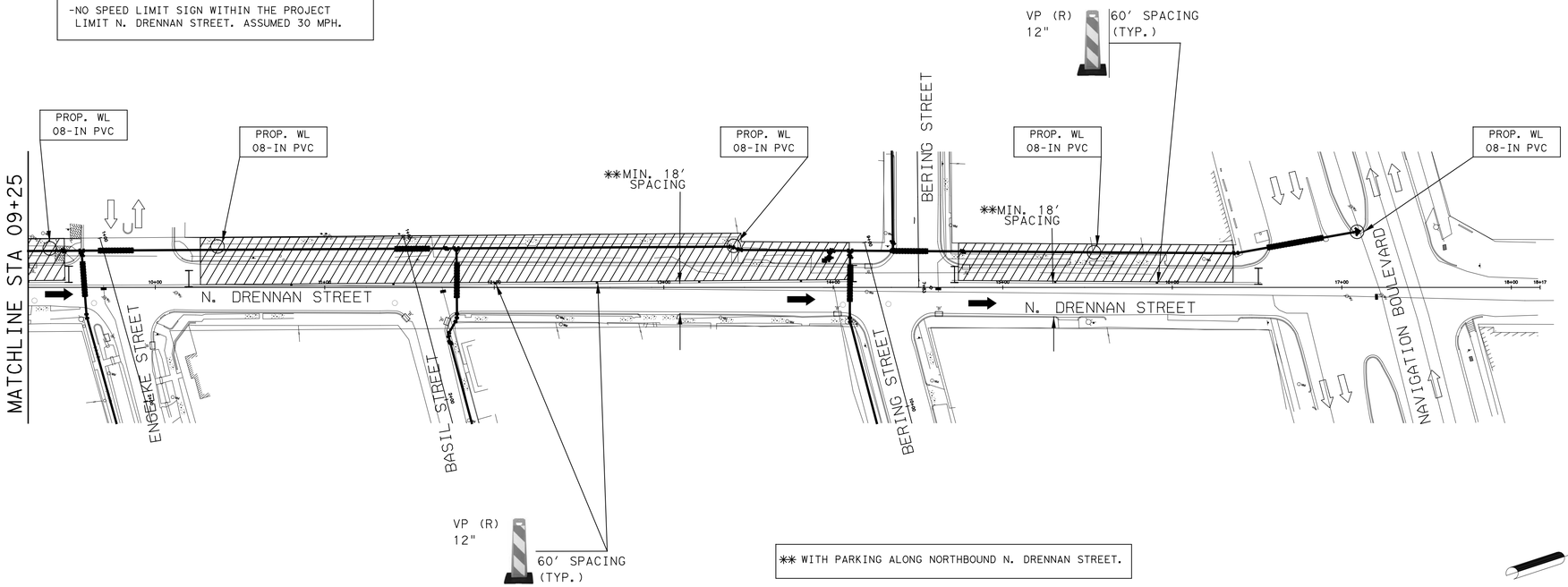
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR N. DRENNAN STREET.

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT N. DRENNAN STREET. ASSUMED 30 MPH.



** WITH PARKING ALONG NORTHBOUND N. DRENNAN STREET.

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A. ORANGE FLAG (TYPICAL)
ROAD WORK AHEAD
CW20-D
36" X 36"

B. RIGHT LANE CLOSED AHEAD
CW-5a (R)
36" X 36"

C. LEFT LANE CLOSED AHEAD
CW-5a (L)
36" X 36"

D. ROAD CLOSED
R11-2
48" X 30"

E. DO NOT ENTER
R5-1
30" X 30"

F. END ROAD WORK
G20-2a
48" X 24"

APP. | REVISION | NO. | DATE

0 40' 80'
SCALE IN FEET

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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

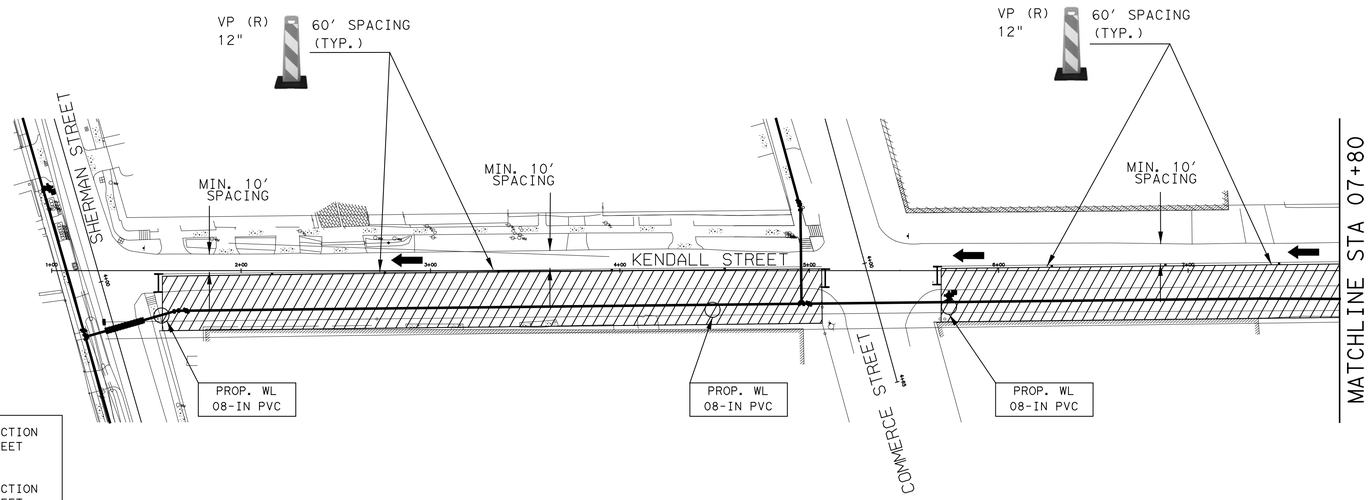
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
N. DRENNAN STREET
STA 01+00 TO 18+37

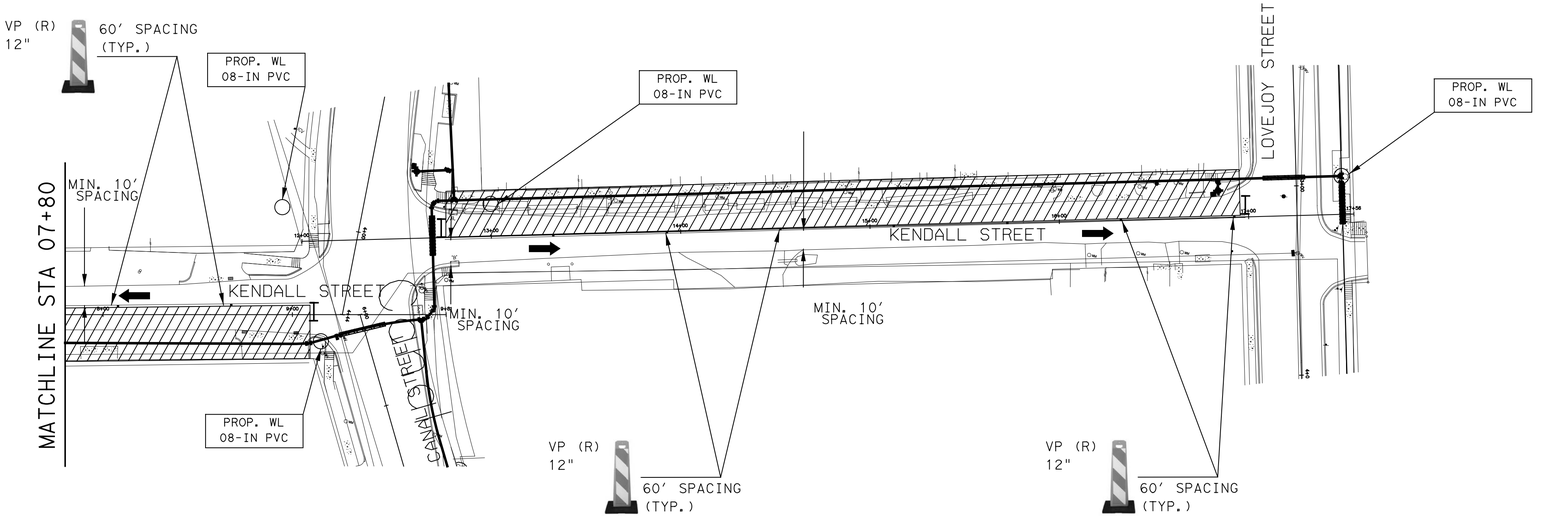
SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 233 OF 275	

90% SUBMITTAL REV



- CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR KENDALL STREET FROM STA 1+00 TO STA 9+50.
- CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-2 FOR KENDALL STREET IN A SEPARATE CONSTRUCTION STEP FROM STA 12+00 TO STA 17+40.
- CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.
- CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.
- MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.
- NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT KENDALL STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A — ORANGE FLAG (TYPICAL); ROAD WORK AHEAD; CW20-D; 36" X 36"

B — RIGHT LANE CLOSED AHEAD; CW-5a (R); 36" X 36"

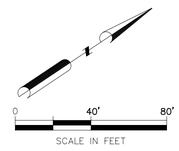
C — LEFT LANE CLOSED AHEAD; CW-5a (L); 36" X 36"

D — ROAD CLOSED; R11-2; 48" X 30"

E — DO NOT ENTER; R5-1; 30" X 30"

F — END ROAD WORK; G20-2a; 48" X 24"

NO.	DATE	REVISION	APP.



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TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
KENDALL STREET
STA 1+00 TO 17+46

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 234 OF 275	

90% SUBMITTAL REV

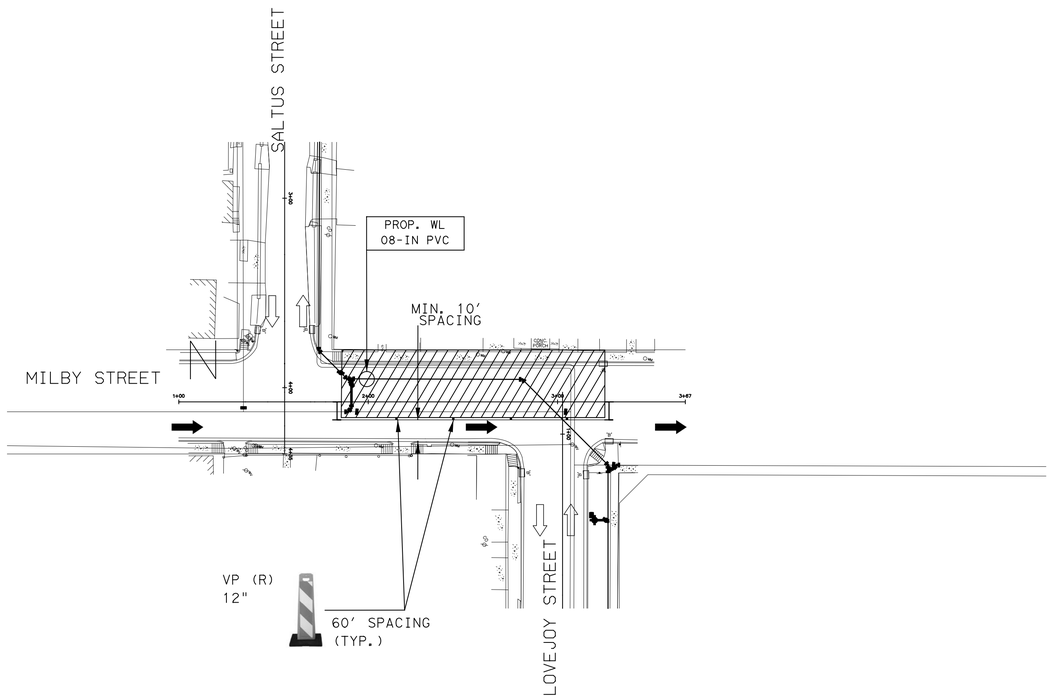
-CONTRACTOR TO APPLY TWO BLOCK CONSTRUCTION TYPICAL DETOUR PLAN-1 FOR MILBY STREET

-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS ALL THE TIME AND COORDINATE RESIDENTIAL DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT MILBY STREET. ASSUMED 30 MPH.



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

(A) ORANGE FLAG (TYPICAL)
ROAD WORK AHEAD
CW20-D
36" X 36"

(B) RIGHT LANE CLOSED AHEAD
CW-5a (R)
36" X 36"

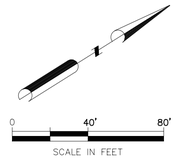
(C) LEFT LANE CLOSED AHEAD
CW-5a (L)
36" X 36"

(D) ROAD CLOSED
R11-2
48" X 30"

(E) DO NOT ENTER
R5-1
30" X 30"

(F) END ROAD WORK
G20-2a
48" X 24"

APP. | NO. | REVISION | DATE



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DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

MILBY STREET

STA 1+00 TO 3+67

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 235 OF 275	

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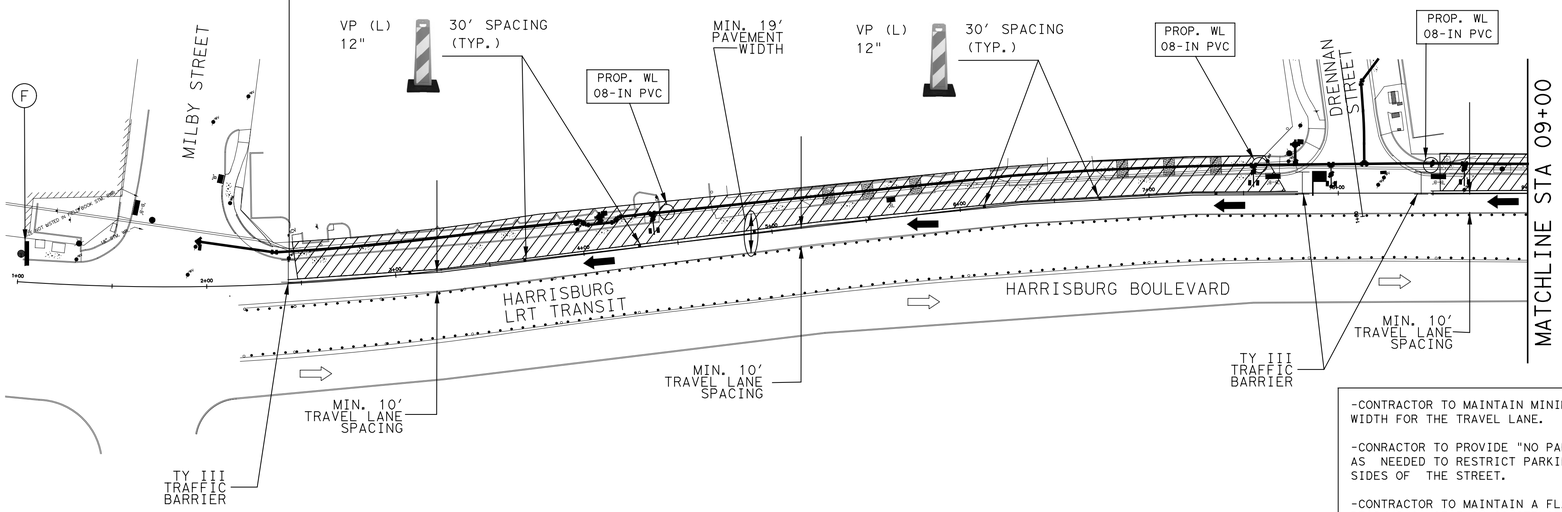
SEGMENT–1

ALONG HARRISBURG BOULVARED
CONTRACTOR SHALL APPLY THE TRAFFIC CONTROL AND CONSTRUCT THE PROPOSED 8-INCH WATERLINE IN TWO BLOCK SEGMENTS AT AT TIME.
SEGMENT-1: STA 2+40 TO STA 11+40



-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-CONTRACTOR TO MAINTAIN A FLAGGER AT THE BEGINNING OF EACH CONSTRUCTION ZONE DURING THE CONSTRUCTION PERIOD.

-MAINTAIN ACCESS TO DRIVEWAYS ALL THE TIME AND COORDINATE DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT HARRISBURG BOULEVARD. ASSUMED 30 MPH.

-NO VERTICAL PANELS PLACED IN FRONT OF DRIVEWAYS

TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- (#) TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

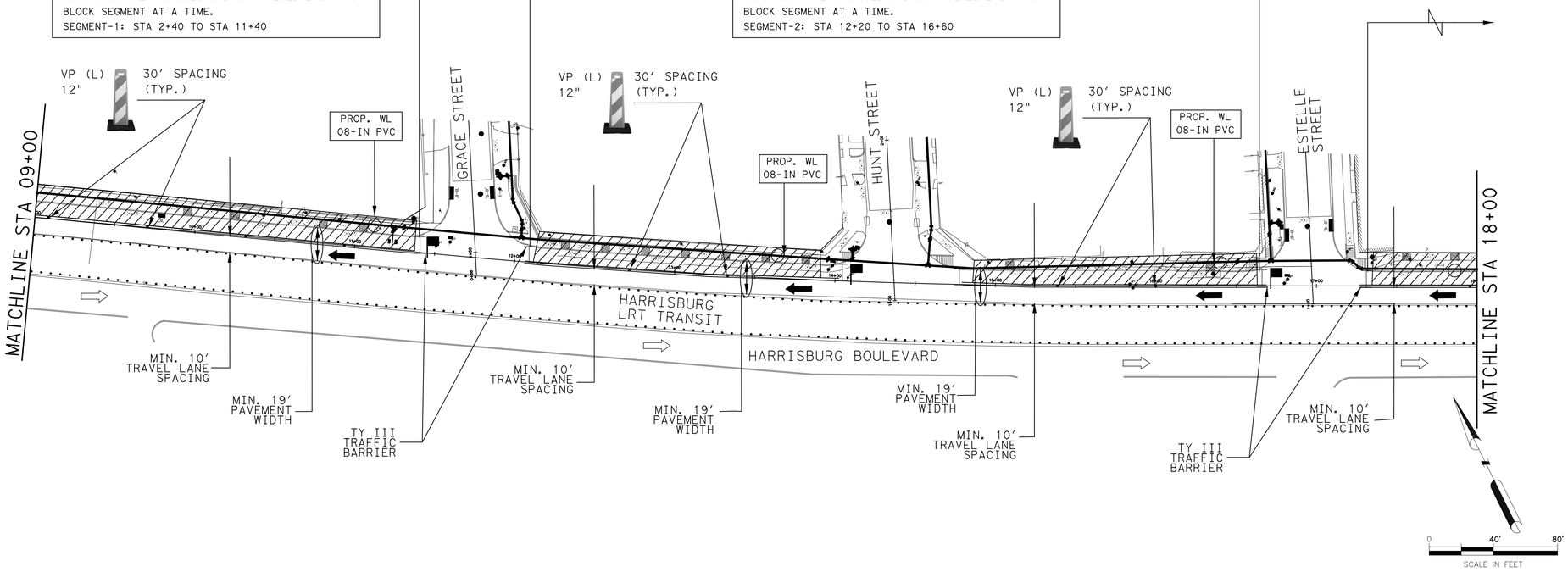
		APP.
A	ORANGE FLAG (TYPICAL); ROAD WORK AHEAD; CW20-D 36" X 36"	REVISION
B	RIGHT LANE CLOSED AHEAD; CW-5a (R) 36" X 36"	NO. DATE
C	LEFT LANE CLOSED AHEAD; CW-5a (L) 36" X 36"	
D	ROAD CLOSED; R11-2 48" X 30"	
E	DO NOT ENTER; R5-1 30" X 30"	
F	END ROAD WORK; G20-2a 48" X 24"	

SEGMENT–1

ALONG HARRISBURG BOULVARED
CONTRACTOR SHALL APPLY THE TRAFFIC CONTROL AND CONSTRUCT THE PROPOSED 8-INCH WATERLINE IN TWO BLOCK SEGMENT AT A TIME.
SEGMENT-1: STA 2+40 TO STA 11+40

SEGMENT–2

ALONG HARRISBURG BOULVARED
CONTRACTOR SHALL APPLY THE TRAFFIC CONTROL AND CONSTRUCT THE PROPOSED 8-INCH WATERLINE IN TWO BLOCK SEGMENT AT A TIME.
SEGMENT-2: STA 12+20 TO STA 16+60



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DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
HARRISBURG BOULEVARD
STA 1+00 TO 18+00

SHEET 1 OF 2

WBS NUMBER
S-000035-0270-4
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AS NOTED
CITY OF HOUSTON PM
NUPUR KRISHNAN, P.E.
SHEET NO. 236 OF 275

FOR CITY OF HOUSTON USE ONLY

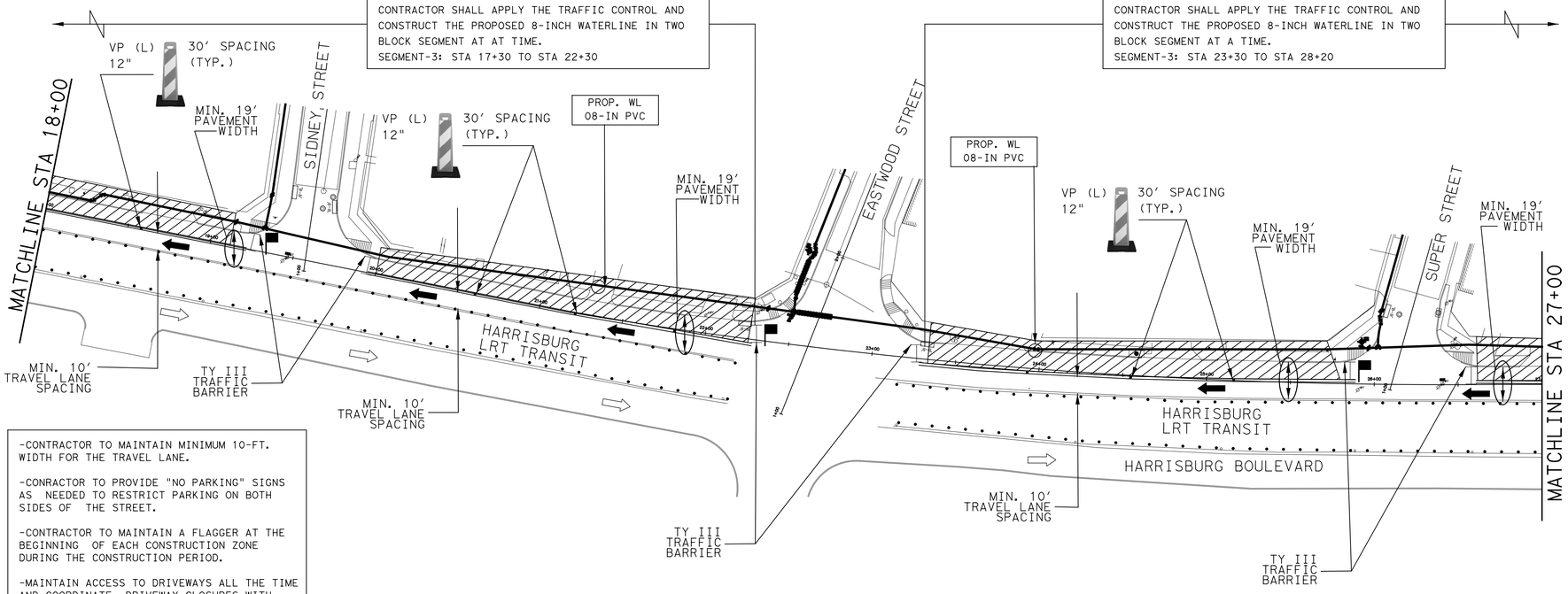
90% SUBMITTAL REV

SEGMENT–3

ALONG HARRISBURG BOULVARED
CONTRACTOR SHALL APPLY THE TRAFFIC CONTROL AND CONSTRUCT THE PROPOSED 8-INCH WATERLINE IN TWO BLOCK SEGMENT AT AT TIME.
SEGMENT-3: STA 17+30 TO STA 22+30

SEGMENT–4

ALONG HARRISBURG BOULVARED
CONTRACTOR SHALL APPLY THE TRAFFIC CONTROL AND CONSTRUCT THE PROPOSED 8-INCH WATERLINE IN TWO BLOCK SEGMENT AT A TIME.
SEGMENT-3: STA 23+30 TO STA 28+20



-CONTRACTOR TO MAINTAIN MINIMUM 10-FT. WIDTH FOR THE TRAVEL LANE.

-CONRACTOR TO PROVIDE "NO PARKING" SIGNS AS NEEDED TO RESTRICT PARKING ON BOTH SIDES OF THE STREET.

-CONTRACTOR TO MAINTAIN A FLAGGER AT THE BEGINNING OF EACH CONSTRUCTION ZONE DURING THE CONSTRUCTION PERIOD.

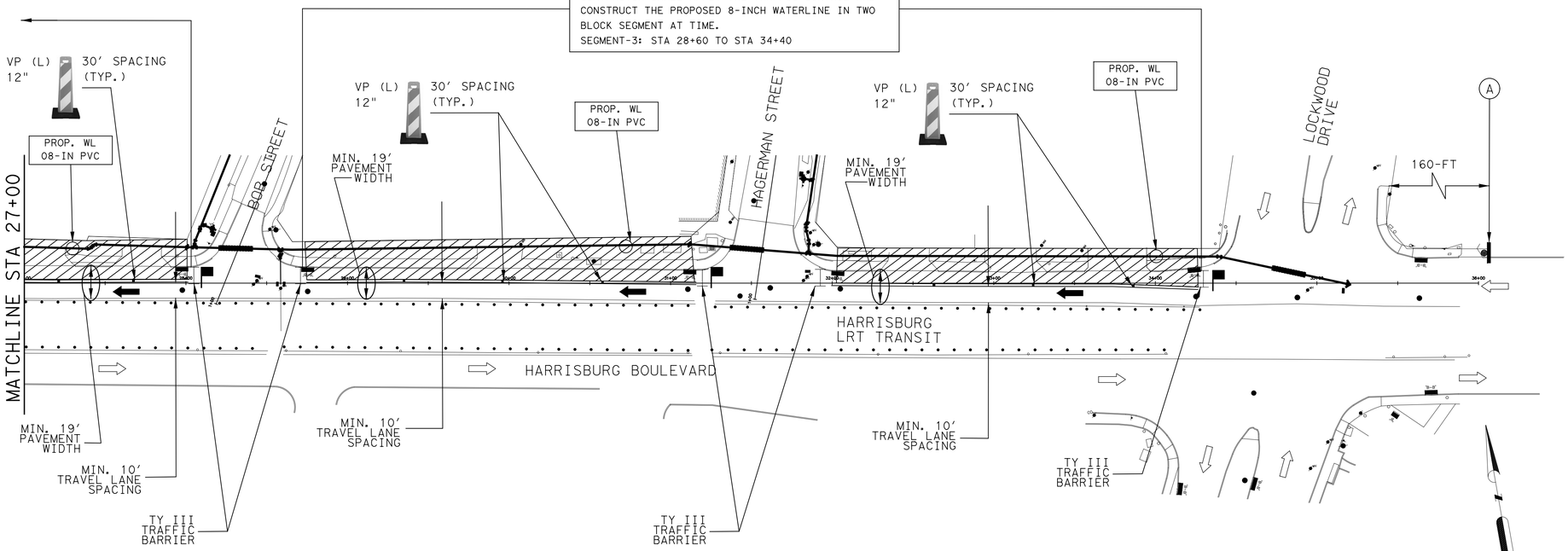
-MAINTAIN ACCESS TO DRIVEWAYS ALL THE TIME AND COORDINATE DRIVEWAY CLOSURES WITH PROPERTY OWNERS.

-NO SPEED LIMIT SIGN WITHIN THE PROJECT LIMIT HARRISBURG BOULEVARD. ASSUMED 30 MPH.

-NO VERTICAL PANELS PLACED IN FRONT OF DRIVEWAYS

SEGMENT–5

ALONG HARRISBURG BOULVARED
CONTRACTOR SHALL APPLY THE TRAFFIC CONTROL AND CONSTRUCT THE PROPOSED 8-INCH WATERLINE IN TWO BLOCK SEGMENT AT TIME.
SEGMENT-3: STA 28+60 TO STA 34+40



TCP LEGEND:

- CONSTRUCTION AREA
- TY III TRAFFIC BARRIER
- TEMP. GROUND MOUNTED SIGNS
- PLASTIC DRUM
- VERTICAL PANEL (12")
- TREFFIC DELINEATROR (36")
- FLASHING ARROW PANEL
- CERTIFIED FLAGGER/ OFF-DUTY OFFICER
- EXISTING DIRECTION OF TRAVEL
- PROPOSED DIRECTION OF TRAVEL

A	ORANGE FLAG (TYPICAL)	
	ROAD WORK AHEAD	CW20-D 36" X 36"
B	RIGHT LANE CLOSED AHEAD	CW-5a (R) 36" X 36"
C	LEFT LANE CLOSED AHEAD	CW-5a (L) 36" X 36"
D	ROAD CLOSED	R11-2 48" X 30"
E	DO NOT ENTER	R5-1 30" X 30"
F	END ROAD WORK	G20-2a 48" X 24"

APP. | REVISION | NO. | DATE

Progressive Traffic & Transportation
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
HARRISBURG BOULEVARD
STA 18+00 TO 36+00

SHEET 2 OF 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 237 OF 275	

90% SUBMITTAL REV

GENERAL NOTES

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL 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. 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.
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.

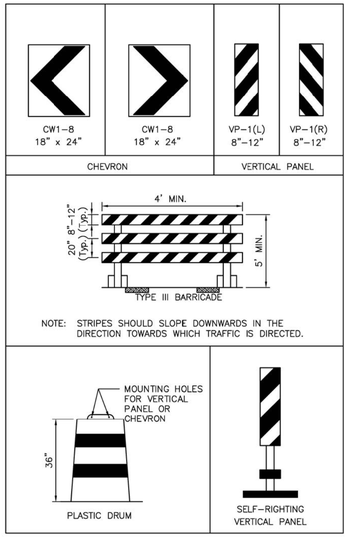
J. SPACING MAY BE ADJUSTED TO PROVIDE DRIVEWAYS, INTERSECTIONS AND /OR MEDIAN OPENINGS.

TABLE C3 – TYPICAL SIGN SPACING, TAPER LENGTHS, AND SUGGESTED SPACING OF CHANNELIZATION DEVICES

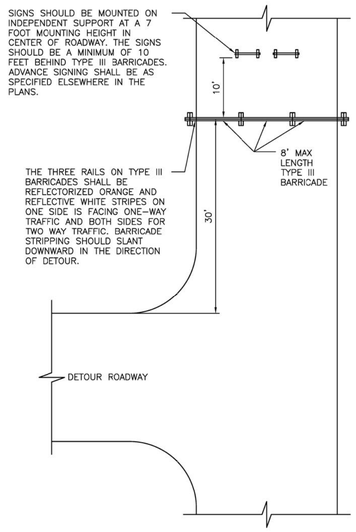
POSTED SPEED (MPH)	SIGN SPACING "X" (FEET)	MIN. DESIRABLE TAPER LENGTH "L"			SUGGESTED MAXIMUM SPACING OF DEVICE	
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT
30	120'	150'	165'	180'	30'	60'–75'
35	160'	205'	225'	245'	35'	70'–90'
40	240'	265'	295'	320'	40'	80'–100'
45	320'	450'	495'	540'	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



CHANNELIZATION AND BARRICADES



PLAN VIEW
TYPE III BARRICADE (POST AND SKID)
TYPICAL APPLICATION

LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

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DocuSigned by: Sukait Kanwar 9EF880C61F5478...	DocuSigned by: KHANG NGUYEN 95A29EF0A75B4CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock A2EC43B7D5A843...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 01555–01

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP NOTES CHANNELIZING DEVICES AND BARRICADES

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Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
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281–206–7495
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TX P.E. NO. 89333
DATE: 07/28/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN
TYPICAL STANDARD DETAILS

SHEET 1 OF 12

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SHEET NO. 238A OF 275	

NO.	DATE	REVISION	APP.

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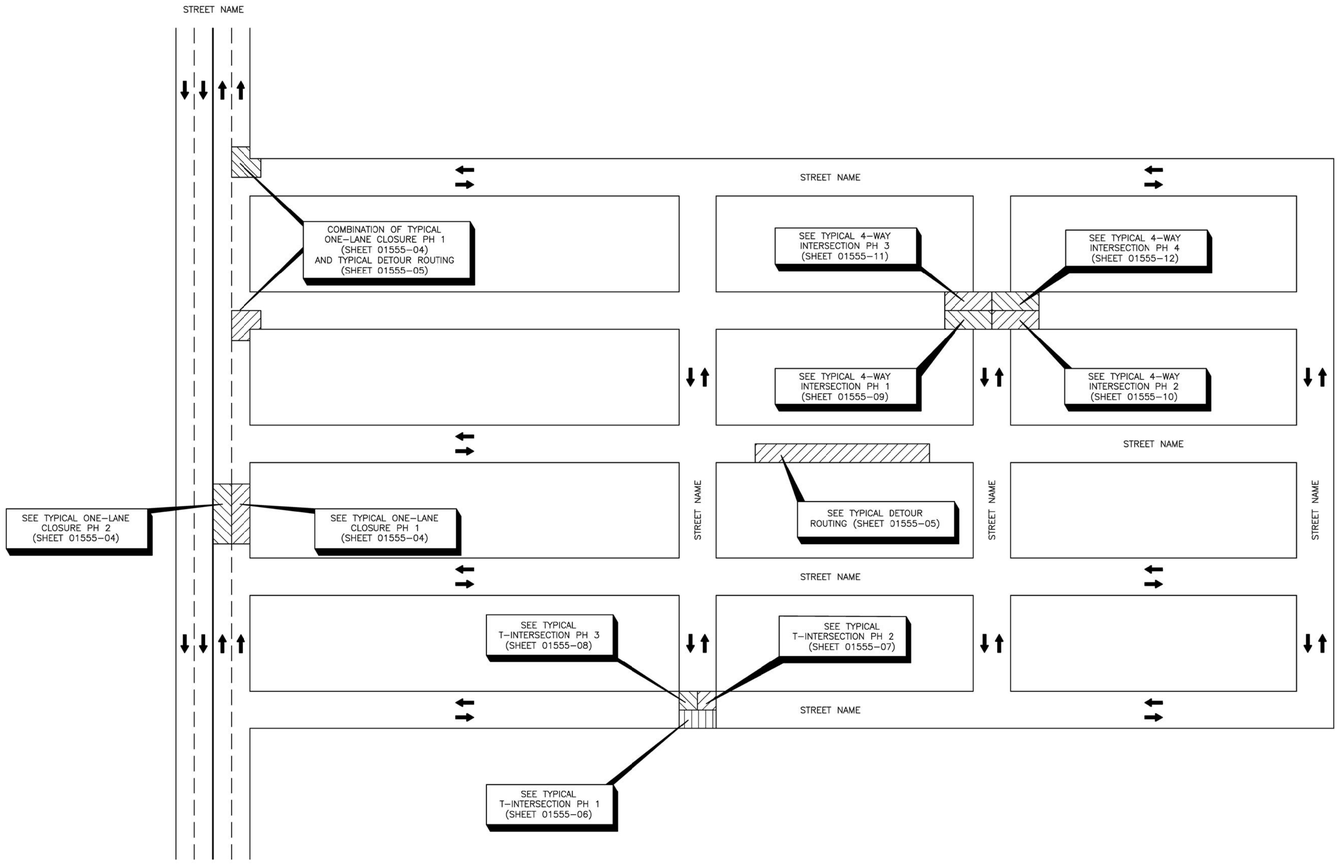

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CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carol Haddock 4B5C21187E9A4A...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-02

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP OVERALL TRAFFIC CONTROL LAYOUT

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TX P.E. NO. 89333

DATE: 07/28/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

TYPICAL STANDARD DETAILS

SHEET 2 OF 12

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NUPUR KRISHNAN, P.E.	
SHEET NO. 238B OF 275	

NO.	DATE	REVISION	APP.

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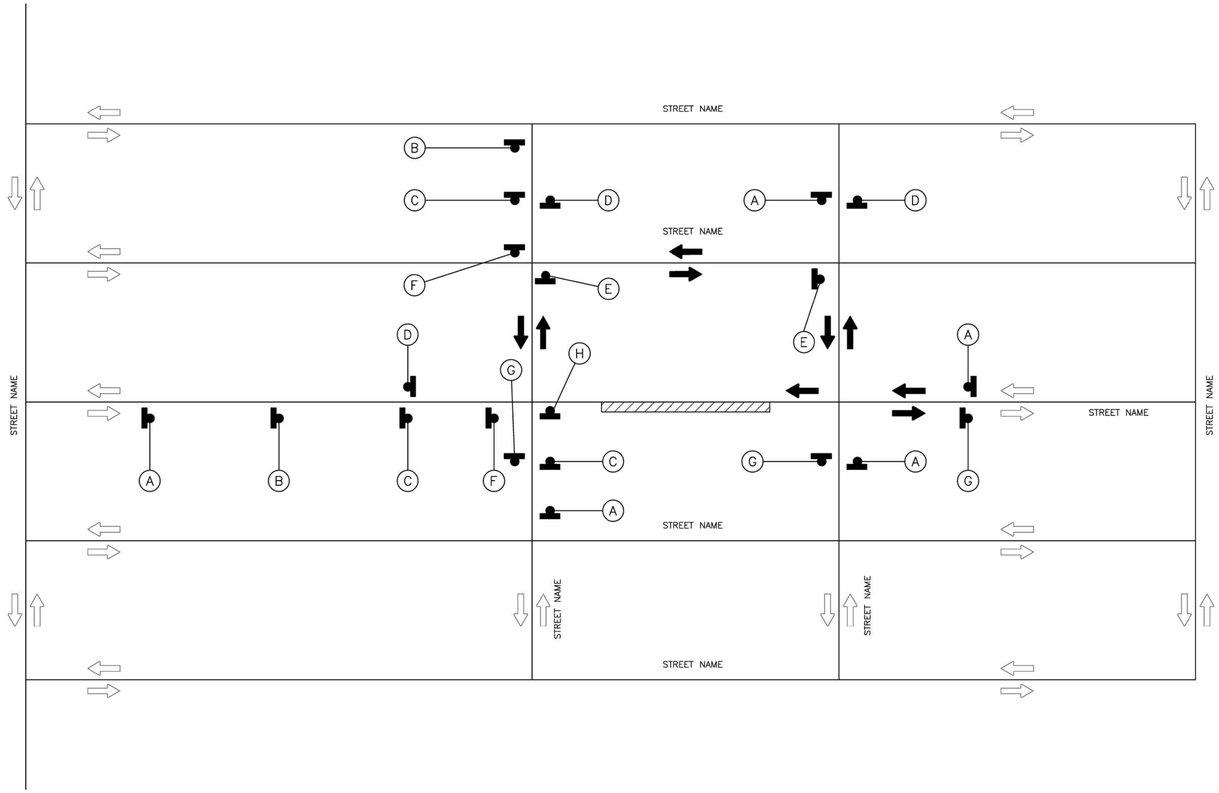
NO.	DATE	REVISION	APP.

A	B	C	D	E	F	G	H
ROAD WORK AHEAD	ROAD CLOSED AHEAD	DETOUR AHEAD	END ROAD WORK	STREET NAME DETOUR →	STREET NAME DETOUR ←	END DETOUR	STREET NAME DETOUR ↑
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

APPROVED BY: (DocuSigned by: Sudat Kanwar 9EF8B0064F5478...) CITY ENGINEER	APPROVED BY: (DocuSigned by: Lisong Nguyen 95A29EFDA758400...) CITY TRAFFIC ENGINEER
APPROVED BY: (DocuSigned by: Carl Haddock A82C4158183E4A5...) DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-03

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TRAFFIC CONTROL LAYOUT

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TX P.E. NO. 89333

DATE: 07/28/2025
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN

TYPICAL STANDARD DETAILS

SHEET 3 OF 12

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CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238C OF 275	

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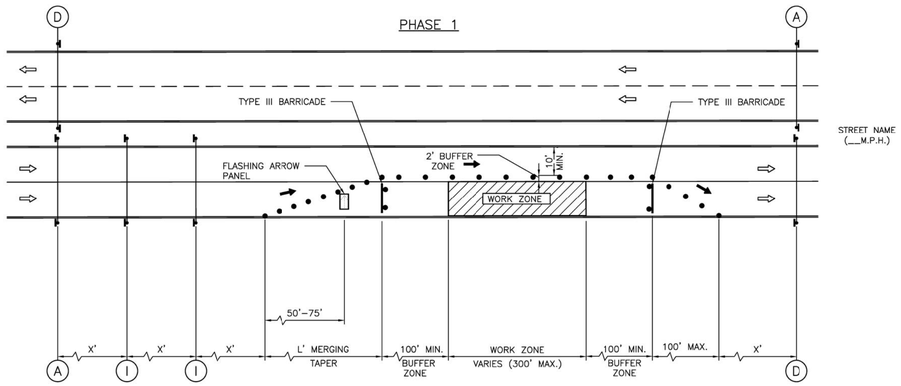
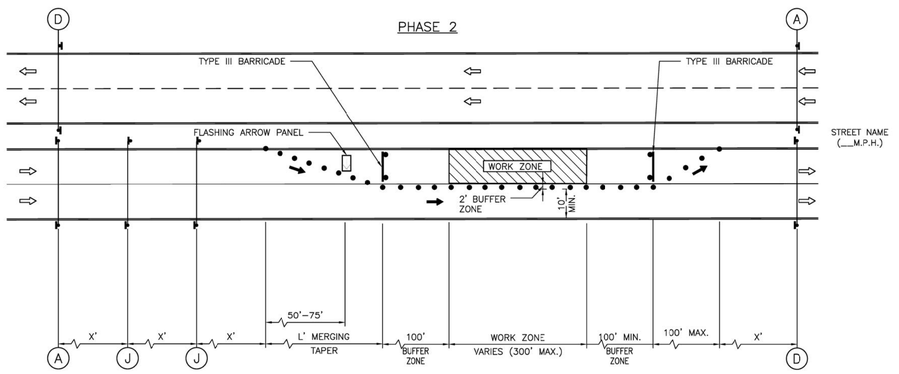
A	D	I	J
ROAD WORK AHEAD	END ROAD WORK	RIGHT LANE CLOSED	LEFT LANE CLOSED
CW20-1	G20-2	AHEAD CW20-5(2) CW16-3	AHEAD CW20-5(1) CW16-3





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.

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DocuSigned by: Sulait Kauswar	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: 01555-04

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP ONE LANE CLOSURE
PHASE 1 & 2

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TX P.E. NO. 89333

DATE: 07/28/2025
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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN

TYPICAL STANDARD DETAILS

SHEET 4 OF 12

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CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238D OF 275	

APP.	REVISION	NO. DATE

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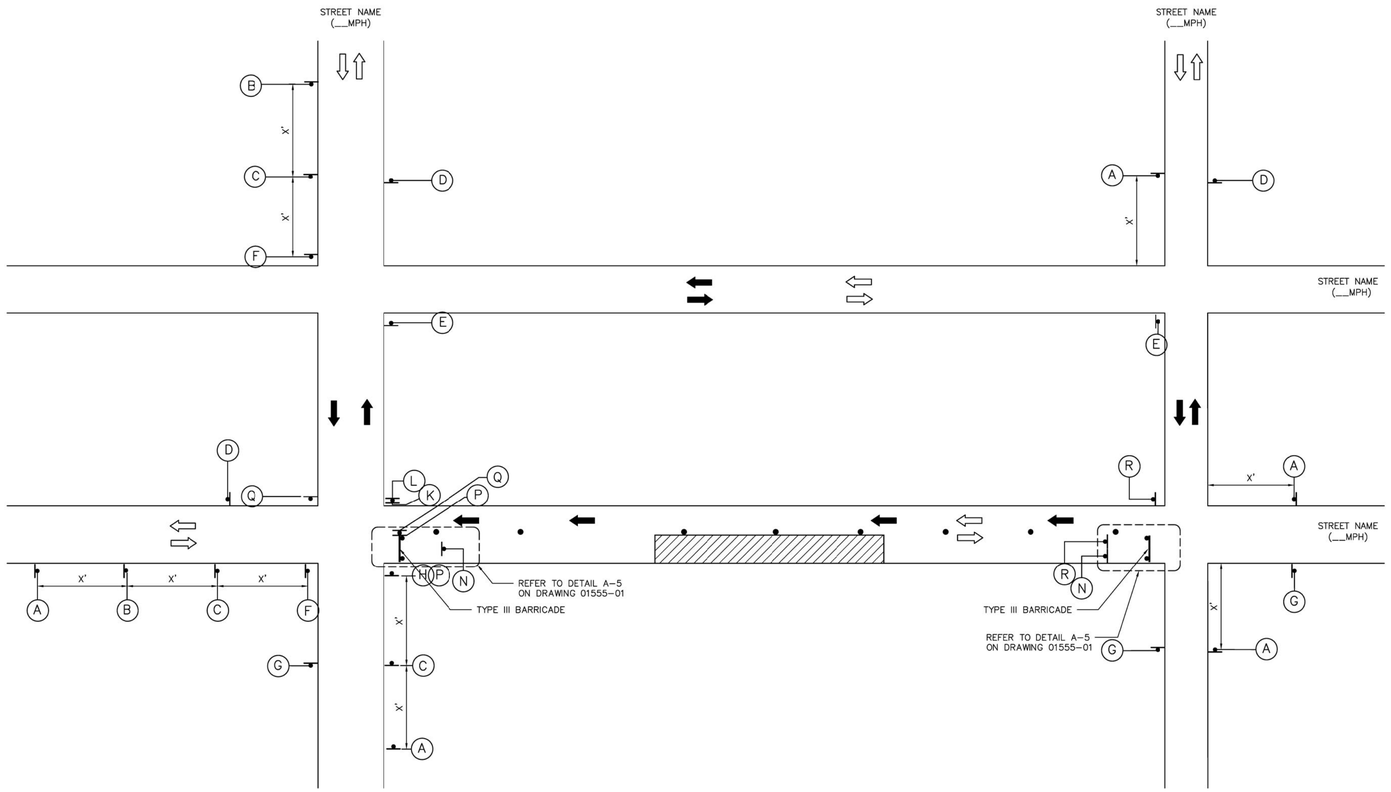
NO.	DATE	REVISION	APP.

A	B	C	D	E	F	G	H	I	J
ROAD WORK AHEAD CW20-1	ROAD CLOSED AHEAD CW20-3	DETOUR AHEAD CW20-2	END ROAD WORK G20-2	STREET NAME DETOUR → M4-9R	STREET NAME DETOUR ← M4-9L	END DETOUR M4-8a	STREET NAME DETOUR ↑ M4-9T	RIGHT LANE CLOSED AHEAD CW20-5(2) CW16-3	LEFT LANE CLOSED AHEAD CW20-5(1) CW16-3

K	L	M	N	O	P	Q	R
ONE WAY ← R6-2(L)	ONE WAY → R6-2(R)	DO NOT ENTER R5-1	ROAD CLOSED R11-2	DETOUR ↓ M4-10(L)	 R3-1	 R3-2	BEGIN ONE WAY R6-6



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. A 10' MINIMUM LANE WIDTH FOR EMERGENCY SHALL BE MADE AVAILABLE AND MAINTAINED BY THE CONTRACTOR AT ALL TIMES.
2. FOR DIMENSIONS REFER TO SHEET 01555-01.
3. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.

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DocuSigned by: Sukai 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: 01555-05

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL DETOUR ROUTING WITH ONE LANE CLOSURE (ONE BLOCK)

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN

TYPICAL STANDARD DETAILS

SHEET 5 OF 12

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238E OF 275	

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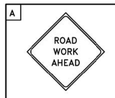					
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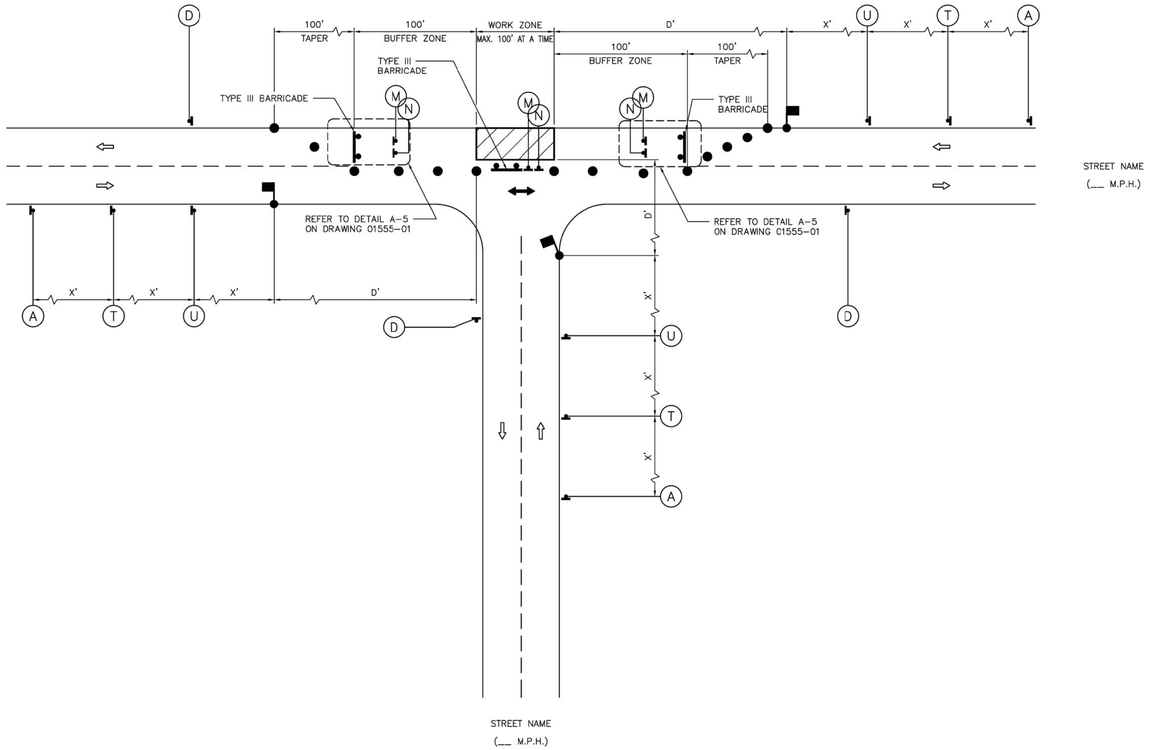

LEGEND:

- 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.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulaal Rauwar 9EF8B0C841F5476...	DocuSigned by: LONG NGUYEN 55A26EFCA75B4CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock A3CA1497E0A4...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-06

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A T-INTERSECTION PHASE 1 OF 3

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TX P.E. NO. 89333

DATE: 07/28/2025

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

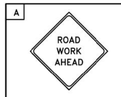
TYPICAL STANDARD DETAILS

SHEET 6 OF 12

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238F OF 275	

NO.	DATE	REVISION	APP.

90% SUBMITTAL REV

A	T	U	D	M	N
					
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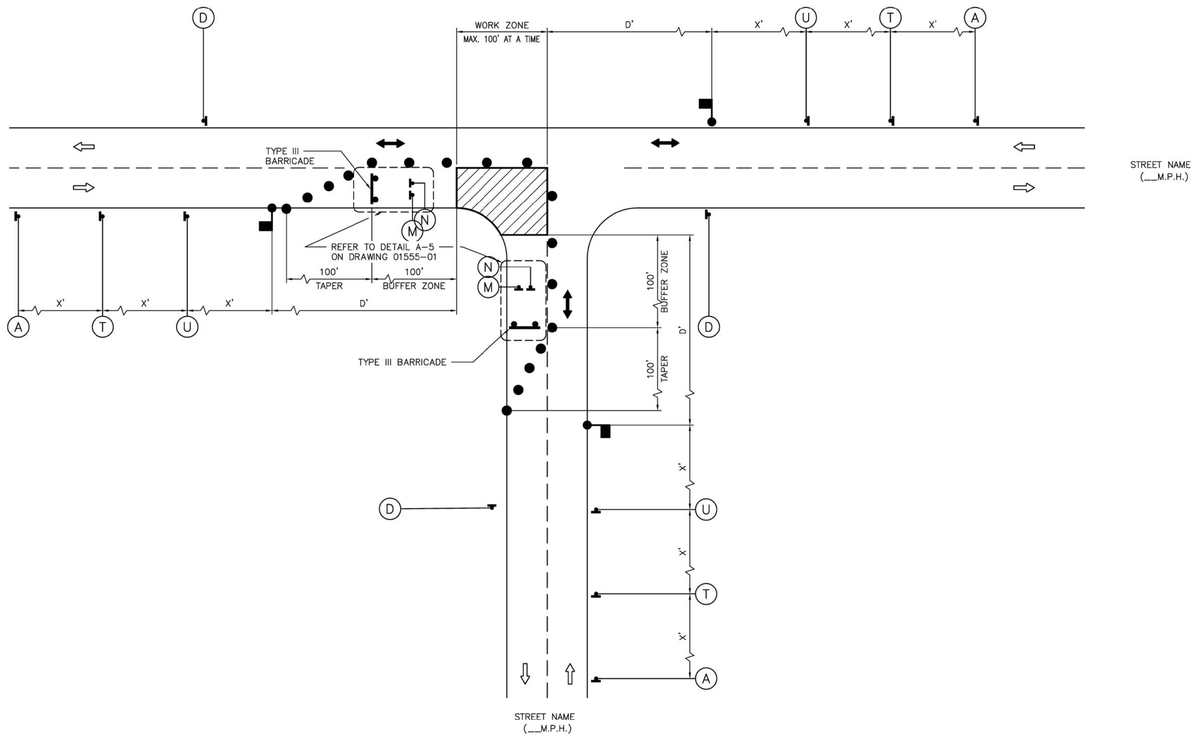

LEGEND:

- 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.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukait Kassaye 8EF8B0C841F5479...	DocuSigned by: Hailing Nguyen 95A26EFCA75B4CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock 4E0C4158FDE04E6...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-07

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A T-INTERSECTION PHASE 2 OF 3

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

NO.	DATE	REVISION	APP.

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333
DATE: 07/28/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

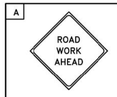
SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN

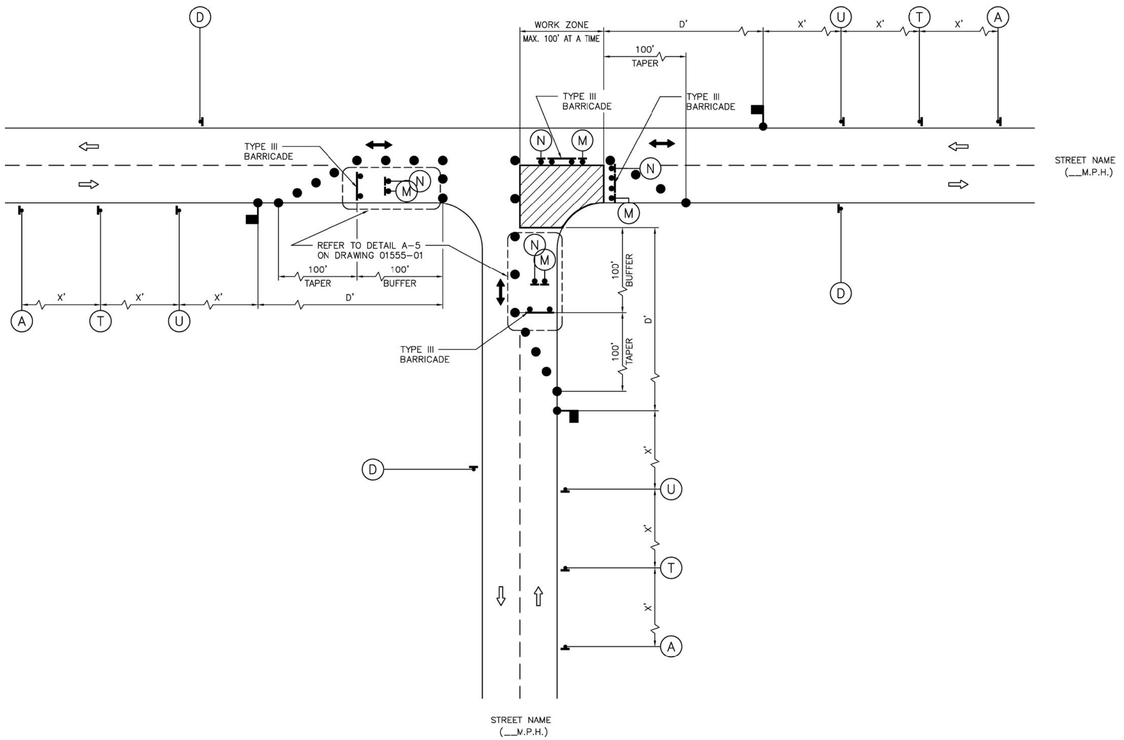
TYPICAL STANDARD DETAILS

SHEET 7 OF 12

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238G OF 275	

90% SUBMITTAL REV

A	T	U	D	M	N
					
CW20-1	CW20-4	CW20-7	G20-2	R5-1	R11-2



LEGEND:

- SIGN
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- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
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4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulail Iranwar 5EF6B0C847F54F6...	DocuSigned by: KHANG NGUYEN 95A2BEFCA7884CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock A33C41087283453...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-08

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A T-INTERSECTION PHASE 3 OF 3

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

TYPICAL STANDARD DETAILS

SHEET 8 OF 12

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238H OF 275	

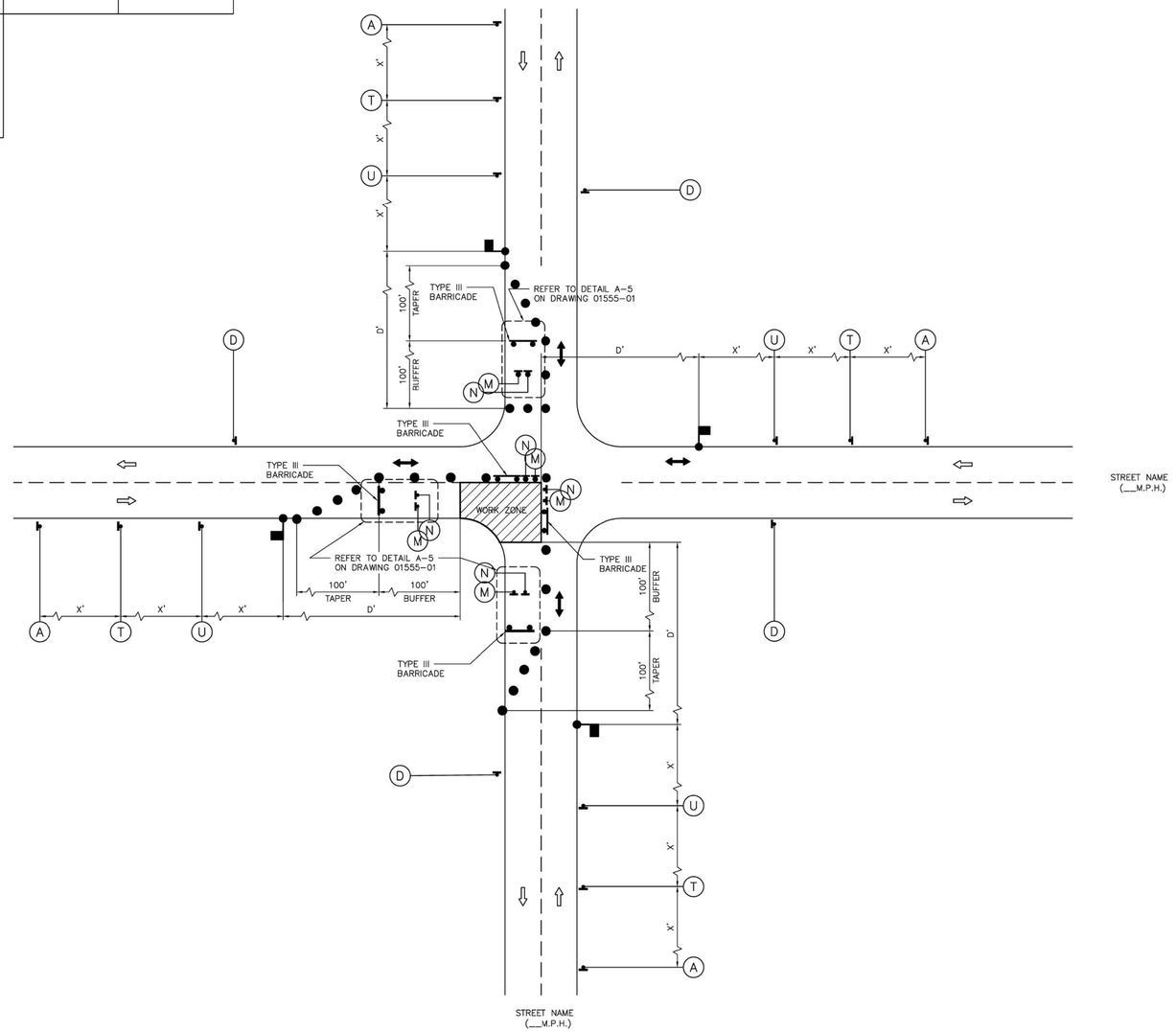
NO.	DATE	REVISION	APP.

90% SUBMITTAL REV

NO.	DATE	REVISION	APP.

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

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4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat 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: 01555-09

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 1 OF 4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NOT TO SCALE

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333
DATE: 07/28/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN

TYPICAL STANDARD DETAILS

SHEET 9 OF 12

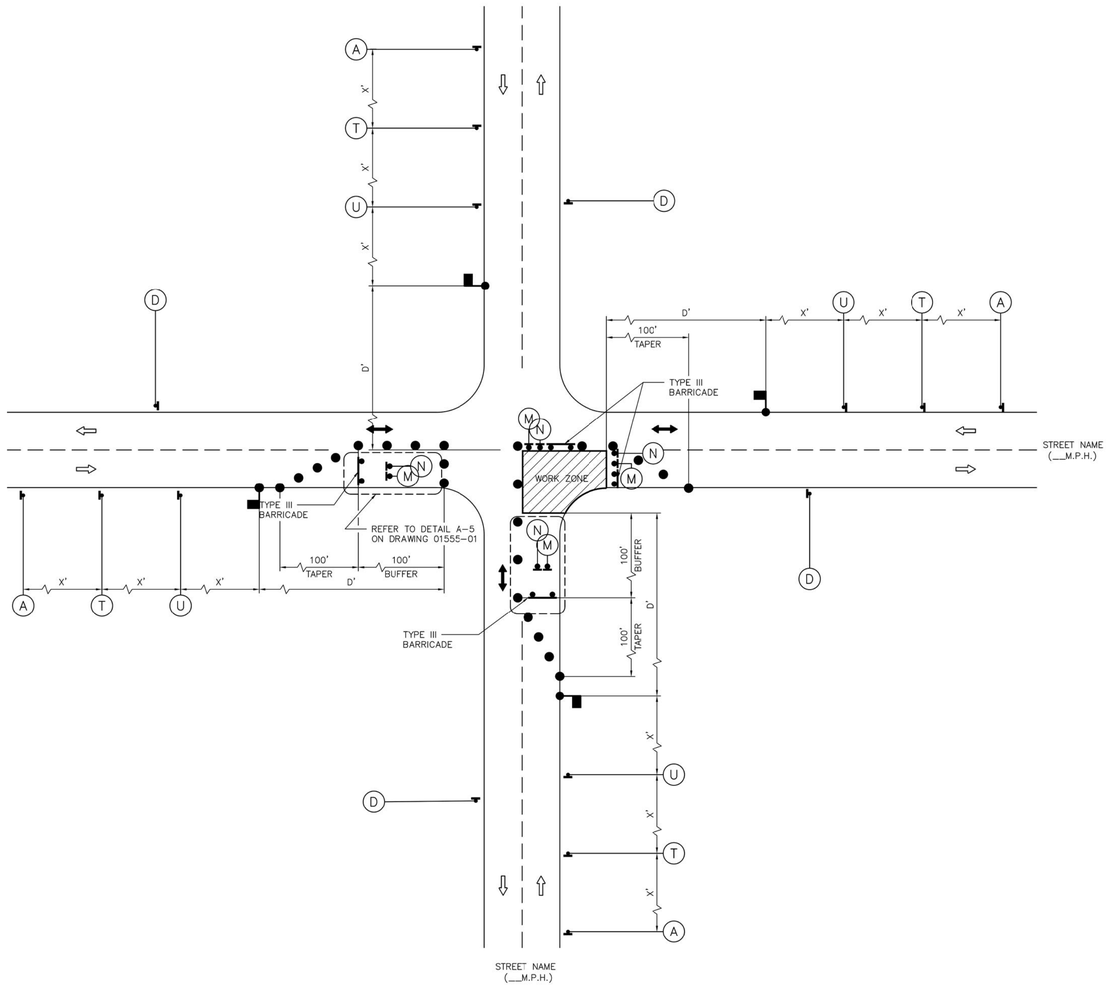
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 2381 OF 275	

90% SUBMITTAL REV

NO.	DATE	REVISION	APP.

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
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- BARRICADE
- FLASHING ARROW PANEL
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4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulcal Bauwar	DocuSigned by: KHUNG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-10

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 2 OF 4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NOT TO SCALE

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

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FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025
90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT
TRAFFIC CONTROL PLAN

TYPICAL STANDARD DETAILS

SHEET 10 OF 12

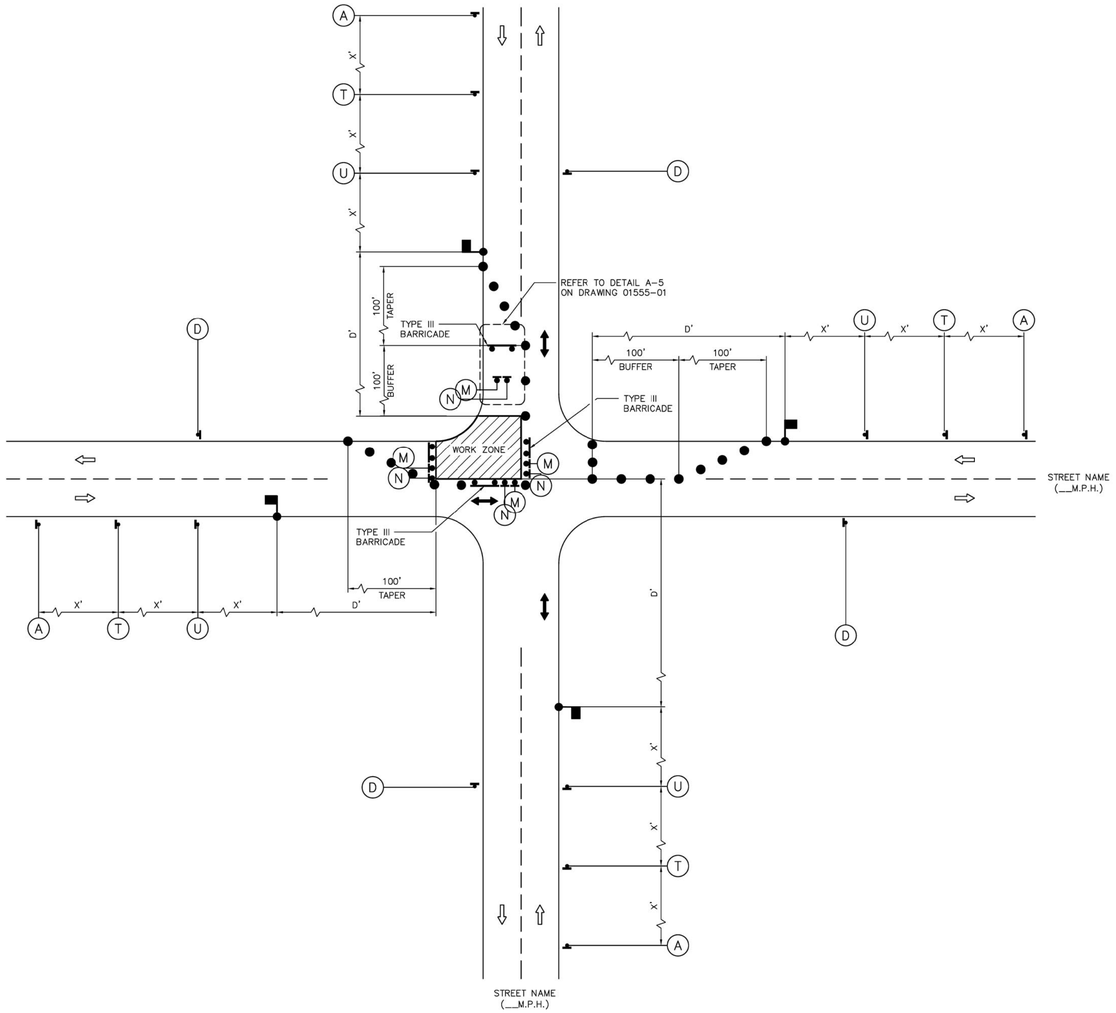
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238J OF 275	

90% SUBMITTAL REV

NO.	DATE	REVISION	APP.

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:

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APPROVED BY:	APPROVED BY:
DocuSigned by: Sulail Kanwar 8EF8B0C8A1F54...	DocuSigned by: KHANG NGUYEN 95A2807DA7B84CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock A93C41087283493...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-11

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 3 OF 4

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

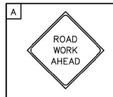
TYPICAL STANDARD DETAILS

SHEET 11 OF 12

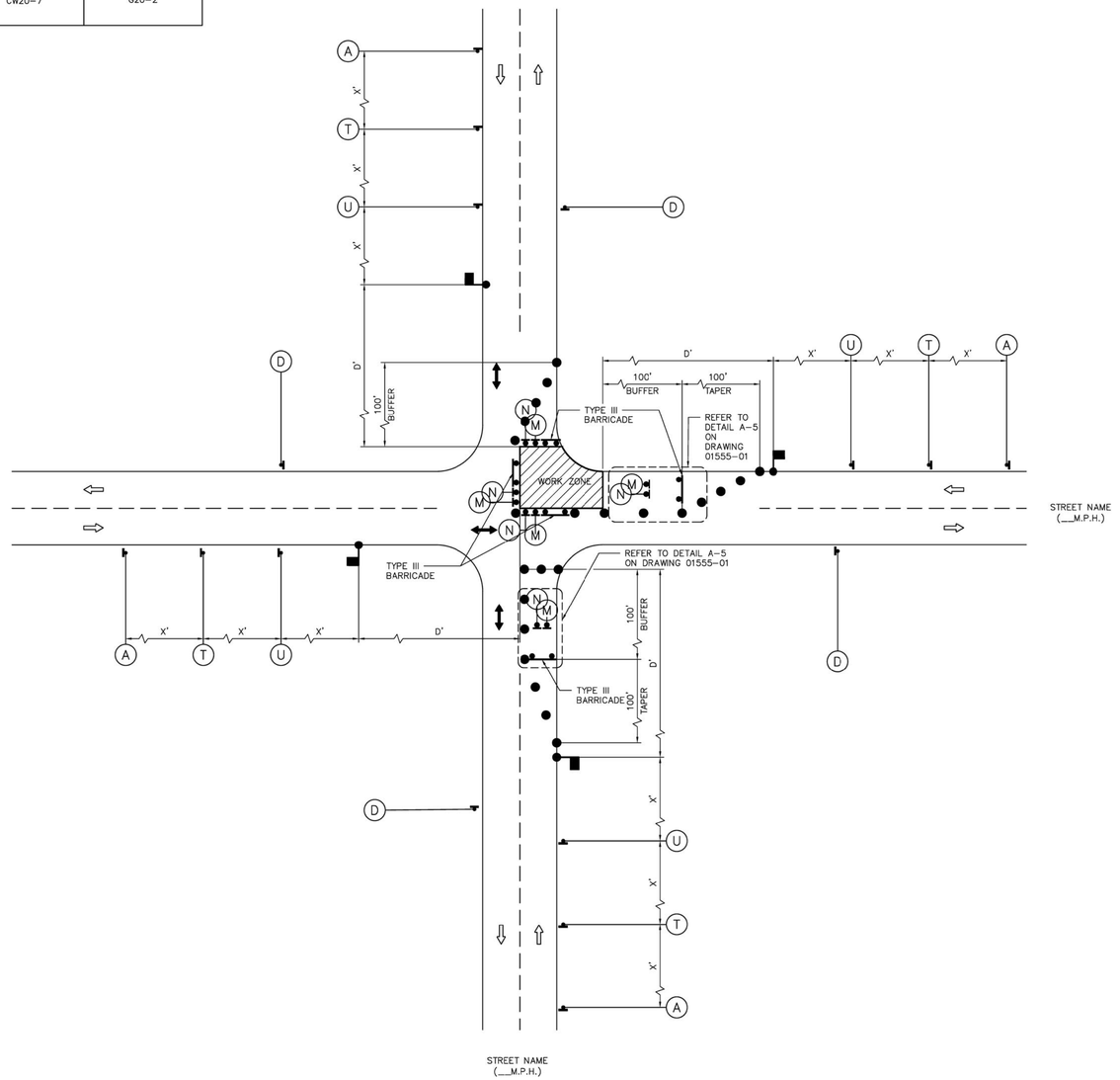
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238K OF 275	

90% SUBMITTAL REV

NO.	DATE	REVISION	APP.

A	T	U	D
			
CW20-1	CW20-4	CW20-7	G20-2

M	N
R5-1	R11-2



LEGEND:

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5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukai Iranwar 907B0C041F5474...	DocuSigned by: HUNG NGUYEN 95A26EFCA75B4CD...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock A80C4108735D4D8...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-12

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 4 OF 4

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

Progressive Traffic & Transportation
Engineers, Planners & Managers
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
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TBPE FIRM REGISTRATION #F-9492

SURVEYED BY: WGC
FB NO. 10038100

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN

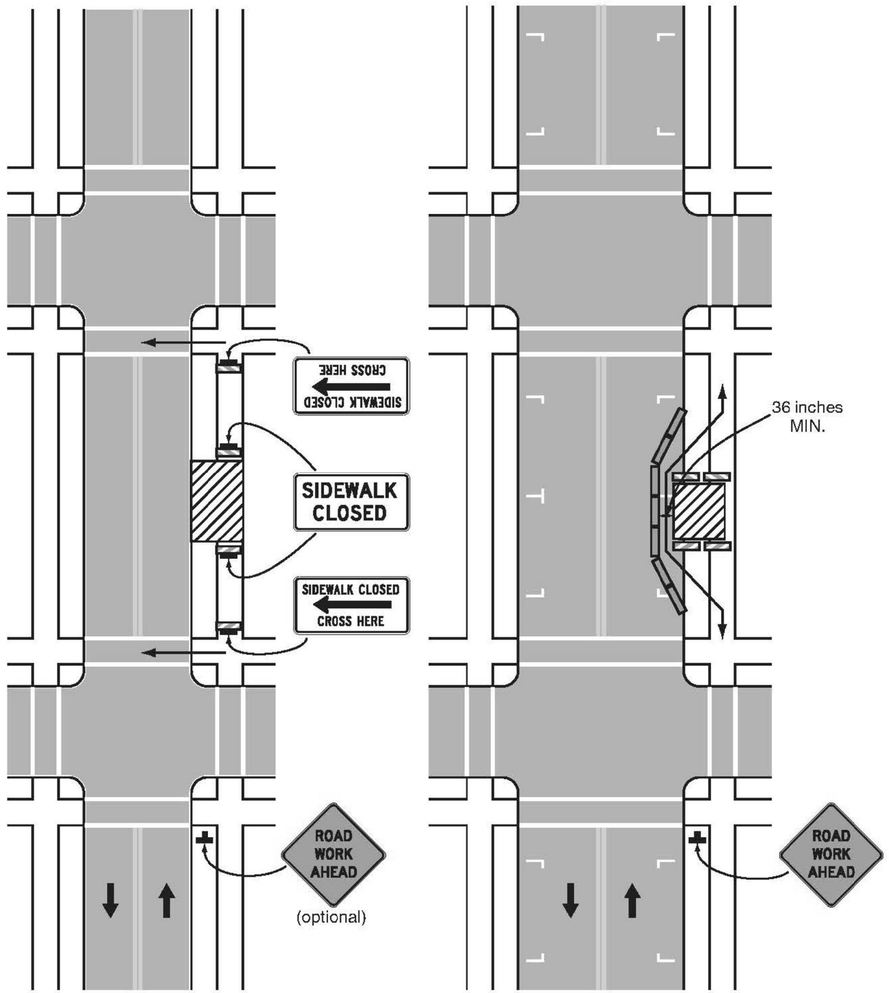
TYPICAL STANDARD DETAILS

SHEET 12 OF 12

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238L OF 275	

90% SUBMITTAL REV

Figure 6H-28. Sidewalk Detour or Diversion (TA-28)

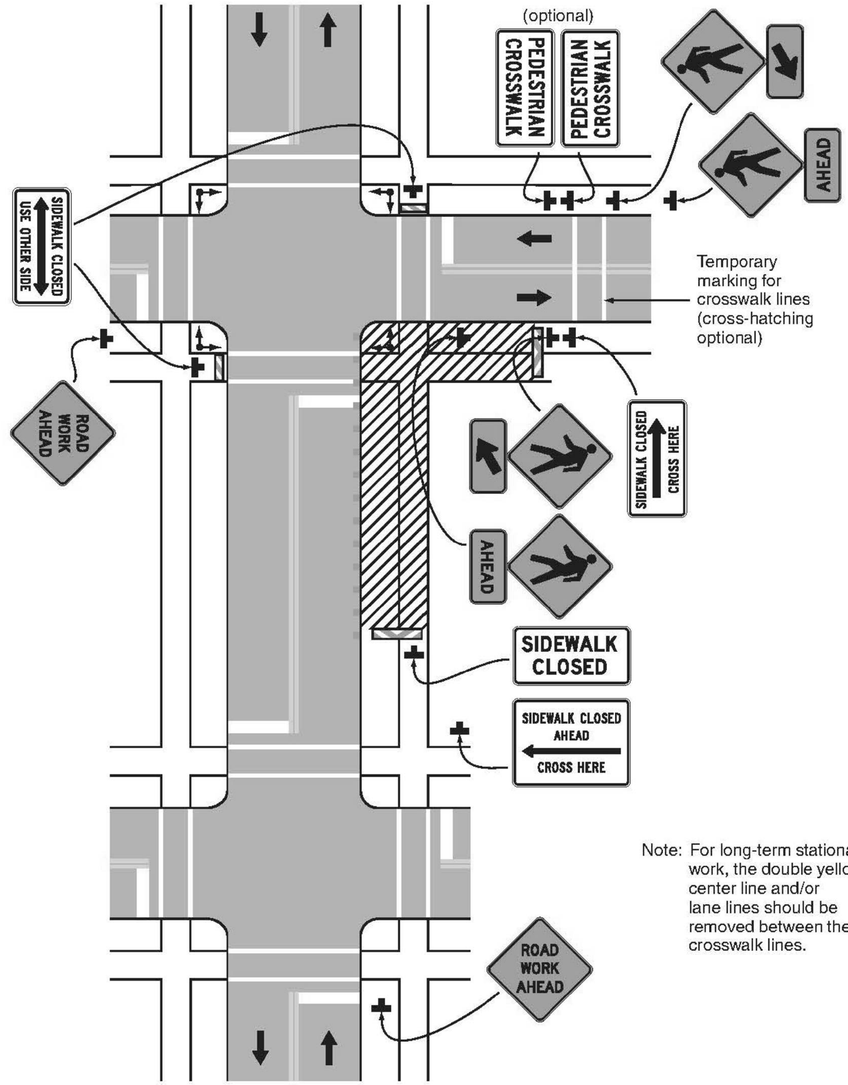


SIDEWALK DETOUR

SIDEWALK DIVERSION

Typical Application 28

Figure 6H-29. Crosswalk Closures and Pedestrian Detours (TA-29)



Note: For long-term stationary work, the double yellow center line and/or lane lines should be removed between the crosswalk lines.

Typical Application 29

0 20' 40'
SCALE IN FEET

NO.	DATE	REVISION	APP.

Progressive Traffic & Transportation
Engineer, Planner & Manager
16360 Park Ten Place, Suite 106
Houston, Texas, 77084
281-206-7495
281-206-7494 FX
TBPE FIRM REGISTRATION #F-9492

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MOHAMMAD IRFAN, P. E.
TX P.E. NO. 89333

DATE: 07/28/2025

90% SUBMITTAL

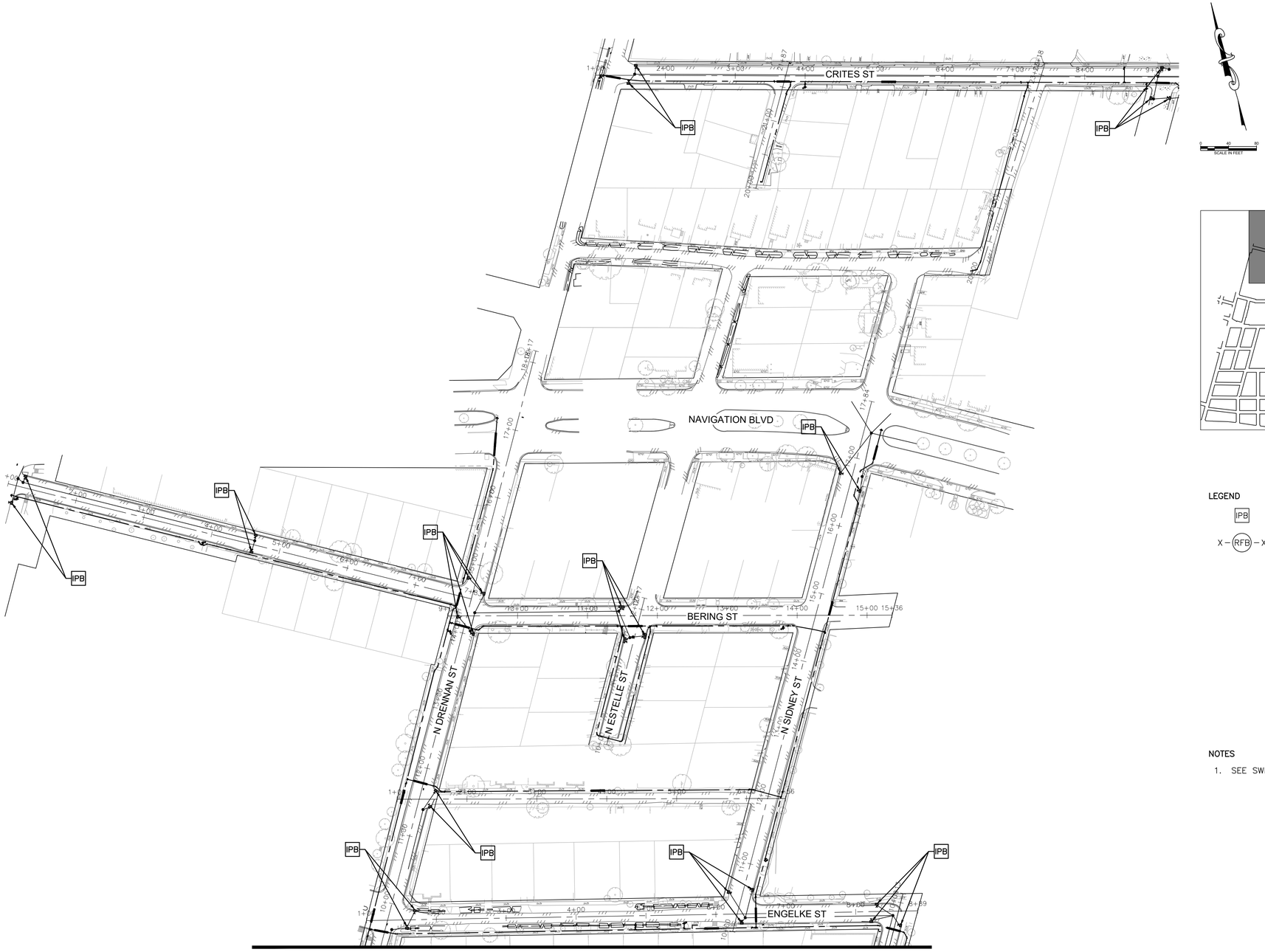
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

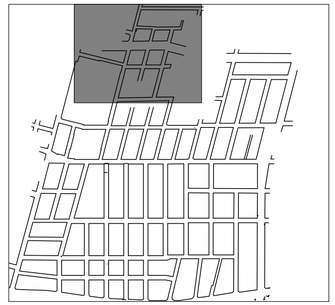
SECONDWARD WATERLINE REPLACEMENT

TRAFFIC CONTROL PLAN
TMUTCD
CROSSWALK CLOSURES AND PEDESTRIAN DETOUR DETAIL, AND SIDEWALK DETOUR DETAILS

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
NOT TRUE SCALE	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 238M OF 275	





LEGEND

IPB	INLET PROTECTION BARRIER
X–(RFB)–X	REINFORCED FILTER FABRIC BARRIER

NOTES

1. SEE SWPPP DETAILS ON SHEET 238.

NOTES:

1) EXISTING UNDERGROUND UTILITY INFORMATION (TYPE, SIZE, & OWNERSHIP) ARE SHOWN APPROXIMATELY BASED ON THE AVAILABLE RECORD DRAWINGS AND FIELD VERIFICATION (WHERE FEASIBLE) WITHOUT PROBING AND EXCAVATION. NO WARRANTY IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE EXISTING UTILITY LOCATION SHOW ON THE DRAWINGS. CAUTION SHOULD BE EXERCISED WHEN EXCAVATING, BORING, OR JACKING IN THE VICINITY OF EXISTING UNDERGROUND UTILITIES. OWNERS OF THE EXISTING UTILITIES SHALL BE NOTIFIED PRIOR TO CONSTRUCTION ACTIVITIES.
2) THIS PROJECT SHALL BE BUILT BY MEANS OF TRENCHLESS CONSTRUCTION EXCEPT AS NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF PITS IN THE FIELD SUBJECT OT THE CITY ENGINEER'S APPROVAL.
3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

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.

HT&J, LLC
10351 STELLA LINK ROAD
HOUSTON, TX 77025
832–767–0090
TX FIRM NUMBER F–14087

SURVEYED BY: WGC

FB NO. 10038100

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HOWARD CHANG, P.E., CFM
TX PE NO. 117939

DATE: 12/19/2022

60% REV SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SWPPP

SHEET 1 OF 6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1:80	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 239 OF 275	

APP. | REVISION | DATE | NO.

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 12/14/2022 10:32 AM
FILE PATH: C:\Users\hsc\Documents_HT&J\4102 Second Ward\Sheets\4102 – 01 – SWPPP.dwg

60% SUBMITTAL REV

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 12/14/2022 10:33 AM

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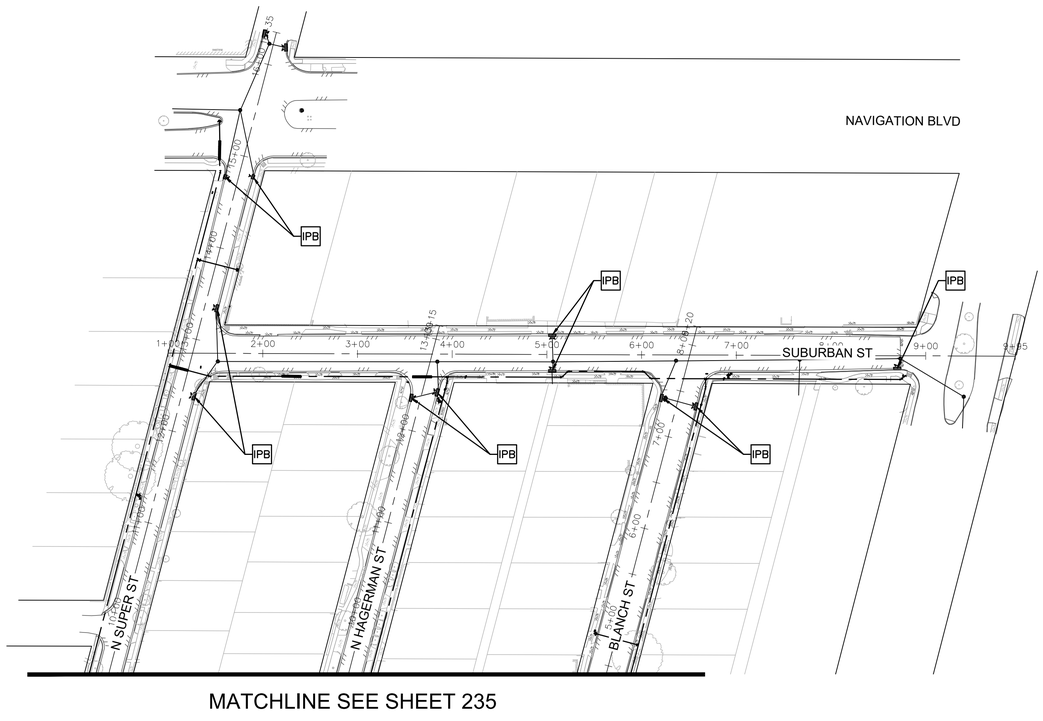

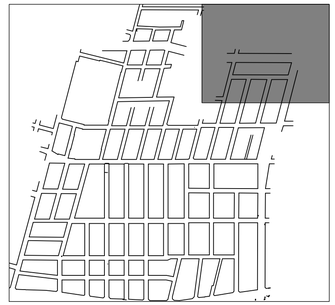

LEGEND

IPB	INLET PROTECTION BARRIER
X – RFB – X	REINFORCED FILTER FABRIC BARRIER

NOTES

1. SEE SWPPP DETAILS ON SHEET 238.

NOTES:

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3) SEE "PROJECT SPECIFIC NOTES" ON SHEET NO. 7 FOR ADDITIONAL INFORMATION.
4) SEE "KEY NOTES" ON SHEET NO. 8 FOR KEY NOTE DESCRIPTION.

BENCH MARK: CITY OF HOUSTON MARKER NO. 5557–7106 BEING A BRASS DISC LOCATED IN WEST MEDIAN AT THE INTERSECTION OF EASTWOOD STREET & NAVIGATION BLVD. ELEV, = 37.97' (NAVD 1988, 2001 ADJUSTMENT GEOID 2018)

NO.	DATE	REVISION	APP.

NOTICE:

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VERIFICATION OF PRIVATE UTILITY LINES

Date

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Signature valid for six months.

Date

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Date

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

HT&J, LLC
10351 STELLA LINK ROAD
HOUSTON, TX 77025
832–767–0090
TX FIRM NUMBER F–14087

SURVEYED BY: WGC

FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

HOWARD CHANG, P.E., CFM
TX PE NO. 117939

DATE: 12/19/2022

60% REV SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SWPPP

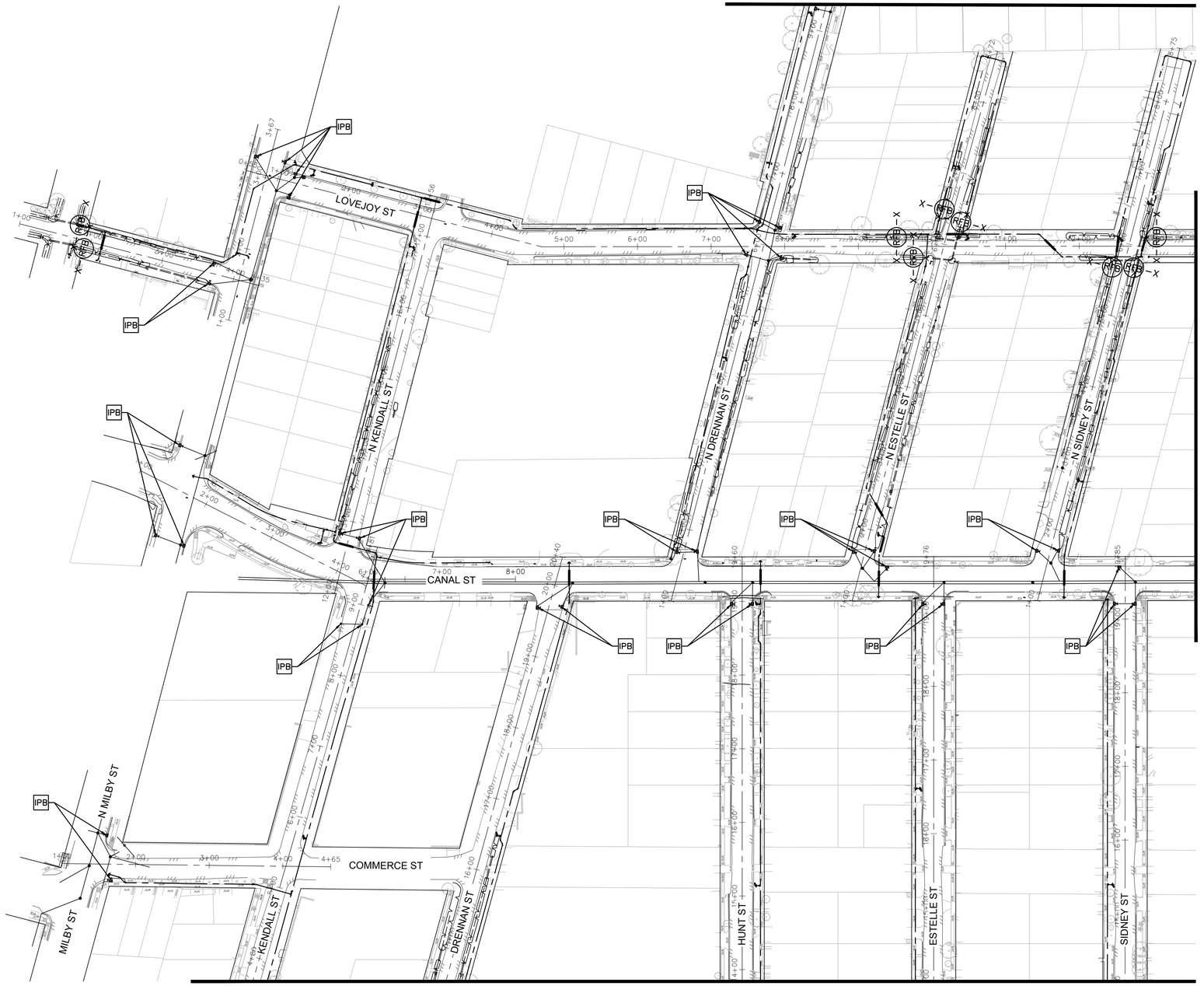
SHEET 2 OF 6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1:80	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 240 OF 275	

60% SUBMITTAL REV

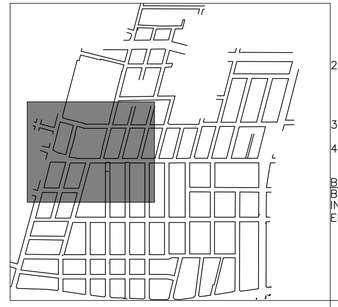
PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 12/14/2022 10:33 AM

MATCHLINE SEE SHEET 232



MATCHLINE SEE SHEET 236

MATCHLINE SEE SHEET 235



LEGEND

IPB	INLET PROTECTION BARRIER
X – RFB – X	REINFORCED FILTER FABRIC BARRIER

NOTES

1. SEE SWPPP DETAILS ON SHEET 238.

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NO.	DATE	REVISION	APP.

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DATE: 12/19/2022

60% REV SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SWPPP

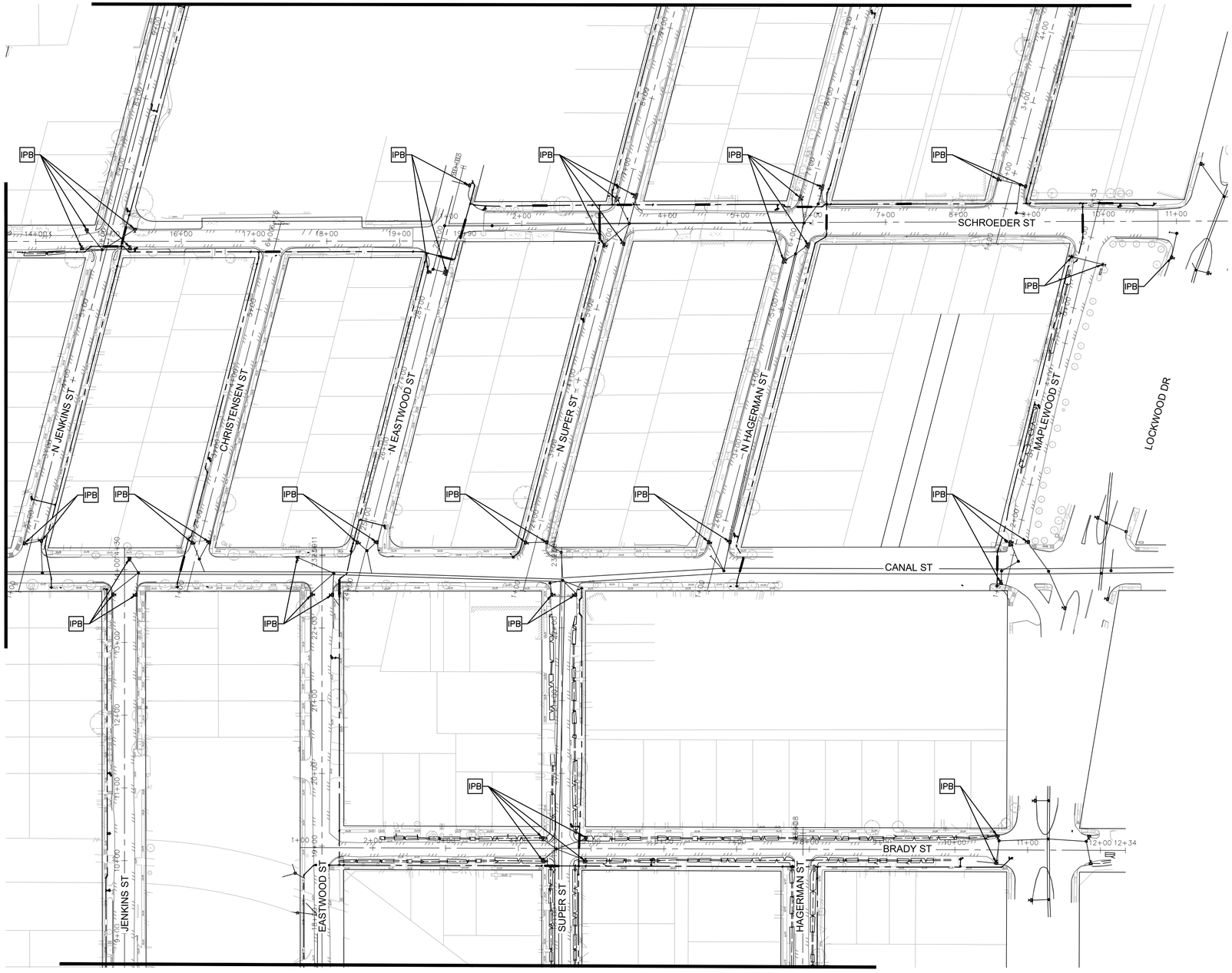
SHEET 3 OF 6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1:80	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 241 OF 275	

FILE PATH: C:\Users\hsc\Documents_HT&J\4102 Second Ward\Sheets\4102 – 01 – SWPPP.dwg

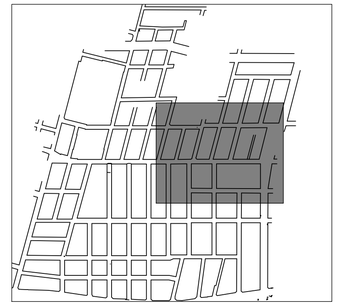
60% SUBMITTAL REV

MATCHLINE SEE SHEET 233



MATCHLINE SEE SHEET 234

MATCHLINE SEE SHEET 237



LEGEND

IPB	INLET PROTECTION BARRIER
X–(RFB)–X	REINFORCED FILTER FABRIC BARRIER

NOTES

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DATE: 12/19/2022

60% REV SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SWPPP

SHEET 4 OF 6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1:80	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 242 OF 275	

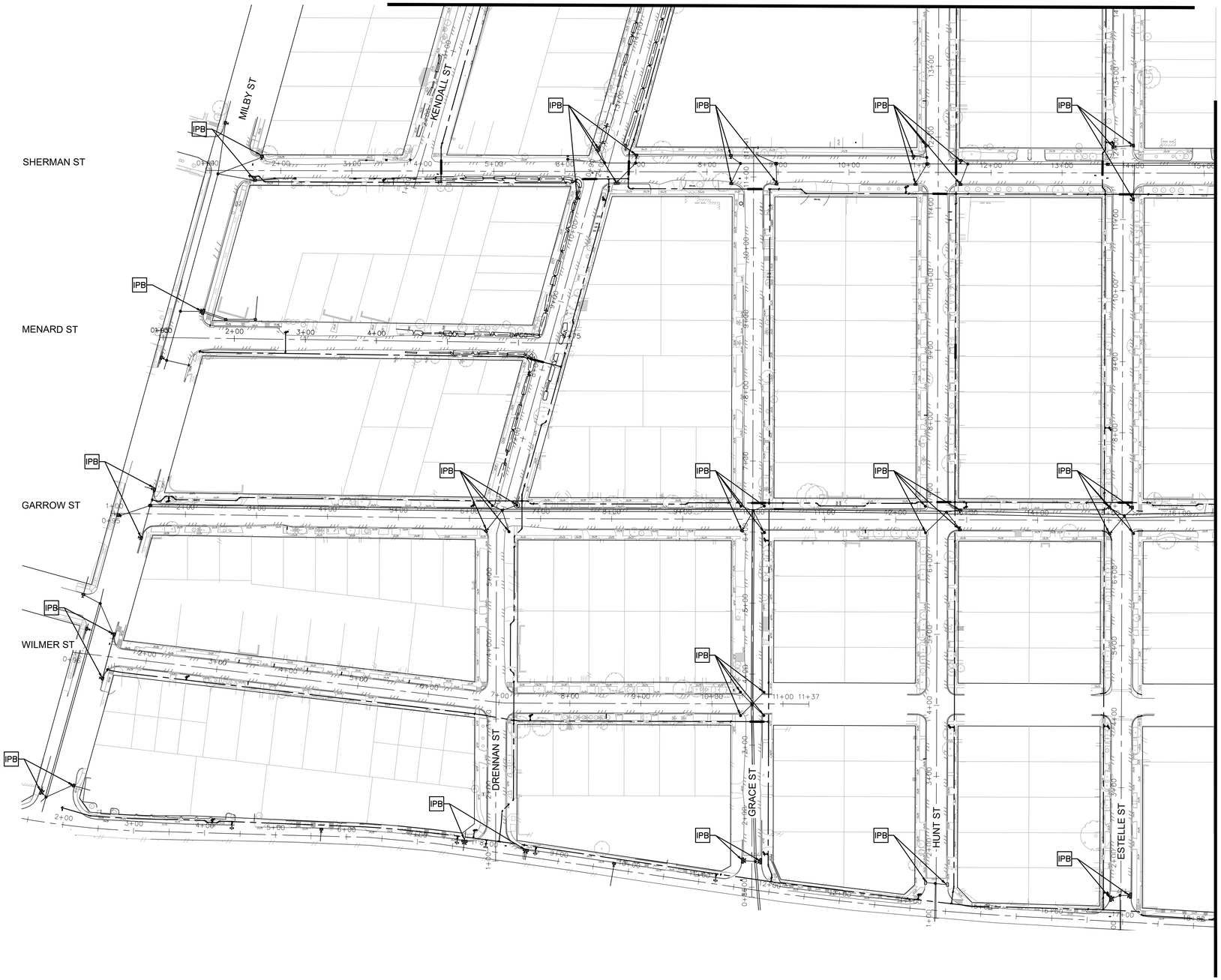
60% SUBMITTAL REV

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 12/14/2022 10:34 AM
FILE PATH: C:\Users\hsc\Documents_HT&J\4102 Second Ward\Sheets\4102 – 01 – SWPPP.dwg

PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 12/14/2022 10:35 AM

FILE PATH: C:\Users\hsc\Documents_HT&J\4102 Second Ward\Sheets\4102 - 01 - SWPPP.dwg

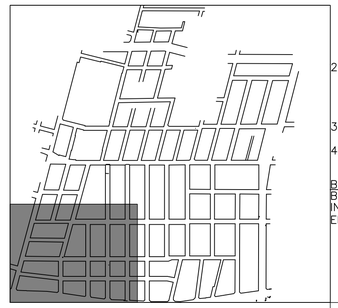
MATCHLINE SEE SHEET 235



MATCHLINE SEE SHEET 237

NOTES

1. SEE SWPPP DETAILS ON SHEET 238.



LEGEND

IPB	INLET PROTECTION BARRIER
X – (RFB) – X	REINFORCED FILTER FABRIC BARRIER

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HOWARD CHANG, P.E., CFM
TX PE NO. 117939

DATE: 12/19/2022

60% REV SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SWPPP

SHEET 5 OF 6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1:80	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 243 OF 275	

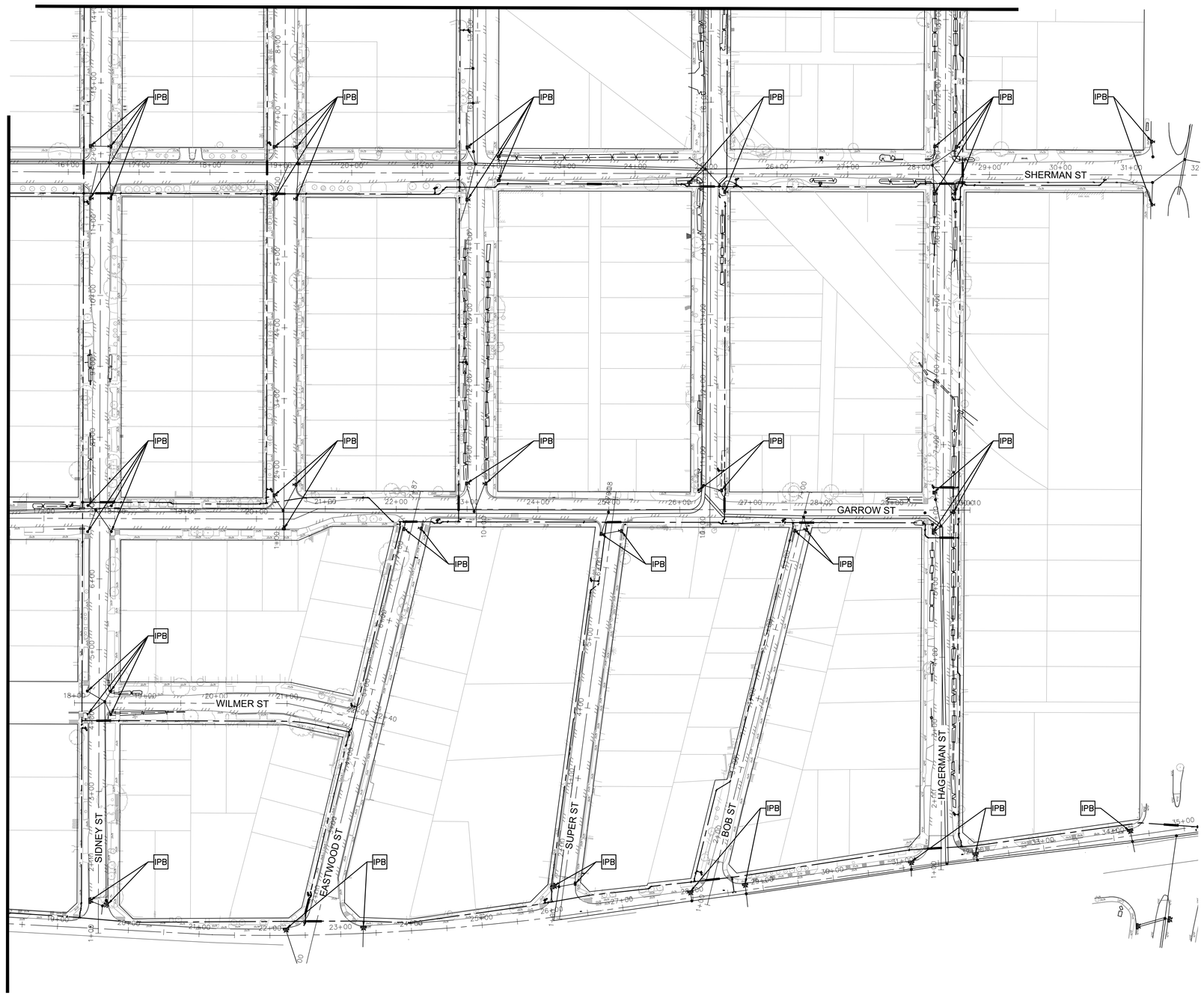
NO.	DATE	REVISION	APP.

60% SUBMITTAL REV

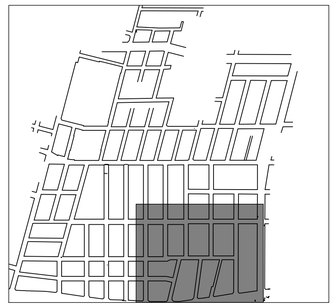
PLOT STYLE: 007_oce_coh_0620.ctb PLOTTED: 12/14/2022 10:35 AM

FILE PATH: C:\Users\hsc\Documents_HT&J\4102 Second Ward\Sheets\4102 - 01 - SWPPP.dwg

MATCHLINE SEE SHEET 235



MATCHLINE SEE SHEET 236



LEGEND

IPB	INLET PROTECTION BARRIER
X–(RFB)–X	REINFORCED FILTER FABRIC BARRIER

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1. SEE SWPPP DETAILS ON SHEET 238.

NO.	DATE	REVISION	APP.

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60% REV SUBMITTAL

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

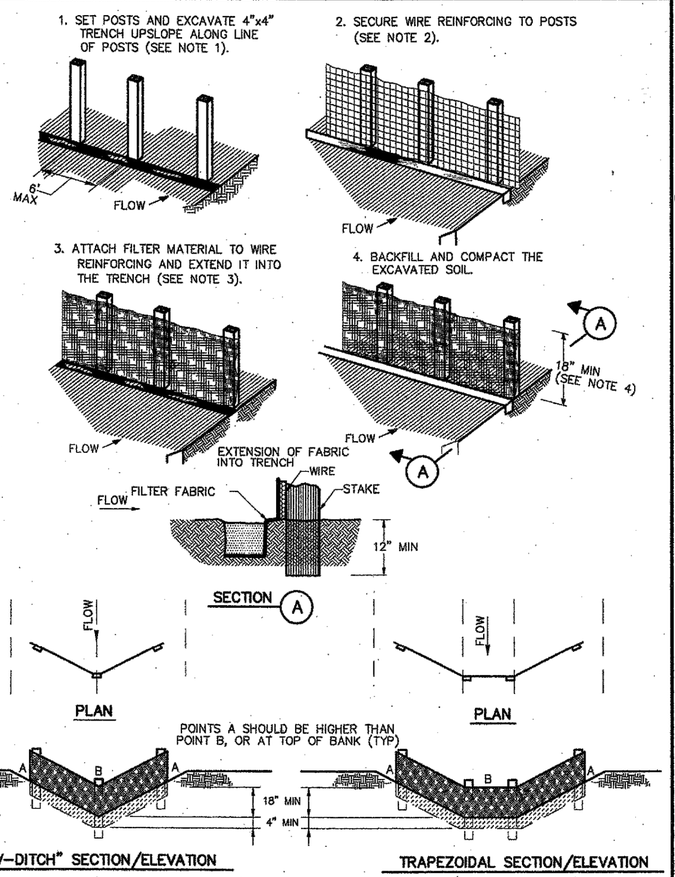
SECONDWARD WATERLINE REPLACEMENT

SWPPP

SHEET 6 OF 6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1:80	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 244 OF 275	

60% SUBMITTAL REV

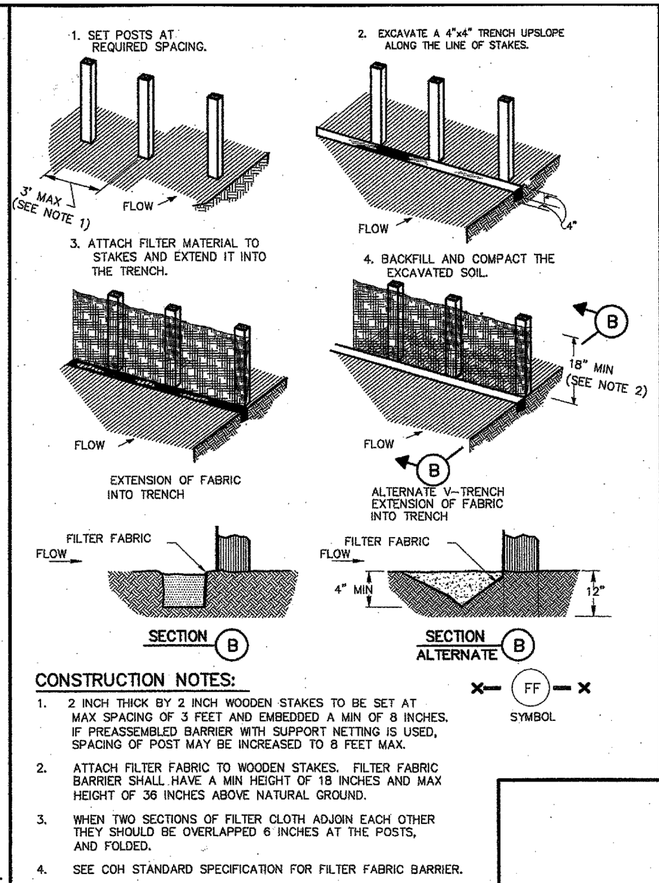


CONSTRUCTION NOTES:

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.

×—(RFB)—× SYMBOL

REINFORCED FILTER FABRIC BARRIER

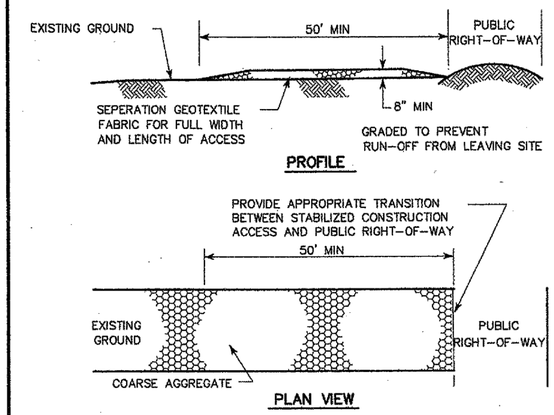


CONSTRUCTION NOTES:

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.

×—(FF)—× SYMBOL

FILTER FABRIC BARRIER

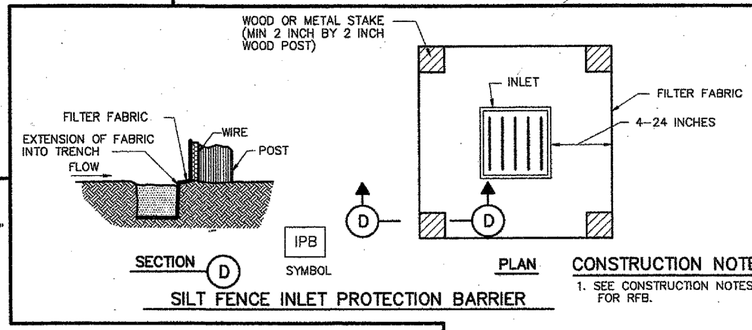


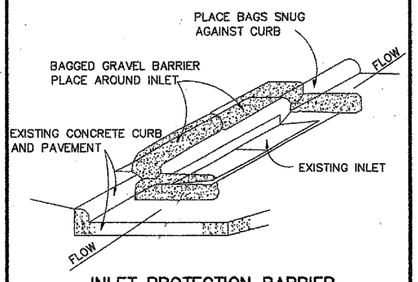
CONSTRUCTION NOTES:

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.

(SC) SYMBOL

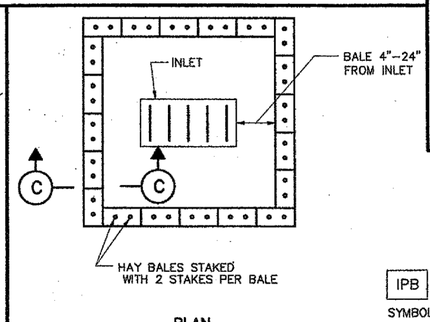
STABILIZED CONSTRUCTION ACCESS



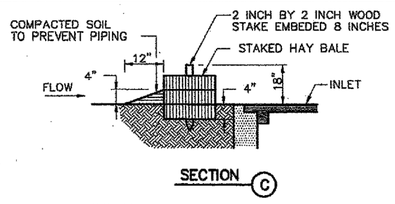


INLET PROTECTION BARRIER

(FOR STAGE II INLETS)
BAGGED GRAVEL BARRIER



IPB SYMBOL



HAY BALE INLET PROTECTION BARRIER

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STORM WATER POLLUTION PREVENTION PLAN DETAILS

(NOT TO SCALE)

APPROVED FOR THE CITY ENGINEER

APPROVED FOR THE DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JULY-01-2010

DWG NO: **01571-01**

HT&J LLC
HT&J, LLC
10351 STELLA LINK ROAD
HOUSTON, TX 77025
832-767-0090
TX FIRM NUMBER F-14087

SURVEYED BY: WGC

FB NO. 10038100

THESE DOCUMENTS ARE RELEASED FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT USES.

HOWARD CHANG, P.E., CFM
TX PE NO. 117939

DATE: 12/19/2022

60% REV SUBMITTAL

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

SWPPP DETAILS

SHEET 1 OF 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	

CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 245 OF 275	

60% SUBMITTAL REV

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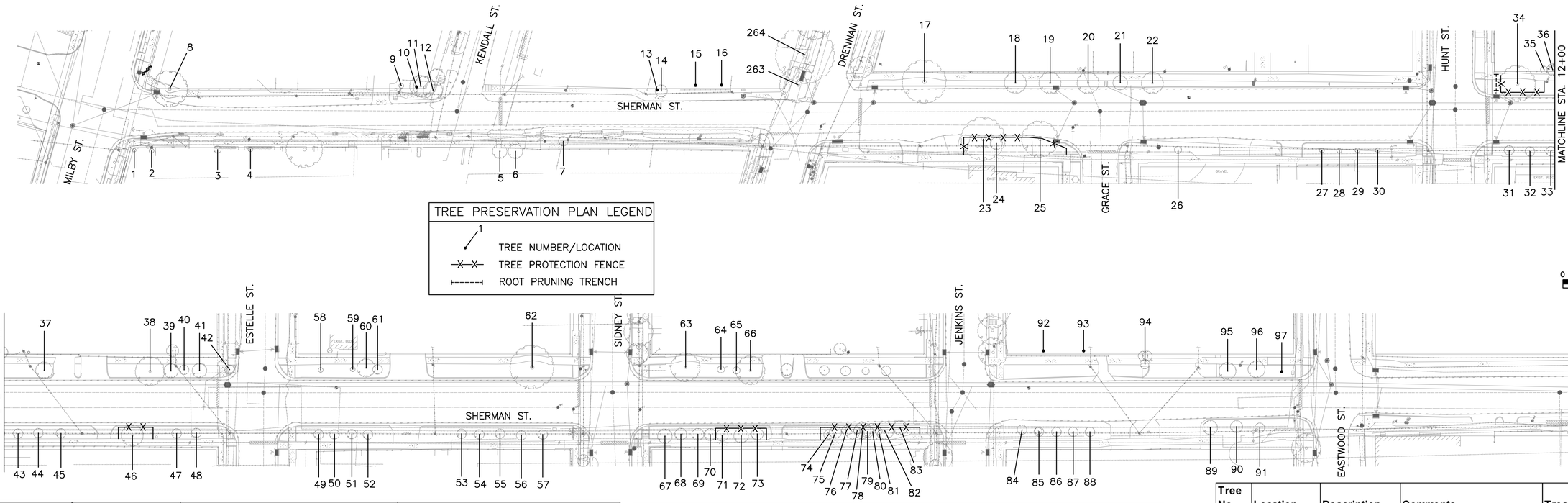

TREE PRESERVATION PLAN LEGEND

- TREE NUMBER/LOCATION
- TREE PROTECTION FENCE
- ROOT PRUNING TRENCH

Tree No.	Location	Description	Comments	Treatment
Trees on Sherman Street				
1	3802 Sherman	4" Live Oak	Private tree, Not impacted	
2	3802 Sherman	4" Live Oak	Private tree, Not impacted	
3	3802 Sherman	4" Live Oak	Private tree, Not impacted	
4	3802 Sherman	4" Live Oak	Private tree, Not impacted	
5	3812 Sherman	14" Arborvitae	Private tree, Not impacted	
6	3812 Sherman	14" Arborvitae	Private tree, Not impacted	
7	3902 Sherman	5" Crepe Myrtle	Not ordinance tree	
8	3815 Sherman	22" Cedar Elm	Ordinance tree, not impacted	
9	3815 Sherman	3" Live Oak	Private tree, Not impacted	
10	3815 Sherman	3" Camphor	Private tree, Not impacted	
11	3815 Sherman	2" Live Oak	Private tree, Not impacted	
12	3815 Sherman	10' Palm	Not ordinance tree	
13	3901 Sherman	5" Sugarberry	Not ordinance tree	
14	3901 Sherman	10' Palm	Not ordinance tree	
15	3901 Sherman	4" Live Oak	Private tree, Not impacted	
16	3901 Sherman	4" Sugarberry	Private tree, Not impacted	
17	4017 Sherman	45" American Elm	Ordinance tree, not impacted	
18	4017 Sherman	14" Live Oak	Ordinance tree, not impacted	
19	4017 Sherman	12" Live Oak	Ordinance tree, not impacted	
20	4017 Sherman	18" Live Oak	Ordinance tree, not impacted	
21	4017 Sherman	12" Live Oak	Ordinance tree, not impacted	
22	4017 Sherman	18" Live Oak	Ordinance tree, not impacted	
23	Not available	24" Pecan	Utility pruned, Ordinance tree	Fence, Bore waterline
24	Not available	8" Pecan	Utility pruned, Ordinance tree	Fence, Bore waterline
25	Not available	20" Pecan	40% dieback, Utility Pruned, Ordinance tree	Hand dig bend, Fence, Bore waterline
26	Not available	2" Crepe Myrtle	Not ordinance tree	
27	Not available	3" Crepe Myrtle	Not ordinance tree	
28	Not available	3" Crepe Myrtle	Not ordinance tree	
29	Not available	3" Crepe Myrtle	Not ordinance tree	
30	Not available	2" Crepe Myrtle	Not ordinance tree	
31	Not available	4" Crepe Myrtle	Not ordinance tree	
32	Not available	4" Crepe Myrtle	Not ordinance tree	
33	Not available	4" Crepe Myrtle	Not ordinance tree	
34	Not available	27" Live Oak	Ordinance tree	Root prune for waterline, Fence, Clearance prune
35	Not available	4" Pine	Private tree, Not impacted	
36	Not available	12" Pine	Private tree, Not impacted	
37	Not available	20' Palm	Not ordinance tree	
38	Not available	20" Baldcypress	Ordinance tree, not impacted	
39	Not available	1' Aloe	Not ordinance tree	
40	Not available	1' Aloe	Not ordinance tree	
41	Not available	1' Aloe	Not ordinance tree	
42	Not available	1' Aloe	Not ordinance tree	
43	Not available	4" Crepe Myrtle	Not ordinance tree	
44	Not available	4" Crepe Myrtle	Not ordinance tree	
45	Not available	4" Crepe Myrtle	Not ordinance tree	
46	Not available	18" Pecan	Ordinance tree	Fence, Bore waterline
47	Not available	3" Crepe Myrtle	Not Ordinance tree	
48	Not available	3" Crepe Myrtle	Not Ordinance tree	
49	Not available	4" Crepe Myrtle	Not Ordinance tree	
50	Not available	4" Crepe Myrtle	Not Ordinance tree	
51	Not available	4" Crepe Myrtle	Not Ordinance tree	
52	Not available	4" Crepe Myrtle	Not Ordinance tree	
53	Not available	5" Crepe Myrtle	Not Ordinance tree	
54	Not available	5" Crepe Myrtle	Not Ordinance tree	
55	Not available	4" Crepe Myrtle	Not Ordinance tree	
56	Not available	5" Crepe Myrtle	Not Ordinance tree	
57	Not available	4" Crepe Myrtle	Not Ordinance tree	
58	Not available	2" Crepe Myrtle	Not Ordinance tree	
59	Not available	4" Crepe Myrtle	Not Ordinance tree	
60	Not available	15" Crepe Myrtle	Not Ordinance tree	
61	Not available	6" Crepe Myrtle	Not Ordinance tree	
62	Not available	33" Willow Oak	Decay, Poor condition, Ordinance tree, Not impacted	
63	Not available	25" Tallow	Ordinance tree, not impacted	
64	Not available	4" Loquat	Not Ordinance tree	
65	Not available	4" Loquat	Not Ordinance tree	
66	Not available	24" Pecan	Ordinance tree, not impacted	
67	4304 Sherman	5" Crepe Myrtle	Not Ordinance tree	
68	4304 Sherman	8" Crepe Myrtle	Not Ordinance tree	
69	4304 Sherman	4" Crepe Myrtle	Not Ordinance tree	
70	4304 Sherman	5" Crepe Myrtle	Not Ordinance tree	
71	4304 Sherman	5" Crepe Myrtle	Not Ordinance tree	
72	4304 Sherman	12" Magnolia	Ordinance tree	Fence, Bore waterline
73	4304 Sherman	5" Crepe Myrtle	Not Ordinance tree	
74	4304 Sherman	2" Loquat	Not Ordinance tree	
75	4304 Sherman	4" Pecan	Ordinance tree	Fence, Bore waterline
76	4304 Sherman	4" Pecan	Ordinance tree	Fence, Bore waterline
77	4304 Sherman	4" Pecan	Ordinance tree	Fence, Bore waterline
78	4304 Sherman	17" Live Oak	Ordinance tree	Fence, Bore waterline
79	4304 Sherman	12" Live Oak	Ordinance tree	Fence, Bore waterline
80	4304 Sherman	13" Live Oak	Ordinance tree	Fence, Bore waterline
81	4304 Sherman	5" Water Oak	Ordinance tree	Fence, Bore waterline
82	4304 Sherman	15" Live Oak	Ordinance tree	Fence, Bore waterline
83	4304 Sherman	14" Pecan	Ordinance tree	Fence, Bore waterline
84	Not available	4" Crepe Myrtle	Not Ordinance tree	
85	Not available	4" Crepe Myrtle	Not Ordinance tree	
86	Not available	4" Crepe Myrtle	Not Ordinance tree	
87	Not available	4" Crepe Myrtle	Not Ordinance tree	
88	Not available	4" Crepe Myrtle	Not Ordinance tree	
89	Not available	6" Wax Myrtle	80% dieback, Not ordinance tree	
90	Not available	5" Juniper	Not Ordinance tree	
91	Not available	4" Crepe Myrtle	Not Ordinance tree	
92	4325 Sherman	22" Pecan	Private tree, Not impacted	
93	4325 Sherman	22" Pecan	Private tree, Not impacted	
94	4325 Sherman	4" Savannah Holly	Ordinance tree, not impacted	
95	4325 Sherman	8" Crepe Myrtle	Not Ordinance tree	
96	4325 Sherman	14" Crepe Myrtle	Not Ordinance tree	
97	4325 Sherman	6" Crepe Myrtle	Not Ordinance tree	
98	4424 Sherman	3" Magnolia	Ordinance tree	Fence, Bore waterline
99	4424 Sherman	12" Crepe Myrtle	Not Ordinance tree	

NOTE:

1. THIS TREE PROTECTION PLAN WAS DEVELOPED WITH INFORMATION PROVIDED BY DESIGN ENGINEER IN DRAWINGS DATED NOVEMBER 2022. THE PLAN CONSIDERS ALL FITTINGS, VERTICAL OFFSETS AND AREAS OF NECESSARY EXCAVATION. CHANGES MADE TO DESIGN MAY COMPROMISE THE TREE PROTECTION PLAN. REFER SPECIFICATIONS 01562. CONDITION OF EACH TREE IS BASED ON VISUAL EVALUATION AT TIME OF DESIGN. CONDITION AND STRUCTURAL INTEGRITY OF EACH TREE IS NOT GUARANTEED BY DESIGNER AT ANY POINT IN THE FUTURE, AS ENVIRONMENTAL AND MAINTENANCE INFLUENCES ON EACH TREE CAN NOT BE DETERMINED BY DESIGNER.
2. CN KOEHL URBAN FORESTRY, INC. HAS NOT BEEN CONTRACTED TO COMPLETE ANY TREE RISK ASSESSMENTS ON THIS PROJECT–THIS TPP INCLUDES PROTECTION MEASURES FOR SPECIES OF TREES PROTECTED BY APPLICABLE ORDINANCE ONLY. CN KOEHL URBAN FORESTRY, INC. DOES NOT GUARANTEE CONDITION OR STRUCTURAL INTEGRITY OF ANY TREES LOCATED ON OR ADJACENT TO THIS PROJECT.
3. IN AREAS WHERE INDIVIDUAL TREES HAVE NOT BEEN TIED IN BY SURVEY APPROXIMATE LOCATION IS INDICATED ON TPP WITH A DOT AND TREE NUMBER. ACCURACY OF REPRESENTED LOCATION IS NOT GUARANTEED BY CN KOEHL URBAN FORESTRY, INC.
4. THE CONTRACTOR'S ARBORIST WILL MARK LOCATIONS OF TREES TO BE PLANTED AND OBTAIN APPROVAL BY CITY ENGINEER AND CITY FORESTER BEFORE PURCHASING OR EXCAVATING PLANTING HOLE OF EACH TREE.

WOOLPERT
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800.414.1045

SURVEYED BY: WGC

FB NO. 10038100

C.N. Koehl
Urban Forestry, Inc.
210 Stone Bush Ct. ◦ Katy, Texas 77493
281-391-0022 ckoehl@koehlurbanforestry.com

Approved :

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 1 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 246 OF 275	

APP. | REVISION | DATE | NO.

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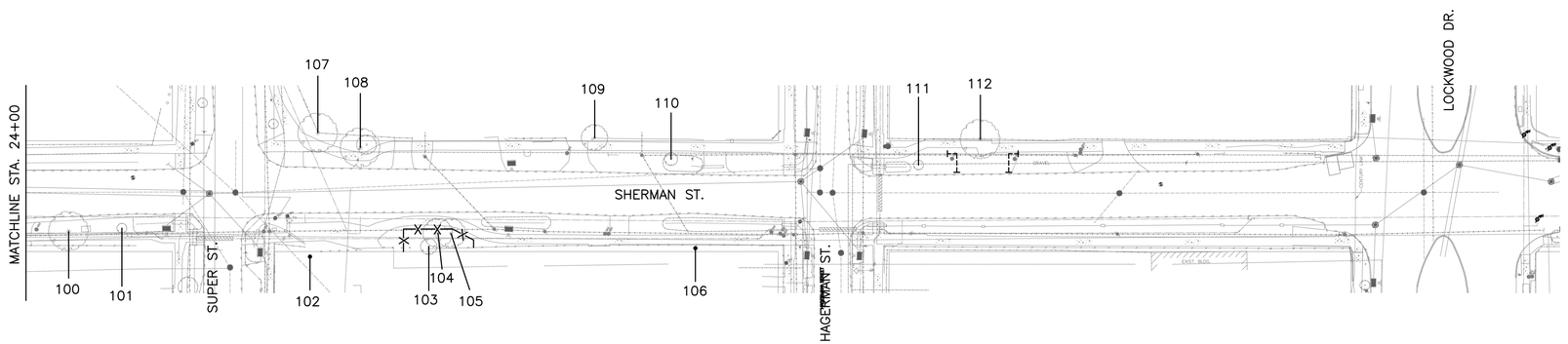

Tree No.	Location	Description	Comments	Treatment
Trees on Sherman Street				
100	4424 Sherman	4" Oleander	Stump sprouts, Freeze damage, Not ordinance tree	
101	4424 Sherman	2" Crepe Myrtle	Not Ordinance tree	
102	4514 Sherman	24" Sugarberry	Topped by utility, Private, Poor, Not impacted	
103	4514 Sherman	10" Sugarberry	Not Ordinance tree	
104	4514 Sherman	20" Sugarberry	Ordinance tree	Fence, Bore waterline
105	4514 Sherman	13" Sugarberry	Not Ordinance tree	
106	4514 Sherman	15" Burford Holly	Private tree, Not impacted	
107	4515 Sherman	25" Sugarberry	Growing in Fence, Private tree, Not impacted	
108	4515 Sherman	25" Camphor	Freeze damage, Poor, Ordinance tree, Not impacted	
109	4515 Sherman	16" American Elm	Private tree, Not impacted	
110	4515 Sherman	3" Crepe Myrtle	Not Ordinance tree	
111	4615 Sherman	3" Crepe Myrtle	Not Ordinance tree	
112	4615 Sherman	36" Pecan	50% dieback, Private tree	Root prune for lead

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- –X–X– TREE PROTECTION FENCE
- ROOT PRUNING TRENCH

N

0 20 40 80

NOTE:

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NO.	DATE	REVISION	APP.

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 2 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 247 OF 275	

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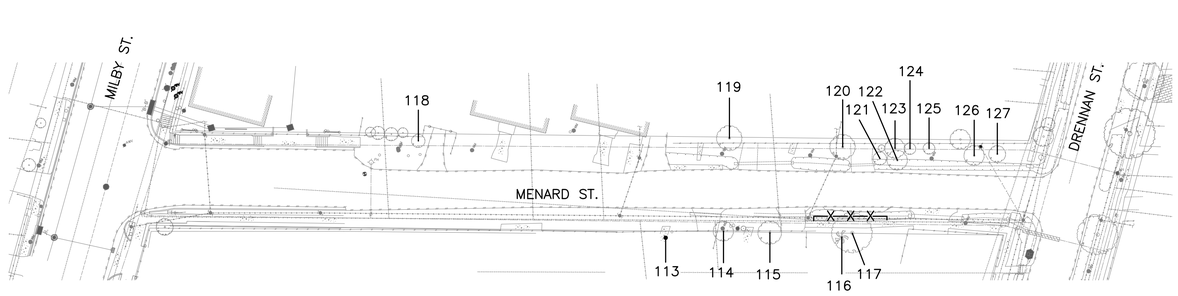

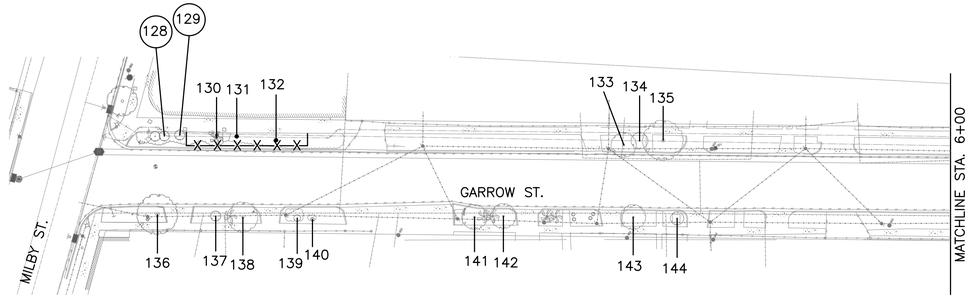

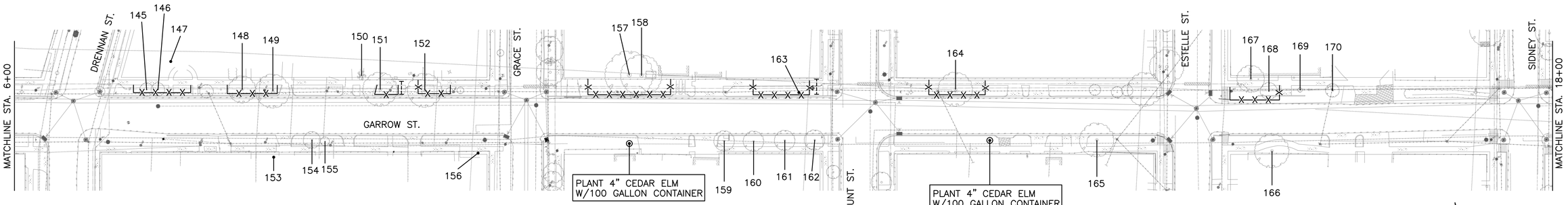

Tree No.	Location	Description	Comments	Treatment
Trees on Menard Street				
113	Not available	15" Arborvitae	Private tree, Not impacted	
114	Not available	15" Loquat	Private tree, Not impacted	
115	Not available	14" Pecan	Private tree, Not impacted	
116	Not available	6' Palm	Not Ordinance tree	
117	Not available	20" Sugarberry	Ordinance tree	Fence, Bore waterline
118	3811 Menard	3" Juniper	Private tree, Not impacted	
119	Not available	12" Cedar	Private tree, Not impacted	
120	Not available	10" Chinaberry	Topped by utility, not ordinance tree	
121	Not available	5" Crepe Myrtle	Not Ordinance tree	
122	Not available	5" Crepe Myrtle	Not Ordinance tree	
123	Not available	14" Chinaberry	Topped by utility, not ordinance tree	
124	Not available	10" Chinaberry	Topped by utility, not ordinance tree	
125	Not available	10" Chinaberry	Topped by utility, not ordinance tree	
126	Not available	3' Variegated Privet	Not Ordinance tree	
127	Not available	10" Chinaberry	Not Ordinance tree	
Trees on Garrow Street				
128	Not available	Larcapatham shrub	Remove for fire hydrant, Not Ordinance tree	Remove tree, No replacement required
129	Not available	Larcapatham shrub	Remove for fire hydrant, Not Ordinance tree	Remove tree, No replacement required
130	Not available	Palm	Dead, not ordinance tree	
131	Not available	24" Live Oak	Ordinance tree	Fence, Bore waterline
132	Not available	4' Sago Palm	Not Ordinance tree	
133	Not available	6" Crepe Myrtle	Rotted, topped by utility, not ordinance tree	
134	Not available	4" Oleander	Not Ordinance tree	
135	Not available	4" Oleander	Not Ordinance tree	
136	3800 Garrow	16" Bald Cypress	Ordinance tree, not impacted	
137	3800 Garrow	5" Live Oak	Ordinance tree, not impacted	
138	3800 Garrow	18" Live Oak	Ordinance tree, not impacted	
139	Not available	3" Magnolia	Ordinance tree, not impacted	
140	Not available	2" Live Oak	Ordinance tree, not impacted	

Tree No.	Location	Description	Comments	Treatment
Trees on Garrow Street				
141	3816 Garrow	18" Magnolia	50% dieback, Ordinance tree, Not impacted	
142	3816 Garrow	12" Magnolia	50% dieback, Ordinance tree, Not impacted	
143	3816 Garrow	18" Crepe Myrtle	80% dieback, Not ordinance tree	
144	3816 Garrow	11" Magnolia	Ordinance tree, not impacted	
145	4001 Garrow	2" Crepe Myrtle	Rotted, Not ordinance tree	
146	4001 Garrow	5" Crepe Myrtle	Rotted, Not ordinance tree	
147	4001 Garrow	30" Live Oak	Private tree	Fence, Bore waterline
148	4011 Garrow	14" Crepe Myrtle	Not ordinance tree	
149	4011 Garrow	26" Tallow	Ordinance tree	Fence, Bore waterline
150	Not available	6' Palm	Private tree, Not impacted	
151	Not available	24" Pecan	Ordinance tree	Root prune for bend, Hand dig tap & lead, Fence, Bore waterline
152	Not available	30" Camphor	Ordinance tree	Fence, Bore waterline
153	4016 Garrow	12" Burford Holly	Not ordinance tree	
154	4016 Garrow	17" Pecan	Ordinance tree, not impacted	
155	4016 Garrow	12" Pecan	Ordinance tree	Hand dig lead
156	4020 Garrow	6" Sugarberry	Not ordinance tree	
157	Not available	28" Water Oak	Utility pruned, Private tree	Hand dig bend, Fence, Bore waterline
158	Not available	25" Water Oak	Utility pruned, Private tree	Fence, Bore waterline
159	Not available	18" Pecan	Ordinance tree, not impacted	
160	Not available	16" Pecan	Ordinance tree, not impacted	
161	Not available	15" Pecan	Ordinance tree, not impacted	
162	Not available	15" Pecan	Ordinance tree, not impacted	
163	Not available	22" Crepe Myrtle	Ordinance tree	Fence, Bore waterline, Root prune for gate valve
164	Not available	25" Pecan	Ordinance tree	Fence, Bore waterline
165	Not available	24" Ash	50% cut back, Ordinance tree, not impacted	
166	4206 Garrow	30" Camphor	Ordinance tree, not impacted	
167	4203 Garrow	35" Live Oak	Private tree	Hand dig bend, Fence, Bore waterline
168	4203 Garrow	6" Pecan	Ordinance tree	Fence, Bore waterline
169	4203 Garrow	5" Pear	Not ordinance tree	
170	4203 Garrow	14" Mulberry	Not ordinance tree	

NOTE:

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4. THE CONTRACTOR'S ARBORIST WILL MARK LOCATIONS OF TREES TO BE PLANTED AND OBTAIN APPROVAL BY CITY ENGINEER AND CITY FORESTER BEFORE PURCHASING OR EXCAVATING PLANTING HOLE OF EACH TREE.

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- –X–X– — TREE PROTECTION FENCE
- |------| — ROOT PRUNING TRENCH
- ⊙ — REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

N

0 20 40 80

WOOLPERT
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Approved :

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 3 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 248 OF 275	

NO.	DATE	REVISION	APP.

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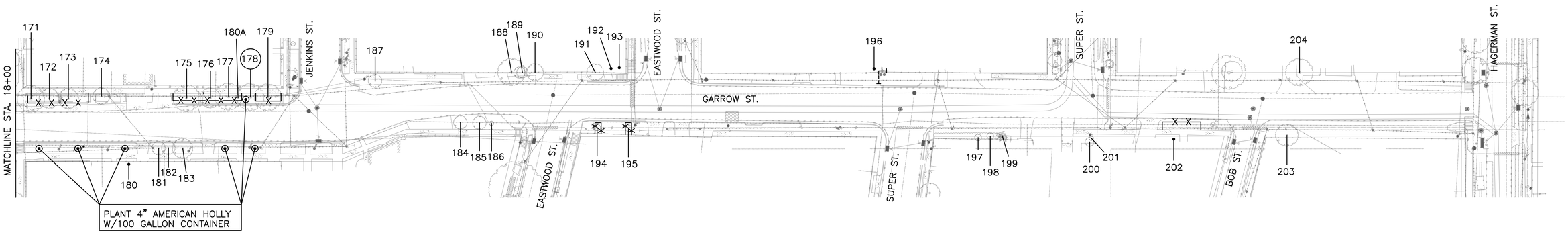

Tree No.	Location	Description	Comments	Treatment
Trees on Garrow Street				
171	Not available	22" Tallow	Utility prune, Ordinance tree	Fence, Bore waterline
172	Not available	20" Crepe Myrtle	Ordinance tree	Fence, Bore waterline
173	Not available	20" Tallow	Ordinance tree	Fence, Bore waterline
174	Not available	5" Crepe Myrtle	Not Ordinance tree	
175	Not available	20" Crepe Myrtle	Ordinance tree	Fence, Bore waterline
176	Not available	15" Crepe Myrtle	Not Ordinance tree	
177	Not available	15" Crepe Myrtle	Not Ordinance tree	
178	Not available	24" Crepe Myrtle	Remove for bends, Ordinance tree	Remove tree, Provide 24" in replacement plantings
179	Not available	20" Crepe Myrtle	Ordinance tree	Fence, Bore waterline
180A	Not available	2" Redbud	Ordinance tree	Fence, Bore waterline
180	4306 Garrow	30" American Elm	Private tree, Not impacted	
181	4306 Garrow	15" Crepe Myrtle	Rotted, Not ordinance tree	
182	4306 Garrow	10" Crepe Myrtle	Rotted, Not ordinance tree	
183	4306 Garrow	14" Crepe Myrtle	Rotted, Not ordinance tree	
184	Not available	10" Pecan	Ordinance tree, not impacted	
185	Not available	8" Pecan	Ordinance tree, not impacted	
186	Not available	4" Pecan	Ordinance tree, not impacted	
187	Not available	12" Crepe Myrtle	Rotted, Not ordinance tree	
188	Not available	24" Pecan	Private tree, Not impacted	
189	Not available	12" Sugarberry	Private tree, Not impacted	
190	Not available	18" Sugarberry	Not Ordinance tree	
191	Not available	14" Sugarberry	Private tree, Not impacted	
192	Not available	12" Tallow	Private tree, Not impacted	
193	Not available	15" Raintree	Private tree, Not impacted	
194	Not available	5" Bald Cypress	Ordinance tree	Fence, Bore waterline
195	Not available	5" Bald Cypress	Ordinance tree	Fence, Bore waterline
196	4407 Garrow	22" Tallow	Private tree	Root prune for lead
197	Not available	4" Ligustrum	Not Ordinance tree	
198	Not available	4" Ligustrum	Not Ordinance tree	
199	Not available	2' Yucca	Not Ordinance tree	
200	4516 Garrow	5" Pecan	Private tree, Not impacted	
201	4516 Garrow	2" Loquat	Private tree, Not impacted	
202	4518 Garrow	20" Crepe Myrtle	Private tree	Fence, Bore waterline
203	Not available	18" Crepe Myrtle	Not Ordinance tree	
204	Not available	20" Sugarberry	Private tree, Not impacted	

TREE PRESERVATION PLAN LEGEND

1 TREE NUMBER/LOCATION

TREE PROTECTION FENCE

ROOT PRUNING TRENCH

N

0 20 40 80

NOTE:

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4. THE CONTRACTOR'S ARBORIST WILL MARK LOCATIONS OF TREES TO BE PLANTED AND OBTAIN APPROVAL BY CITY ENGINEER AND CITY FORESTER BEFORE PURCHASING OR EXCAVATING PLANTING HOLE OF EACH TREE.

WOOLPERT
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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210 Stone Bush Ct. ◦ Katy, Texas 77493
281-391-0022 ckoehl@koehlurbanforestry.com
Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

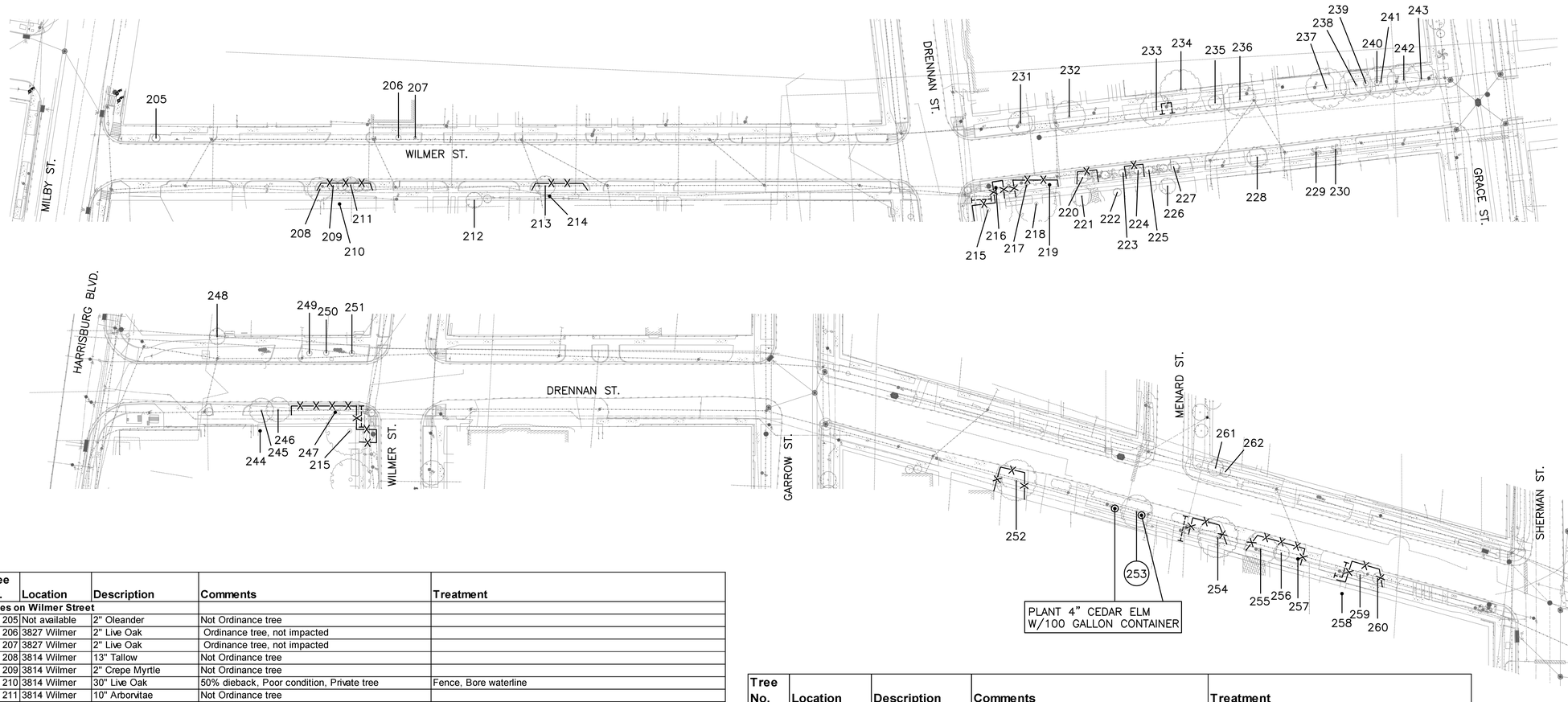
TREE PROTECTION PLAN

SHEET 4 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 249 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 12/15/2022 7:11 AM
PLOT STYLE: CNKoehl.ctb
FILE PATH: C:\Users\Ned\Desktop\Work For Craig\CIVILTECH SECOND WARD\WOOLPERT SECOND WARD TP-4.dwg



Tree No.	Location	Description	Comments	Treatment
Trees on Wilmer Street				
205	Not available	2" Oleander	Not Ordinance tree	
206	3827 Wilmer	2" Live Oak	Ordinance tree, not impacted	
207	3827 Wilmer	2" Live Oak	Ordinance tree, not impacted	
208	3814 Wilmer	13" Tallow	Not Ordinance tree	
209	3814 Wilmer	2" Crepe Myrtle	Not Ordinance tree	
210	3814 Wilmer	30" Live Oak	50% dieback, Poor condition, Private tree	Fence, Bore waterline
211	3814 Wilmer	10" Arborvitae	Not Ordinance tree	
212	3816 Wilmer	12" Arborvitae	Not Ordinance tree	
213	Not available	7" Cedar	Dead, not ordinance tree	
214	Not available	24" Sugarberry	Ordinance tree	Fence, Bore waterline
215	4002 Wilmer	36" Live Oak	Private tree	Fence, Bore waterline, Root prune for fittings
216	4002 Wilmer	2" Savannah Holly	Ordinance tree	Fence, Bore waterline
217	4002 Wilmer	2" Savannah Holly	Ordinance tree	Fence, Bore waterline
218	4002 Wilmer	30" Live Oak	Private tree	Hand dig tap & lead, Fence, Bore waterline
219	4002 Wilmer	3" Savannah Holly	Ordinance tree	Fence, Bore waterline
220	4002 Wilmer	4" Crepe Myrtle	Not Ordinance tree	
221	4006 Wilmer	12" Magnolia	Private tree	Fence, Bore waterline
222	4006 Wilmer	6" Magnolia	Private tree	Fence, Bore waterline
223	4006 Wilmer	3" Crepe Myrtle	Not Ordinance tree	
224	4006 Wilmer	3' Sago Palm	Not Ordinance tree	
225	4006 Wilmer	6" Crepe Myrtle	Not Ordinance tree	
226	4006 Wilmer	8" Crepe Myrtle	Private tree, Not impacted	
227	4006 Wilmer	6" Crepe Myrtle	Not Ordinance tree	
228	4008 Wilmer	8" Crepe Myrtle	Not Ordinance tree	
229	4008 Wilmer	Palm	Dead, not ordinance tree	
230	4008 Wilmer	30' Palm	Not Ordinance tree	
231	4001 Wilmer	17" Pecan	Ordinance tree	Hand dig lead
232	4003 Wilmer	20" Pecan	Ordinance tree	Keep excavation for lead at least 20' from trunk
233	Not available	22" Chinaberry	Ordinance tree	Root prune for lead
234	Not available	26" Live Oak	Ordinance tree	Root prune for lead
235	Not available	7" Crepe Myrtle	Not Ordinance tree	
236	Not available	22" Crepe Myrtle	Ordinance tree	Hand dig lead
237	4015 Wilmer	20" American Elm	Ordinance tree	Hand dig lead
238	4015 Wilmer	18" Crepe Myrtle	Not Ordinance tree	
239	4015 Wilmer	2" Italian Cypress	Not Ordinance tree	
240	4015 Wilmer	2" Italian Cypress	Not Ordinance tree	
241	4015 Wilmer	14" Crepe Myrtle	Not Ordinance tree	
242	4015 Wilmer	15" Crepe Myrtle	Not Ordinance tree	
243	4015 Wilmer	20" Crepe Myrtle	Ordinance tree, not impacted	

Tree No.	Location	Description	Comments	Treatment
Trees on Drennan Street				
244	4002 Wilmer	22" Sugarberry	Private tree, Not impacted	
245	4002 Wilmer	3" Crepe Myrtle	Not ordinance tree	
246	4002 Wilmer	1/2" Crepe Myrtle	Not ordinance tree	
247	4002 Wilmer	2" Crepe Myrtle	Not ordinance tree	
248	Not available	14" Slippery Elm	Private tree, Not impacted	
249	Not available	4" Live Oak	Ordinance tree, not impacted	
250	Not available	4" Live Oak	Ordinance tree, not impacted	
251	Not available	4" Live Oak	Ordinance tree, not impacted	
252	Not available	26" American Elm	Ordinance tree	Hand dig for bend, Fence, Bore waterline
253	Not available	18" Pecan	Dead, ordinance tree, remove for tee	Remove tree, No replacement required
254	Not available	35" American Elm	Ordinance tree	Root prune for tap & lead, Fence, Bore waterline
255	Not available	20" American Ash	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
256	Not available	13" Crepe Myrtle	Rotted, Not ordinance tree	
257	Not available	2" Crepe Myrtle	Not ordinance tree	
258	203 Drennan	20" Arizona Ash	Private tree	Root prune for tap & lead, Fence, Bore waterline
259	203 Drennan	2" Crepe Myrtle	Not ordinance tree	
260	203 Drennan	3" Crepe Myrtle	Not ordinance tree	
261	Not available	12" Arborvitae	Not ordinance tree	
262	Not available	4" Arborvitae	Not ordinance tree	
263	114 Drennan	30" Live Oak	Ordinance tree, not impacted	
264	114 Drennan	36" Live Oak	Ordinance tree, not impacted	
265	114 Drennan	28" Live Oak	Ordinance tree	Hand dig lead

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

0 20 40 80

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WOOLPERT
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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281-391-0022 ckoehl@koehlurbanforestry.com
Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 5 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 250 OF 275	

NO.	DATE	REVISION	APP.

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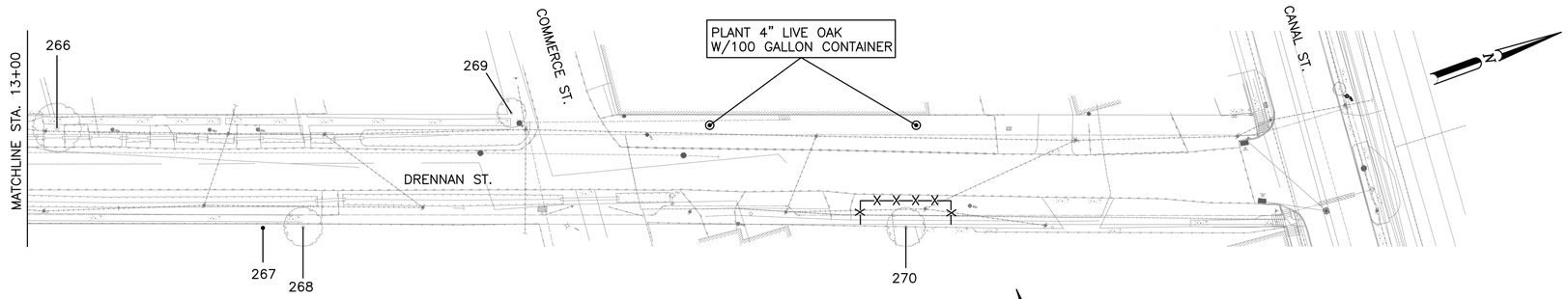

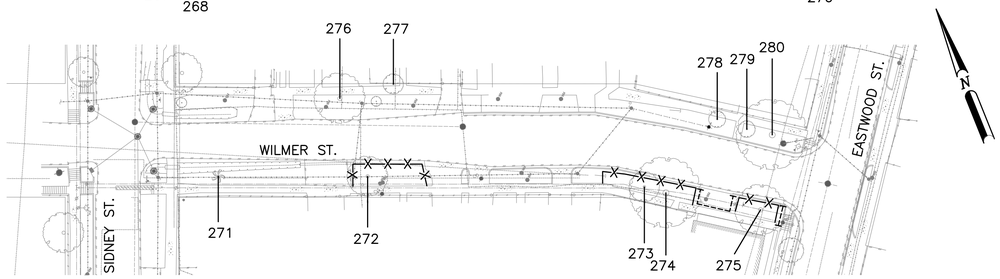

0 20 40 80

Tree No.	Location	Description	Comments	Treatment
Trees on Drennan Street				
266	114 Drennan	35" Live Oak	Ordinance tree, not impacted	
267	Not available	12" Tallow	Private tree, Not impacted	
268	Not available	25" Tallow	Private tree, Not impacted	
269	106 Drennan	12" Tallow	Private tree, Not impacted	
270	Not available	25" Green Ash	Private tree	Fence, Bore waterline
Trees on Wilmer Street				
271	Not available	6' Palm	Not Ordinance tree	
272	Not available	27" Cedar	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
273	Not available	18" Pecan	Ordinance tree	Fence, Bore waterline
274	Not available	36" Live Oak	Ordinance tree	Root prune for tap & lead, Fence, Bore waterline
275	Not available	26" Live Oak	Ordinance tree	Root prune for tap & lead, Fence, Bore waterline
276	4305 Wilmer	18" American Elm	Not Ordinance tree	
277	4305 Wilmer	3" Pecan	Private tree, Not impacted	
278	Not available	9" Tallow	Not Ordinance tree	
279	Not available	10" Pecan	Ordinance tree, not impacted	
280	Not available	35" Tallow	Ordinance tree, not impacted	

TREE PRESERVATION PLAN LEGEND

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- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

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SURVEYED BY: WGC
FB NO. 10038100

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281-391-0022 ckoehl@koehlurbanforestry.com

Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 6 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 251 OF 275	

NO.	DATE	REVISION	APP.

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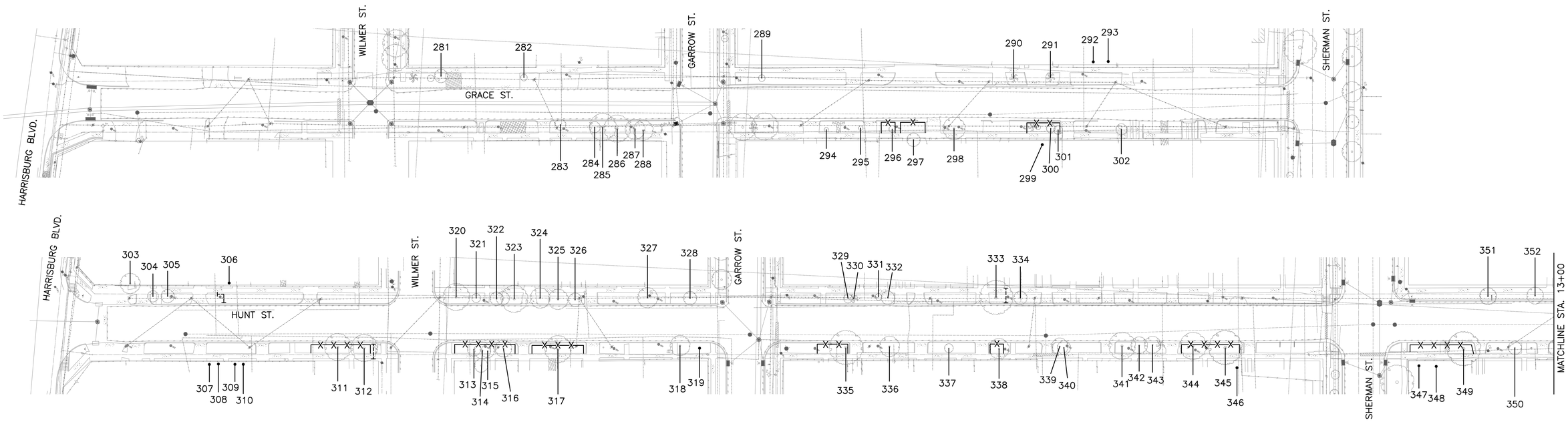

Tree No.	Location	Description	Comments	Treatment
Trees on Grace Street				
281	306 Grace	20" Crepe Myrtle	Ordinance tree, not impacted	
282	306 Grace	7" Crepe Myrtle	Not Ordinance tree	
283	305 Grace	5" Crepe Myrtle	Not Ordinance tree	
284	305 Grace	6" Loquat	Not Ordinance tree	
285	305 Grace	2" Oleander	Not Ordinance tree	
286	305 Grace	2" Oleander	Not Ordinance tree	
287	305 Grace	2" Oleander	Not Ordinance tree	
288	305 Grace	2" Oleander	Not Ordinance tree	
289	Not available	2" Crepe Myrtle	Not Ordinance tree	
290	218 Grace	20' Palm	Not Ordinance tree	
291	218 Grace	15' Palm	Not Ordinance tree	
292	208 Grace	18" Arborvitae	Private tree, Not impacted	
293	208 Grace	18" Arborvitae	Private tree, Not impacted	
294	225 Grace	3" Vitex	Not Ordinance tree	
295	225 Grace	2" Vitex	Not Ordinance tree	
296	225 Grace	2" Saucer Magnolia	Ordinance tree	Fence, Bore waterline
297	225 Grace	12" Shumard Oak	Ordinance tree	Fence, Bore waterline
298	221 Grace	18" Arborvitae	Not Ordinance tree	
299	Not available	15" Pecan	Private tree	Fence, Bore waterline
300	Not available	12" Pear	Not Ordinance tree	
301	Not available	5" Crepe Myrtle	Not Ordinance tree	
302	Not available	12" Camphor	60% dead, Not Ordinance tree	

Tree No.	Location	Description	Comments	Treatment
Trees on Hunt Street				
303	414 Hunt	20" Live Oak	Private tree, Not impacted	
304	414 Hunt	2" Crepe Myrtle	Not Ordinance tree	
305	414 Hunt	3" Crepe Myrtle	Not Ordinance tree	
306	414 Hunt	24" Live Oak	Private tree	Root prune for lead
307	409 Hunt	12" Arborvitae	Private tree, Not impacted	
308	409 Hunt	12" Arborvitae	Private tree, Not impacted	
309	409 Hunt	12" Arborvitae	Private tree, Not impacted	
310	409 Hunt	12" Arborvitae	Private tree, Not impacted	
311	401 Hunt	20" Live Oak	Ordinance tree	Fence, Bore waterline
312	401 Hunt	20" Live Oak	Ordinance tree	Fence, Bore waterline, Root prune for fire hydrant
313	315 Hunt	5" Photinia	Not Ordinance tree	
314	315 Hunt	13" Live Oak	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
315	315 Hunt	5" Crepe Myrtle	Not Ordinance tree	
316	315 Hunt	13" Live Oak	Ordinance tree	Fence, Bore waterline
317	309 Hunt	22" Pecan	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
318	301 Hunt	12" Crepe Myrtle	Not Ordinance tree	
319	301 Hunt	9" Crepe Myrtle	Not Ordinance tree	
320	Not available	14" Crepe Myrtle	Not Ordinance tree	
321	Not available	12" Arborvitae	Not Ordinance tree	
322	Not available	8" Arborvitae	Not Ordinance tree	
323	Not available	16" Crepe Myrtle	Not Ordinance tree	
324	Not available	12" Crepe Myrtle	Not Ordinance tree	
325	Not available	16" Ligustrum	Not Ordinance tree	
326	Not available	8" Crepe Myrtle	Not Ordinance tree	
327	302 Hunt	17" Pecan	Ordinance tree	Hand dig lead
328	302 Hunt	12" Pecan	Ordinance tree, not impacted	
329	226 Hunt	4" Crepe Myrtle	Not Ordinance tree	
330	226 Hunt	5' Sago	Not Ordinance tree	
331	224 Hunt	8" Crepe Myrtle	Not Ordinance tree	
332	224 Hunt	11" Tallow	Not Ordinance tree	
333	216 Hunt	24" Crepe Myrtle	Ordinance tree	Root prune for lead
334	216 Hunt	2" Crepe Myrtle	Not Ordinance tree	
335	227 Hunt	24" Pecan	Trunk cavity, Ordinance tree	Fence, Bore waterline
336	225 Hunt	Palm	Dead, not ordinance tree	
337	Not available	8" Chinaberry	Not Ordinance tree	
338	217 Hunt	29" Chinaberry	80% pruned, Trunk rot, Ordinance tree	Fence, Bore waterline
339	213 Hunt	11" Crepe Myrtle	Not Ordinance tree	
340	213 Hunt	8" Sugarberry	Not Ordinance tree	
341	209 Hunt	18" Tallow	Not Ordinance tree	
342	209 Hunt	15" Tallow	Not Ordinance tree	
343	209 Hunt	15" Tallow	Not Ordinance tree	
344	Not available	20" Sugarberry	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
345	Not available	15" Sugarberry	Not Ordinance tree	
346	Not available	12" American Elm	Private tree, Not impacted	
347	Not available	10" Loblolly Pine	Private tree	Fence, Bore waterline
348	Not available	10" Loblolly Pine	Private tree	Fence, Bore waterline
349	Not available	25" Live Oak	Ordinance tree	Fence, Bore waterline
350	115 Hunt	13" Camphor	Not Ordinance tree	
351	Not available	18" Ligustrum	Not Ordinance tree	
352	Not available	18" Camphor	Not Ordinance tree	

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH

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N

0 20 40 80

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SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 7 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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1"=40'	
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NUPUR KRISHNAN, P.E.	
SHEET NO. 252 OF 275	

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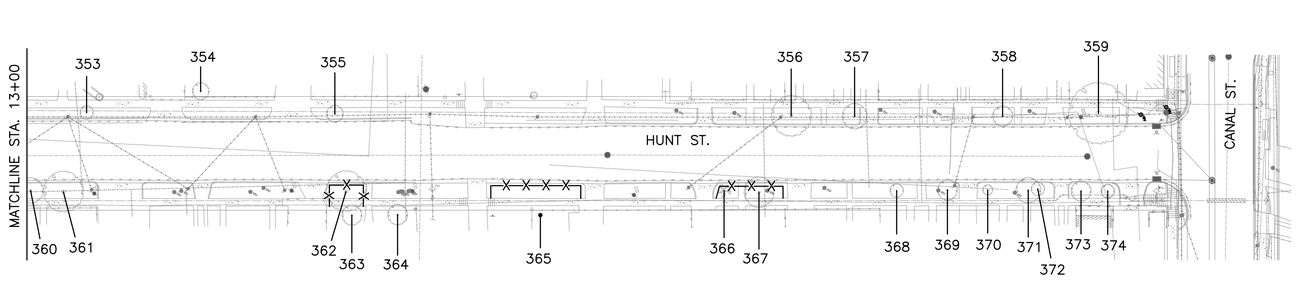

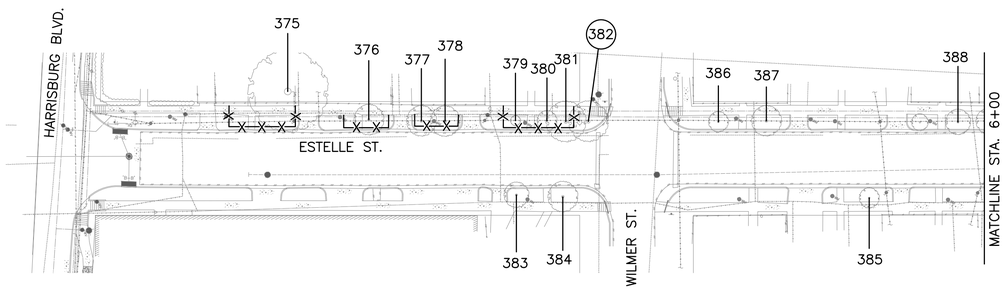

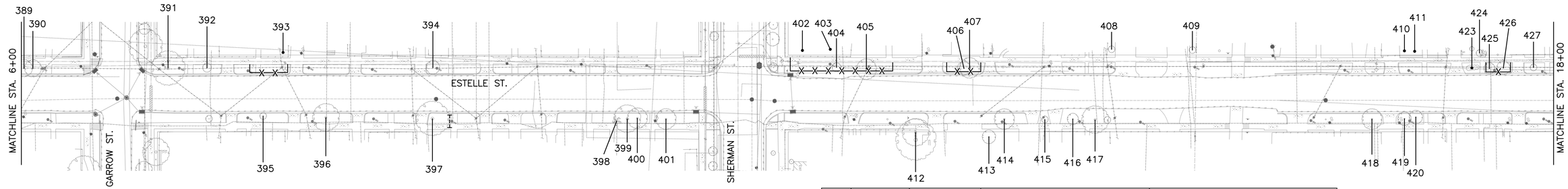

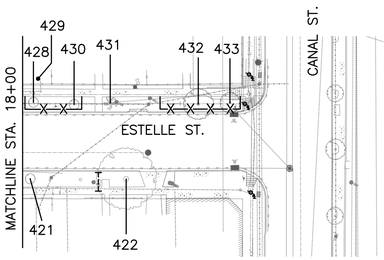

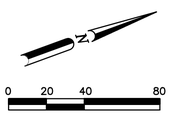

NOTE:

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4. THE CONTRACTOR'S ARBORIST WILL MARK LOCATIONS OF TREES TO BE PLANTED AND OBTAIN APPROVAL BY CITY ENGINEER AND CITY FORESTER BEFORE PURCHASING OR EXCAVATING PLANTING HOLE OF EACH TREE.

Tree No.	Location	Description	Comments	Treatment
Trees on Hunt Street				
353	Not available	5" Camphor	Not Ordinance tree	
354	Not available	10" Pear	Private tree, Not impacted	
355	Not available	3" Camphor	Not Ordinance tree	
356	16 Hunt	20" Crepe Myrtle	Topped, Ordinance tree, Not impacted	
357	16 Hunt	15" Crepe Myrtle	Topped, Not ordinance tree	
358	12 Hunt	3" Crepe Myrtle	Not Ordinance tree	
359	4 Hunt	34" Tallow	Ordinance tree	Hand dig for lead
360	115 Hunt	14" Arborvitae	Not Ordinance tree	
361	115 Hunt	19" Camphor	Not Ordinance tree	
362	105 Hunt	24" Chinaberry	Ordinance tree	Fence, Bore waterline
363	105 Hunt	5" Crepe Myrtle	Private tree, Not impacted	
364	105 Hunt	14" Crepe Myrtle	Private tree, Not impacted	
365	Not available	40" Live Oak	Private tree	Fence, Bore waterline
366	12 Hunt	Palm	Dead, not ordinance tree	
367	12 Hunt	21" Magnolia	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
368	11 Hunt	4" Crepe Myrtle	Not Ordinance tree	
369	11 Hunt	12" Crepe Myrtle	Not Ordinance tree	
370	7 Hunt	4" Crepe Myrtle	Not Ordinance tree	
371	7 Hunt	18" Chinaberry	Not Ordinance tree	
372	7 Hunt	6" Crepe Myrtle	Not Ordinance tree	
373	5 Hunt	8" Crepe Myrtle	Not Ordinance tree	
374	5 Hunt	3" Crepe Myrtle	Not Ordinance tree	
Trees on Estelle Street				
375	414 Estelle	45" Water Oak	30% dieback, Private tree	Hand dig tap & lead, Fence, Bore waterline
376	410 Estelle	18" Live Oak	Ordinance tree	Fence, Bore waterline
377	406 Estelle	23" Live Oak	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
378	406 Estelle	20" Live Oak	Ordinance tree	Fence, Bore waterline
379	402 Estelle	3" Oleander	Not Ordinance tree	
380	402 Estelle	10" Live Oak	Ordinance tree	Fence, Bore waterline
381	402 Estelle	3" Crepe Myrtle	Not Ordinance tree	
382	402 Estelle	10" Crepe Myrtle	Remove for fire hydrant, Not ordinance tree	Remove tree, No replacement required
383	Not available	13" Lacebark Elm	Dead, Not impacted	
384	Not available	14" Live Oak	Ordinance tree, not impacted	
385	313 Estelle	7" Crepe Myrtle	Not Ordinance tree	
386	Not available	12" Crepe Myrtle	Not Ordinance tree	
387	Not available	14" Crepe Myrtle	Not Ordinance tree	
388	304 Estelle	5" Crepe Myrtle	Not Ordinance tree	
389	304 Estelle	5" Crepe Myrtle	Not Ordinance tree	
390	304 Estelle	4" Crepe Myrtle	Not Ordinance tree	
391	Not available	16" Crepe Myrtle	Not Ordinance tree	

Tree No.	Location	Description	Comments	Treatment
Trees on Estelle Street				
392	Not available	9" Crepe Myrtle	Not ordinance tree	
393	224 Estelle	22" Green Ash	Ordinance tree	Hand dig fire hydrant, Fence, Bore waterline
394	216 Estelle	13" Mimosa	Not ordinance tree	
395	Not available	4" Live Oak	Ordinance tree, not impacted	
396	225 Estelle	27" Mulberry	Root rot, Ordinance tree, not impacted	
397	Not available	22" Live Oak	Ordinance tree	Root prune for lead
398	209 Estelle	5' Sago	Not ordinance tree	
399	209 Estelle	18" Crepe Myrtle	Not ordinance tree	
400	209 Estelle	14" Crepe Myrtle	Not ordinance tree	
401	Not available	22" Pecan	Ordinance tree, not impacted	
402	122 Estelle	22" Sweetgum	Private tree	Hand dig fire hydrant, Fence, Bore waterline
403	122 Estelle	18" Bald Cypress	Private tree	Hand dig tap & lead, Fence, Bore waterline
404	122 Estelle	4" Pear	Not ordinance tree	
405	122 Estelle	21" Sugarberry	Poor condition, Ordinance tree	Fence, Bore waterline
406	114 Estelle	12" Live Oak	Ordinance tree	Fence, Bore waterline
407	114 Estelle	13" Camphor	Not ordinance tree	
408	104 Estelle	5" Live Oak	Private tree, Not impacted	
409	104 Estelle	5" Live Oak	Private tree, Not impacted	
410	Not available	15" Arborvitae	Private tree, Not impacted	
411	Not available	15" Arborvitae	Private tree, Not impacted	
412	117 Estelle	30" Live Oak	Private tree, Not impacted	
413	105 Estelle	12" Magnolia	Private tree, Not impacted	
414	105 Estelle	14" Crepe Myrtle	Not ordinance tree	
415	105 Estelle	5" Loquat	Not ordinance tree	
416	105 Estelle	5" Loquat	Not ordinance tree	
417	105 Estelle	18" Crepe Myrtle	Topped, Not ordinance tree	
418	Not available	20" American Elm	Ordinance tree, not impacted	
419	Not available	8" Crepe Myrtle	Not ordinance tree	
420	Not available	5" Crepe Myrtle	Not ordinance tree	
421	5 Estelle	4" Loquat	Not ordinance tree	
422	5 Estelle	30" Green Ash	Ordinance tree	Root prune for lead
423	12 Estelle	4" Crepe Myrtle	Not ordinance tree	
424	12 Estelle	2" Loquat	Private tree, Not impacted	
425	12 Estelle	3" Crepe Myrtle	Not ordinance tree	
426	12 Estelle	13" Magnolia	Ordinance tree	Fence, Bore waterline
427	12 Estelle	2" Crepe Myrtle	Not ordinance tree	
428	12 Estelle	2" Crepe Myrtle	Not ordinance tree	
429	12 Estelle	20" Arizona Ash	Private tree	Fence, Bore waterline
430	8 Estelle	3" Crepe Myrtle	Not ordinance tree	
431	8 Estelle	1' Sago Palm	Not ordinance tree	
432	Not available	18" Magnolia	Ordinance tree	Fence, Bore waterline
433	Not available	14" Magnolia	Ordinance tree	Hand dig bends, Fence, Bore waterline

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- –X–X– TREE PROTECTION FENCE
- ----- ROOT PRUNING TRENCH

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

C.N. Koehl
Urban Forestry, Inc.
210 Stone Bush Ct. ◦ Katy, Texas 77493
281-391-0022 ckoehl@koehlurbanforestry.com
Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 8 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 253 OF 275	

APP. | REVISION | NO. | DATE

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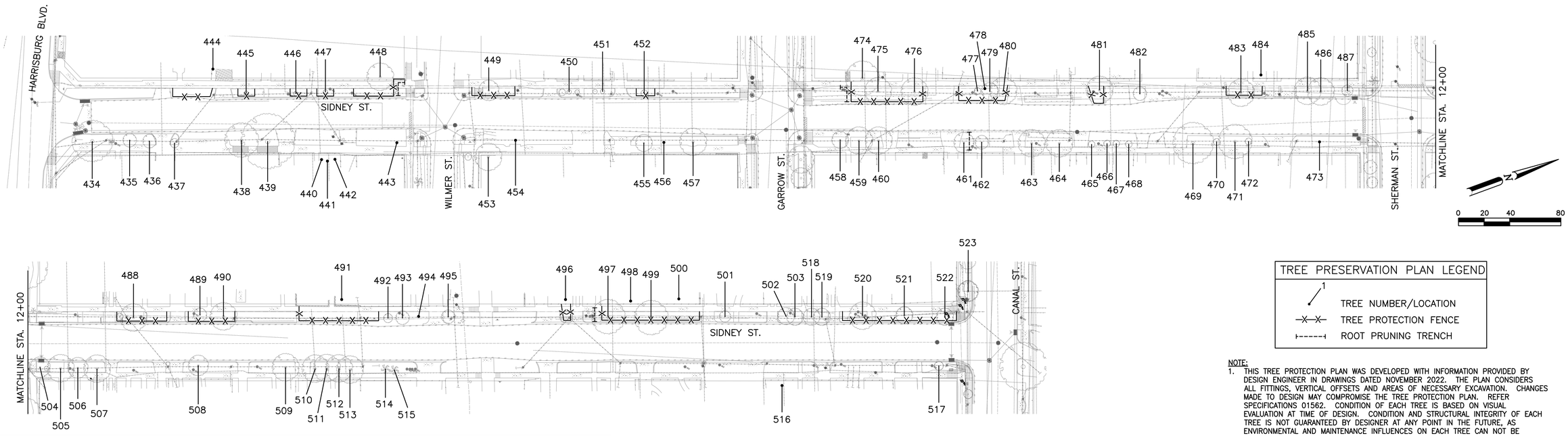

TREE PRESERVATION PLAN LEGEND	
1	TREE NUMBER/LOCATION
-X-X-	TREE PROTECTION FENCE
-|------|-	ROOT PRUNING TRENCH

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Tree No.	Location	Description	Comments	Treatment
Trees on Sidney Street				
434	421 Sidney	22' Crepe Myrtle	Ordinance tree, not impacted	
435	421 Sidney	13" Live Oak	Ordinance tree, not impacted	
436	421 Sidney	15" Live Oak	Ordinance tree, not impacted	
437	421 Sidney	6" Live Oak	Ordinance tree, not impacted	
438	Not available	33" Live Oak	Ordinance tree, not impacted	
439	Not available	45" Live Oak	Ordinance tree, not impacted	
440	407 Sidney	12" Water Oak	Private tree, Not impacted	
441	407 Sidney	12" Water Oak	Private tree, Not impacted	
442	407 Sidney	12" Water Oak	Private tree, Not impacted	
443	407 Sidney	4" Chinese Pistache	Ordinance tree, not impacted	
444	410 Sidney	36" Live Oak	Private tree	Fence, Bore waterline
445	410 Sidney	3" Chinese Pistache	Ordinance tree	Fence, Bore waterline
446	410 Sidney	5" Chinese Pistache	Ordinance tree	Fence, Bore waterline
447	Not available	4" Chinese Pistache	Ordinance tree	Fence, Bore waterline
448	Not available	30" Live Oak	Private tree	Root prune for fire hydrant, Fence, Bore Waterline
449	314B Sidney	18" Pecan	Utility pruned, Ordinance tree	Fence, Bore waterline
450	Not available	4" Orchid Tree	Not Ordinance tree	
451	Not available	4" Orchid Tree	Not Ordinance tree	
452	306 Sidney	6" Pecan	Ordinance tree	Fence, Bore waterline
453	Not available	20" Tallow	Private tree, Not impacted	
454	Not available	6" Tallow	Not Ordinance tree	
455	Not available	14" Pear	Not Ordinance tree	
456	Not available	5" Pecan	Ordinance tree, not impacted	
457	Not available	20" Water Oak	Ordinance tree, not impacted	
458	231 Sidney	12" Tallow	Not Ordinance tree	
459	231 Sidney	18" Tallow	Not Ordinance tree	
460	231 Sidney	22" Tallow	Ordinance tree, not impacted	
461	Not available	12" Live Oak	Ordinance tree	Root prune for lead
462	Not available	4" Crepe Myrtle	Not Ordinance tree	
463	Not available	18" Arizona Ash	Not Ordinance tree	
464	Not available	24" Catalpa	Cavities, Ordinance tree, Not impacted	
465	Not available	2" Oleander	Not Ordinance tree	
466	Not available	7" Live Oak	Ordinance tree, not impacted	
467	Not available	10" Live Oak	Ordinance tree, not impacted	
468	Not available	2" Oleander	Not Ordinance tree	
469	211 Sidney	20" Crepe Myrtle	Cavities, Ordinance tree, Not impacted	
470	211 Sidney	5" Cedar	Not Ordinance tree	
471	211 Sidney	27" Live Oak	Trunk rot, Damaged, Ordinance tree, not impacted	
472	207 Sidney	6" Magnolia	Ordinance tree, not impacted	
473	201 Sidney	13" Magnolia	Ordinance tree, not impacted	
474	232 Sidney	30" Live Oak	Ordinance tree	Root prune tap & lead, Fence, Bore waterline
475	232 Sidney	18" Arizona Ash	Not Ordinance tree	
476	232 Sidney	20" Tallow	Ordinance tree	Fence, Bore waterline

Tree No.	Location	Description	Comments	Treatment
Trees on Sidney Street				
477	Not available	15" Live Oak	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
478	Not available	4" Magnolia	Ordinance tree	Fence, Bore waterline
479	Not available	15" Live Oak	Ordinance tree	Fence, Bore waterline
480	Not available	24" Tallow	Ordinance tree	Fence, Bore waterline
481	214 Sidney	24" Mulberry	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
482	210 Sidney	18" Sugarberry	Not Ordinance tree	
483	208 Sidney	16" Crepe Myrtle	Not Ordinance tree	
484	208 Sidney	28" Live Oak	Private tree	Hand dig tap & lead, Fence, Bore waterline
485	204 Sidney	12" Arborvitae	Not Ordinance tree	
486	204 Sidney	12" Arborvitae	Not Ordinance tree	
487	204 Sidney	8" Loquat	Not Ordinance tree	
488	Not available	26" Tallow	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
489	Not available	13" Bald Cypress	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
490	Not available	26" Green Ash	Ordinance tree	Fence, Bore waterline
491	Not available	25" Live Oak	Private tree	Fence, Bore waterline
492	Not available	2" Crepe Myrtle	Not Ordinance tree	
493	Not available	4" Crepe Myrtle	Not Ordinance tree	
494	Not available	8" Crepe Myrtle	Not Ordinance tree	
495	108 Sidney	10" Crepe Myrtle	Not Ordinance tree	
496	20 Sidney	36" Live Oak	Private tree	Fence, Bore waterline
497	Not available	26" Live Oak	Ordinance tree	Root prune for tap and lead, Fence, Bore waterline
498	Not available	28" Live Oak	Ordinance tree	Fence, Bore waterline
499	Not available	30" Live Oak	Ordinance tree	Fence, Bore waterline
500	Not available	30" Live Oak	Private tree	Fence, Bore waterline
501	16 Sidney	5" Mountain Laurel	Not Ordinance tree	
502	16 Sidney	12" Arborvitae	Not Ordinance tree	
503	16 Sidney	12" Arborvitae	Not Ordinance tree	
504	Not available	20" Crepe Myrtle	Ordinance tree, not impacted	
505	Not available	20" Crepe Myrtle	Ordinance tree, not impacted	
506	Not available	20" Crepe Myrtle	Ordinance tree	Hand dig for lead
507	Not available	20" Crepe Myrtle	Ordinance tree, not impacted	
508	119 Sidney	24" Green Ash	Ordinance tree	Hand dig for lead
509	111 Sidney	22" Tallow	Ordinance tree, not impacted	
510	109 Sidney	20" Crepe Myrtle	Ordinance tree, not impacted	
511	109 Sidney	20" Crepe Myrtle	Ordinance tree, not impacted	
512	109 Sidney	20" Crepe Myrtle	Ordinance tree, not impacted	
513	109 Sidney	20" Crepe Myrtle	Ordinance tree, not impacted	
514	109 Sidney	6' Sago Palm	Not Ordinance tree	
515	109 Sidney	4' Sago Palm	Not Ordinance tree	
516	Not available	24" Pecan	Private tree, Not impacted	
517	1 Sidney	10" Loquat	Not Ordinance tree	
518	Not available	6" Arborvitae	Not Ordinance tree	
519	Not available	6" Arborvitae	Not Ordinance tree	
520	4 Sidney	20" Live Oak	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
521	4 Sidney	18" Live Oak	Ordinance tree	Fence, Bore waterline
522	4 Sidney	14" Live Oak	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
523	4 Sidney	20" Live Oak	Ordinance tree, not impacted	

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Approved :

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HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 9 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 254 OF 275	

NO.	DATE	REVISION	APP.

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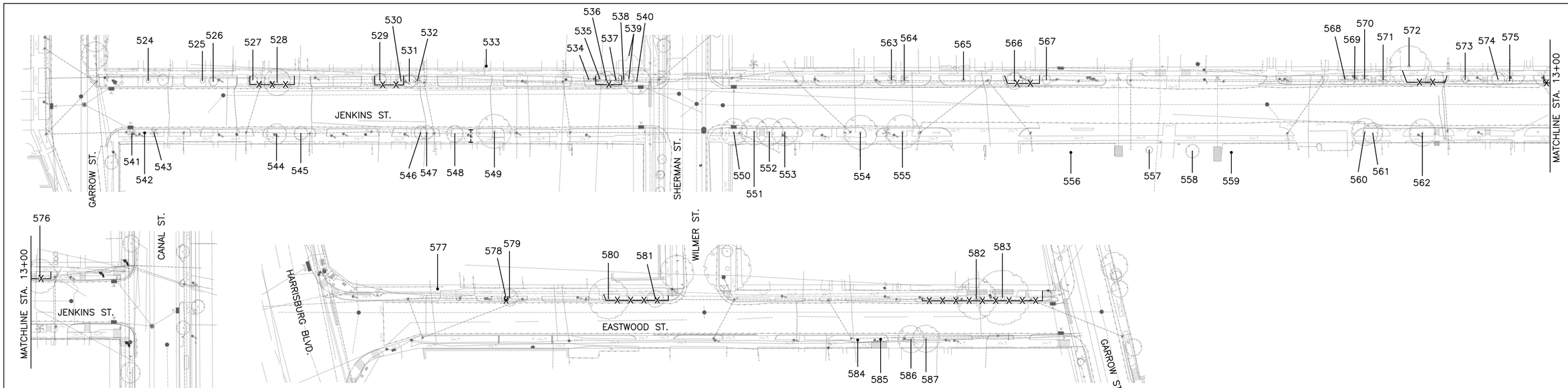

Tree No.	Location	Description	Comments	Treatment
Trees on Jenkins Street				
524	Not available	2" Chinaberry	Not Ordinance tree	
525	Not available	4" Crepe Myrtle	Not Ordinance tree	
526	Not available	8" Crepe Myrtle	Not Ordinance tree	
527	116 Jenkins	9" Crepe Myrtle	Not Ordinance tree	
528	116 Jenkins	15" Bald Cypress	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
529	112 Jenkins	12" Shumard Oak	Ordinance tree	Fence, Bore waterline
530	112 Jenkins	5" Crepe Myrtle	Not Ordinance tree	
531	112 Jenkins	6" Loquat	Not Ordinance tree	
532	112 Jenkins	5' Sago Palm	Not Ordinance tree	
533	Not available	18" Sugarberry	Private tree, Not impacted	
534	Not available	4" Loquat	Not Ordinance tree	
535	Not available	4" Loquat	Not Ordinance tree	
536	Not available	7" Pecan	Ordinance tree	Fence, Bore waterline
537	Not available	10" Arizona Ash	Not Ordinance tree	
538	Not available	8" Arizona Ash	Not Ordinance tree	
539	Not available	8" Arizona Ash	Not Ordinance tree	
540	Not available	18" Camphor	Not Ordinance tree	
541	Not available	4' Sago Palm	Not Ordinance tree	
542	Not available	4' Sago Palm	Not Ordinance tree	
543	Not available	5' Sago Palm	Not Ordinance tree	
544	Not available	6" Crepe Myrtle	Not Ordinance tree	
545	Not available	5" Crepe Myrtle	Not Ordinance tree	
546	107 Jenkins	12" Arborvitae	Not Ordinance tree	
547	107 Jenkins	12" Arborvitae	Not Ordinance tree	
548	107 Jenkins	14" Arizona Ash	Not Ordinance tree	
549	107 Jenkins	25" Live Oak	Ordinance tree	Root prune for lead
550	Not available	18" Crepe Myrtle	Not Ordinance tree	
551	Not available	18" Crepe Myrtle	Not Ordinance tree	
552	Not available	20" Crepe Myrtle	Ordinance tree, not impacted	
553	Not available	20" Crepe Myrtle	Ordinance tree	Hand dig lead
554	49 Jenkins	22" Live Oak	Ordinance tree, not impacted	
555	45 Jenkins	24" Pecan	Ordinance tree	Hand dig for lead
556	Not available	24" Live Oak	Private tree, Not impacted	
557	Not available	6" Live Oak	Private tree, Not impacted	
558	Not available	12" Bald Cypress	Private tree, Not impacted	
559	Not available	18" Live Oak	Private tree, Not impacted	
560	Not available	16" Tallow	Not Ordinance tree	
561	Not available	18" Tallow	Not Ordinance tree	
562	Not available	25" Crepe Myrtle	Ordinance tree	Hand dig lead
563	Not available	6' Sago Palm	Not Ordinance tree	
564	Not available	4' Sago Palm	Dead	
565	Not available	2" American Sycamore	Not Ordinance tree	
566	Not available	14" Pecan	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
567	Not available	2" Crepe Myrtle	Not Ordinance tree	
568	22 Jenkins	18' Palm	Dead	
569	22 Jenkins	20' Palm	Not Ordinance tree	
570	22 Jenkins	5' Palm	Dead	
571	22 Jenkins	20' Palm	Not Ordinance tree	
572	14 Jenkins	28" Tallow	Ordinance tree	Fence, Bore waterline
573	10 Jenkins	4" Italian Cypress	Not Ordinance tree	
574	10 Jenkins	5" Verbena	Not Ordinance tree	
575	10 Jenkins	6" Italian Cypress	Not Ordinance tree	
576	6 Jenkins	20" Crepe Myrtle	Topped, Rotted, Ordinance tree	Fence, Bore waterline

Tree No.	Location	Description	Comments	Treatment
Trees on Eastwood Street				
577	Not available	3" Sugarberry	Not Ordinance tree	
578	318 Eastwood	2" Live Oak	Ordinance tree	Fence, Bore waterline
579	318 Eastwood	2' Yucca	Not Ordinance tree	
580	316 Eastwood	32" Live Oak	Ordinance tree	Fence, Bore waterline
581	316 Eastwood	16" Live Oak	50% dieback, Trunk cavities, Ordinance Tree	Fence, Bore waterline
582	306 Eastwood	40" Live Oak	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
583	306 Eastwood	50" Live Oak	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
584	311 Eastwood	24" Tallow	Ordinance tree, not impacted	
585	311 Eastwood	24" Pecan	Ordinance tree	Hand dig for lead
586	311 Eastwood	20" Tallow	Ordinance tree	Hand dig for lead
587	311 Eastwood	14" Tallow	Not Ordinance tree	

TREE PRESERVATION PLAN LEGEND

1 TREE NUMBER/LOCATION

TREE PROTECTION FENCE

ROOT PRUNING TRENCH

N

0 20 40 80

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4. THE CONTRACTOR'S ARBORIST WILL MARK LOCATIONS OF TREES TO BE PLANTED AND OBTAIN APPROVAL BY CITY ENGINEER AND CITY FORESTER BEFORE PURCHASING OR EXCAVATING PLANTING HOLE OF EACH TREE.

WOOLPERT
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

C.N. Koehl
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210 Stone Bush Ct. ◦ Katy, Texas 77493
281-391-0022 ckoehl@koehlurbanforestry.com

Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 10 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 255 OF 275	

NO.	DATE	REVISION	APP.

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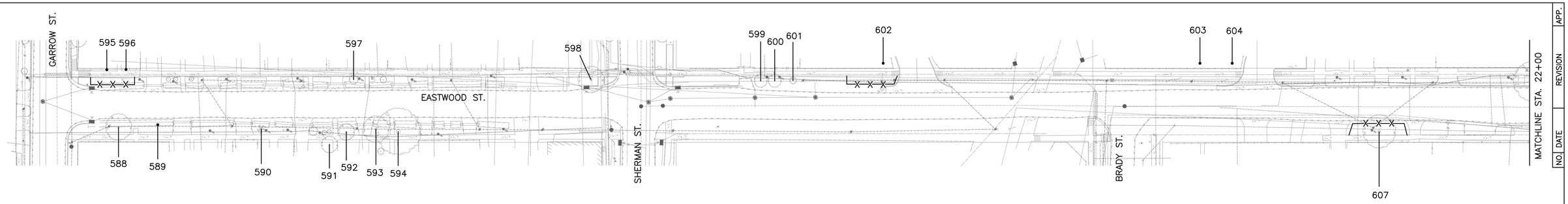
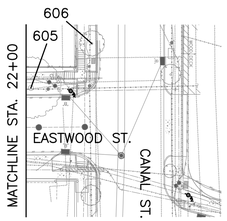
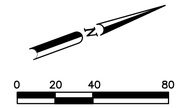




Tree No.	Location	Description	Comments	Treatment
Trees on Eastwood Street				
588	Not available	16" Crepe Myrtle	Not ordinance tree	
589	Not available	12" Pear	Not ordinance tree	
590	Not available	20' Palm	Not ordinance tree	
591	219 Eastwood	15" Pecan	Private tree, Not impacted	
592	219 Eastwood	18" Live Oak	Ordinance tree, not impacted	
593	215 Eastwood	16" Crepe Myrtle	Not ordinance tree	
594	215 Eastwood	15" Crepe Myrtle	Not ordinance tree	
595	218 Eastwood	15" Pecan	Ordinance tree	Fence, Bore waterline
596	218 Eastwood	4" Redbud	Private tree, Not impacted	
597	Not available	4" Crepe Myrtle	Not ordinance tree	
598	Not available	5" Crepe Myrtle	Not ordinance tree	
599	118 Eastwood	5" Crepe Myrtle	Not ordinance tree	
600	118 Eastwood	2" Crepe Myrtle	Not ordinance tree	
601	118 Eastwood	3" Crepe Myrtle	Not ordinance tree	
602	Not available	20" Live Oak	Private tree	Hand dig fire hydrant, Fence, Bore waterline
603	Not available	26" Live Oak	Private tree, Not impacted	
604	Not available	10" Crepe Myrtle	Private tree, Not impacted	
605	Not available	31" Live Oak	Ordinance tree	Hand dig lead
606	Not available	10" Monterrey Oak	Ordinance tree, not impacted	
607	19 Eastwood	26" Tallow	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH



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NO. | DATE | REVISION | APP.

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 11 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 256 OF 275	

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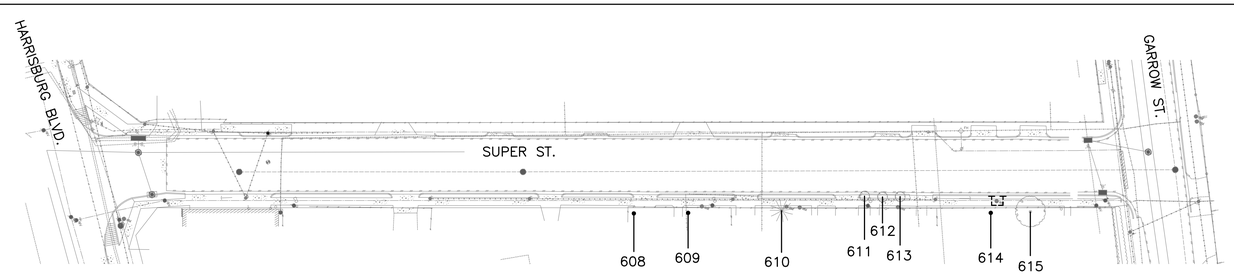
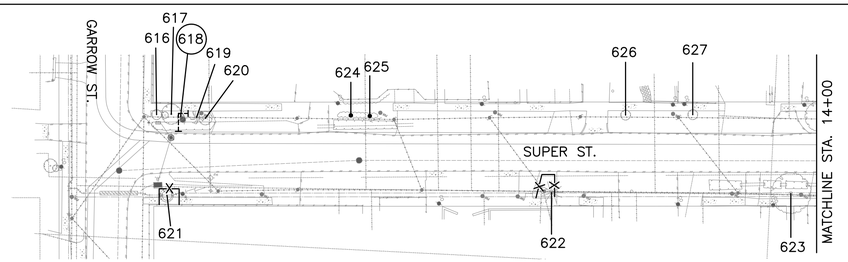
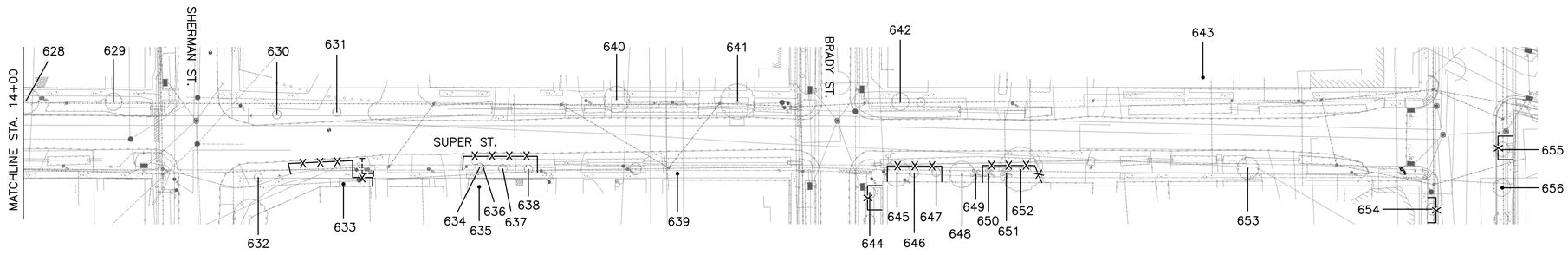
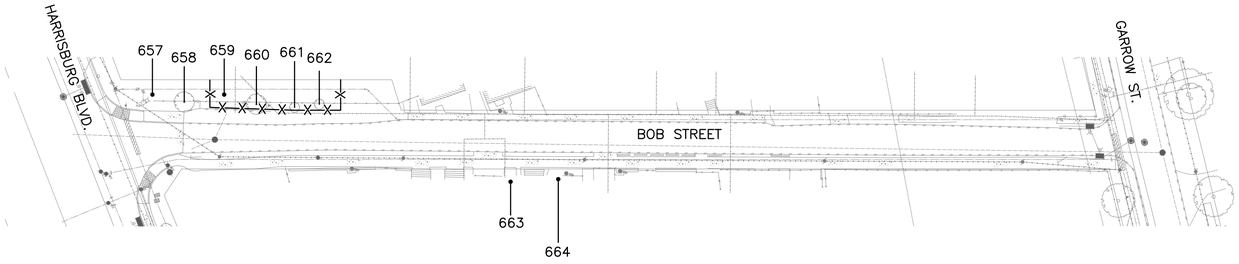


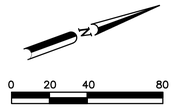






TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- —X—X— TREE PROTECTION FENCE
- ----- ROOT PRUNING TRENCH



NOTE:

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Tree No.	Location	Description	Comments	Treatment
Trees on Super Street				
608	311 Super	10" Magnolia	Private tree, Not impacted	
609	311 Super	12" Arborvitae	Private tree, Not impacted	
610	307 Super	9" Loblolly Pine	Private tree	Hand dig for lead
611	305 Super	12" Crepe Myrtle	Not Ordinance tree	
612	305 Super	12" Crepe Myrtle	Not Ordinance tree	
613	305 Super	12" Crepe Myrtle	Not Ordinance tree	
614	Not available	18" Pecan	Private tree	Root prune for tap and lead
615	Not available	15" Live Oak	Private tree, Not impacted	
616	Not available	2" Crepe Myrtle	Not Ordinance tree	
617	Not available	10" Pecan	Ordinance tree	Root prune for fire hydrant salvage
618	Not available	2" Loquat	Remove for fire hydrant, Not ordinance tree	Remove tree, No replacement required
619	Not available	2' Sago Palm	Not Ordinance tree	
620	Not available	6" Camphor	Not Ordinance tree	
621	4501 Garrow	5" Magnolia	Ordinance tree	Fence, Bore waterline
622	211 Super	8" Loblolly Pine	Ordinance tree	Fence, Bore waterline
623	205 Super	15" Crepe Myrtle	Not Ordinance tree	
624	Not available	1" Italian Cypress	Not Ordinance tree	
625	Not available	1" Italian Cypress	Not Ordinance tree	
626	Not available	7" Magnolia	Ordinance tree, not impacted	
627	Not available	7" Magnolia	50% dieback, Ordinance tree	Keep excavation for lead at least 5' from trunk
628	204 Super	12" Crepe Myrtle	Not Ordinance tree	
629	204 Super	8" Crepe Myrtle	Not Ordinance tree	
630	Not available	3" Crepe Myrtle	Not Ordinance tree	
631	Not available	2" Crepe Myrtle	Not Ordinance tree	
632	111 Super	2" Crepe Myrtle	Not Ordinance tree	
633	Not available	24" Pecan	Private tree	Root prune for tap and lead, Fence, Bore waterline
634	Not available	9" Water Oak	Ordinance tree	Fence, Bore waterline
635	Not available	35" Pecan	Private tree	Fence, Bore waterline

Tree No.	Location	Description	Comments	Treatment
Trees on Super Street				
636	Not available	2" Bur Oak	Ordinance tree	Fence, Bore waterline
637	Not available	2" Crepe Myrtle	Not Ordinance tree	
638	Not available	2" Crepe Myrtle	Not Ordinance tree	
639	Not available	3" Sugarberry	Not Ordinance tree	
640	106 Super	17" Chinaberry	Not Ordinance tree	
641	Not available	20" Chinaberry	Ordinance tree, not impacted	
642	4409 Brady	12" Loquat	Not Ordinance tree	
643	16 Super	20" Tallow	Private tree, Not impacted	
644	Not available	10" Magnolia	Ordinance tree	Fence
645	Not available	14" Water Oak	Ordinance tree	Hand dig for tap and lead, Fence, Bore waterline
646	Not available	2" Pecan	Ordinance tree	Fence, Bore waterline
647	Not available	2" Pecan	Ordinance tree	Fence, Bore waterline
648	Not available	18" Sugarberry	Not Ordinance tree	
649	Not available	1' Sago Palm	Not Ordinance tree	
650	Not available	2' Sago Palm	Not Ordinance tree	
651	Not available	1' Sago Palm	Not Ordinance tree	
652	Not available	20" Arizona Ash	Ordinance tree	Fence, Bore waterline
653	15 Super	16" Crepe Myrtle	Not Ordinance tree	
654	Not available	8" Monterrey Oak	Ordinance tree	Fence
655	4515 Canal	12" Monterrey Oak	Ordinance tree	Fence
656	4515 Canal	12" Monterrey Oak	Poor condition - root exposed - Ordinance tree, Not impacted	
Trees on Bob Street				
657	Not available	12" American Elm	Not Ordinance tree	
658	Not available	12" Mulberry	Not Ordinance tree	
659	Not available	6" Pecan	Ordinance tree	Fence, Bore waterline
660	Not available	12" Live Oak	Ordinance tree	Fence, Bore waterline
661	Not available	7" Live Oak	Ordinance tree	Fence, Bore waterline
662	Not available	5" Live Oak	Ordinance tree	Fence, Bore waterline
663	321 Bob Street	12" Arborvitae	Private tree, Not impacted	
664	321 Bob Street	12" Arborvitae	Private tree, Not impacted	

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 12 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 257 OF 275	

NO.	DATE	REVISION	APP.

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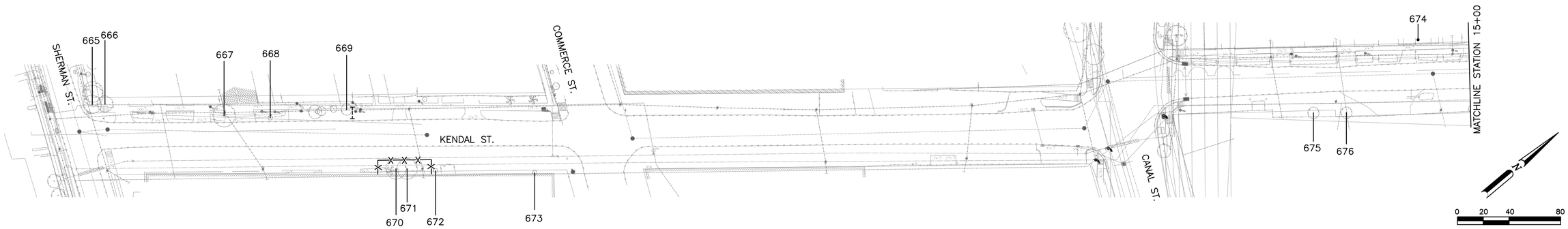

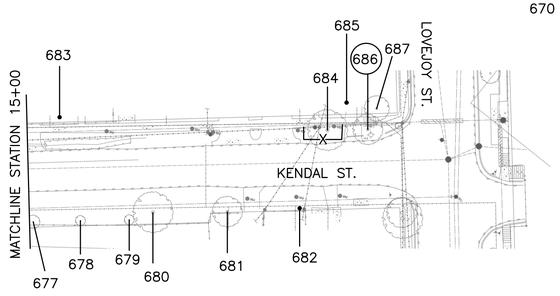

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

Tree No.	Location	Description	Comments	Treatment
Trees on Kendall Street				
665	3815 Sherman	12' Palm	Not ordinance tree	
666	3815 Sherman	3" Live Oak	Poor condition, Ordinance tree	
667	Not available	8" Tallow	Not ordinance tree	
668	110 Kendall	3" Bradford Pear	Not ordinance tree	
669	108 Kendall	10" Live Oak	Ordinance tree	Root prune for lead
670	3901 Sherman	18" Sycamore	Ordinance tree	Fence, Bore waterline
671	3901 Sherman	22" American Elm	Ordinance tree	Fence, Bore waterline
672	3901 Sherman	3" Mulberry	Not ordinance tree	
673	Not available	5" American Elm	Private tree, Not impacted	
Trees on N Kendall Street				
674	119 N Kendall	14" Crepe Myrtle	Private tree, Not impacted	
675	123 N Drennan	8" Live Oak	Private tree, Not impacted	
676	123 N Drennan	8" Live Oak	Ordinance tree, not impacted	
677	123 N Drennan	4" Live Oak	Ordinance tree, not impacted	
678	123 N Drennan	4" Live Oak	Ordinance tree, not impacted	
679	123 N Drennan	4" Live Oak	Ordinance tree, not impacted	
680	123 N Drennan	17" Tallow	Not ordinance tree	
681	123 N Drennan	15" Pecan	Private tree	Root prune for lead
682	132 Kendall	3" Pecan	Ordinance tree, not impacted	
683	123 Kendall	9" Loquat	Private tree, Not impacted	
684	133 Kendall	10" Crepe Myrtle	Not ordinance tree	
685	133 Kendall	25" Sycamore	Topped by utility, Private tree	Fence, Bore waterline
686	133 Kendall	4" Crepe Myrtle	Not ordinance tree	Remove for vertical bend
687	133 Kendall	13" Arborvitae	Private tree, Not impacted	

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 13 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–000035–0270–4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 258 OF 275	

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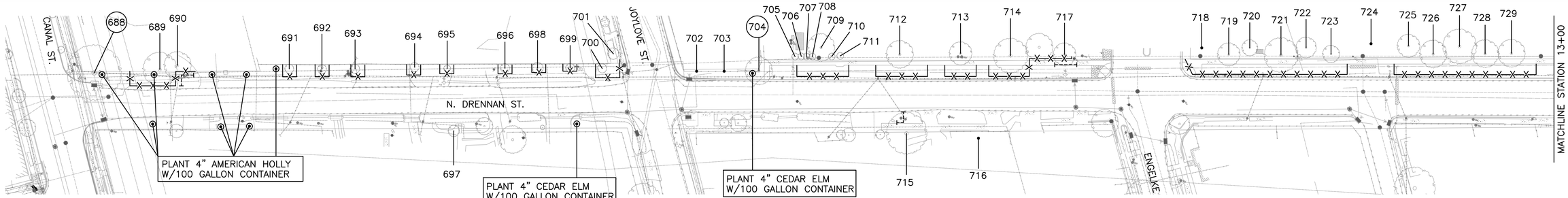

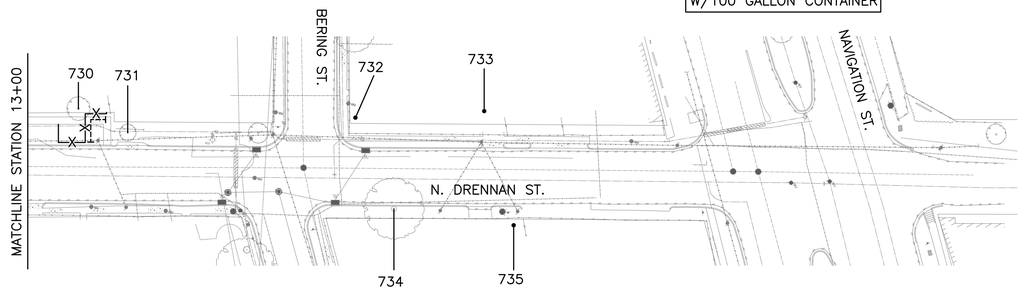

Tree No.	Location	Description	Comments	Treatment
Trees on N Drennan Street				
688	Not available	3" Post Oak	Ordinance tree	Remove for bends
689	Not available	23" Post Oak	Topped by utility, Private tree	Fence, Bore waterline
690	Not available	19" Pecan	Private tree	Root prune for tap & lead, Fence, Bore waterline
691	123 N Drennan	6" Live Oak	Ordinance tree	Fence, Bore waterline
692	123 N Drennan	6" Live Oak	Ordinance tree	Fence, Bore waterline
693	123 N Drennan	8" Live Oak	Ordinance tree	Fence, Bore waterline
694	123 N Drennan	6" Live Oak	Ordinance tree	Fence, Bore waterline
695	123 N Drennan	7" Live Oak	Ordinance tree	Fence, Bore waterline
696	123 N Drennan	10" Live Oak	Ordinance tree	Fence, Bore waterline
697	126 N Drennan	5" Sweet Olive	Private tree, Not impacted	
698	123 N Drennan	7" Live Oak	Ordinance tree	Fence, Bore waterline
699	123 N Drennan	6" Live Oak	Ordinance tree	Fence, Bore waterline
700	123 N Drennan	7" Live Oak	Ordinance tree	Fence, Bore waterline
701	123 N Drennan	9" Live Oak	Ordinance tree	Fence, Bore waterline
702	301 N Drennan	5" Bradford Pear	Poor condition, Not ordinance tree	
703	301 N Drennan	10" Bradford Pear	Not ordinance tree	
704	301 N Drennan	15" American Elm	Not ordinance tree	Remove for bends
705	301 N Drennan	2" Holly	Private tree, Not impacted	
706	301 N Drennan	2" Holly	Private tree, Not impacted	
707	301 N Drennan	2" Holly	Private tree, Not impacted	
708	301 N Drennan	2" Holly	Private tree, Not impacted	
709	301 N Drennan	22" Bald Cypress	Private tree	Fence, Bore waterline
710	301 N Drennan	2" Holly	Private tree, Not impacted	
711	301 N Drennan	2" Holly	Private tree	
712	301 N Drennan	19" Bald Cypress	Private tree	Fence, Bore waterline
713	301 N Drennan	16" Bald Cypress	Private tree	Fence, Bore waterline
714	301 N Drennan	18" Bald Cypress	Private tree	Fence, Bore waterline
715	214 N Drennan	35" Live Oak	40% gone, Home construction impacts, Private tree	Root prune for lead
716	218 N Drennan	16" Water Oak	40% dieback, Home construction impacts, Private tree, Not impacted	
717	301 N Drennan	17" Bald Cypress	Private tree	Root prune for fire hydrant, Fence, Bore Waterline
718	301 N Drennan	16" Bald Cypress	Private tree	Fence, Bore waterline
719	301 N Drennan	21" Bald Cypress	Private tree	Fence, Bore waterline
720	301 N Drennan	12" Bald Cypress	Private tree	Fence, Bore waterline
721	301 N Drennan	20" Bald Cypress	Private tree	Fence, Bore waterline
722	301 N Drennan	16" Bald Cypress	Private tree	Fence, Bore waterline
723	301 N Drennan	14" Bald Cypress	Private tree	Fence, Bore waterline
724	301 N Drennan	22" Black Willow	Private tree, Not impacted	
725	301 N Drennan	15" Bald Cypress	Private tree	Fence, Bore waterline
726	301 N Drennan	15" Bald Cypress	Private tree	Fence, Bore waterline
727	301 N Drennan	17" Bald Cypress	Private tree	Fence, Bore waterline
728	301 N Drennan	14" Bald Cypress	Private tree	Fence, Bore waterline
729	301 N Drennan	16" Bald Cypress	Private tree	Fence, Bore waterline
730	301 N Drennan	18" Bald Cypress	Private tree	Root prune for bend, Fence, Bore waterline
731	301 N Drennan	13" Tallow	Not ordinance tree	
732	Not available	15" Crepe Myrtle	Private tree, Not impacted	
733	Not available	14" Crepe Myrtle	Topped, Poor condition, Private tree, Not impacted	
734	4103 Bering	28" Arizona Ash	Trunk topped at 15', Poor condition, Ordinance tree	
735	4103 Bering	13" American Elm	Private tree, Not impacted	

NOTE:
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N

0 20 40 80

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

C.N. Koehl
Urban Forestry, Inc.
210 Stone Bush Ct. ◦ Katy, Texas 77493
281-391-0022 ckoehl@koehlurbanforestry.com

Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 14 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 259 OF 275	

APP. | REVISION | NO. | DATE

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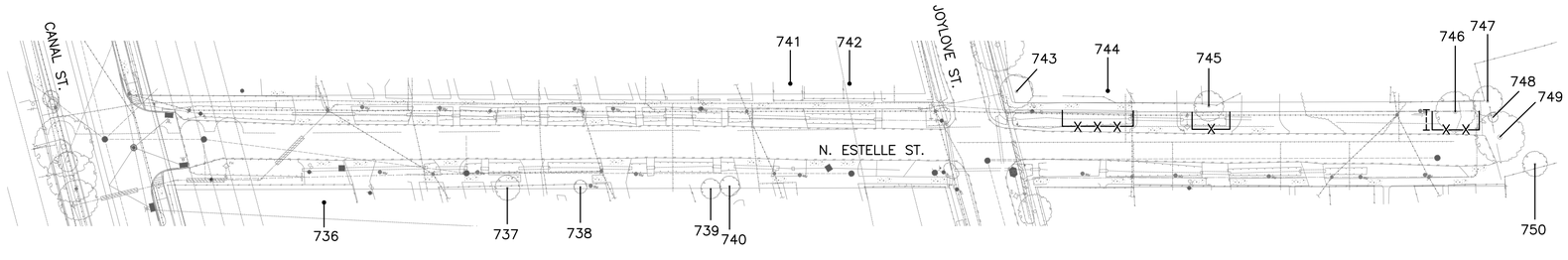
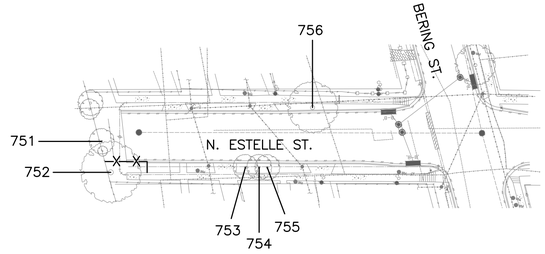
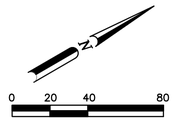




Tree No.	Location	Description	Comments	Treatment
Trees on N Estelle Street				
736	Not available	25" Live Oak	Private tree, Not impacted	
737	116 N Estelle	10" Saucer Magnolia	Private tree, Not impacted	
738	120 N Estelle	5" Juniper	Not ordinance tree	
739	126 N Estelle	14" Magnolia	Private tree, Not impacted	
740	126 N Estelle	13" Magnolia	50% dieback, Ordinance tree, Not impacted	
741	131 N Estelle	15" Burford Holly	Private tree, Not impacted	
742	131 N Estelle	16" Arborvitae	Private tree, Not impacted	
743	Not available	15" Eastern Red Cedar	Private tree, Not impacted	
744	Not available	16" Pecan	Private tree	Fence, Bore waterline
745	Not available	14" Live Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
746	Not available	22" Pecan	Ordinance tree	Hand dig bends & gate valve, Fence, Bore waterline, Root prune tap & lead
747	Not available	13" Water Oak	Private tree, Not impacted	
748	Not available	8" Sugarberry	Not ordinance tree	
749	Not available	23" Tallow	Ordinance tree, not impacted	
750	Not available	12" Sugarberry	Not ordinance tree	
751	Not available	14" Sugarberry	Not ordinance tree	
752	328 N Estelle	27" Willow Oak	Ordinance tree	Hand dig bends, Fence, Bore waterline
753	328 N Estelle	5" Crepe Myrtle	Not ordinance tree	
754	328 N Estelle	5" Crepe Myrtle	Not ordinance tree	
755	328 N Estelle	5" Crepe Myrtle	Not ordinance tree	
756	Not available	23" Tallow	Topped by utility, Ordinance tree, Not impacted	



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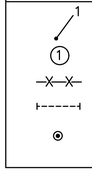
TREE PRESERVATION PLAN LEGEND



TREE NUMBER/LOCATION
TREE TO BE REMOVED
TREE PROTECTION FENCE
ROOT PRUNING TRENCH
REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
11750 Katy Freeway, Suite 1260
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FB NO. 10038100

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281-391-0022 ckoehl@koehlurbanforestry.com
Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 15 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 260 OF 275	

NO. | DATE | REVISION | APP.

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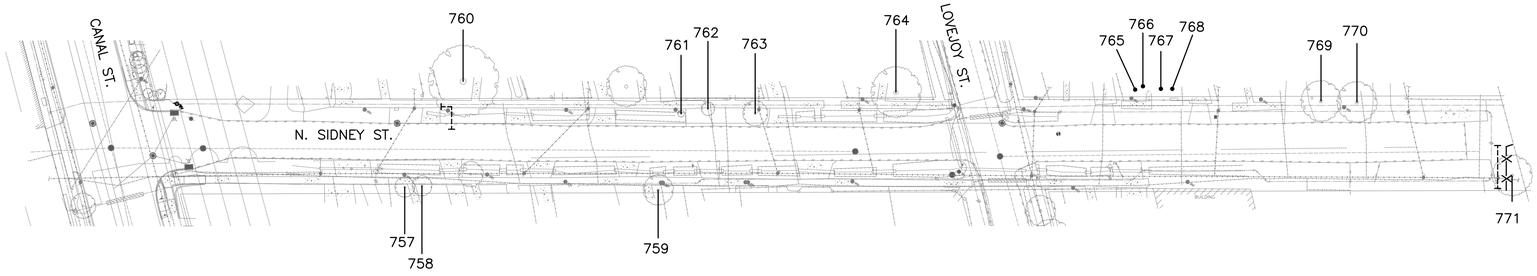

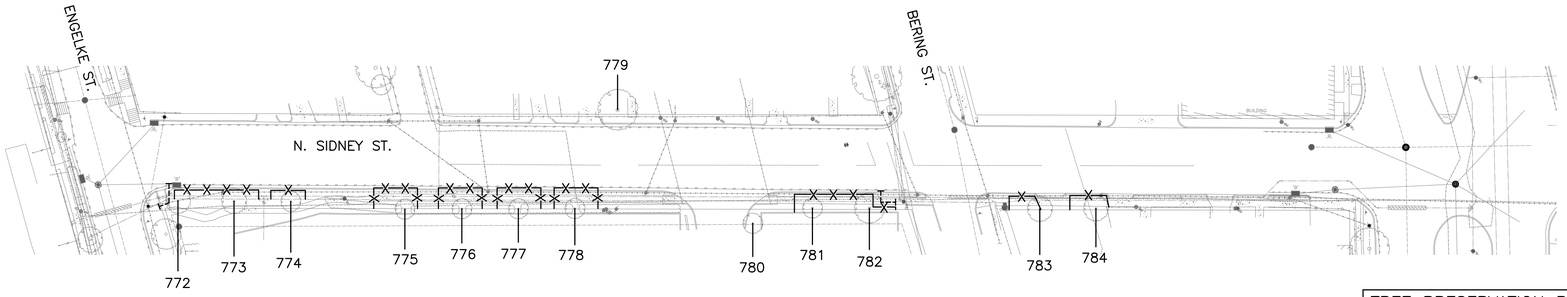

Tree No.	Location	Description	Comments	Treatment
Trees on N Sidney Street				
757	Not available	4' Sago Palm	Not ordinance tree	
758	Not available	4' Sago Palm	Not ordinance tree	
759	120 N Sidney	16" Eastern Red Cedar	Not ordinance tree	
760	113 N Sidney	29" Post Oak	Private tree	Root prune for lead
761	123 N Sidney	4" Pecan	Ordinance tree	Keep excavation for lead at least 5' from trunk
762	123 N Sidney	2" Pecan	Ordinance tree, not impacted	
763	123 N Sidney	11" Peach	Dead, Not ordinance tree	
764	126 N Sidney	26" Live Oak	Private tree, Not impacted	
765	205 N Sidney	6" Eastern Red Cedar	Private tree, Not impacted	
766	205 N Sidney	5" Arborvitae	Private tree, Not impacted	
767	205 N Sidney	5" Eastern Red Cedar	Private tree, Not impacted	
768	205 N Sidney	5" Eastern Red Cedar	Private tree, Not impacted	
769	215 N Sidney	3" Rose	Not ordinance tree	
770	215 N Sidney	3" Rose	Not ordinance tree	
771	Not available	19" Pecan	Ordinance tree	Root prune for waterline, Fence, Clearance prune
772	4410 Navigation	12" Water Oak	Ordinance tree	Root prune for bend, Fence, Bore waterline
773	4410 Navigation	13" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
774	4410 Navigation	11" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
775	4410 Navigation	11" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
776	4410 Navigation	12" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
777	4410 Navigation	12" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
778	4410 Navigation	11" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
779	323 N Sidney	24" Live Oak	Private tree, Not impacted	
780	4410 Navigation	12" Crepe Myrtle	Topped, Private tree, Not impacted	
781	4410 Navigation	12" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
782	4410 Navigation	14" Water Oak	Topped by utility, Ordinance tree	Hand dig for gate valve, Root prune for tee, Fence, Bore waterline
783	4410 Navigation	14" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
784	4410 Navigation	13" Water Oak	Topped by utility, Ordinance tree	Fence, Bore waterline

TREE PRESERVATION PLAN LEGEND

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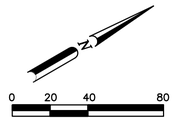
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ------ ROOT PRUNING TRENCH
- ⊙ REPLACEMENT PLANTING SPECIES AND SIZE/TYPE



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WOOLPERT
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11750 Katy Freeway, Suite 1260
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800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

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210 Stone Bush Ct. ◦ Katy, Texas 77493
281-391-0022 ckoehl@koehlurbanforestry.com
Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 16 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 261 OF 275	

NO.	DATE	REVISION	APP.

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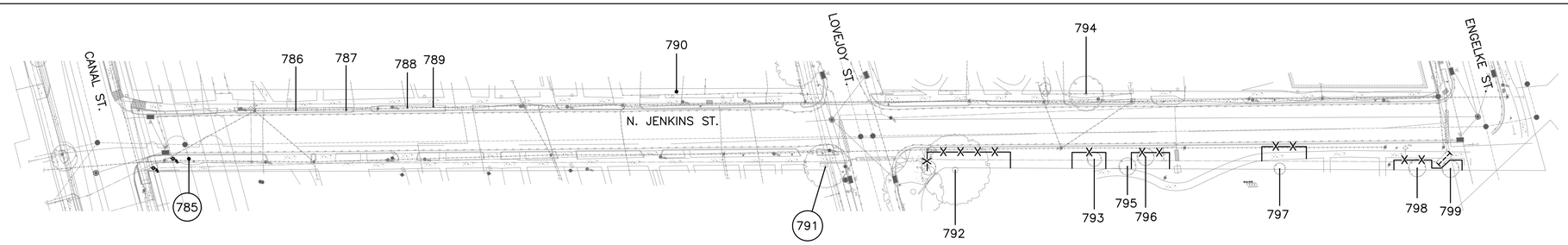

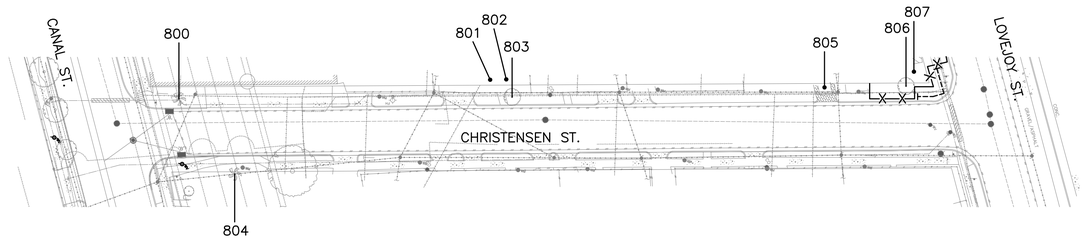

TREE PRESERVATION PLAN LEGEND

- TREE NUMBER/LOCATION
- (1) TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

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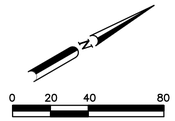

Tree No.	Location	Description	Comments	Treatment
Trees on N Jenkins Street				
785	Not available	13" Tallow	5' Stump, Not ordinance tree	Remove for vertical bend
786	111 N Jenkins	12" Crepe Myrtle	Not ordinance tree	
787	111 N Jenkins	10" Crepe Myrtle	Not ordinance tree	
788	115 N Jenkins	13" Crepe Myrtle	Not ordinance tree	
789	115 N Jenkins	14" Pecan	Topped by utility, Ordinance tree, Not impacted	
790	121 N Jenkins	18" Magnolia	70% dieback, Ordinance tree, Not impacted	
791	Not available	20" Crepe Myrtle	Large trunk cavity, Poor condition, Ordinance tree	Remove for vertical bend
792	4410 Navigation	42" Live Oak	Topped by utility, Private tree	Fence, Bore waterline
793	4410 Navigation	10" Burr Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
794	209 N Jenkins	23" Bald Cypress	Ordinance tree	Hand dig lead
795	4410 Navigation	10" Ligustrum	Private tree, Not impacted	
796	4410 Navigation	10" Burr Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
797	4410 Navigation	9" Burr Oak	Topped by utility, Ordinance tree	Fence, Bore waterline
798	4410 Navigation	11" Burr Oak	Ordinance tree	Fence, Bore waterline
799	4410 Navigation	10" Burr Oak	Ordinance tree	Root prune for waterline, Fence, Clearance prune
Trees on Christensen Street				
800	4327 Canal	3' Sago Palm	Not ordinance tree	
801	115 Christensen	10" Arborvitae	Private tree, Not impacted	
802	115 Christensen	10" Arborvitae	Private tree, Not impacted	
803	115 Christensen	5" Crepe Myrtle	Topped, Not ordinance tree	
804	4401 Canal	2' Sago Palm	Not ordinance tree	
805	133.5 Christensen	5" Sugarberry	Not ordinance tree	
806	133.5 Christensen	12" Sugarberry	Not ordinance tree	
807	133.5 Christensen	19" Arizona Ash	Topped by utility, Private tree	Root prune for fittings, Fence, Bore waterline

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SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 17 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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DRAWING SCALE	
1"=40'	
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NUPUR KRISHNAN, P.E.	
SHEET NO. 262 OF 275	

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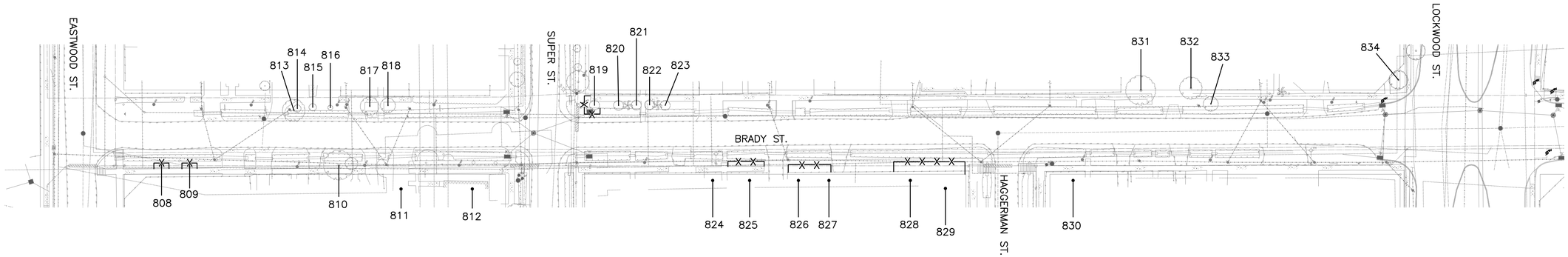

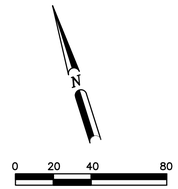

Tree No.	Location	Description	Comments	Treatment
Trees on Brady Street				
808	4402 Brady	4" Holly	Ordinance tree	Fence, Bore waterline
809	4402 Brady	4" Little Gem Magnolia	Ordinance tree	Fence, Bore waterline
810	Not available	18" Chinaberry	Not ordinance tree	
811	Not available	16" Chinaberry	Not ordinance tree	
812	Not available	4" Camphor	Private tree, Not impacted	
813	4405 Brady	3' Agave	Not ordinance tree	
814	4405 Brady	3" Crepe Myrtle	Not ordinance tree	
815	4405 Brady	3" Crepe Myrtle	Not ordinance tree	
816	4405 Brady	2" Loquat	Not ordinance tree	
817	4407 Brady	11" Pine	Ordinance tree, not impacted	
818	4407 Brady	10" Eastern Red Cedar	Not ordinance tree	
819	4505 Brady	7" Magnolia	Ordinance tree	Fence
820	4505 Brady	8" Crepe Myrtle	Not ordinance tree	
821	4505 Brady	8" Crepe Myrtle	Not ordinance tree	
822	4505 Brady	8" Crepe Myrtle	Not ordinance tree	
823	4505 Brady	8" Crepe Myrtle	Not ordinance tree	
824	4506 Brady	14" Eastern Red Cedar	Topped by utility, Private tree, Not impacted	
825	4506 Brady	22" Pecan	Poor condition, Topped by utility, Private tree	Fence, Bore waterline
826	4506 Brady	12" Water Oak	Poor condition, Topped by utility, Private tree	Fence, Bore waterline
827	4506 Brady	23" Pecan	Poor condition, Topped by utility, Private tree	Fence, Bore waterline
828	102 Hagerman	10" Magnolia	Private tree	Fence, Bore waterline
829	102 Hagerman	27" Arizona Ash	Topped by utility, Private tree	Fence, Bore waterline
830	Not available	13" Arizona Ash	Topped, Private tree, Not impacted	
831	4602 Brady	22" American Elm	Private tree, Not impacted	
832	4602 Brady	19" American Elm	Private tree, Not impacted	
833	4602 Brady	10" Mulberry	Poor condiiton, Not ordinance tree	
834	4602 Brady	11" Magnolia	Private tree, Not impacted	

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

NOTE:

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WOOLPERT
ARCHITECTURE | ENGINEERING | ENVIRONMENTAL
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SURVEYED BY: WGC
FB NO. 10038100

C.N. Koehl
Urban Forestry, Inc.
210 Stone Bush Ct. ◦ Katy, Texas 77493
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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 18 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 263 OF 275	

NO.	DATE	REVISION	APP.

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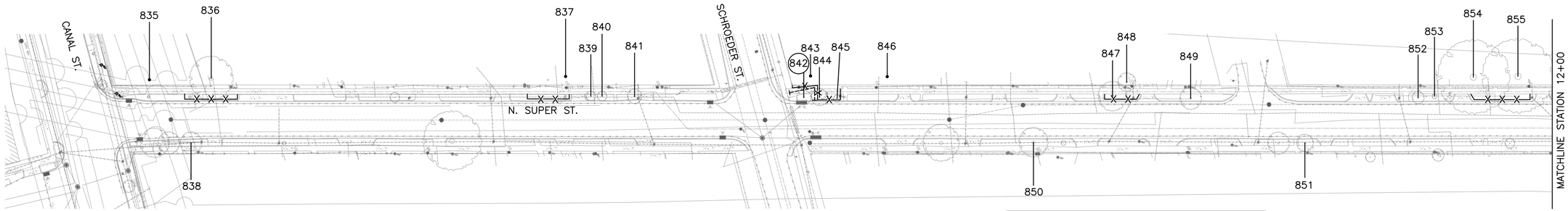

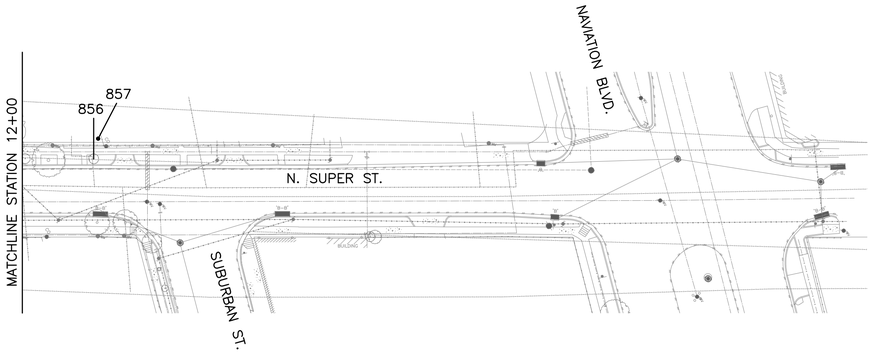

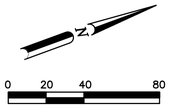

Tree No.	Location	Description	Comments	Treatment
Trees on N Super Street				
835	105 N Super	5" Peach	Private tree, Not impacted	
836	105 N Super	21" American Elm	50% of canopy removed, Private tree	Fence, Bore waterline
837	125 N Super	23" Pecan	Private tree	Fence, Bore waterline
838	Not available	15" Crepe Myrtle	Not ordinance tree	
839	125 N Super	8" Crepe Myrtle	Not ordinance tree	
840	125 N Super	8" Crepe Myrtle	Not ordinance tree	
841	125 N Super	10" Crepe Myrtle	Not ordinance tree	
842	201 N Super	12" Crepe Myrtle	Not ordinance tree, Remove for bends	Remove tree, No replacement required
843	201 N Super	17" Magnolia	Private tree	Root prune for bend, Fence, Bore waterline
844	201 N Super	20" Crepe Myrtle	Ordinance tree	Root prune for bend, Fence, Bore waterline
845	201 N Super	4" Crepe Myrtle	Not ordinance tree	
846	201 N Super	16" Magnolia	Private tree, Not impacted	
847	211 N Super	21" Green Ash	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
848	211 N Super	10" Arborvitae	Private tree, Not impacted	
849	217 N Super	9" Crepe Myrtle	Not ordinance tree	
850	210 N Super	15" Crepe Myrtle	Not ordinance tree	
851	302 N Super	11" Pecan	Topped, Ordinance tree	Hand dig lead
852	305 N Super	6" Crepe Myrtle	Not ordinance tree	
853	305 N Super	13" Crepe Myrtle	Not ordinance tree	
854	305 N Super	26" Live Oak	Dead, Private tree	
855	305 N Super	37" Live Oak	Private tree	Fence, Bore waterline
856	319 N Super	3" Loquat	Not ordinance tree	
857	319 N Super	10" Arborvitae	Private tree, Not impacted	

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ⊢-----⊣ ROOT PRUNING TRENCH
- ⊙ REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 19 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 264 OF 275	

NO.	DATE	REVISION	APP.

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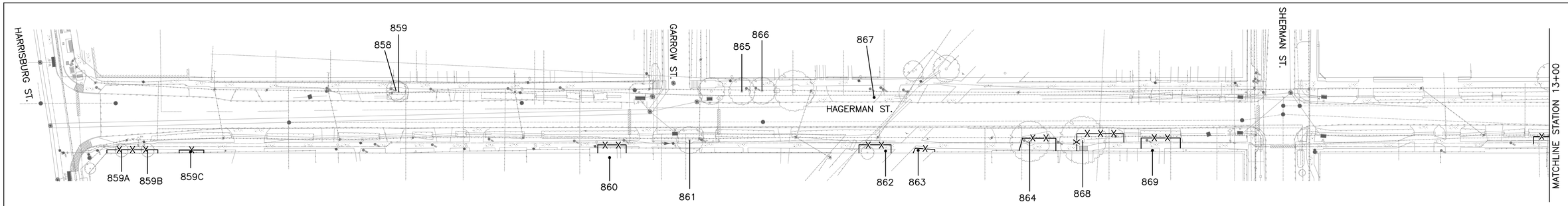

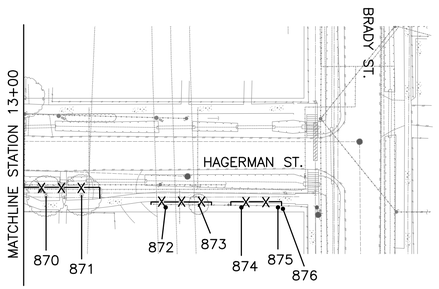

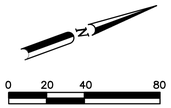

Tree No.	Location	Description	Comments	Treatment
Trees on Hagerman Street				
858	308 Hagerman	14" Sugarberry	Topped by utility, Not ordinance tree	
859	308 Hagerman	13" Sugarberry	Dead, Not ordinance tree	
859A	Not available	11" Live Oak	Ordinance tree	Fence, Bore waterline
859B	Not available	12" Live Oak	Ordinance tree	Hand dig fire hydrant, Fence, Bore waterline
859C	Not available	12" Live Oak	Ordinance tree	Fence, Bore waterline
860	303 Hagerman	12 Magnolia	Private tree	Fence, Bore waterline
861	219 Hagerman	17" Sycamore	Not ordinance tree	
862	Not available	11" Bald Cypress	Ordinance tree	Fence, Bore waterline
863	Not available	4" Burr Oak	Ordinance tree	Fence, Bore waterline
864	Not available	23" Green Ash	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
865	214 Hagerman	18" Water Oak	Topped by utility, Ordinance tree	Hand dig lead
866	214 Hagerman	15" Willow Oak	Topped by utility, Ordinance tree	Hand dig lead
867	212 Hagerman	22" Sycamore	Topped, Ordinance tree	Hand dig lead
868	205 Hagerman	31" Live Oak	Ordinance tree	Fence, Bore waterline
869	203 Hagerman	27" American Elm	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
870	113 Hagerman	19" Pecan	Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
871	113 Hagerman	17" Pecan	Ordinance tree	Fence, Bore waterline
872	113 Hagerman	7" Pecan	Topped, Ordinance tree	Fence, Bore waterline
873	113 Hagerman	11" Pecan	Topped, Ordinance tree	Fence, Bore waterline
874	113 Hagerman	10" Pecan	Topped, Ordinance tree	Fence, Bore waterline
875	113 Hagerman	3" Pecan	Topped, Ordinance tree	Fence, Bore waterline
876	113 Hagerman	5" Pecan	Topped, Ordinance tree	Fence, Bore waterline

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TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- –X–X– — TREE PROTECTION FENCE
- |-----| — ROOT PRUNING TRENCH
- ⊙ — REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

NO. | DATE | REVISION | APP.

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HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 20 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 265 OF 275	

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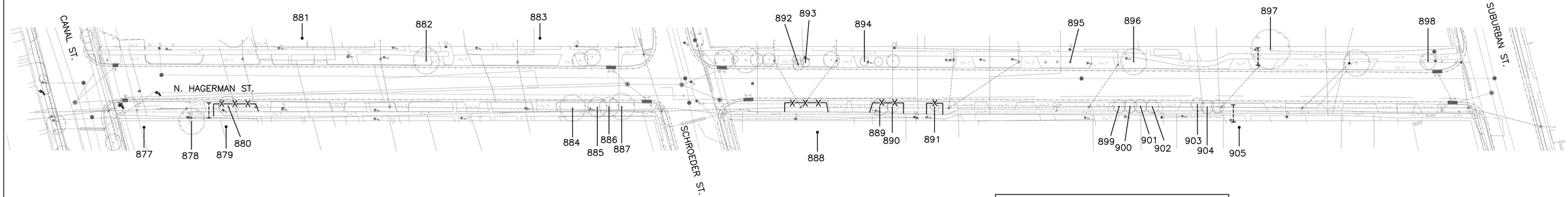
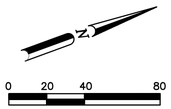


Tree No.	Location	Description	Comments	Treatment
Trees on N Hagerman Street				
877	4601 Canal Street	25" Green Ash	Poor condition, Topped, Private tree, Not impacted	
878	4601 Canal Street	15" Crepe Myrtle	Private tree, Not impacted	
879	4601 Canal Street	27" Tallow	Private tree	Root prune for tap & lead, Fence, Bore waterline
880	4601 Canal Street	15" Crepe Myrtle	Not ordinance tree	
881	109 N Hagerman	26" Catalpa	Private tree, Not impacted	
882	117 N Hagerman	17" Crepe Myrtle	Not ordinance tree	
883	125 N Hagerman	23" Tallow	Private tree, Not impacted	
884	4602 Schroeder	13" Crepe Myrtle	Not ordinance tree	
885	4602 Schroeder	9" Crepe Myrtle	Not ordinance tree	
886	4602 Schroeder	9" Crepe Myrtle	Not ordinance tree	
887	4602 Schroeder	18" Crepe Myrtle	Not ordinance tree	
888	202 N Hagerman	36" Live Oak	Private tree	Fence, Bore waterline
889	210 N Hagerman	11" Green Ash	Topped by utility, Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
890	210 N Hagerman	5" Green Ash	Topped by utility, Ordinance tree	Fence, Bore waterline
891	214 N Hagerman	5" Green Ash	Topped by utility, Ordinance tree	Fence, Bore waterline
892	219 N Hagerman	11" Crepe Myrtle	Not ordinance tree	
893	219 N Hagerman	5" Crepe Myrtle	Not ordinance tree	
894	221 N Hagerman	6" Crepe Myrtle	Not ordinance tree	
895	227 N Hagerman	2" Red Maple	Ordinance tree	Keep excavation for lead at least 5' from trunk
896	299 N Hagerman	22" Crepe Myrtle	Ordinance tree	Hand dig lead
897	Not available	24" Cottonwood	30% dieback, Ordinance tree	Root prune for lead
898	Not available	13" Pecan	Ordinance tree	Hand dig fire hydrant salvage
899	302 N Hagerman	10" Crepe Myrtle	Not ordinance tree	
900	302 N Hagerman	10" Crepe Myrtle	Not ordinance tree	
901	302 N Hagerman	6" Crepe Myrtle	Not ordinance tree	
902	302 N Hagerman	5" Crepe Myrtle	Not ordinance tree	
903	306 N Hagerman	5" Crepe Myrtle	Not ordinance tree	
904	306 N Hagerman	6" Crepe Myrtle	Not ordinance tree	
905	310 N Hagerman	12" Live Oak	Private tree	Root prune for tap and lead



TREE PRESERVATION PLAN LEGEND

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- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

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CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 21 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 266 OF 275	

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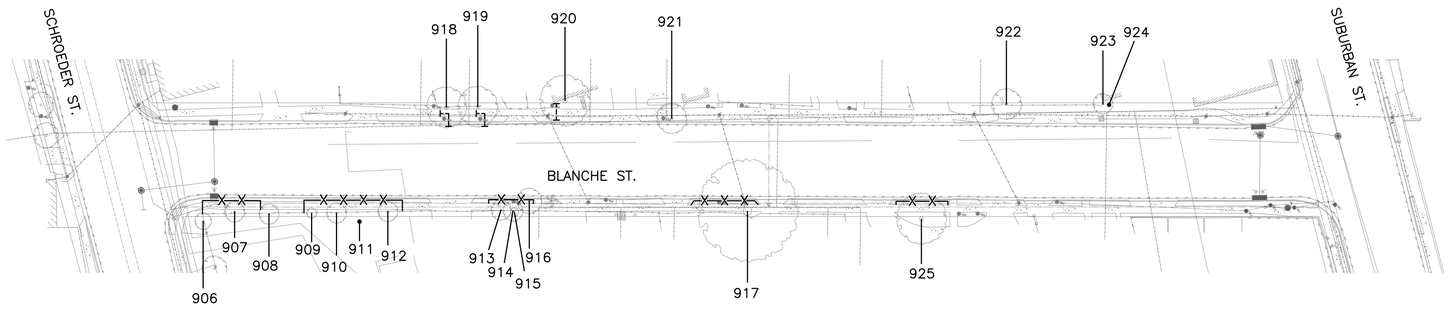

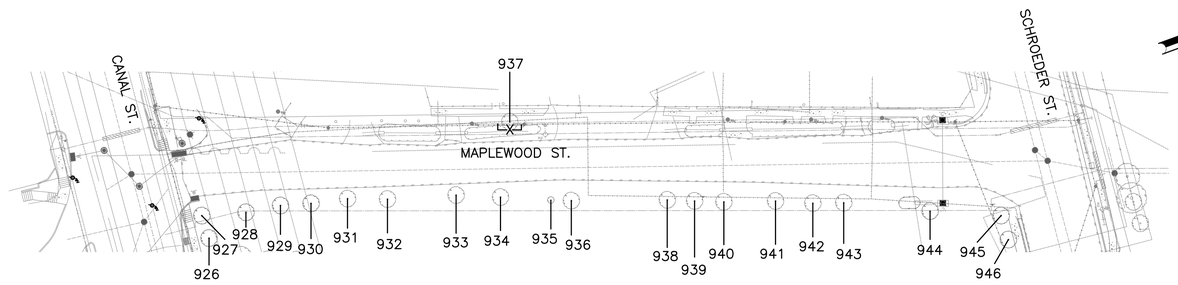

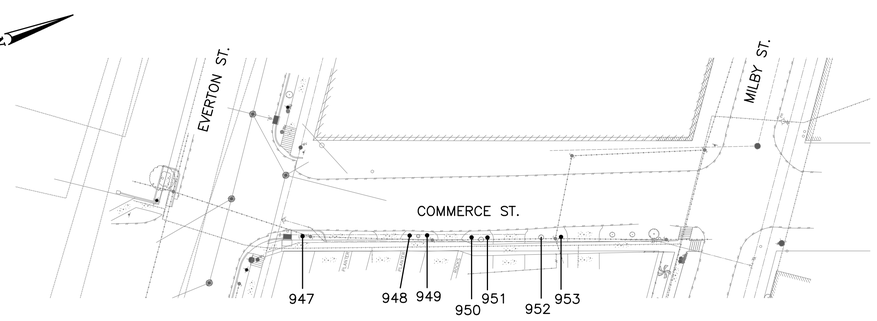

Tree No.	Location	Description	Comments	Treatment
Trees on Blanche Street				
906	Not available	15" Mulberry	Topped, Poor condition, Private tree, Not impacted	
907	Not available	14" Green Ash	Ordinance tree	Hand dig gate valve, Fence, Bore waterline
908	Not available	12" American Elm	Private tree, Not impacted	
909	Not available	5" Sugarberry	Not ordinance tree	
910	Not available	10" Sugarberry	Not ordinance tree	
911	Not available	27" Green Ash	Private tree	Fence, Bore waterline
912	Not available	13" American Elm	Ordinance tree	Fence, Bore waterline
913	Not available	4" Sugarberry	Not ordinance tree	
914	Not available	10" American Elm	Ordinance tree	Fence, Bore waterline
915	Not available	13" Green Ash	Topped, Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
916	Not available	20' Palm	Not ordinance tree	
917	222 Blanche	39" Green Ash	80% dieback, Ordinance tree	Hand dig tap & lead, Fence, Bore waterline
918	213 Blanche	18" Green Ash	Topped by utility, Ordinance tree	Root prune lead
919	213 Blanche	19" Green Ash	Topped by utility, Ordinance tree	Root prune lead
920	219 Blanche	21" Green Ash	Topped by utility, Private tree	Root prune lead
921	225 Blanche	15" Boxelder	Not ordinance tree	
922	323 Blanche	10" American Elm	Private tree, Not impacted	
923	323 Blanche	9" American Elm	Private tree, Not impacted	
924	323 Blanche	10" Pecan	Private tree, Not impacted	
925	310 Blanche	17" Live Oak	Private tree	Fence, Bore waterline

Tree No.	Location	Description	Comments	Treatment
Trees on Maplewood Street				
926	Not available	10" Live Oak	Private tree, Not impacted	
927	Not available	10" Live Oak	Ordinance tree, not impacted	
928	Not available	9" Live Oak	Private tree, Not impacted	
929	Not available	8" Live Oak	Ordinance tree, not impacted	
930	Not available	8" Live Oak	Ordinance tree, not impacted	
931	Not available	7" Live Oak	Ordinance tree, not impacted	
932	Not available	7" Live Oak	Ordinance tree, not impacted	
933	Not available	8" Live Oak	Ordinance tree, not impacted	
934	Not available	8" Live Oak	Ordinance tree, not impacted	
935	Not available	5" Sycamore	Ordinance tree, not impacted	
936	Not available	9" Live Oak	Ordinance tree, not impacted	
937	Not available	8" Live Oak	Ordinance tree, not impacted	
938	Not available	9" Live Oak	Ordinance tree, not impacted	
939	Not available	10" Live Oak	Ordinance tree, not impacted	
940	Not available	8" Live Oak	Ordinance tree, not impacted	
941	Not available	9" Live Oak	Ordinance tree, not impacted	
942	Not available	9" Live Oak	Ordinance tree, not impacted	
943	Not available	9" Live Oak	Ordinance tree, not impacted	
944	Not available	10" Live Oak	Ordinance tree, not impacted	
945	Not available	9" Live Oak	Ordinance tree, not impacted	
946	Not available	9" Live Oak	Ordinance tree, not impacted	
Trees on Commerce Street				
947	Not available	2" Yaupon	Not ordinance tree	
948	Not available	2" Yaupon	Not ordinance tree	
949	Not available	2" Yaupon	Not ordinance tree	
950	Not available	2" Yaupon	Not ordinance tree	
951	Not available	2" Yaupon	Not ordinance tree	
952	Not available	2" Yaupon	Not ordinance tree	
953	Not available	2" Yaupon	Not ordinance tree	

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

NOTE:

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0 20 40 80

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Houston, TX 77079
800.414.1045

SURVEYED BY: WGC
FB NO. 10038100

C.N. Koehl
Urban Forestry, Inc.
210 Stone Bush Ct. ◦ Katy, Texas 77493
281-391-0022 ckoehl@koehlurbanforestry.com
Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 22 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 267 OF 275	

NO. | DATE | REVISION | APP.

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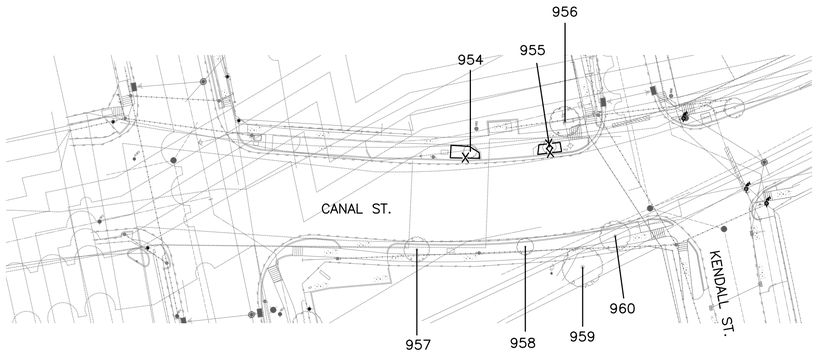

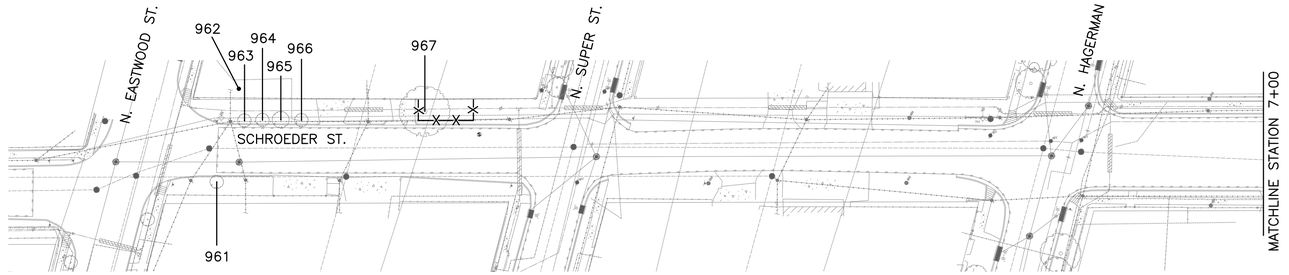

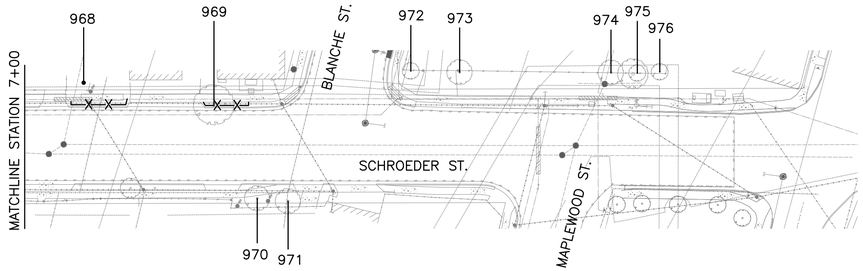

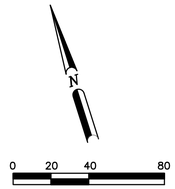

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Tree No.	Location	Description	Comments	Treatment
Trees on Canal Street				
954	Not available	6" Monterrey Oak	Ordinance tree	Fence, Bore waterline
955	Not available	5" Monterrey Oak	Ordinance tree	Fence, Bore waterline
956	Not available	12" Sugarberry	Not ordinance tree	Fence, Bore waterline
957	110 N Milby	12" Monterrey Oak	Topped by utility, Ordinance tree, Not impacted	
958	110 N Milby	8" Monterrey Oak	Topped by utility, Ordinance tree, Not impacted	
959	110 N Milby	21" Live Oak	Ordinance tree, not impacted	
960	110 N Milby	14" Monterrey Oak	Ordinance tree, not impacted	
Trees on Schroeder Street				
961	Not available	5" Crepe Myrtle	Not ordinance tree	
962	204 N Eastwood	8' Palm	Private tree, Not impacted	
963	204 N Eastwood	7" Crepe Myrtle	Not ordinance tree	
964	204 N Eastwood	7" Crepe Myrtle	Not ordinance tree	
965	204 N Eastwood	7" Crepe Myrtle	Not ordinance tree	
966	204 N Eastwood	7" Crepe Myrtle	Not ordinance tree	
967	Not available	23" Tallow	Topped by utility, Ordinance tree	Fence, Bore waterline
968	Not available	22" American Elm	Private tree	Hand dig tap & lead, Fence, Bore waterline
969	Not available	17" Pecan	Topped by utility, Ordinance tree	Fence, Bore waterline
970	4618 Schroeder	14" Crepe Myrtle	Not ordinance tree	
971	4618 Schroeder	11" Crepe Myrtle	Not ordinance tree	
972	Not available	14" Sugarberry	Private tree, Not impacted	
973	Not available	15" Sugarberry	Private tree, Not impacted	
974	Not available	14" Sugarberry	Private tree, Not impacted	
975	Not available	16" Sugarberry	Private tree, Not impacted	
976	Not available	10" Sugarberry	Private tree, Not impacted	

TREE PRESERVATION PLAN LEGEND

1	TREE NUMBER/LOCATION
(1)	TREE TO BE REMOVED
–X–X–	TREE PROTECTION FENCE
⊢-----⊣	ROOT PRUNING TRENCH
◉	REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

NO.	DATE	REVISION	APP.

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 23 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 268 OF 275	

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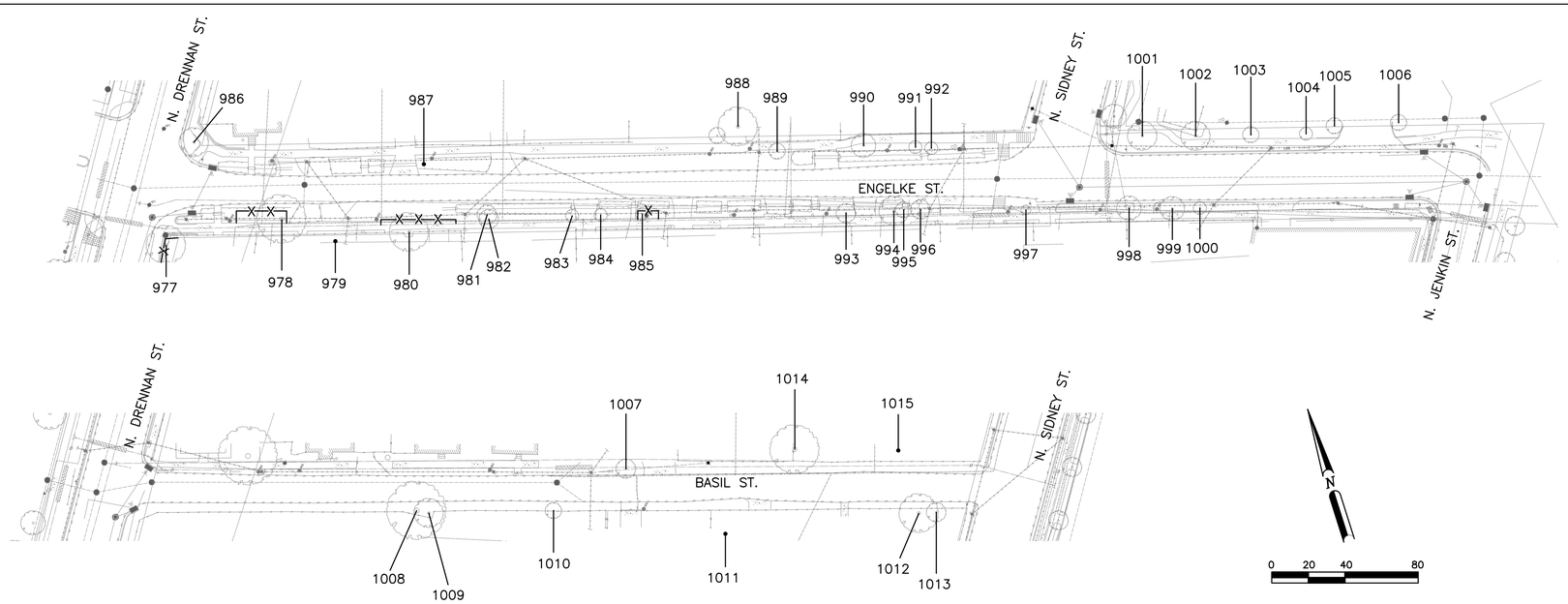

TREE PRESERVATION PLAN LEGEND

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- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
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Tree No.	Location	Description	Comments	Treatment
Trees on Engelke Street				
977	4102 Engelke	18" Pecan	Behind curbwall at WCR, Ordinance tree	Fence
978	4102 Engelke	25" Sycamore	70% dieback, Topped, Poor condition, Ordinance tree	Fence, Bore waterline
979	4102 Engelke	11" Sugarberry	Private tree, Not impacted	
980	4106 Engelke	21" Pecan	Ordinance tree	Fence, Bore waterline
981	4106 Engelke	13" Chinaberry	Not ordinance tree	
982	4106 Engelke	13" Chinaberry	Not ordinance tree	
983	4116 Engelke	6" Arborvitae	Not ordinance tree	
984	4116 Engelke	6" Arborvitae	Not ordinance tree	
985	4116 Engelke	6" Saucer Magnolia	Ordinance tree	Fence, Bore waterline
986	4103 Engelke	14" Pecan	Ordinance tree, not impacted	
987	4111 Engelke	14" Crepe Myrtle	Not ordinance tree	
988	4205 Engelke	23" American Elm	Private tree, Not impacted	
989	4205 Engelke	9" Eastern Red Cedar	Not ordinance tree	
990	4205 Engelke	10" Crepe Myrtle	Not ordinance tree	
991	4205 Engelke	8" Crepe Myrtle	Not ordinance tree	
992	4205 Engelke	8" Crepe Myrtle	Not ordinance tree	
993	4212 Engelke	12" Eastern Red Cedar	Not ordinance tree	
994	4212 Engelke	6" Crepe Myrtle	Not ordinance tree	
995	4212 Engelke	8" Italian Cypress	Not ordinance tree	
996	4212 Engelke	9" Crepe Myrtle	Not ordinance tree	
997	4216 Engelke	3" Crepe Myrtle	Not ordinance tree	
998	4220 Engelke	7" Crepe Myrtle	Topped, Not ordinance tree	
999	4220 Engelke	7" Crepe Myrtle	Topped, Not ordinance tree	
1000	4220 Engelke	9" Crepe Myrtle	Topped, Not ordinance tree	
1001	4410 Navigation	16" Live Oak	Topped by utility, Ordinance tree, Not impacted	
1002	4410 Navigation	14" Live Oak	Topped by utility, Ordinance tree, Not impacted	
1003	4410 Navigation	10" Live Oak	Topped by utility, Ordinance tree, Not impacted	
1004	4410 Navigation	9" Live Oak	Topped by utility, Ordinance tree, Not impacted	
1005	4410 Navigation	10" Crepe Myrtle	Not ordinance tree	
1006	4410 Navigation	11" Crepe Myrtle	Not ordinance tree	

Tree No.	Location	Description	Comments	Treatment
Trees on Basil Street				
1007	4203 Basil	21" Crepe Myrtle	Topped to 4', Not ordinance tree	
1008	Not available	27" Tallow	Deadwood, Private tree, Not impacted	
1009	Not available	18" Tallow	Trunk Cavity, Poor condition, Private tree, Not impacted	
1010	Not available	11" Sugarberry	Private tree, Not impacted	
1011	Not available	17" Pecan	Private tree, Not impacted	
1012	Not available	24" Sycamore	Topped, Private tree, Not impacted	
1013	Not available	10" Crepe Myrtle	Private tree, Not impacted	
1014	4203 Basil	16" Sugarberry	Trunk decay, Poor condition, Private tree, Not impacted	
1015	319 N Sidney	9" Ligustrum	Trunk decay, Private tree, Not impacted	

APP. | REVISION | DATE | NO.

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HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 24 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 269 OF 275	

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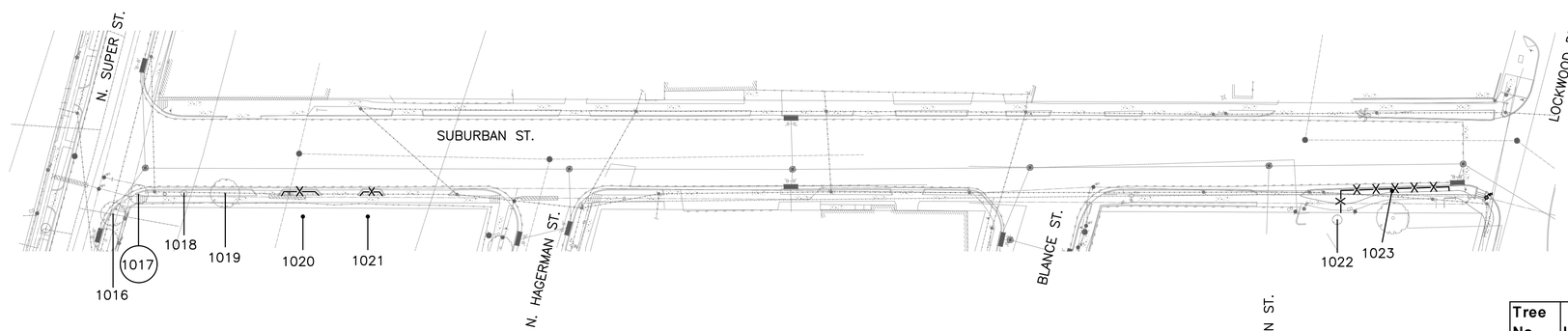

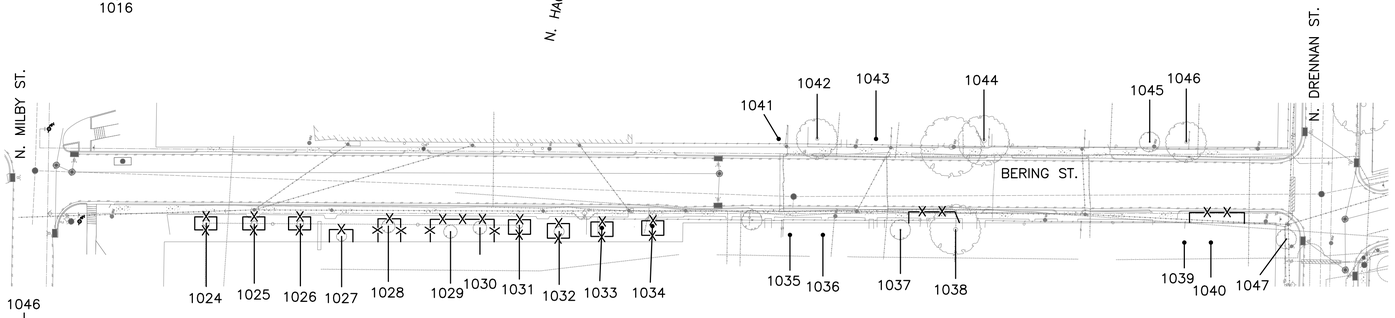

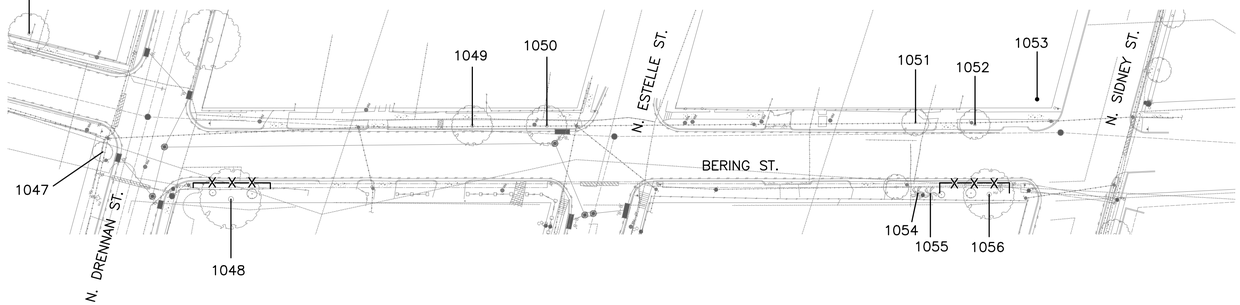

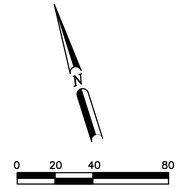

Tree No.	Location	Description	Comments	Treatment
Trees on Suburban Street				
1016	334 N Super	9" Crepe Myrtle	Not ordinance tree	
1017	334 N Super	8" Crepe Myrtle	Not ordinance tree	Remove for bends
1018	334 N Super	1" Crepe Myrtle	Not ordinance tree	
1019	334 N Super	11" Crepe Myrtle	Not ordinance tree	
1020	334 N Super	13" Live Oak	Private tree	Fence, Bore waterline
1021	334 N Super	27" Cottonwood	Private tree	Fence, Bore waterline
1022	333 Lockwood Drive	3" Ligustrum	Private tree, Not impacted	
1023	333 Lockwood Drive	24" Pecan	Ordinance tree	Fence, Bore waterline

Tree No.	Location	Description	Comments	Treatment
Trees on Bering Street				
1024	301 Milby	3" Live Oak	Ordinance tree	Fence, Bore waterline
1025	301 Milby	4" Live Oak	Ordinance tree	Fence, Bore waterline
1026	301 Milby	4" Live Oak	Ordinance tree	Fence, Bore waterline
1027	301 Milby	6" Shumard Oak	Ordinance tree	Fence, Bore waterline
1028	301 Milby	7" Shumard Oak	Ordinance tree	Fence, Bore waterline
1029	301 Milby	7" Shumard Oak	Ordinance tree	Fence, Bore waterline
1030	301 Milby	7" Shumard Oak	Ordinance tree	Fence, Bore waterline
1031	301 Milby	4" Live Oak	Ordinance tree	Fence, Bore waterline
1032	301 Milby	5" Magnolia	Ordinance tree	Fence, Bore waterline
1033	301 Milby	3" Live Oak	Ordinance tree	Fence, Bore waterline
1034	301 Milby	4" Live Oak	Ordinance tree	Fence, Bore waterline
1035	3912 Bering	5" Peach	Private tree, Not impacted	
1036	3912 Bering	6" Camphor	Private tree, Not impacted	
1037	3916 Bering	5" Juniper	Private tree, Not impacted	
1038	3916 Bering	23" Sycamore	Topped by utility, Private tree	Fence, Bore waterline
1039	Not available	16" Live Oak	Topped, Poor condition, Private tree, Not impacted	
1040	Not available	23" Pecan	Topped, Poor condition, Private tree	Fence, Bore waterline
1041	3911 Bering	7" Live Oak	Private tree, Not impacted	
1042	3911 Bering	17" Live Oak	Private tree, Not impacted	
1043	3911 Bering	15" Mulberry	Private tree, Not impacted	
1044	3915 Bering	27" Pecan	50% dieback, Private tree, Not impacted	
1045	4005 Bering	10" Eastern Red Cedar	Private tree, Not impacted	
1046	4005 Bering	15" Water Oak	Topped, Poor condition, Private tree, Not impacted	
1047	Not available	11" American Elm	Not ordinance tree	
1048	332 N Drennan	24" Pecan	Ordinance tree	Fence, Bore waterline
1049	4115 Bering	17" Crepe Myrtle	Not ordinance tree	
1050	4115 Bering	16" Crepe Myrtle	Not ordinance tree	
1051	4209 Bering	9" Live Oak	Topped by utility, Ordinance tree, Not impacted	
1052	4209 Bering	13" Crepe Myrtle	Not ordinance tree	
1053	4209 Bering	17" Pecan	Topped by utility, Private tree, Not impacted	
1054	331 N Sidney	40' Palm	Not ordinance tree	
1055	331 N Sidney	40' Palm	Not ordinance tree	
1056	331 N Sidney	20" Live Oak	Ordinance tree	Hand dig for fire hydrant, Fence, Bore waterline

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- -X-X- — TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

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HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 25 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 270 OF 275	

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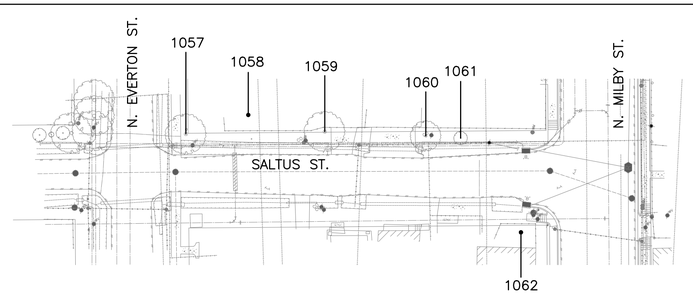
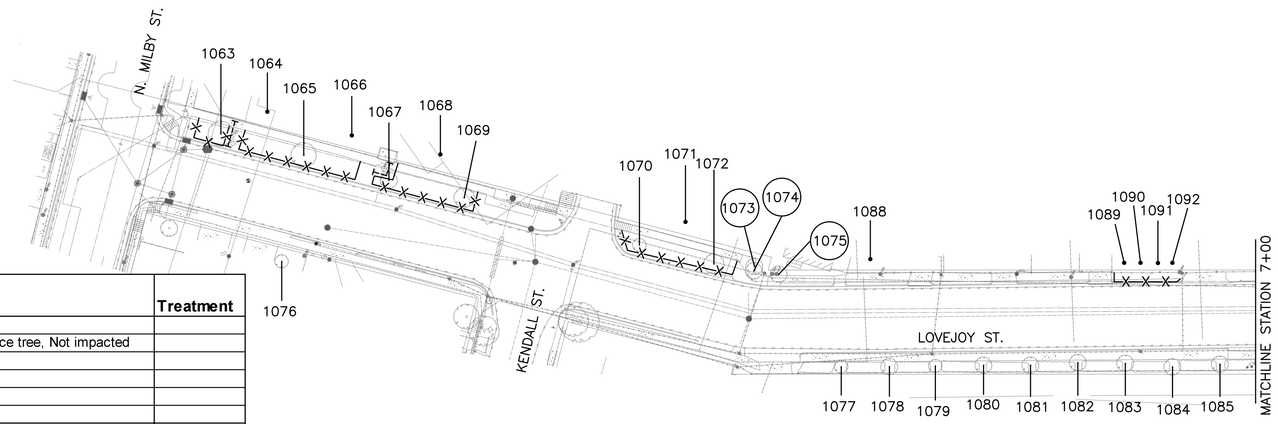
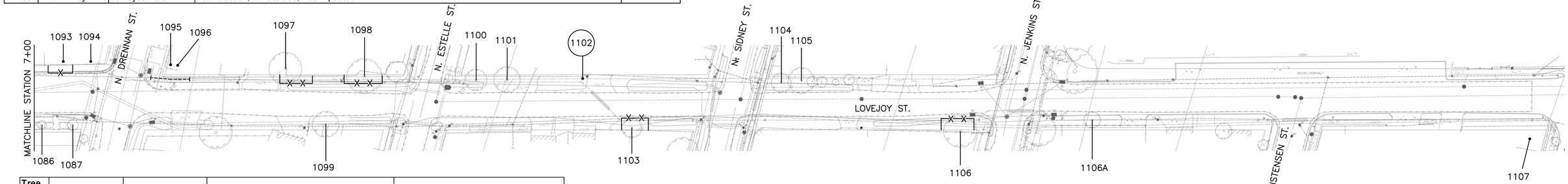
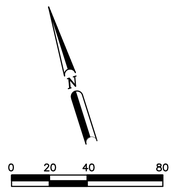




Tree No.	Location	Description	Comments	Treatment
Trees on Saltus Street				
1057	202 Saltus	16" Sugarberry	Butt rot, Houston Parks and Recreation Department needs to address, Not oridnance tree, Not impacted	
1058	202 Saltus	26" American Elm	Private tree, Not impacted	
1059	Not available	21" Sugarberry	Poor condition, Private tree, Not impacted	
1060	201 N Milby	15" Bald Cypress	Ordinance tree, not impacted	
1061	201 N Milby	8" Chinese Pistache	Ordinance tree, not impacted	
1062	147 N Milby	23" Sycamore	40% dieback, Private tree, Not impacted	



Tree No.	Location	Description	Comments	Treatment
Trees on Lovejoy Street				
1063	220 N Milby	12" Bald Cypress	Ordinance tree	Root prune for fire hydrant, Fence, Bore Waterline
1064	220 N Milby	14" Bald Cypress	Private tree	Fence, Bore waterline
1065	220 N Milby	13" Bald Cypress	Ordinance tree	Fence, Bore waterline
1066	220 N Milby	13" Bald Cypress	Private tree	Fence, Bore waterline
1067	220 N Milby	10" Bald Cypress	Ordinance tree	Root prune for tap, Fence, Bore waterline
1068	220 N Milby	14" Bald Cypress	Private tree	Fence, Bore waterline
1069	220 N Milby	12" Bald Cypress	Ordinance tree	Fence, Bore waterline
1070	220 N Milby	11" Bald Cypress	Ordinance tree	Fence, Bore waterline
1071	220 N Milby	12" Cherrybark Oak	Private tree	Fence, Bore waterline
1072	220 N Milby	11" Bald Cypress	Ordinance tree	Fence, Bore waterline
1073	220 N Milby	3" American Elm	Not ordinance tree	Remove for bends
1074	220 N Milby	6" Sugarberry	Not ordinance tree	Remove for bends
1075	220 N Milby	10" Mulberry	Not ordinance tree	Remove for bends
1076	3804 Lovejoy	5" Live Oak	Private tree, Not impacted	
1077	Not available	8" Live Oak	Ordinance tree, not impacted	
1078	Not available	8" Live Oak	Ordinance tree, not impacted	
1079	Not available	8" Live Oak	Ordinance tree, not impacted	
1080	Not available	8" Live Oak	Ordinance tree, not impacted	
1081	Not available	8" Live Oak	Ordinance tree, not impacted	
1082	Not available	8" Live Oak	Ordinance tree, not impacted	
1083	Not available	8" Live Oak	Ordinance tree, not impacted	
1084	Not available	8" Live Oak	Ordinance tree, not impacted	
1085	Not available	8" Live Oak	Ordinance tree, not impacted	
1086	Not available	8" Live Oak	Ordinance tree, not impacted	
1087	Not available	8" Live Oak	Ordinance tree, not impacted	
1088	3917 Lovejoy	5" Live Oak	Private tree, Not impacted	
1089	4007 Lovejoy	24" Pecan	Private tree	Fence, Bore waterline
1090	4007 Lovejoy	11" Sugarberry	Private tree, Not impacted	
1091	4007 Lovejoy	11" Sugarberry	Private tree, Not impacted	
1092	4007 Lovejoy	18" Pecan	Private tree	Fence, Bore waterline
1093	4007 Lovejoy	10" Live Oak	Ordinance tree	Fence, Bore waterline
1094	4007 Lovejoy	7" Citrus	Freeze damage, Private tree, Not impacted	
1095	202 Kendall	13" Pecan	Private tree	Root prune for waterline
1096	202 Kendall	15" Pecan	Private tree	Root prune for waterline
1097	202 Kendall	23" Tallow	Private tree	Fence, Bore waterline
1098	202 Kendall	21" American Elm	Ordinance tree	Fence, Bore waterline
1099	Not available	23" pecan	Ordinance tree, not impacted	
1100	4205 Lovejoy	15" Tallow	Not ordinance tree	
1101	4205 Lovejoy	22" Tallow	Hollow, Houston Parks and Recreation Department needs to address, Ordinance tree	
1102	4205 Lovejoy	26" Water Oak	70% dieback, Ordinance tree	Remove for bends
1103	127 Lovejoy	15" Magnolia	Ordinance tree	Fence, Bore waterline
1104	202 N Sidney	13" Pecan	Ordinance tree, not impacted	
1105	202 N Sidney	23" Pecan	Ordinance tree, not impacted	
1106	133 N Jenkins	23" Crepe Myrtle	Private tree	Hand dig gate valve & fittings, Fence, Bore waterline
1106A	132 N Jenkins	14" Pecan	Decay, To be addressed by City of Houston Parks and Rec	
1107	129 N Eastwood	18" Magnolia	Private tree, Not impacted	



TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

NOTE:

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WOOLPERT
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SURVEYED BY: WGC
FB NO. 10038100

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

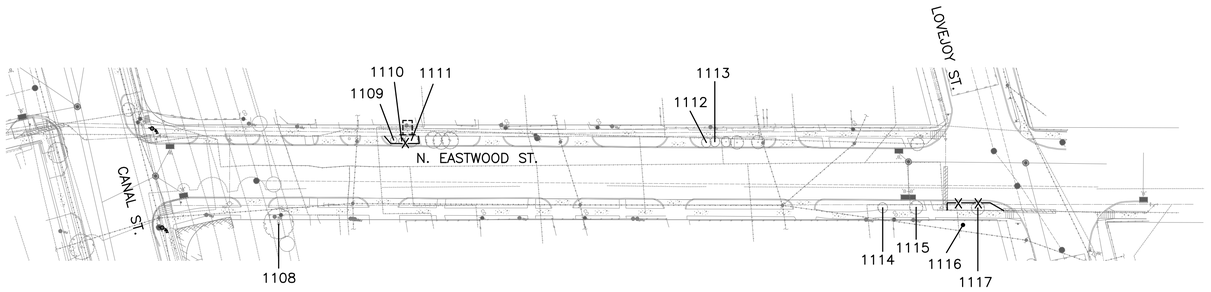
TREE PROTECTION PLAN

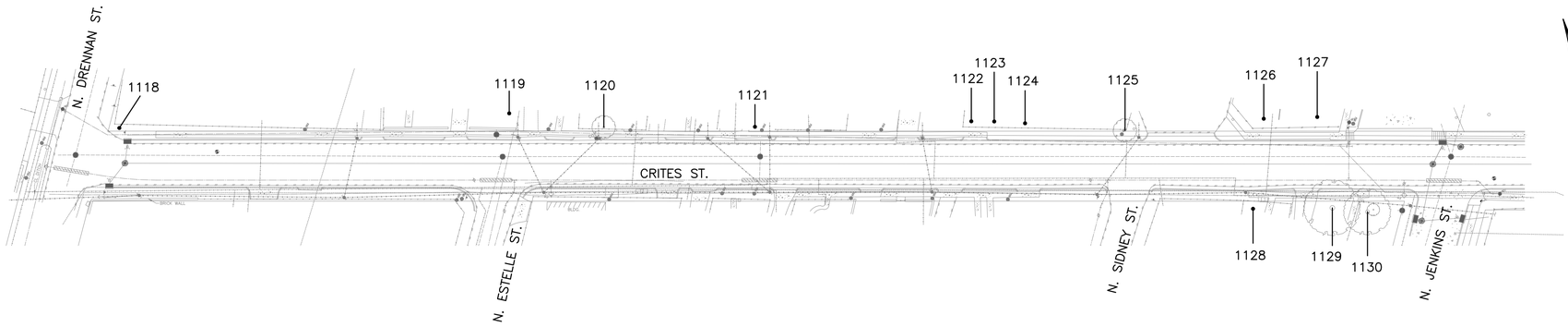
SHEET 26 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 271 OF 275	

NO.	DATE	REVISION	APP.

PLOTTED: 12/15/2022 7:15 AM
PLOT STYLE: CNKoehl.ctb
FILE PATH: C:\Users\Ned\Desktop\Work For Craig\CIVILTECH SECOND WARD\WOOLPERT SECOND WARD TP-26.dwg





Tree No.	Location	Description	Comments	Treatment
Trees on N Eastwood Street				
1108	104 N Eastwood	12" American Elm	Private tree, Not impacted	
1109	109 N Eastwood	4" Crepe Myrtle	Not ordinance tree	
1110	109 N Eastwood	4" Crepe Myrtle	Not ordinance tree	
1111	109 N Eastwood	11" Water Oak	Private tree	Root prune for tap&lead, Fence, Bore waterline
1112	Not available	2" Crepe Myrtle	Not ordinance tree	
1113	Not available	5" Crepe Myrtle	Not ordinance tree	
1114	Not available	6" Crepe Myrtle	Topped, Not ordinance tree	
1115	Not available	6" Crepe Myrtle	Topped, Not ordinance tree	
1116	Not available	15" Magnolia	30% dieback, Private tree	Fence, Bore waterline
1117	Not available	5" Crepe Myrtle	Not ordinance tree	
Trees on Crites Street				
1118	Not available	15" Crepe Myrtle	Private tree, Not impacted	
1119	4109 Crites	10" Arborvitae	Private tree, Not impacted	
1120	4203 Crites	10" Ligustrum	Private tree, Not impacted	
1121	4211 Crites	9" Camphor	Private tree, Not impacted	
1122	Not available	11" Sugarberry	Private tree, Not impacted	
1123	Not available	11" Sugarberry	Private tree, Not impacted	
1124	Not available	21" American Elm	Private tree, Not impacted	
1125	Not available	13" Sugarberry	Private tree, Not impacted	
1126	4323 Crites	23" Live Oak	Private tree, Not impacted	
1127	4323 Crites	20" Live Oak	Private tree, Not impacted	
1128	4316 Crites	7" Peach	60% dieback, Private tree, Not impacted	
1129	4316 Crites	10" Ash	Stump sprouts, Private tree, Not impacted	
1130	4316 Crites	7" Loquat	Private tree, Not impacted	

0 20 40 80

TREE PRESERVATION PLAN LEGEND

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- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 27 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 272 OF 275	

NO.	DATE	REVISION	APP.

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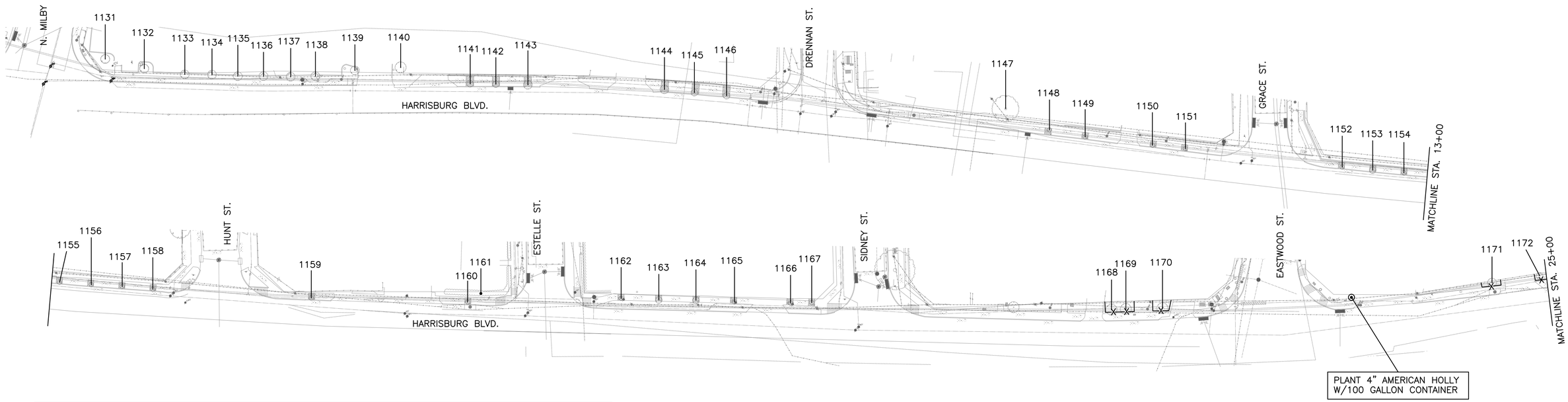

Tree No.	Location	Description	Comments	Treatment
Trees on Harrisburg Blvd				
1131	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1132	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1133	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1134	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1135	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1136	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1137	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1138	3801 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1139	3825 Harrisburg	2" Crepe Myrtle	Not ordinance tree	
1140	3825 Harrisburg	5" Crepe Myrtle	Not ordinance tree	
1141	3825 Harrisburg	6" Crepe Myrtle	Not ordinance tree	
1142	3825 Harrisburg	6" Crepe Myrtle	Not ordinance tree	
1143	3825 Harrisburg	7" Crepe Myrtle	Not ordinance tree	
1144	3825 Harrisburg	7" Crepe Myrtle	Not ordinance tree	
1145	3825 Harrisburg	7" Crepe Myrtle	Not ordinance tree	
1146	3825 Harrisburg	6" Crepe Myrtle	Not ordinance tree	
1147	Not available	13" Mimosa	Stump sprouts, Private tree, Not impacted	
1148	Not available	5" Crepe Myrtle	Not ordinance tree	
1149	Not available	5" Crepe Myrtle	Not ordinance tree	
1150	Not available	4" Crepe Myrtle	Not ordinance tree	
1151	Not available	4" Crepe Myrtle	Not ordinance tree	
1152	418 Hunt	6" Crepe Myrtle	Not ordinance tree	
1153	418 Hunt	6" Crepe Myrtle	Not ordinance tree	
1154	418 Hunt	6" Crepe Myrtle	Not ordinance tree	
1155	418 Hunt	6" Crepe Myrtle	Not ordinance tree	
1156	418 Hunt	5" Crepe Myrtle	Not ordinance tree	
1157	418 Hunt	5" Crepe Myrtle	Not ordinance tree	
1158	418 Hunt	4" Crepe Myrtle	Not ordinance tree	
1159	4101 Harrisburg	4" Crepe Myrtle	Not ordinance tree	
1160	416 Estelle	4" Crepe Myrtle	Not ordinance tree	
1161	416 Estelle	Ligustrum Hedge	Not ordinance tree	
1162	409 Estelle	5" Crepe Myrtle	Not ordinance tree	
1163	409 Estelle	6" Crepe Myrtle	Not ordinance tree	
1164	409 Estelle	5" Crepe Myrtle	Not ordinance tree	
1165	409 Estelle	4" Crepe Myrtle	Dead, Not ordinance tree	
1166	409 Estelle	4" Crepe Myrtle	Dead, Not ordinance tree	
1167	409 Estelle	4" Crepe Myrtle	Dead, Not ordinance tree	
1168	4313 Harrisburg	11" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1169	4313 Harrisburg	10" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1170	4313 Harrisburg	12" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1171	4405 Harrisburg	7" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1172	4405 Harrisburg	5" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ROOT PRUNING TRENCH
- REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

N

0 20 40 80

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SURVEYED BY: WGC
FB NO. 10038100

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281-391-0022 ckoehl@koehlurbanforestry.com

Approved :

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 28 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 273 OF 275	

NO. | DATE | REVISION | APP.

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PLOT STYLE: CNKoehl.ctb

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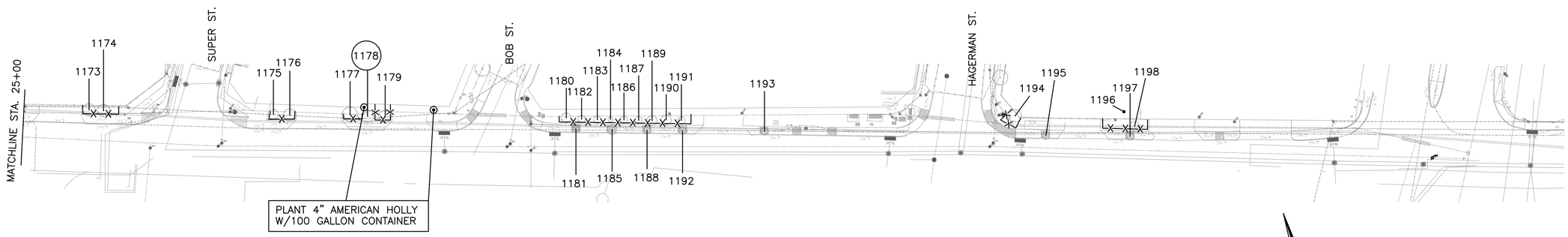

Tree No.	Location	Description	Comments	Treatment
Trees on Harrisburg Blvd				
1173	4405 Harrisburg	8" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1174	4405 Harrisburg	6" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1175	4501 Harrisburg	6" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1176	4501 Harrisburg	7" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1177	4501 Harrisburg	9" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1178	4507 Harrisburg	9" Live Oak	Remove for bends, Ordinance tree	Remove tree, Provide 9" in replacement plantings
1179	4507 Harrisburg	8" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1180	4525 Harrisburg	6" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1181	4525 Harrisburg	6" Crepe Myrtle	Not ordinance tree	
1182	4525 Harrisburg	5" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1183	4525 Harrisburg	6" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1184	4525 Harrisburg	4" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1185	4525 Harrisburg	6" Crepe Myrtle	Not ordinance tree	
1186	4525 Harrisburg	5" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1187	4525 Harrisburg	4" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1188	4525 Harrisburg	6" Crepe Myrtle	Not ordinance tree	
1189	4525 Harrisburg	6" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1190	4525 Harrisburg	5" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1191	4525 Harrisburg	4" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1192	4525 Harrisburg	5" Crepe Myrtle	Not ordinance tree	
1193	4525 Harrisburg	7" Crepe Myrtle	Not ordinance tree	
1194	4601 Harrisburg	8" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline
1195	4601 Harrisburg	7" Crepe Myrtle	Not ordinance tree	
1196	4601 Harrisburg	17" Live Oak	Private tree	Fence, Bore waterline
1197	4601 Harrisburg	7" Crepe Myrtle	Not ordinance tree	
1198	4601 Harrisburg	8" Live Oak	Pruned by CPE, Ordinance tree	Fence, Bore waterline

TREE PRESERVATION PLAN LEGEND

- 1 — TREE NUMBER/LOCATION
- (1) — TREE TO BE REMOVED
- —X—X— TREE PROTECTION FENCE
- ----- ROOT PRUNING TRENCH
- ⊙ — REPLACEMENT PLANTING SPECIES AND SIZE/TYPE

N

0 20 40 80

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SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 29 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
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DRAWING SCALE	
1"=40'	
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FILE PATH: C:\Users\Ned\Desktop\Work For Craig\CIVILTECH SECOND WARD\WOOLPERT SECOND WARD TP-29.dwg

Arboriculturally Significant Tree List

Tree No.	Location	Description
17	4017 Sherman	45" American Elm
23	Not available	24" Pecan
34	Not available	27" Live Oak
62	Not available	33" Willow Oak
66	Not available	24" Pecan
102	4514 Sherman	24" Sugarberry
107	4515 Sherman	25" Sugarberry
108	4515 Sherman	25" Camphor
112	4615 Sherman	36" Pecan
131	Not available	24" Live Oak
147	4001 Garrow	30" Live Oak
149	4011 Garrow	26" Tallow
151	Not available	24" Pecan
152	Not available	30" Camphor
157	Not available	28" Water Oak
158	Not available	25" Water Oak
164	Not available	25" Pecan
165	Not available	24" Ash
166	4206 Garrow	30" Camphor
167	4203 Garrow	35" Live Oak
178	Not available	24" Crepe Myrtle
180	4306 Garrow	30" American Elm
188	Not available	24" Pecan
210	3814 Wilmer	30" Live Oak
214	Not available	24" Sugarberry
215	4002 Wilmer	36" Live Oak
218	4002 Wilmer	30" Live Oak
234	Not available	26" Live Oak
252	Not available	26" American Elm
254	Not available	35" American Elm
263	114 Drennan	30" Live Oak
264	114 Drennan	36" Live Oak
265	114 Drennan	28" Live Oak
266	114 Drennan	35" Live Oak
268	Not available	25" Tallow
270	Not available	25" Green Ash
272	Not available	27" Cedar
274	Not available	36" Live Oak
275	Not available	26" Live Oak
280	Not available	35" Tallow
335	227 Hunt	24" Pecan
349	Not available	25" Live Oak
365	Not available	40" Live Oak
375	414 Estelle	45" Water Oak
396	225 Estelle	27" Mulberry
412	117 Estelle	30" Live Oak
422	5 Estelle	30" Green Ash
438	Not available	33" Live Oak
439	Not available	45" Live Oak
444	410 Sidney	36" Live Oak
448	Not available	30" Live Oak
471	211 Sidney	27" Live Oak
474	232 Sidney	30" Live Oak
488	Not available	26" Tallow
490	Not available	26" Green Ash
491	Not available	25" Live Oak
496	20 Sidney	36" Live Oak
497	Not available	26" Live Oak

Arboriculturally Significant Tree List

Tree No.	Location	Description
498	Not available	28" Live Oak
499	Not available	30" Live Oak
500	Not available	30" Live Oak
508	119 Sidney	24" Green Ash
549	107 Jenkins	25" Live Oak
555	45 Jenkins	24" Pecan
556	Not available	24" Live Oak
572	14 Jenkins	28" Tallow
580	316 Eastwood	32" Live Oak
582	306 Eastwood	40" Live Oak
583	306 Eastwood	50" Live Oak
584	311 Eastwood	24" Tallow
585	311 Eastwood	24" Pecan
603	Not available	26" Live Oak
605	Not available	31" Live Oak
633	Not available	24" Pecan
635	Not available	35" Pecan
685	133 Kendall	25" Sycamore
715	214 N Drennan	35" Live Oak
734	4103 Bering	28" Arizona Ash
736	Not available	25" Live Oak
752	328 N Estelle	27" Willow Oak
760	113 N Sidney	29" Post Oak
764	126 N Sidney	26" Live Oak
779	323 N Sidney	24" Live Oak
792	4410 Navigation	42" Live Oak
829	102 Hagerman	27" Arizona Ash
854	305 N Super	26" Live Oak
855	305 N Super	37" Live Oak
868	205 Hagerman	31" Live Oak
869	203 Hagerman	27" American Elm
877	4601 Canal Street	25" Green Ash
879	4601 Canal Street	27" Tallow
881	109 N Hagerman	26" Catalpa
888	202 N Hagerman	36" Live Oak
897	Not available	24" Cottonwood
911	Not available	27" Green Ash
917	222 Blanche	39" Green Ash
978	4102 Engelke	25" Sycamore
1008	Not available	27" Tallow
1012	Not available	24" Sycamore
1021	334 N Super	27" Cottonwood
1023	333 Lockwood Drive	24" Pecan
1044	3915 Bering	27" Pecan
1048	332 N Drennan	24" Pecan
1058	202 Saltus	26" American Elm
1089	4007 Lovejoy	24" Pecan
1102	4205 Lovejoy	26" Water Oak

Trees Identified by City of Houston Forestry/Parks & Recreation Department as Arboriculturally Significant are identified here and/or in treatment schedule included on TPP sheets. Arboriculturally Significant trees are to be pruned under direct supervision of City of Houston Forestry. Minimal pruning will be allowed for construction equipment access, and in some cases no pruning will be allowed. Contractor must review conditions around and/or under the canopy of Arboriculturally Significant trees and consider restrictions when preparing cost estimate and planning construction equipment that will be necessary to accomplish design installation with minimal to no tree pruning.

Tree Removal List

Tree No.	Location	Description	Replacement requirement
128	Not available	Larcapatham shrub	0
129	Not available	Larcapatham shrub	0
178	Not available	24" Crepe Myrtle	24
253	Not available	18" Pecan	18
382	402 Estelle	10" Crepe Myrtle	0
618	Not available	2" Loquat	0
686	133 Kendall	4" Crepe Myrtle	0
688	Not available	3" Post Oak	3
704	301 N Drennan	15" American Elm	0
785	Not available	13" Tallow	0
791	Not available	20" Crepe Myrtle	20
842	201 N Super	12" Crepe Myrtle	0
1017	334 N Super	8" Crepe Myrtle	0
1073	220 N Milby	3" American Elm	0
1074	220 N Milby	6" Sugarberry	0
1075	220 N Milby	10" Mulberry	0
1102	4205 Lovejoy	26" Water Oak	26
1178	4507 Harrisburg	9" Live Oak	9
		TOTAL REPLACEMENT INCHES REQUIRED	**100**

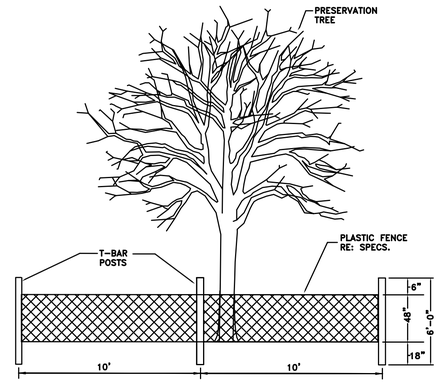
Tree Replacement List

Quantity	Caliper Size	Species	Container/Tree Spade size
17	4	American Holly (Ilex opaca)	100 gallon container
6	4	Cedar Elm (Ulmus crassifolia)	100 gallon container
2	4	Live Oak (*Quercus virginiana)*	100 gallon container
		TOTAL REPLACEMENT INCHES INCLUDED IN PLAN	**100**

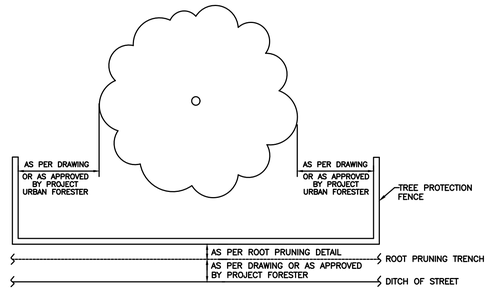
NOTE: Tree replacement locations are not shown on plans. Contractor must coordinate with City of Houston Urban Forestry and Houston Public Works prior to PURCHASING trees. This project may not have adequate room for all required replacement trees without creating regulatory sign or traffic/pedestrian visibility issues. Number of trees and planting locations will be determined by City of Houston Urban Forestry in construction phase. Trees that are planted are 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.

Trees are 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 Forestry.

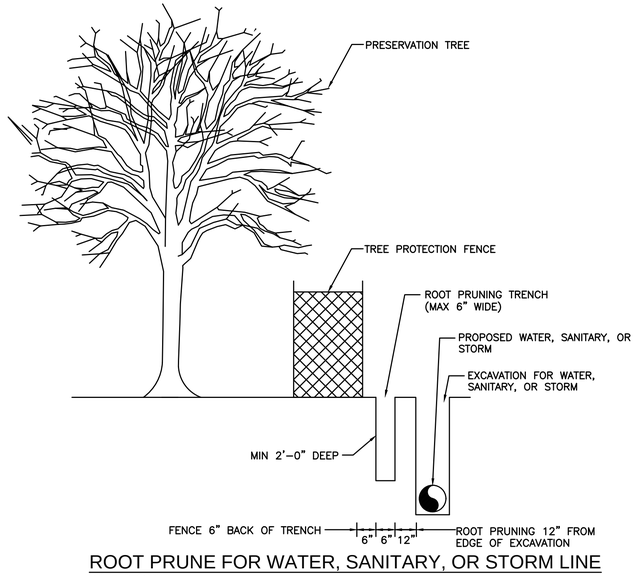
Tree replacement locations shall comply with Houston Public Works spec sections 02811, 02911, 02912, 02915, 02921 & 02922. In general trees along sides of street right of ways shall be no closer than 3' to back of curb or 20' from another tree. Trees in medians shall be no closer than 6' back of curb, 75' from an intersection, 50' to a median cut, or 20' from another tree. Contractor to coordinate locations with City Forestry and HPW prior to PURCHASING trees. All replacement trees called out on plans may not be planted on project relative to coordination with listed parties.



TREE PROTECTION FENCING DETAIL A
NOT TO SCALE



TREE PROTECTION FENCING DETAIL B
NOT TO SCALE



ROOT PRUNE FOR WATER, SANITARY, OR STORM LINE
NOT TO SCALE

WOOLPERT
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Houston, TX 77079
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FB NO. 10038100

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Approved :

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SECONDWARD WATERLINE REPLACEMENT

TREE PROTECTION PLAN

SHEET 30 OF 30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-000035-0270-4	
DRAWING SCALE	
1"=40'	
CITY OF HOUSTON PM	
NUPUR KRISHNAN, P.E.	
SHEET NO. 275 OF 275	

NO.	DATE	REVISION	APP.

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