CITY OF BALTIMORE FRANCHISE AGREEMENT #__-

(FORMERLY DEVELOPERS AGREEMENT NO. 1620)

FOR

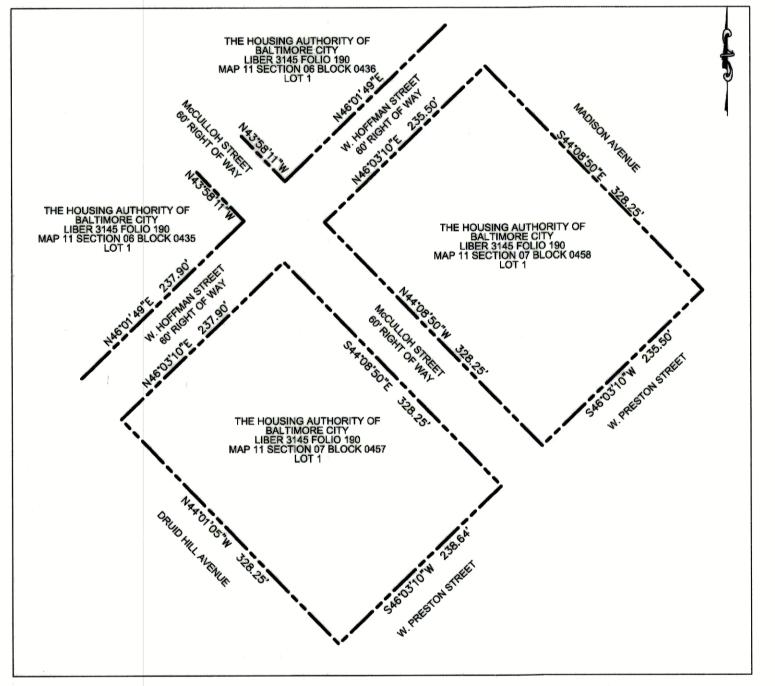
McCULLOH HOMES

INSTALLATION OF PRIVATE WATER LINES

4" DIAMETER HOT WATER SUPPLY

3" DIAMETER HOT WATER RETURN

4" DIAMETER COLD WATER SUPPLY



PROPERTY MOSAIC

LIGHTING

DRAINAGE

CONDUIT

SEDIMENT

CONTROL

SCALE: 1"= 100'

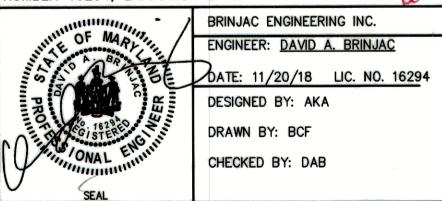
INTENT NOTE

THE INTENT OF THE PLAN IS TO DETAIL THE WORK PROPOSED WITHIN THE RIGHT-OF-WAY OF THE 1000 BLOCK OF McCULLOH STREET FOR THE PURPOSE OF ACQUIRING A FRANCHISE AGREEMENT. THIS PROJECT PROPOSES THE INSTALLATION OF THREE PRIVATE WATER LINES TO CONNECT THE BOILER IN 443 CUMMINGS COURT WITH 400 CUMMINGS COURT ON THE OTHER SIDE OF McCULLOH STREET. THE THREE PIPES ARE COMPRISED OF AN INSULATED 4" DIAMETER HOT WATER SUPPLY LINE, AN INSULATED 3" DIAMETER HOT WATER RETURN LINE AND A UNINSULATED 4" DIAMETER COLD WATER SUPPLY LINE. ALL THREE LINES WILL REMAIN PRIVATE AND BE INSTALLED IN THE SAME TRENCH WITH 9" SEPARATION AND WILL CROSS McCULLOH STREET AT 90 DEGREES THEREBY MINIMIZING THE INSTALLATION WITHIN THE RIGHT-OF-WAY OF McCULLOH STREET.

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE
NUMBER 16294, EXPIRATION DATE: 12-14-2018-2020 AF

BRIDGES

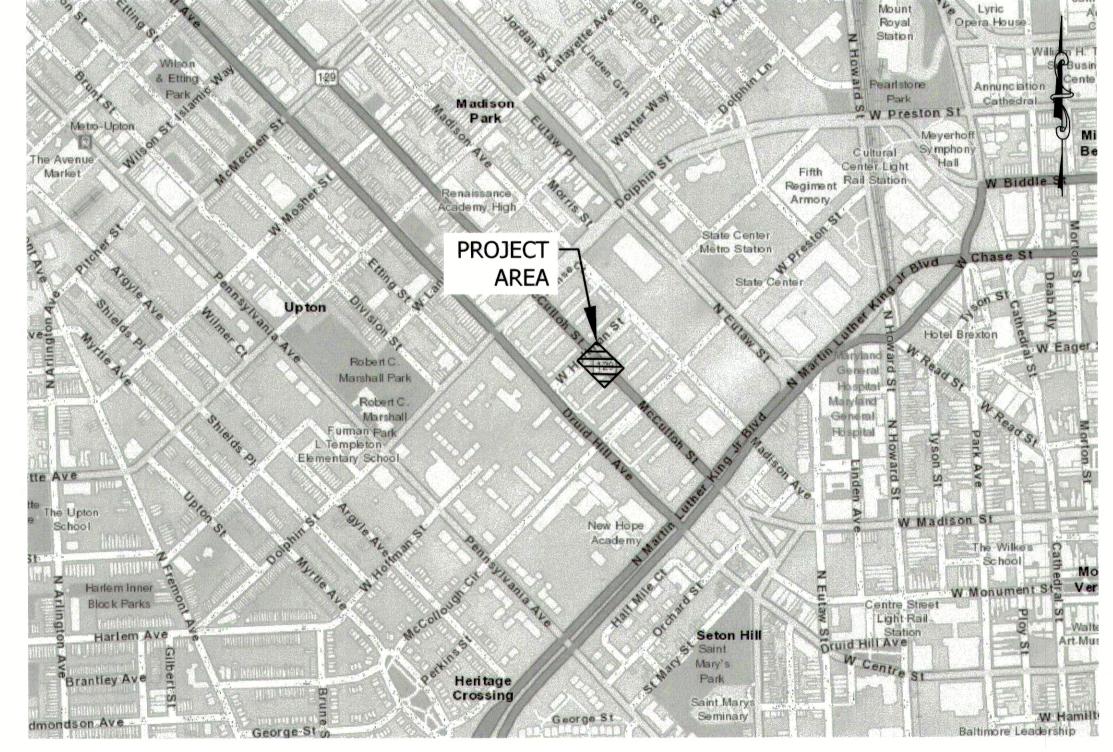


DESIGN

REVIEW

	WARD: 11							
	SECTION: 7			SECT		APP.		
	BLO	CK: 0457/045	8					
	LOT: 001 & 001							
AFFIC NEERING		WASTEWATER ENGINEERING		WATER NGINEERING	Е	SIGNAL NGINEERING		
M		SM		SM	-	TOB		

11-30-18 3/7/19 3/7/19 12-4-



LOCATION MAP SCALE: 1"= 500'

SHEET INDEX:

SHEET NO.	DESCRIPTION
1 OF 3	TITLE SHEET
2 OF 3	SITE PLAN
3 OF 3	DETAILS SHEET

AS BUILT REVISIONS	REVISIONS			
BV.	DESCRIPTION	DATE		
BY:				
DATED:				
		- I		

<u>LEGEND</u>

EXISTING INDEX CONTOUR	
EXISTING INTERMEDIATE CONTOUR	
PARCEL BOUNDARY	
EXISTING STRUCTURE	·/////////////////////////////////////
EXISTING WATER MAIN	W
EXISTING SANITARY SEWER MAIN	S
EXISTING UNDERGRROUND CABLE	CTV
EXISTING UNDERGTOUND TELEPHONE	UT
EXISTING UNDERGROUND ELECTRIC LINES	UE
EXISTING UNKNOWN UNDERGROUND UTILITY	UNK
SINGLE WHITE LINE	SWL
PAVEMENT MARKING EXISTING GAS MAIN	
EXISTING STORMWATER & MANHOLE	
EXISTING HYDRANT	***
EXISTING SANITARY MANHOLE	(S)
EXISTING WATER METER	(WM)
EXISTING WATER VALVE	\otimes
EXISTING GAS VALVE	$\stackrel{GV}{\bowtie}$
EXISTING STORMWATER INLET	
EXISTING UNDERGROUND ELECTRIC HANDBOX	TRAF BOX
EXISTING STREET LIGHT	₽
EXISTING STREET SIGN	
END OF UTILITY INVESTIGATION	EOI
EXISTING TELEPHONE PEDESTAL	TEL
EXISTING CONCRETE SIDEWALK	4 4 4
EXISTING CONIFEROUS TREE	EN S
EXISTING DECIDUOUS TREE	
PROPOSED COLD WATER SUPPLY	CWS CWS
PROPOSED HOT WATER RETURN	HWR HWR
PROPOSED HOT WATER SUPPLY	HWS
LIMIT OF TRENCH EXCAVATION	
PROPOSED FLEXIBLE PAVEMENT	
PROPOSED CONCRETE SIDEWALK	
PROPOSED BUS STOP CONCRETE	

OWNER / APPLICANT:

HOUSING AUTHORITY OF BALTIMORE CITY 417 E FAYETTE STREET, SUITE 266 BALTIMORE, MD 21202-3431 CONTACT: MICHAEL WODKA PHONE: 410-396-8468

DESIGNED BY:

BRINJAC ENGINEERING, INC. 114 NORTH SECOND STREET HARRISBURG, PA 17101 CONTACT: ANNE K. ANDERSON PHONE: 717-260-1140 HOUSING AUTHORITY OF BALTIMORE CITY 417 E FAYETTE STREET, SUITE 266 BALTIMORE, MD 21202-3431 CONTACT: MICHAEL WODKA PHONE: 410-396-8468

DEVELOPER:

Mull Wal	05/20/19
ASSISTANT CHIEF-ENGINEERING AN HOUSING AUTHORITY OF BALTIMOR	
HOUSING AUTHORITY OF BALTIMON	2/2-/19
EXECUTIVE DIRECTOR, HOUSING AL	CITY 03/25/19 PHORITY OF DATE
BALTIMORE CITY	
CHEIF, TRANSPORTATION ENGINEER	1 3 17 DATE
AND CONSTRUCTION DIVISION	A A A A
Muhemmed Khe	1.5 4 5/16
DIRECTOR, DEPARTMENT OF TRANS	PORTATION DATE
adii.	3.4.2019
CHIEF, STICE OF ENGINEERING A	ND CONSTRUCTION DATE
MARET	3/19/19
DIRECTOR DEPARTMENT OF PUBLIC	WORKS DATE

OWNER / APPLICANT / DEVELOPER:
HOUSING AUTHORITY OF BALTIMORE CITY
417 E FAYETTE STREET, SUITE 266
BALTIMORE, MD 21202-3431

CITY OF BALTIMORE
FRANCHISE AGREEMENT #_____

(FORMERLY DEVELOPERS AGREEMENT NO. 1620)

McCULLOH HOMES

1000 BLOCK OF McCULLOH STREET
INSTALLATION OF PRIVATE WATER LINES

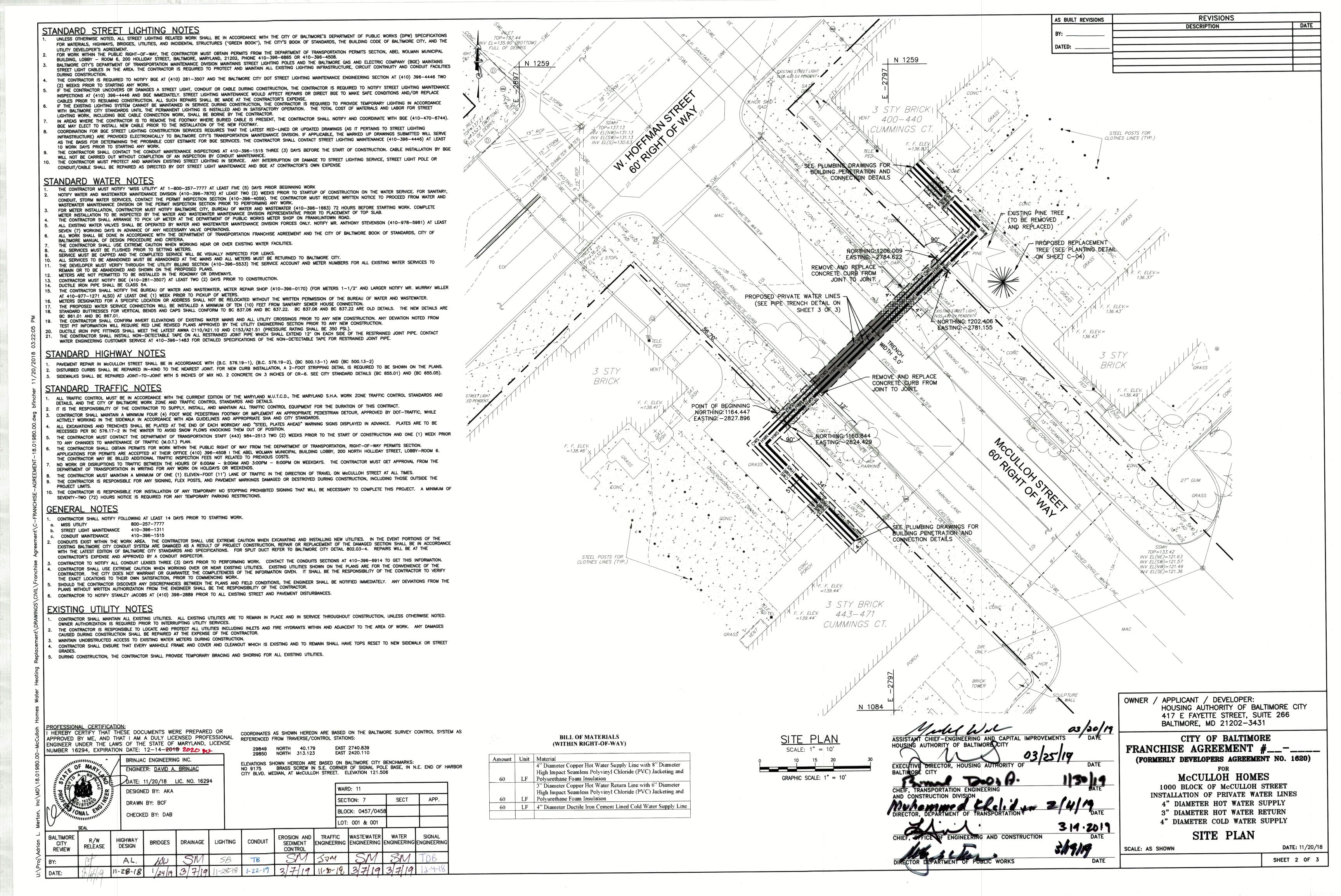
4" DIAMETER HOT WATER SUPPLY 3" DIAMETER HOT WATER RETURN 4" DIAMETER COLD WATER SUPPLY

TITLE SHEET

SCALE: AS SHOWN

DATE: 11/20/18

SHEET 1 OF 3

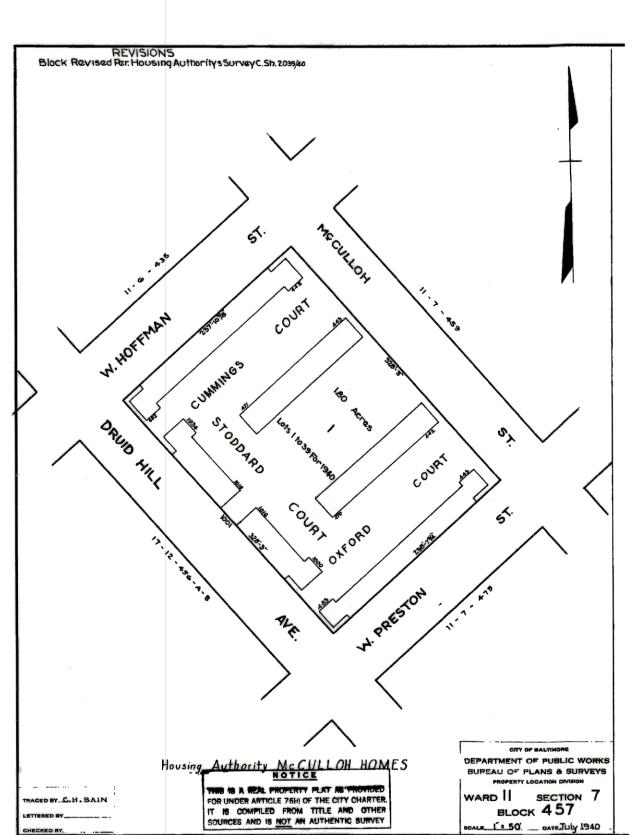


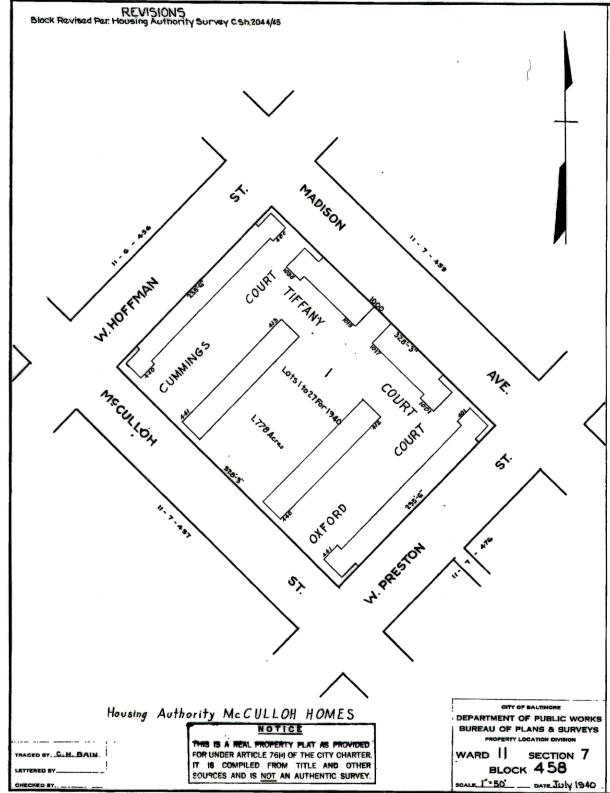
- - - - - - - - WATER LINE TO BE ISOLATED.

6 - WATER VALVES TO BE CLOSED IN THE EVENT OF AN EMERGENCY.

EMERGENCY SHUT OFF DIAGRAM

NOT TO SCALE





PROPERTY PLATS

NOT TO SCALE

ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 16294, EXPIRATION DATE: 12-14-2018 2020 8-F

LIGHTING

CONDUIT

1-22-19

BRINJAC ENGINEERING INC. ENGINEER: DAVID A. BRINJAC DATE: 11/20/18 LIC. NO. 16294 DESIGNED BY: AKA DRAWN BY: BCF CHECKED BY: DAB

BRIDGES

DRAINAGE

HIGHWAY

DESIGN

AL.

11-28-18

RELEASE

APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL

	WARD: 11					
	SEC	TION: 7	SECT	APP.		
	BLO	CK: 0457/045	8			
	LOT: 001 & 001					
EROSION AND SEDIMENT CONTROL			WASTEWATER ENGINEERING	WATER ENGINEERING	SIGNAL ENGINEERING	
SM	STA	1	SM	SM	TOR	

DESCRIPTION DATE EXISTING AND PROPOSED GRADE CONCRETE SIDEWALK PROPOSED GRADE CONCRETE PAVEMENT BUS STOP CONCRETE 12" MINIMUM CLEARANCE PROPOSED PRIVATE WATER LINES - PROPOSED PRIVATE WATER LINES 12" MINIMUM CLEARANCE - 4" DIAMETER HOT WATER SUPPLY - 4" DIAMETER HOT WATER SUPPLY - 3" DIAMETER HOT WATER RETURN - 3" DIAMETER HOT WATER RETURN - 4" DIAMETER COLD WATER SUPPLY - 4" DIAMETER COLD WATER SUPPLY (SEE PIPE TRENCH DETAIL FOR INSULATION (SEE PIPE TRENCH DETAIL FOR AND PIPE SPACING) INSULATION AND PIPE SPACING) McCULLOH STREET 60' RIGHT-OF-WAY

PRIVATE WATER LINES PROFILE

SCALE: 1"= 10' HORIZ. 1"= 10' VERT. GRAPHIC SCALE: 1" = 10'

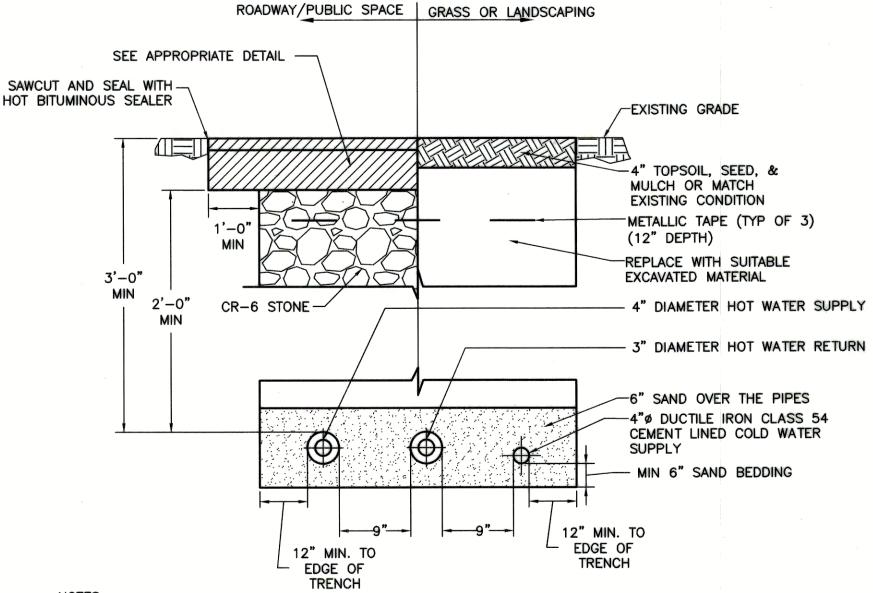
1. 12" MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN OUTSIDE OF EXISTING UTILITIES AND OUTSIDE

OF ALL WATER PIPES OR STRUCTURES.

2. THE SUPPLIER OF THE PRE-INSULATED PIPING SYSTEM SHALL BE RESPONSIBLE FOR THE DESIGN OF THE COMPLETE ENGINEERED PRE-INSULATED PIPING, INCLUDING CARRIER PIPE SELECTION, THERMAL INSULATION, PROTECTIVE JACKETING, FITTINGS, ANCHORS, THRUST BLOCK DESIGN, AND EXPANSION

LOOPS OR EXPANSION ELBOWS IF REQUIRED. 3. PROVIDE DUCT BANK SUPPORT PER (BC 891.01) TO SUPPORT EXISTING ELECTRICAL CONDUIT.

4. THE PROFILE IS STATIONED BASED ON THE HOT WATER RETURN LINE.



NOTES:

1. COMPACT ALL BACKFILL UNDER PAVED OR GRAVEL AREAS TO 95% AND ALL BACKFILL UNDER

1. COMPACT ALL BACKFILL UNDER PAVED OR GRAVEL AREAS TO 95% AND ALL BACKFILL UNDER GRASSED OR LANDSCAPED AREAS TO 90% OF IT'S MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH THE MODIFIED PROCTOR METHOD (ASTM D1557).

TRANSPORTATION REQUIREMENTS. 3. 24" MINIMUM COVER REQUIRED FROM TOP OF INSULATED PIPE TO TOP OF COMPACTED SUBBASE. 4. HOT WATER SUPPLY SHALL BE 4" DIAMETER COPPER WITH 8" DIAMETER HIGH IMPACT SEAMLESS

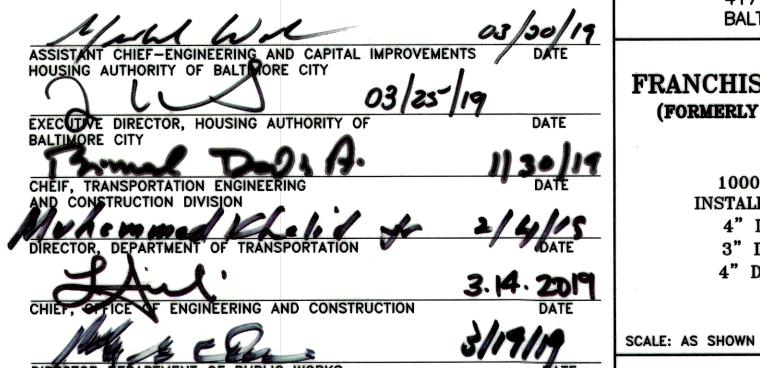
2. ALL CONSTRUCTION IN ROADWAYS SHALL BE IN ACCORDANCE WITH BALTIMORE CITY DEPARTMENT OF

- POLYVINYL CHLORIDE (PVC) CLASS 12454 B, JACKETING MATERIAL AND POLYURETHANE FOAM 4. HOT WATER RETURN SHALL BE 3" DIAMETER COPPER WITH 6" DIAMETER HIGH IMPACT SEAMLESS POLYVINYL CHLORIDE (PVC) CLASS 12454 B, JACKETING MATERIAL AND POLYURETHANE FOAM
- INSULATION. PRE-INSULATED PIPE TO BE SUPPLIED BY ENERGY TASK FORCE OR APPROVED EQUAL. THE SUPPLIER OF THE PRE-INSULATED PIPING SYSTEM SHALL BE RESPONSIBLE FOR THE DESIGN OF THE COMPLETE ENGINEERED PRE-INSULATED PIPING, INCLUDING CARRIER PIPE SELECTION, THERMAL

INSULATION, PROTECTIVE JACKETING, FITTINGS, ANCHORS, THRUST BLOCK DESIGN, AND EXPANSION

LOOPS OR EXPANSION ELBOWS IF REQUIRED. 7. PROVIDE PAVEMENT REPAIR IN ACCORDANCE WITH BALTIMORE CITY STANDARD DETAILS BC 576.19-1, BC 576.19-2, BC 500.13-1, AND BC 500.13-2.

> PIPE TRENCH DETAIL NO SCALE



OWNER / APPLICANT / DEVELOPER: HOUSING AUTHORITY OF BALTIMORE CITY 417 E FAYETTE STREET, SUITE 266 BALTIMORE, MD 21202-3431

REVISIONS

AS BUILT REVISIONS

CITY OF BALTIMORE FRANCHISE AGREEMENT #__-_ (FORMERLY DEVELOPERS AGREEMENT NO. 1620)

> McCULLOH HOMES 1000 BLOCK OF McCULLOH STREET INSTALLATION OF PRIVATE WATER LINES

- 4" DIAMETER HOT WATER SUPPLY
- 3" DIAMETER HOT WATER RETURN 4" DIAMETER COLD WATER SUPPLY

DETAILS

DATE: 11/20/18 SHEET 3 OF 3

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR

REVIEW

BALTIMORE

CITY