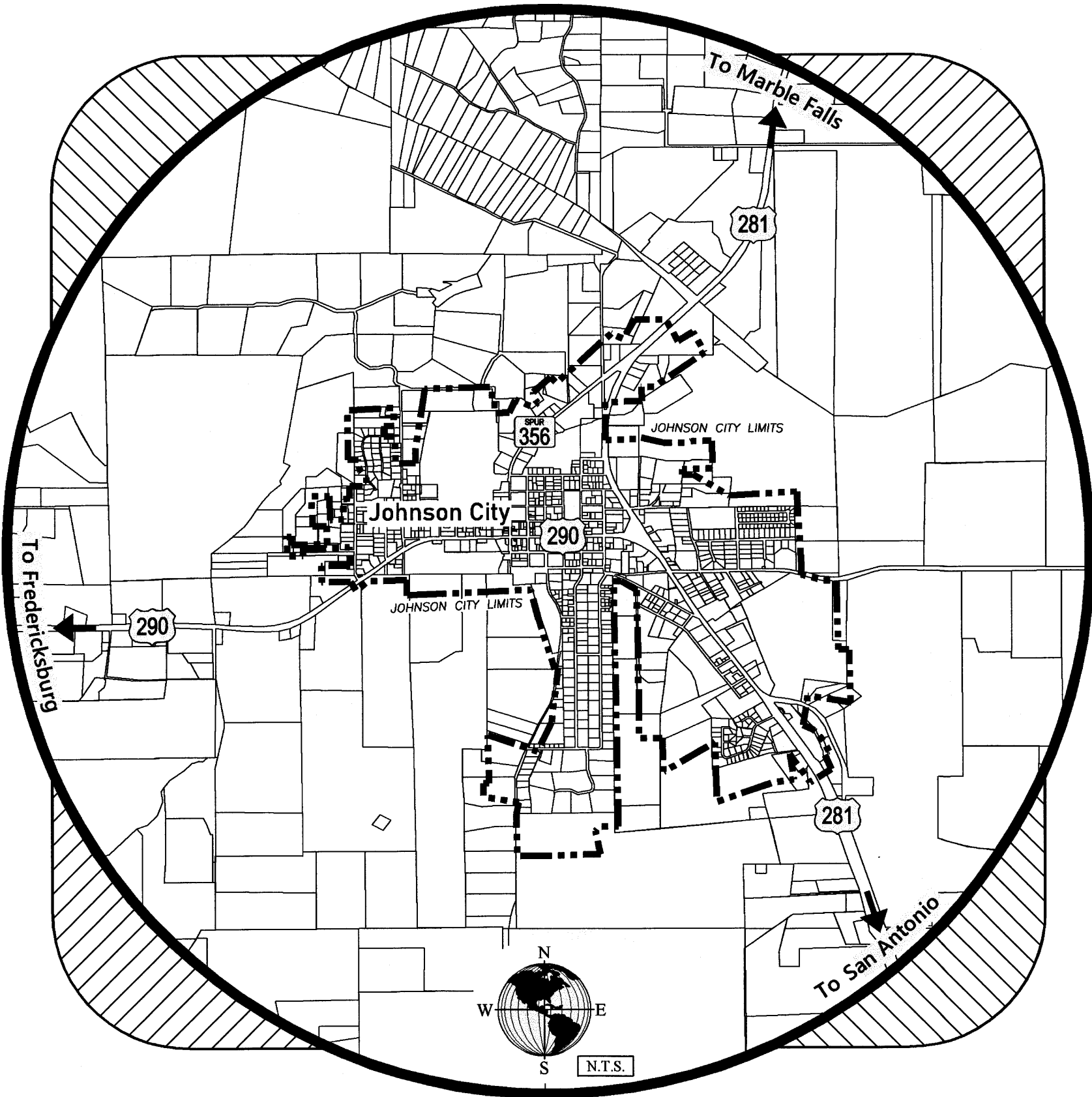


CITY OF JOHNSON CITY, TEXAS  
FIRE HYDRANT AND GATE VALVE IMPROVEMENTS  
TDA FY 2021/2022  
PROJECT #CDV21-0060

CITY OF JOHNSON CITY, TEXAS  
FIRE HYDRANT AND GATE VALVE IMPROVEMENTS  
TDA FY 2021/2022  
PROJECT #CDV21-0060  
PROJECT NO. 665-1789

CITY OFFICIALS

Mayor	STEPHANIE FISHER
Mayor Pro Tempore	SHELTON COLEMAN
Council Member	KARI THOMAS
Council Member	TERESA BABB
Council Member	GAYLA JO GUTHRIE
Council Member	PAT DILDINE
Chief Administrative Officer/City Secretary	RICK SCHRODER
Director of Public Works	BRENT J. SULTEMEIER



**S.D. KALLMAN, L.P.**  
*Engineers and Environmental Consultants*  
TBPE Firm Registration No. F-516  
1106 South Mays, Suite 101  
Round Rock, Tx. 78664  
Phone: (512) 218-4404  
Fax: (512) 218-1668  
[www.sdkallman.com](http://www.sdkallman.com)



STEVEN D. KALLMAN, P.E.

*hdk* **D. Kallman** 01-25-2024  
DATE

SHEET INDEX

SHEET NO.	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	OVERALL PROJECT LOCATION MAP
4	PROJECT LOCATION DETAILS (Sheet 1 of 3)
5	PROJECT LOCATION DETAILS (Sheet 2 of 3)
6	PROJECT LOCATION DETAILS (Sheet 3 of 3)
7	GENERAL CONSTRUCTION DETAILS

PLAN REVISIONS				
Date	Sheet No.	Revision No.	Description	Made By

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS  
REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN  
ACCEPTING THESE PLANS, THE CITY OF JOHNSON CITY  
MUST RELY UPON THE WORK OF THE DESIGN ENGINEER.

ACCEPTED FOR CONSTRUCTION:

*[Signature]*  
RICK SCHRODER, CHIEF ADMINISTRATIVE OFFICER/CITY SECRETARY  
CITY OF JOHNSON CITY, TEXAS

01-25-2024  
DATE

GENERAL NOTES

1. Except for "Special Technical Specifications" provided in rear of the "Contract Documents and Technical Specifications" booklet, all construction for water improvements shall be in accordance with the current City of Austin Standard Construction Specifications. Whenever the term "Austin", "City", or "Owner" is used in the same specifications, it shall be construed to mean "City of Johnson City".
2. For existing water utilities owned by the City of Johnson City, the City's Water Department will assist the contractor in locating these utilities. If adjustments are required, the City's Public Works Department will relocate the utilities at the City's expense. If the Contractor is careless in damaging water and wastewater utilities, in the opinion of the Owner and Engineer, the Contractor will be required to repair the utilities at his expense.
3. The Contractor shall verify all depths and locations of existing utilities prior to any construction. For assistance in obtaining existing water locations, contact the City of Johnson City Public Works Department at (830) 868-7111. Any discrepancies with the construction plans found in the field shall be brought immediately to the attention of the Engineer.
4. Imported clean bedding material shall be placed 12" over, 12" under and 12" around all water mains and service lines. The bedding material shall be clean pit-run sand or gravel which shall be clean, well-graded and crushed screening with 100% passing a 1/2" sieve, 95% passing a 1/4" sieve. The plasticity index shall be no more than 12 when tested in accordance with Texas Department of Transportation Test Method Tex-106-E.
5. Prior to any construction, the Contractor shall convene a Pre-Construction Conference between the City of Johnson City, himself, the Engineer, other utility companies, any affected parties, and any other entity the City or Engineer may require.
6. The Contractor shall keep accurate records of all construction that deviates from the plans on one (1) record set of blueprints. The Contractor shall then furnish these records to the Engineer at the end of construction. The Engineer shall furnish the City of Johnson City accurate "As-Built" drawings following completion of all construction. These "As-Built" drawings shall meet with the satisfaction of the Public Works Department prior to final acceptance.
7. All construction operations shall be accomplished in accordance with all Local, State and Federal laws, and all applicable regulations of the U.S. Occupational Safety and Health Administration (OSHA).
8. When construction is being carried out within easements, the Contractor shall confine his work within the permanent and any temporary easements. Prior to final acceptance, the Contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the Engineer.
9. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.

TRENCH SAFETY NOTES

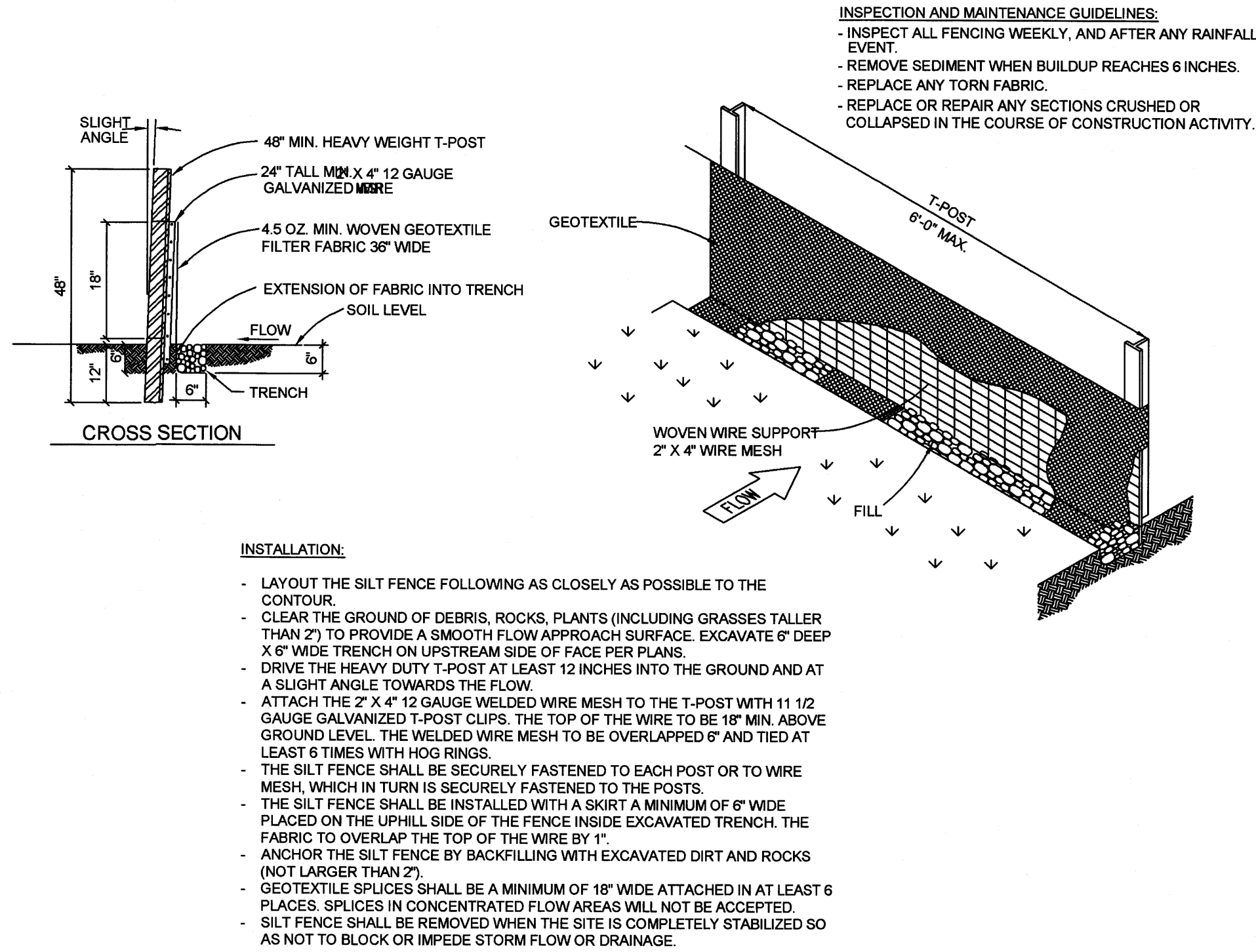
1. In accordance with the Laws of the State of Texas and the U.S. Occupational Safety and Health Administration regulations, all trenches over 5-feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5-feet in depth shall also be effectively protected when hazardous ground movement may be expected.
2. In accordance with the U.S. Occupational Safety and Health Administration regulations, when employees are required to be in trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25-feet of lateral travel.
3. If trench safety system details were not provided in the plans because trenches were anticipated to be less than 5-feet in depth, and during construction it is found that trenches are in fact 5-feet or more in depth or trenches less than 5-feet in depth are in an area where hazardous ground movement is expected, all construction shall cease; the trenched area shall be barricaded, and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer are submitted to and accepted by the City of Johnson City, and, a bid item for implementation of trench safety systems is added to the contract by change order.

TRAFFIC MARKING NOTES

1. Any methods, street marking and signage necessary for warning motorists, warning pedestrians, or diverting traffic during construction shall conform to the Texas Manual on Uniform Traffic Control Devices for Streets and Highways, latest edition.
2. All pavement markings, markers, paint, traffic buttons, traffic controls and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges, and the Texas Manual on Uniform Traffic Control Devices for Streets and Highways, latest edition.

SPECIAL WASTEWATER SERVICES NOTE:

THE CITY OF JOHNSON CITY'S DIRECTOR OF PUBLIC WORKS, B.J. SULTEMEIER, HAS REVIEWED THE CITY'S WASTEWATER COLLECTION SYSTEM IN THE FIELD AND HAS STATED THAT THERE ARE NO EXISTING WASTEWATER SERVICES WITHIN 9 FEET OF ANY OF THE PROPOSED FIRE HYDRANT INSTALLATIONS ON THIS PROJECT.



EROSION AND SEDIMENTATION CONTROL NOTES

1. Erosion control measures, site work and restoration work shall be in accordance with the City of Austin Erosion and Sedimentation Control Ordinance. Whenever the term "Austin", "City" or "Owner" is used in the same specifications, it shall be construed to mean "City of Johnson City".
2. Silt fence, rock berms, sedimentation basins and similarly recognized techniques and materials shall be employed during construction to prevent point source sedimentation loading of downstream facilities. Such installation shall be regularly inspected by the City of Johnson City for effectiveness. Additional measures may be required if, in the opinion of the Engineer, they are warranted.
3. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the Engineer. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the Engineer.

PLAN REVISIONS			
NO.	DATE	DESCRIPTION	MADE BY

DESIGNED BY: _____	SDK
DRAWN BY: _____	TIM
CHECKED BY: _____	SDK
APPROVED BY: _____	SDK
SUBMITTAL: _____	
DATE: _____	SEPTEMBER, 2019

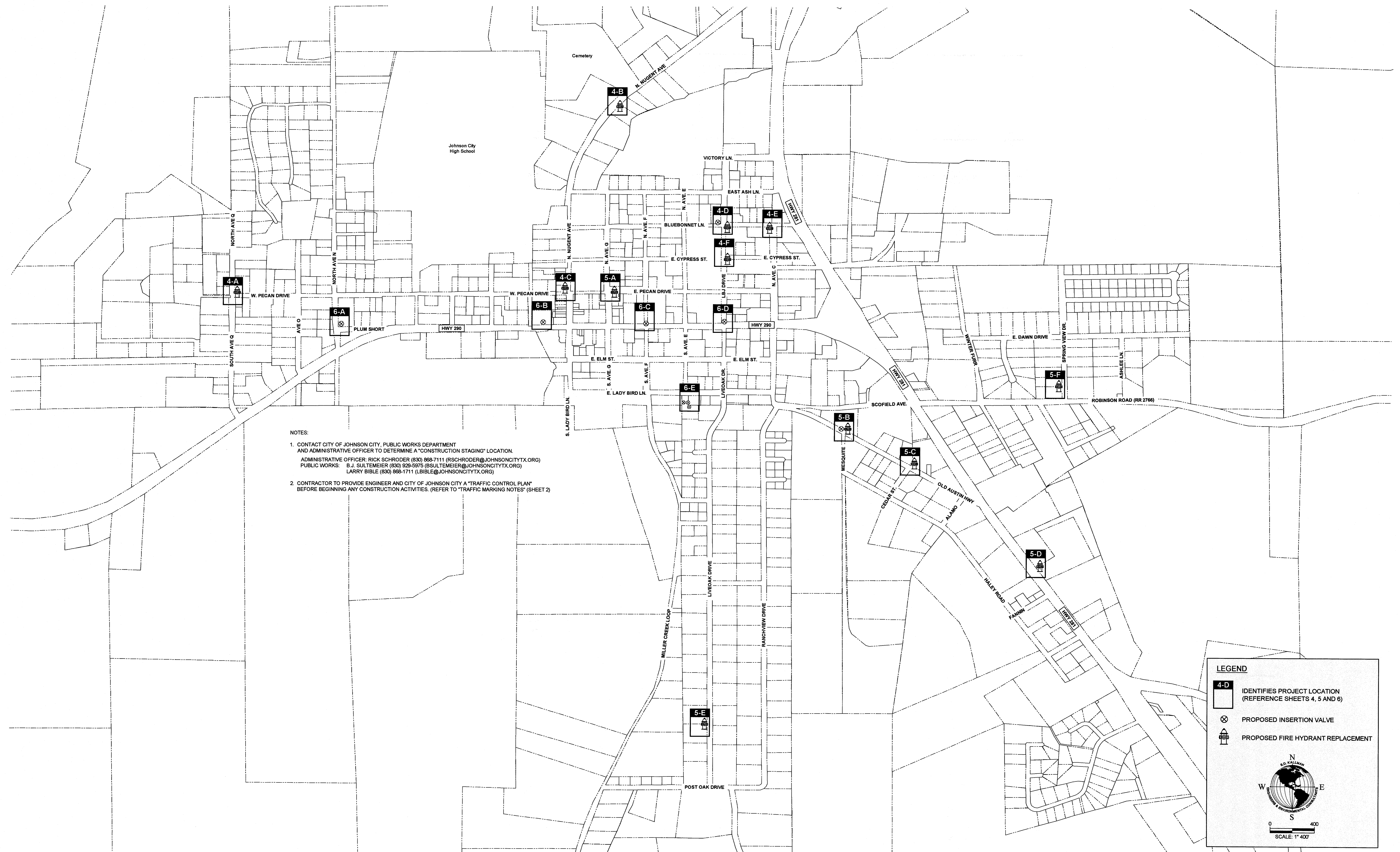
<p><b><i>S.D. KALLMAN, L.P.</i></b> <b><i><u>Engineers and Environmental Consultants</u></i></b></p> <p>TBPE Firm Registration No. F-516 1106 South Mays, Suite 101 Round Rock, Tx. 78664 Phone: (512) 218-4404 Fax: (512) 218-1668 <a href="http://www.sdkallman.com">www.sdkallman.com</a></p>	
FILE: Site Plan	PROJECT NO. 724-1650

<b>CITY OF JOHNSON CITY, TEXAS</b> FIRE HYDRANT AND GATE VALVE IMPROVEMENTS TDA FY 2021/2022 PROJECT #CDV21-0060 PROJECT NO. 665-1789
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<b>GENERAL NOTES</b>
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 STEVEN D. KALLMAN 40762 01-25-24	2 7
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[illegible]

DESIGNED BY: \_\_\_\_\_ *SDK*  
DRAWN BY: \_\_\_\_\_ *TIM*  
CHECKED BY: \_\_\_\_\_ *SDK*  
APPROVED BY: \_\_\_\_\_ *SDK*  
SUBMITTAL: \_\_\_\_\_  
DATE: \_\_\_\_\_ *SEPTEMBER, 2019*

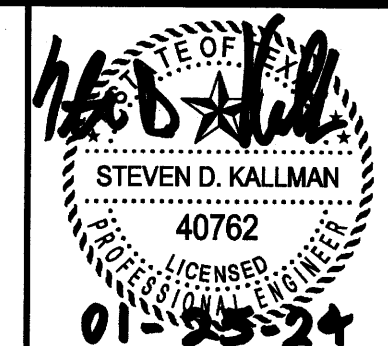
***S.D. KALLMAN, L.P.***  
***Engineers and Environmental Consultants***

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FILE: Site Plan	PROJECT NO. 724-1650
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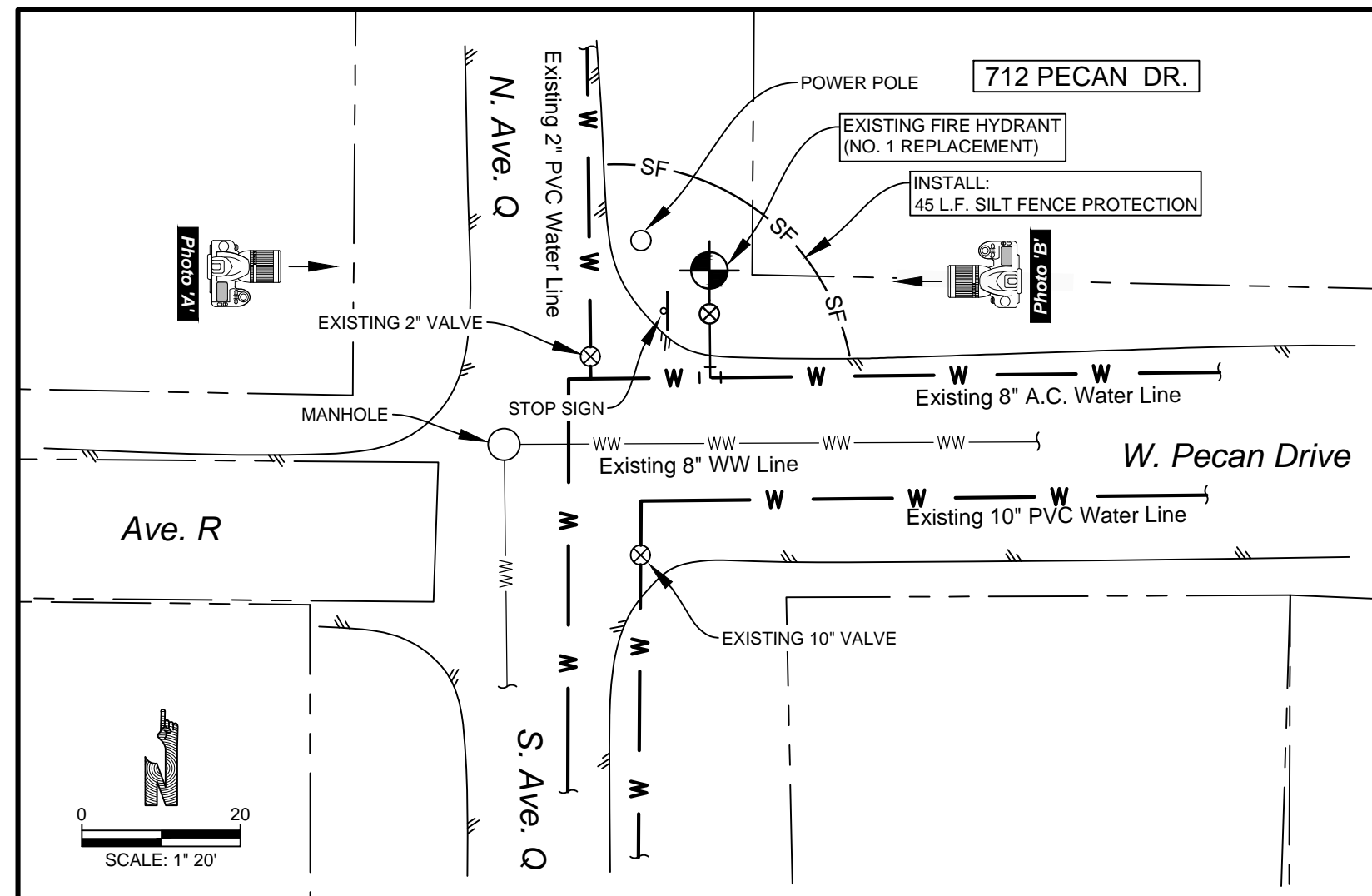
**CITY OF JOHNSON CITY, TEXAS**  
FIRE HYDRANT AND GATE VALVE IMPROVEMENTS  
TDA FY 2021/2022  
PROJECT #CDV21-0060  
PROJECT NO. 665-1789

## OVERALL PROJECT LOCATION MAP

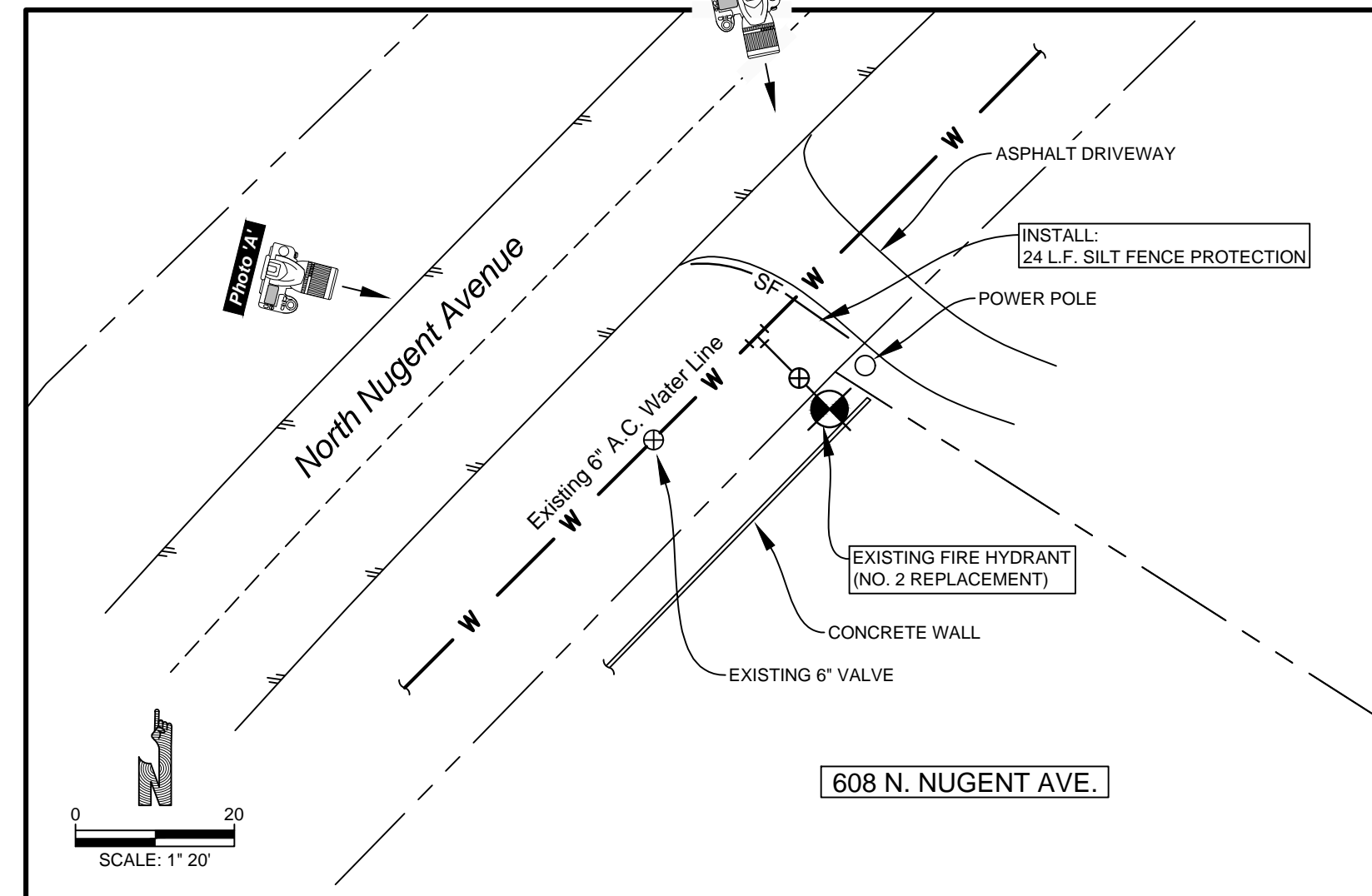
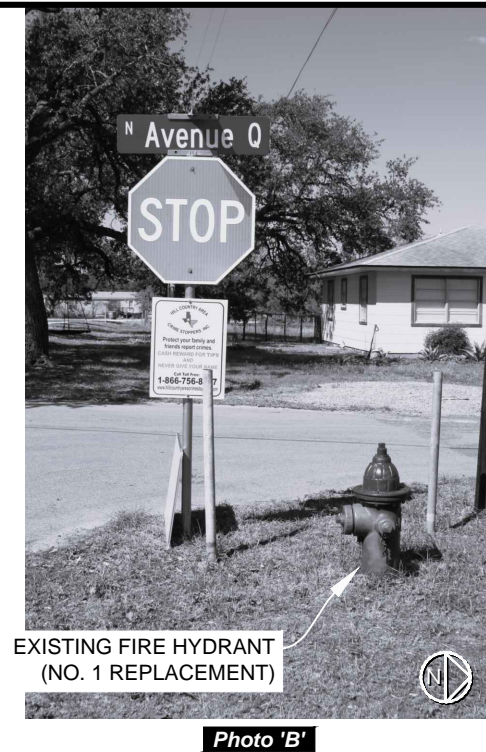


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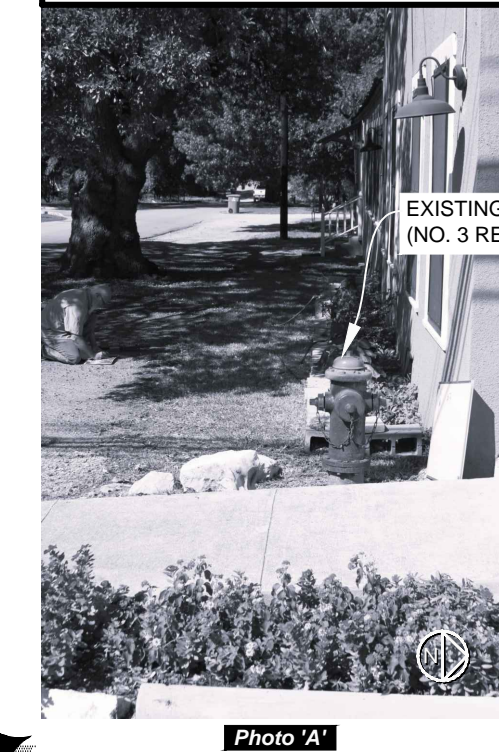
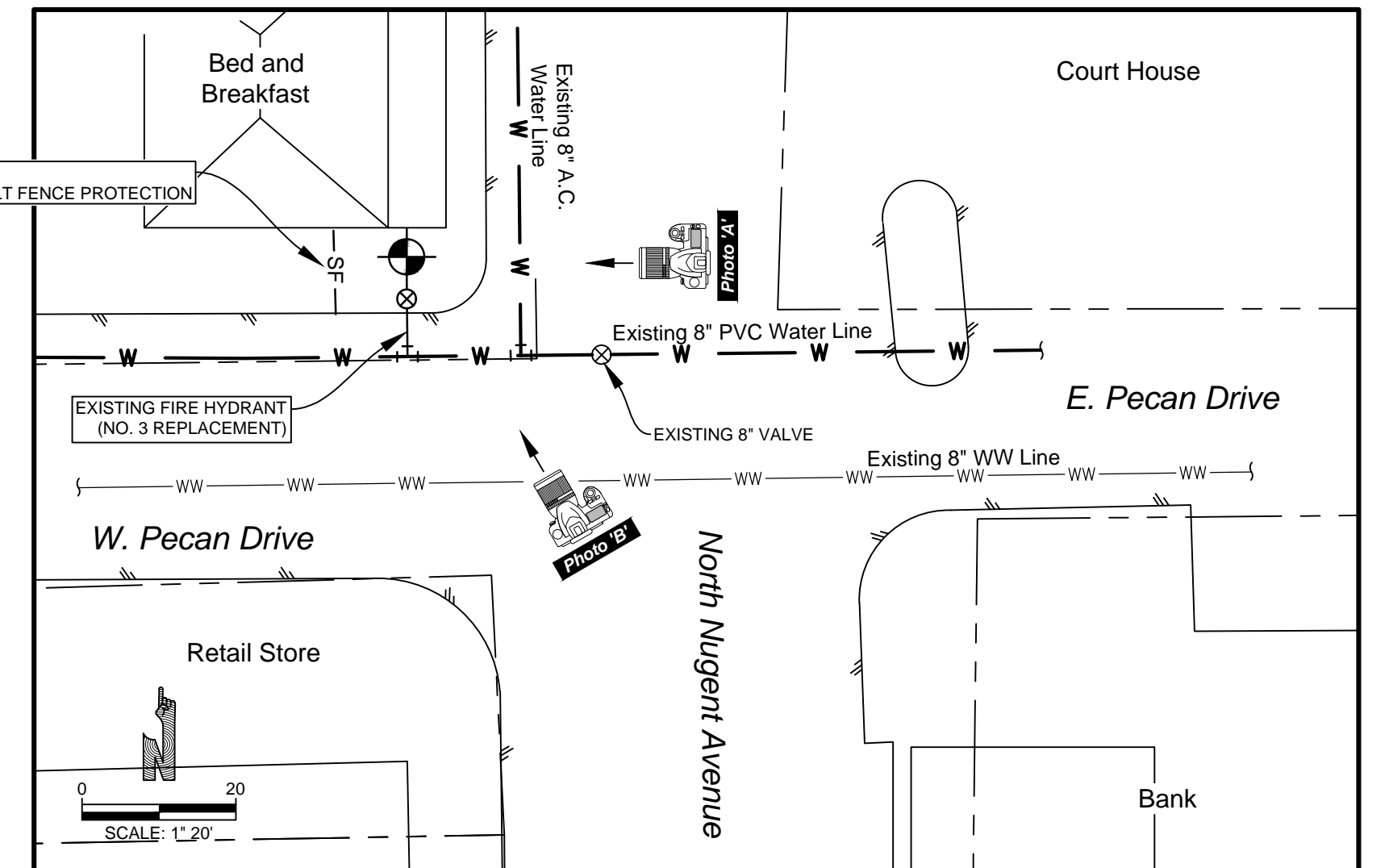




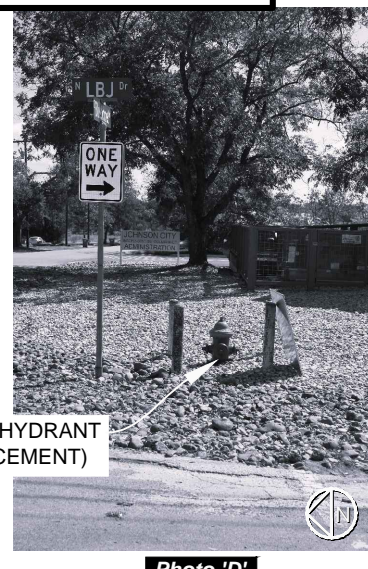
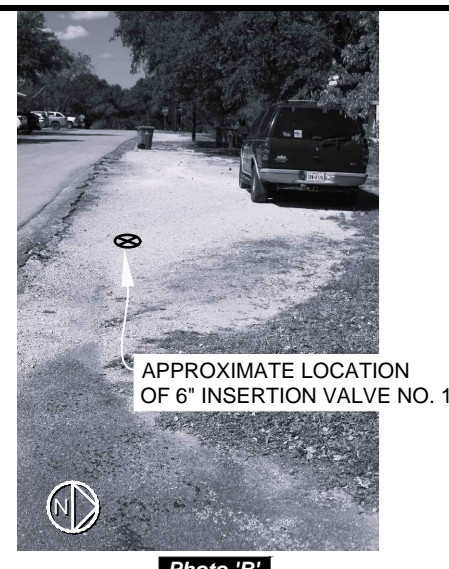
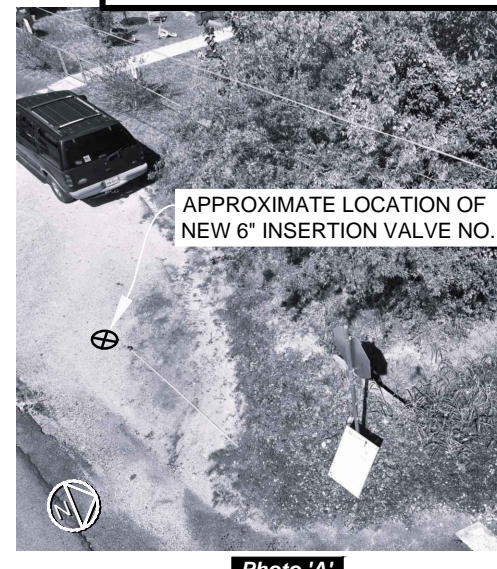
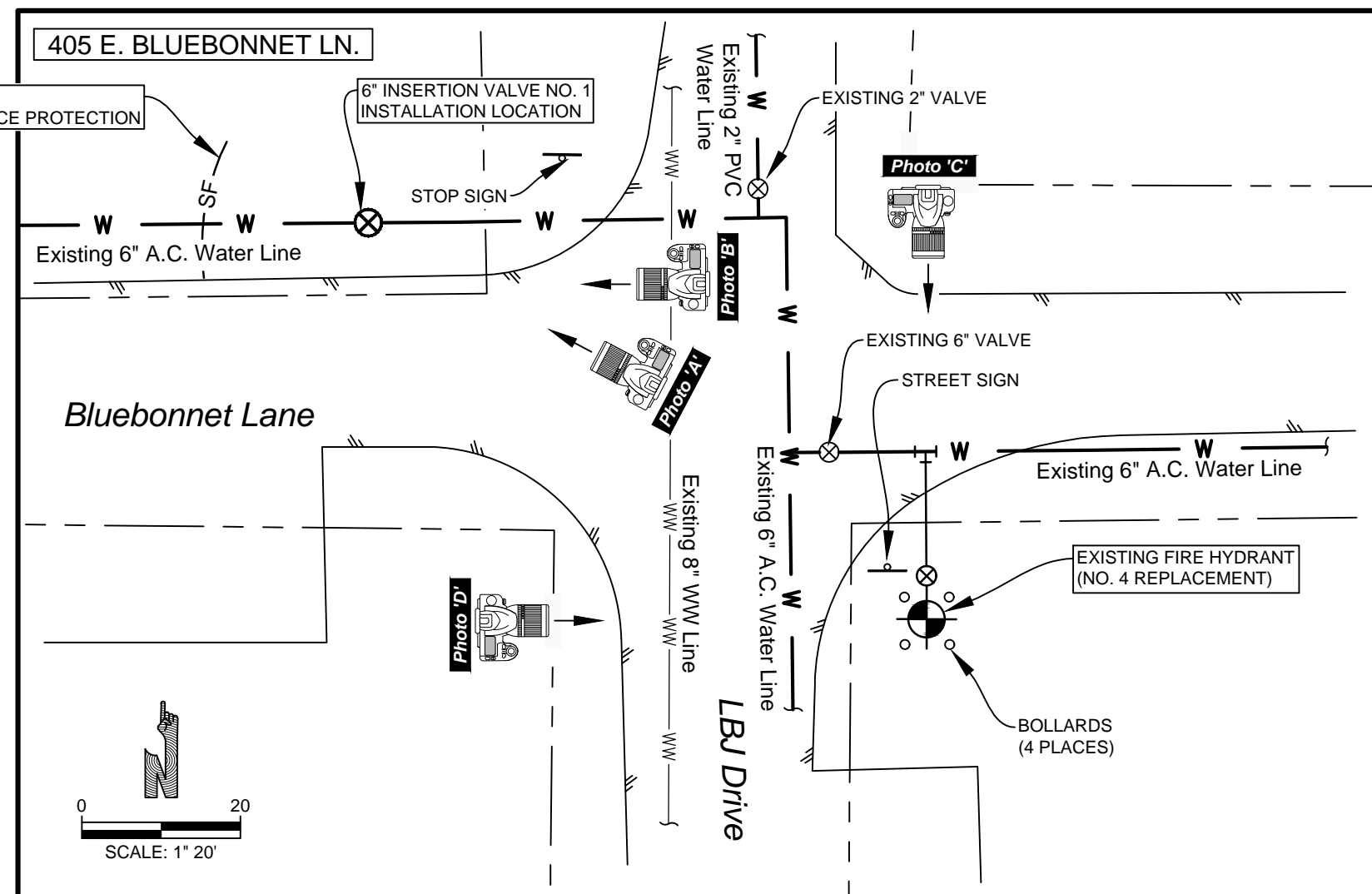
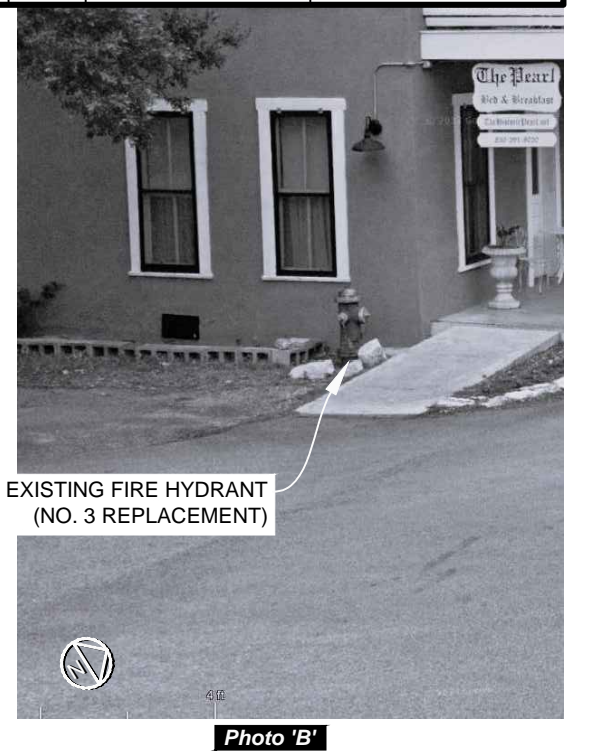
**FIRE HYDRANT NO. 1  
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South Avenue Q)



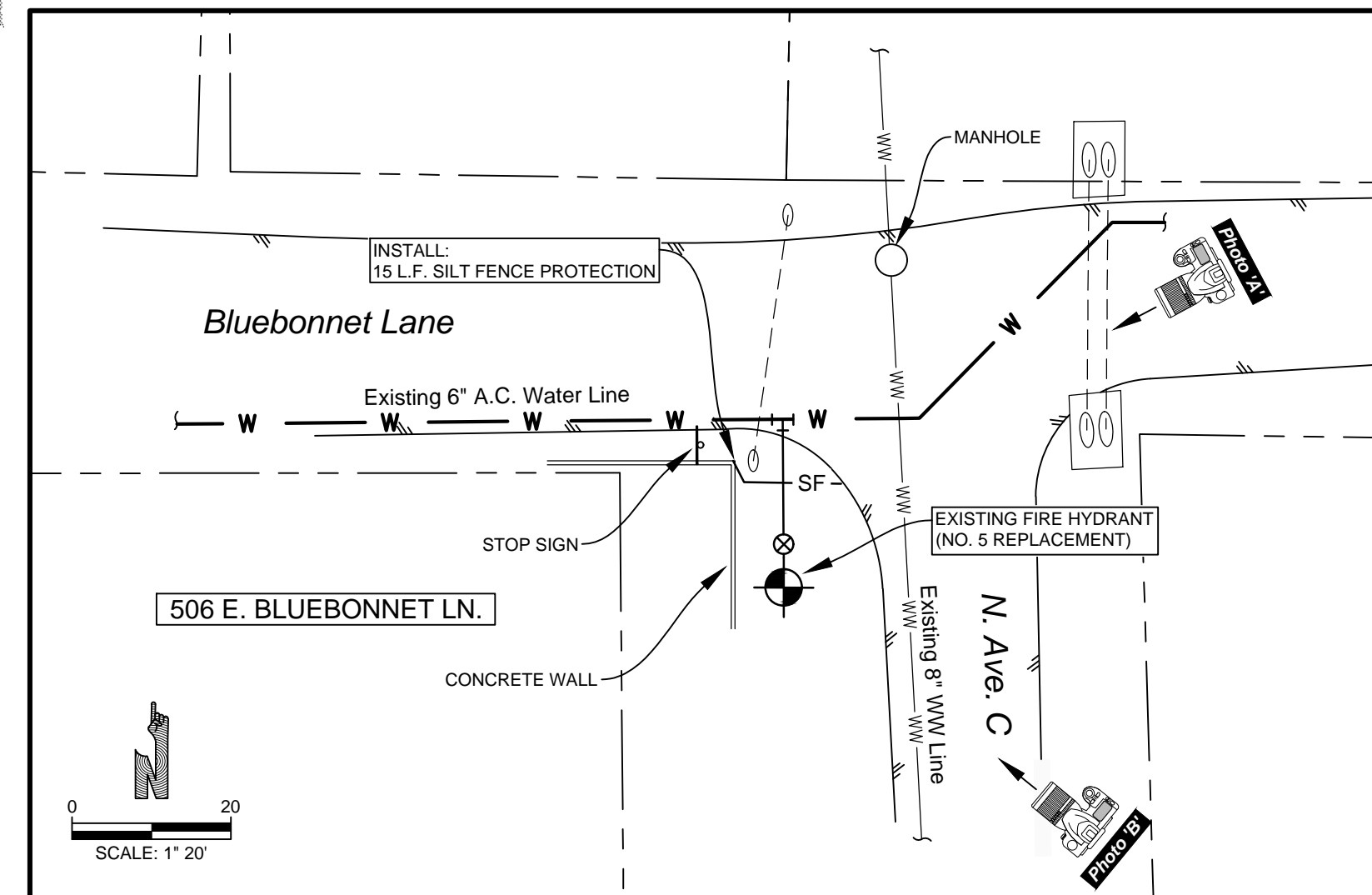
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(610 N. Nugent Ave.)



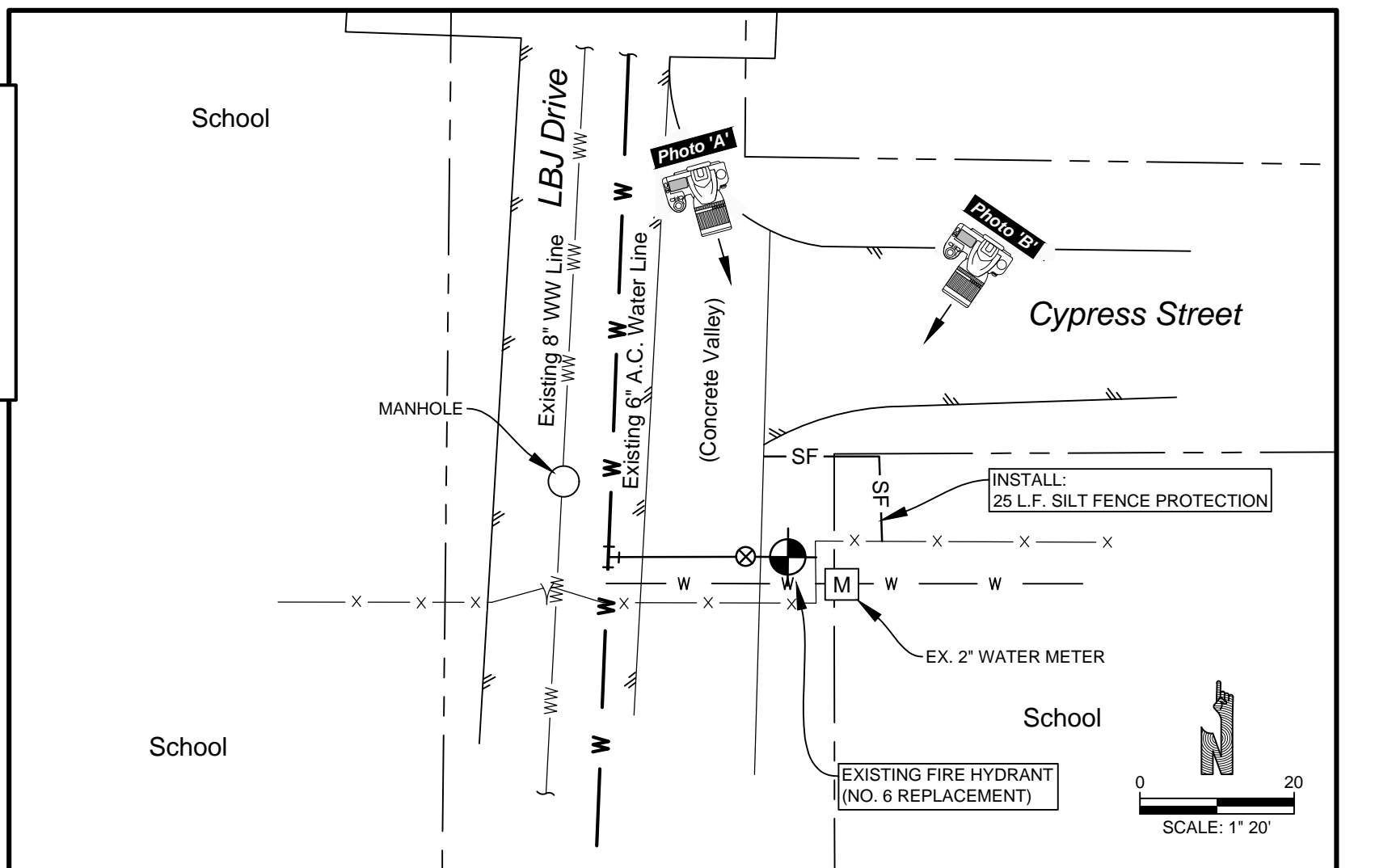
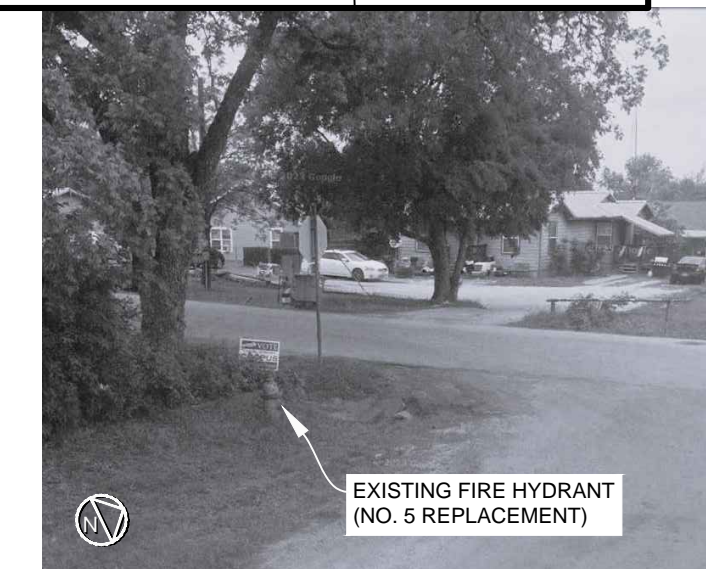
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REPLACEMENT**  
(Corner of Pecan Drive and  
Nugent Ave.)



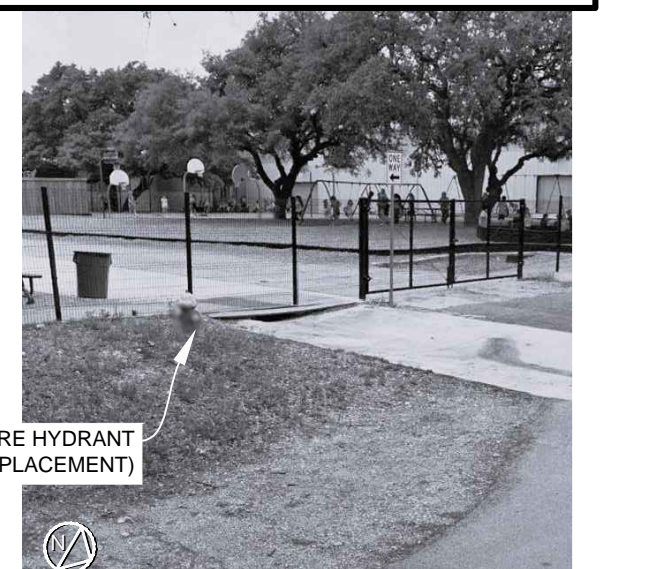
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INSERTION VALVE NO. 1 INSTALLATION**  
(Corner of Bluebonnet Lane and LBJ Drive)



**FIRE HYDRANT NO. 5 REPLACEMENT,**  
(Corner of Bluebonnet Lane and Ave. C)



**FIRE HYDRANT NO. 6 REPLACEMENT,**  
(Corner of Cypress Street and LBJ Drive)



D

E

F

C

PLAN REVISIONS			
NO.	DATE	DESCRIPTION	MADE BY

DESIGNED BY: SDK  
 DRAWN BY: TJM  
 CHECKED BY: SDK  
 APPROVED BY: SDK  
 SUBMITTAL:    
 DATE: SEPTEMBER, 2019

**S.D. KALLMAN, L.P.**  
*Engineers and Environmental Consultants*  
 TBPE Firm Registration No. F-516  
 1106 South Mays, Suite 101  
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 Phone: (512) 218-4404  
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 www.sdkallman.com

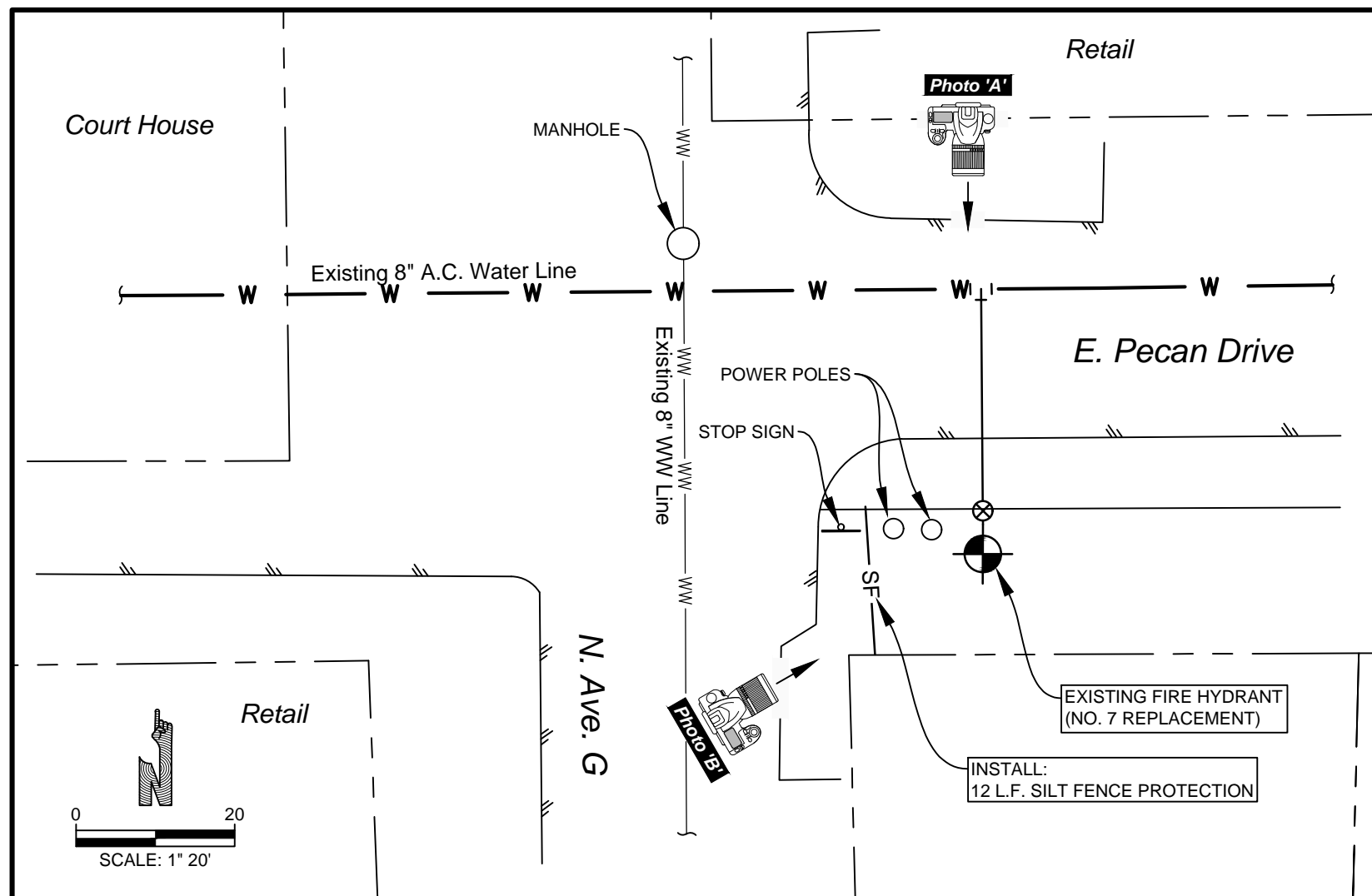
**CITY OF JOHNSON CITY, TEXAS**  
**FIRE HYDRANT AND GATE VALVE IMPROVEMENTS**  
 TDA FY 2021/2022  
 PROJECT #CDV21-0060  
 PROJECT NO. 665-1789

**PROJECT LOCATION DETAILS**  
 (Sheet 1 of 3)

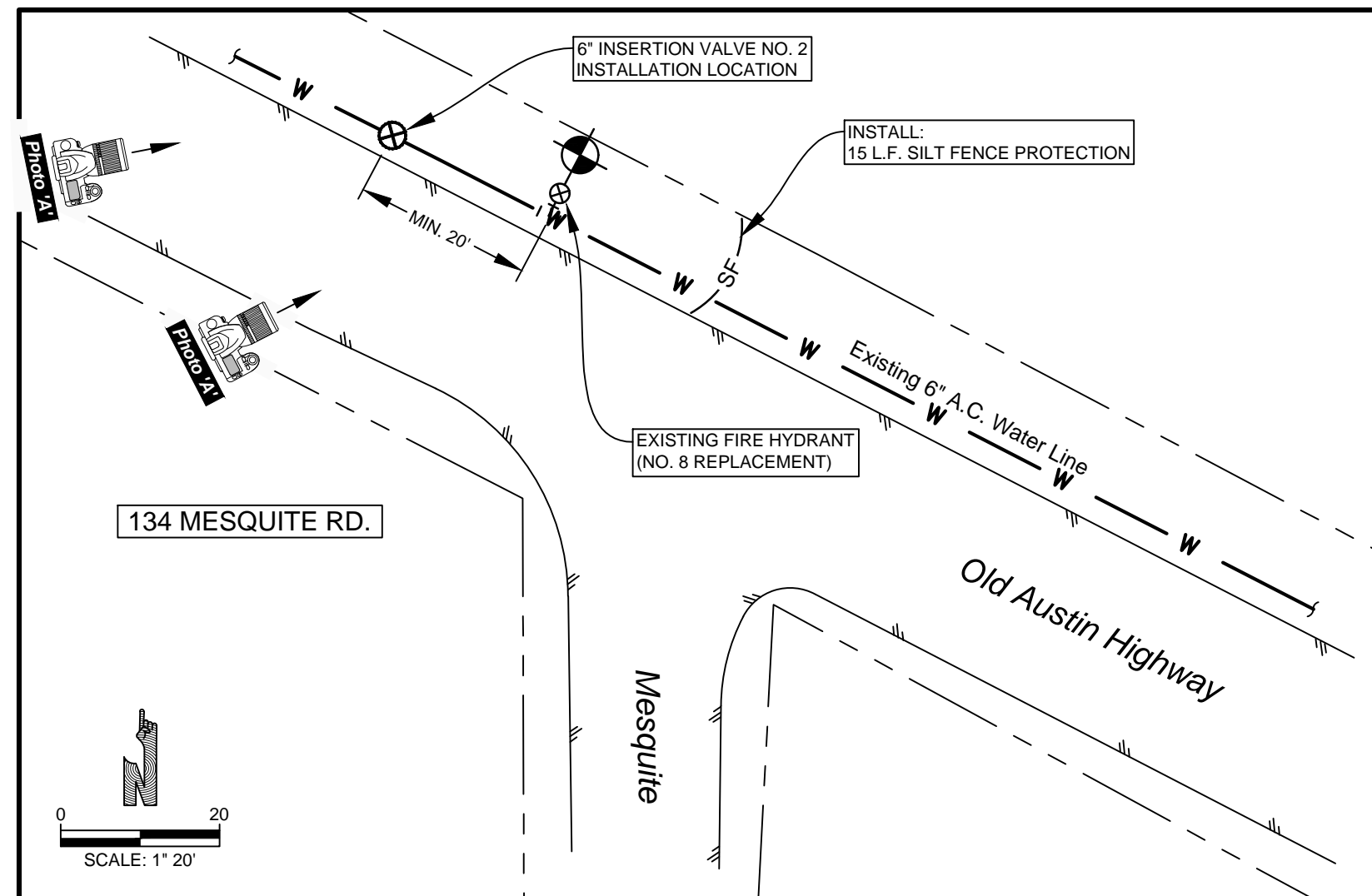
**STEVEN D. KALLMAN**  
 40762  
 01/25/2024

**4**  
**7**

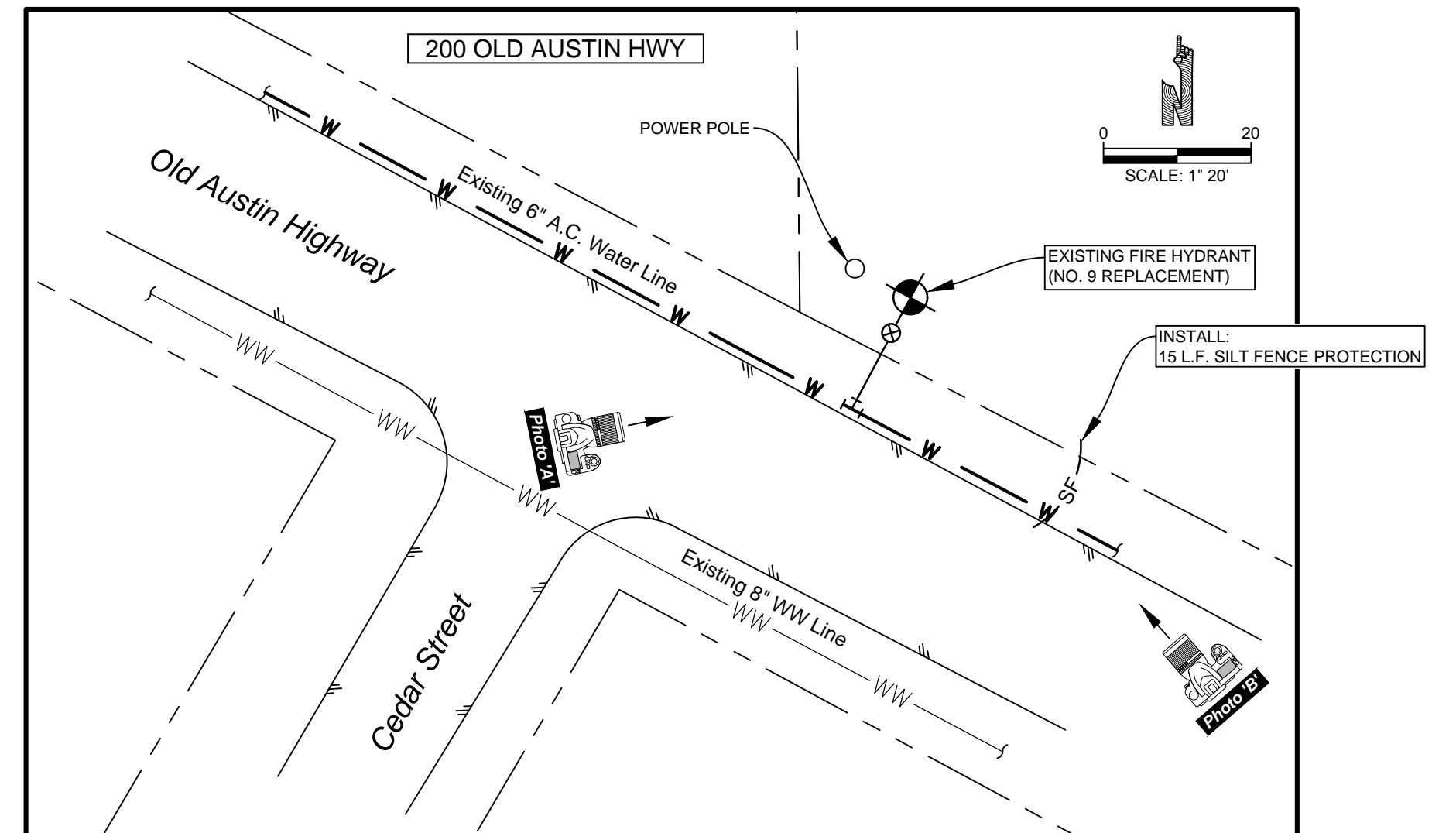




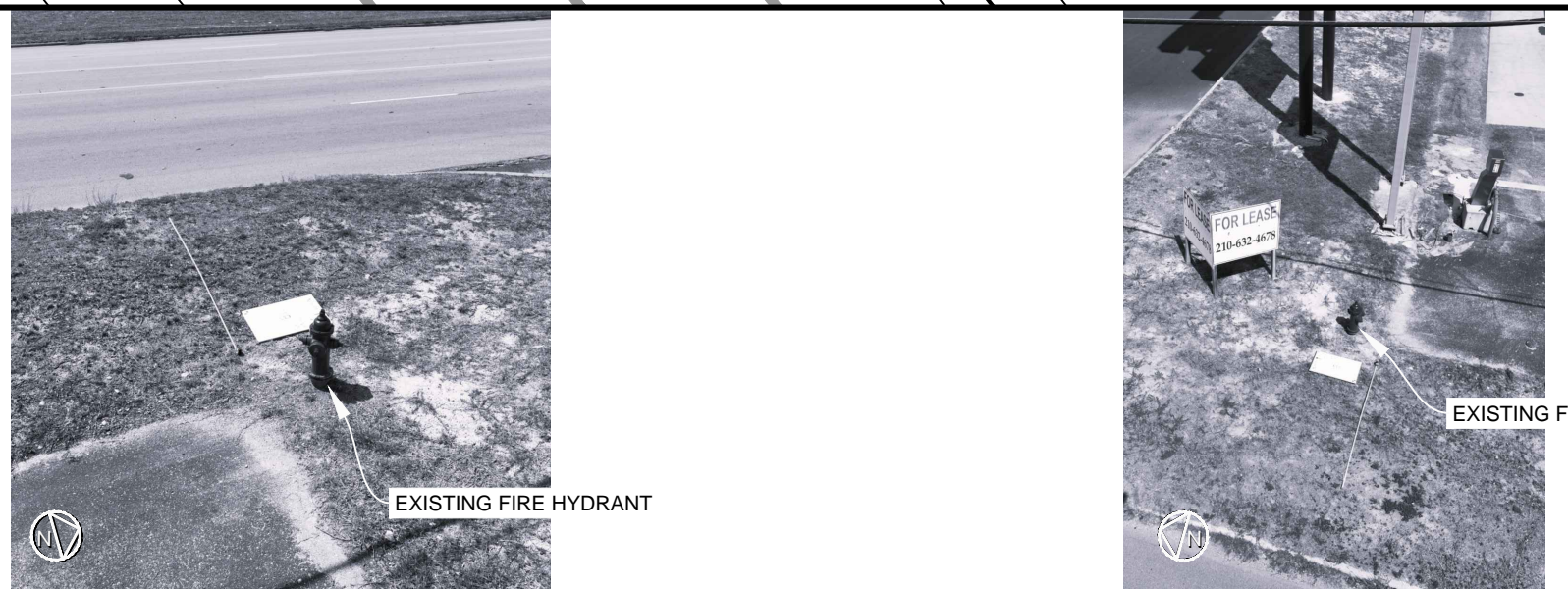
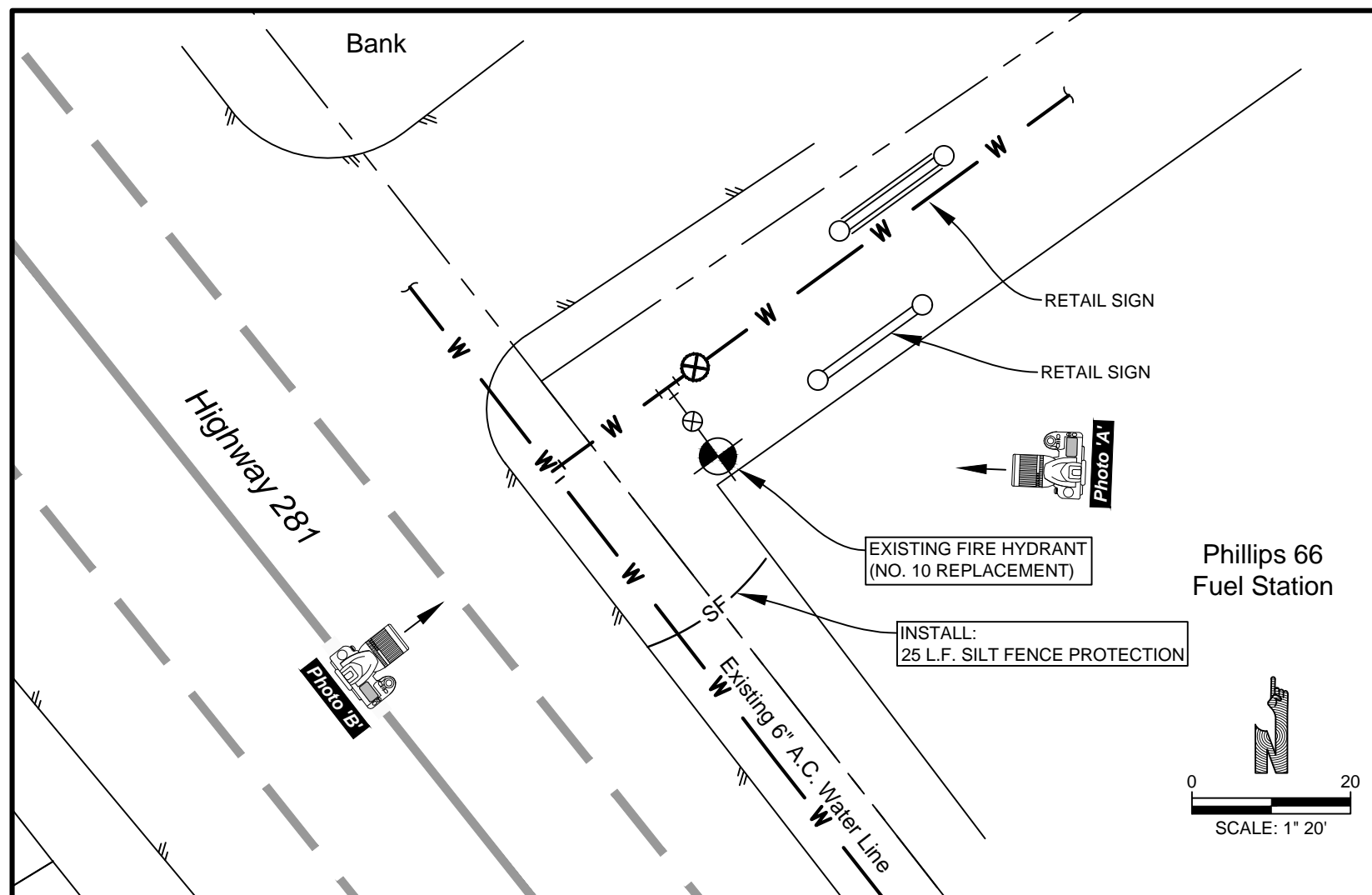
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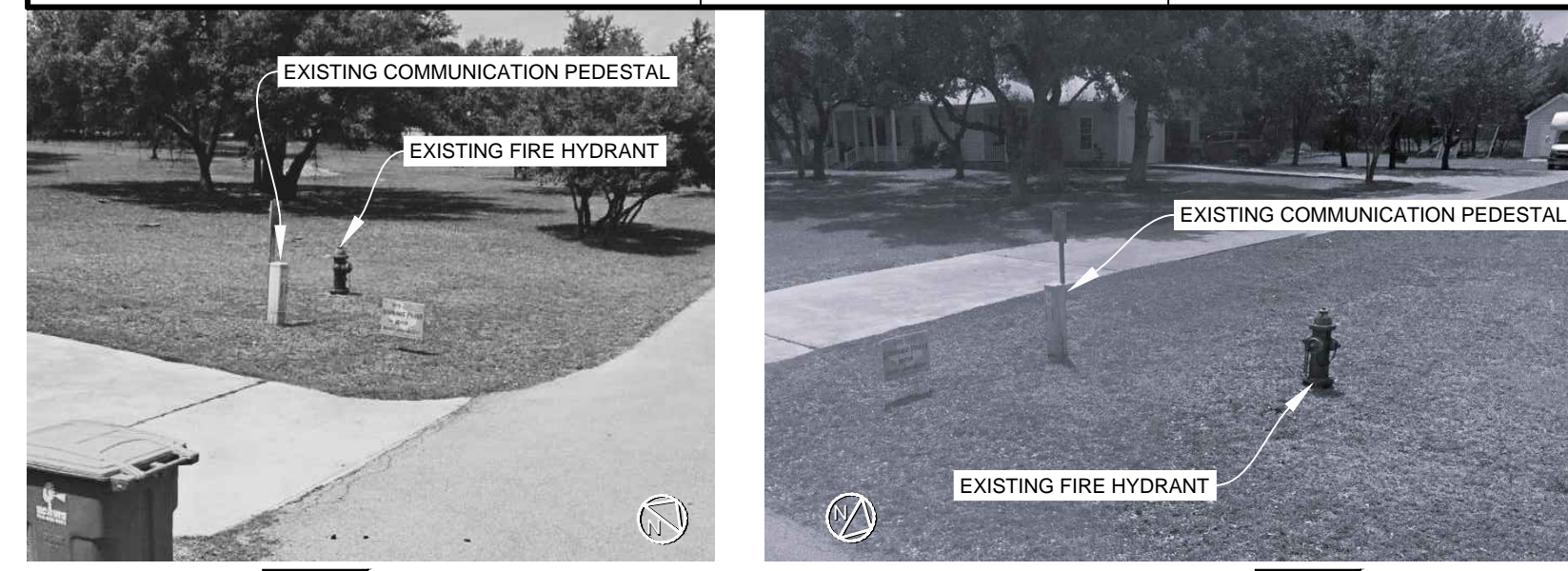
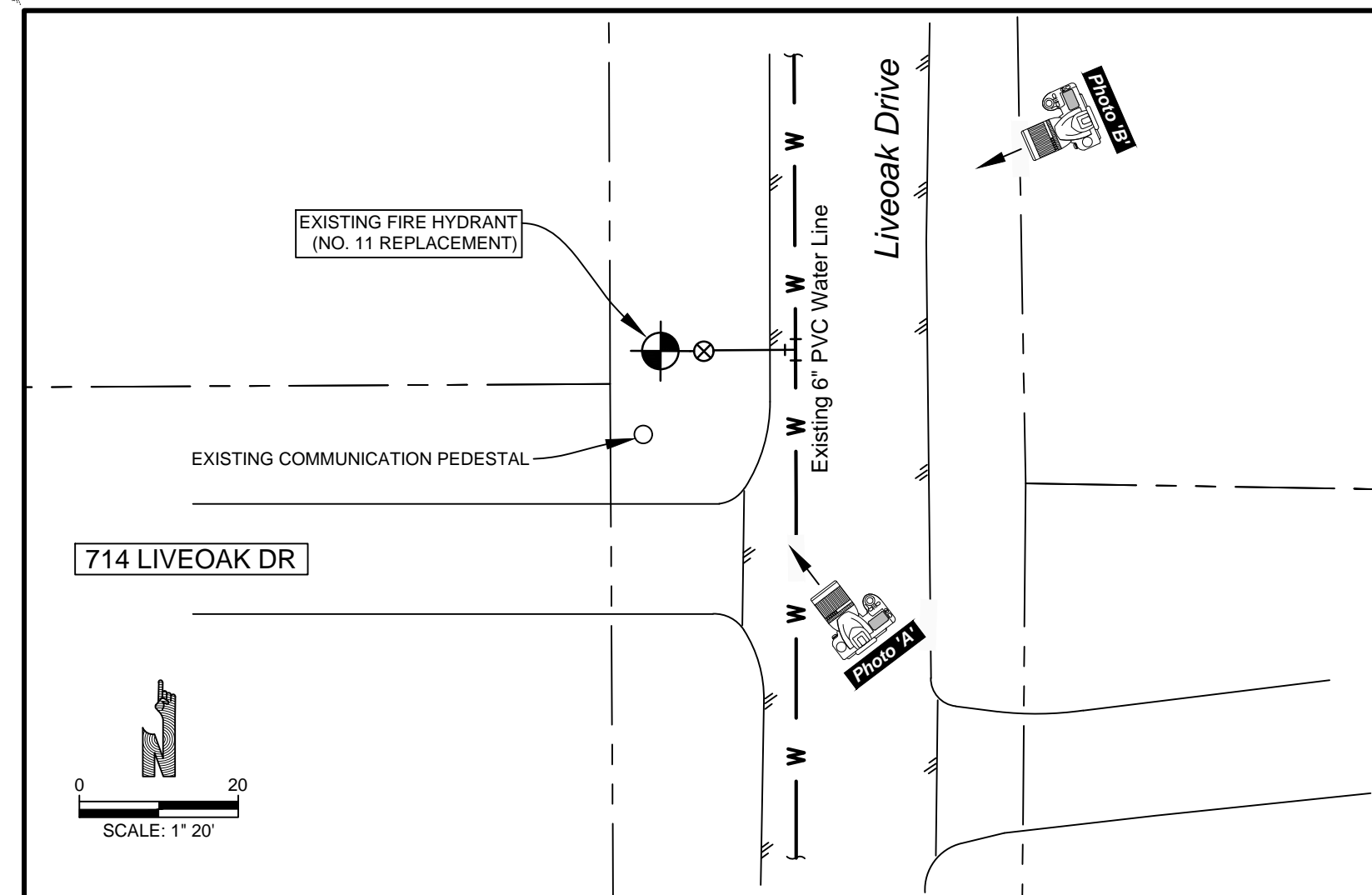
**FIRE HYDRANT NO. 8 REPLACEMENT,  
INSERTION VALVE NO. 2 INSTALLATION**  
(Old Austin Highway at Mesquite)



**FIRE HYDRANT NO. 9 REPLACEMENT,**  
(Old Austin Highway at Cedar Street)

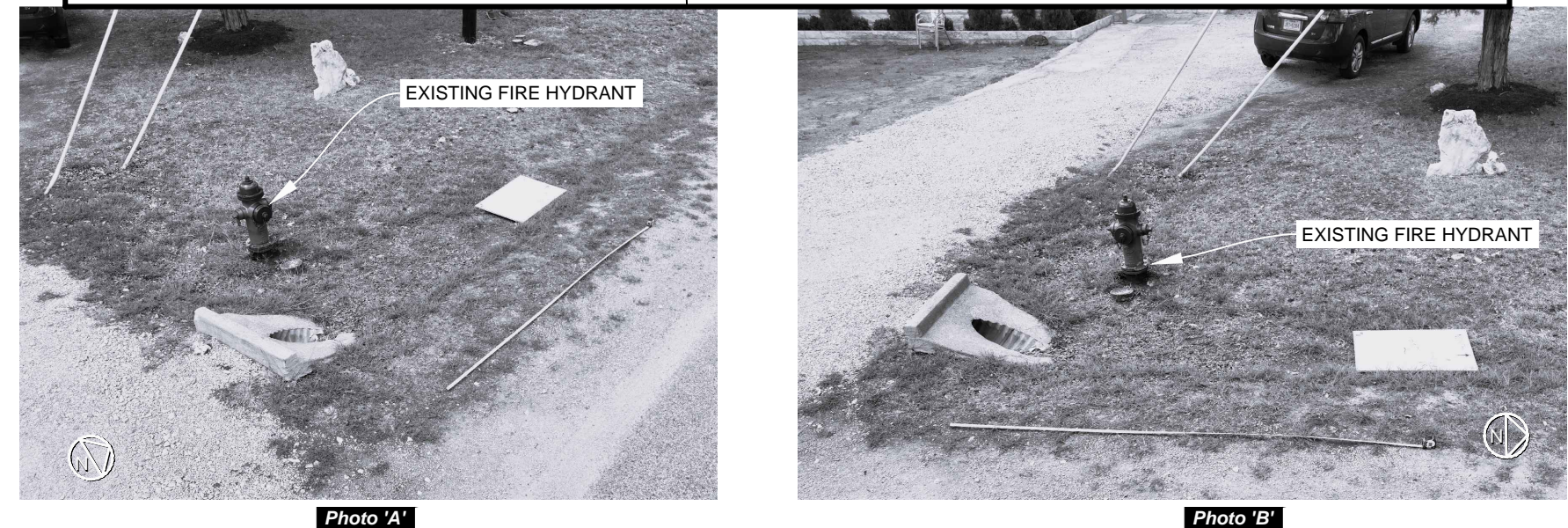
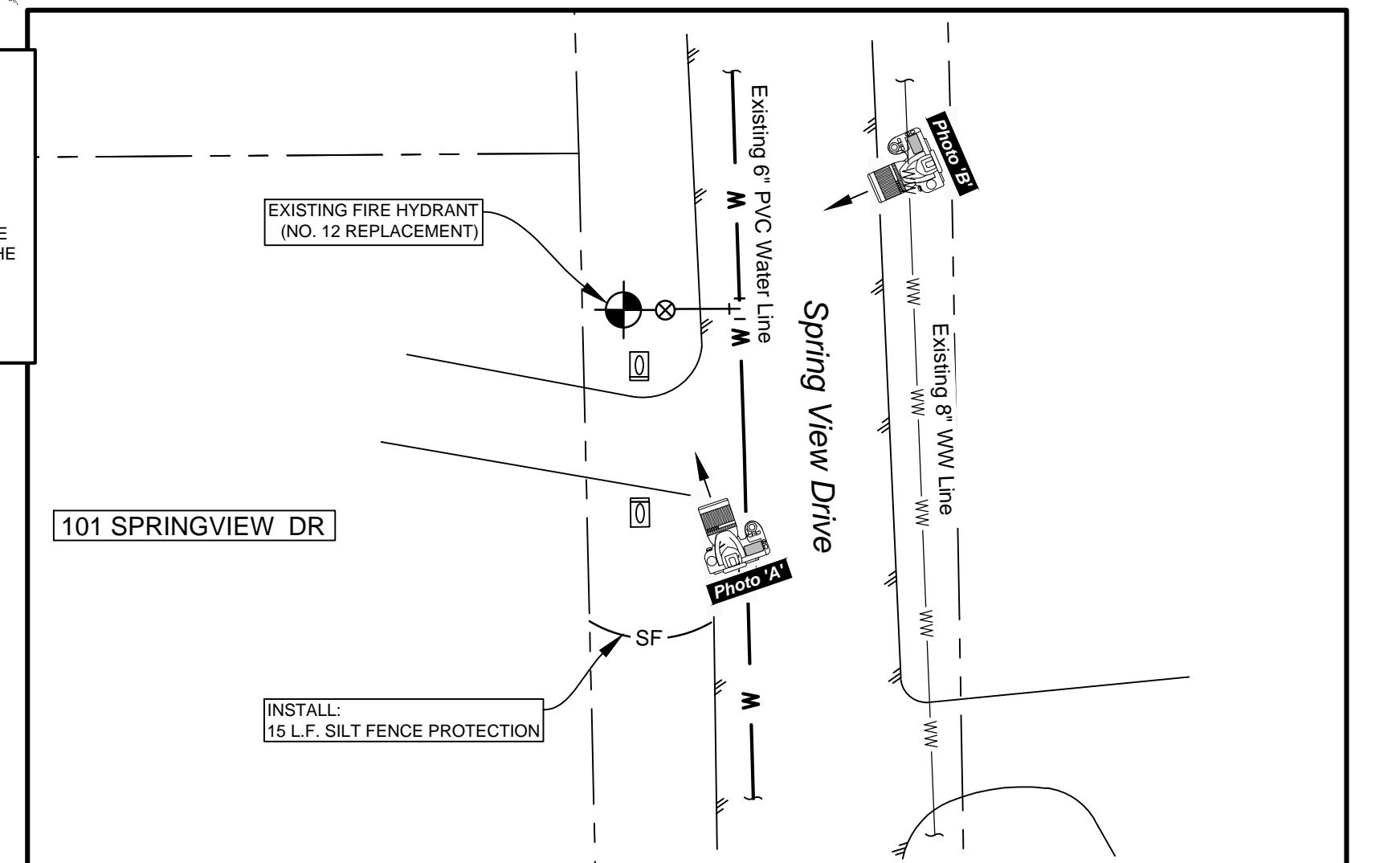


**FIRE HYDRANT NO. 10 REPLACEMENT**  
(Phillips 66 Fuel Station at Hwy 281)



**FIRE HYDRANT NO. 11 REPLACEMENT**  
(Live Oak Drive)

NOTES:  
1. EROSION AND SEDIMENTATION CONTROL NOTES AND TRAFFIC MARKING NOTES (SHEET 2) SHALL APPLY TO ALL LOCATIONS FOR THIS PROJECT.  
2. NO EXISTING VALVES ARE TO BE OPENED/CLOSED WITHOUT PRIOR NOTIFICATION AND CONSENT OF THE "PUBLIC WORKS DEPARTMENT AT THE CITY OF JOHNSON CITY".  
PUBLIC WORKS:  
LARRY BIBLE (830) 868-1711 (LBIBLE@JOHNSONCITYTX.ORG)



**FIRE HYDRANT NO. 12 REPLACEMENT**  
(Spring View Drive at RR 2766)

PLAN REVISIONS			
NO.	DATE	DESCRIPTION	MADE BY

DESIGNED BY: SDK  
DRAWN BY: TIM  
CHECKED BY: SDK  
APPROVED BY: SDK  
SUBMITTAL:    
DATE: SEPTEMBER, 2019

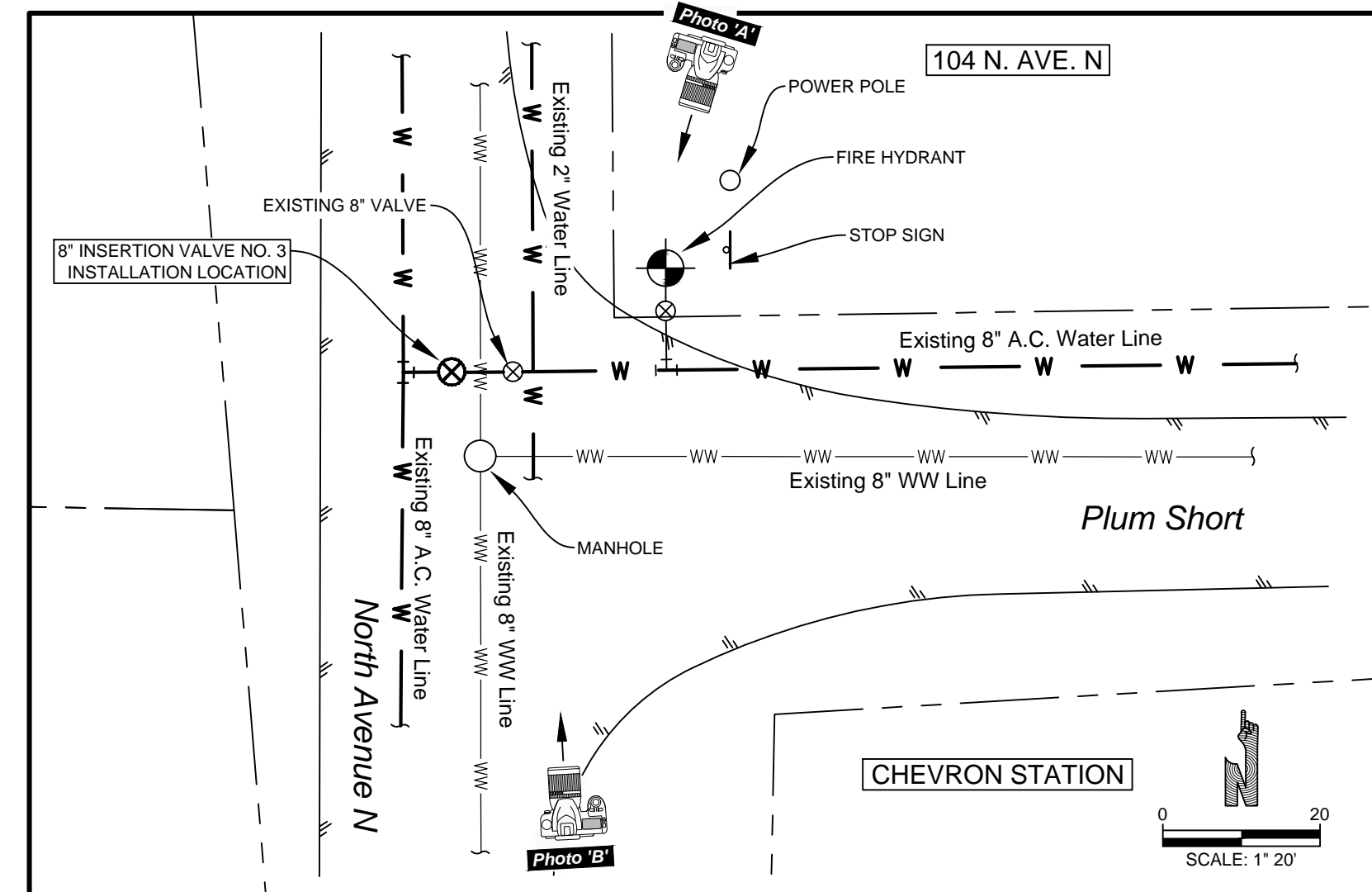
**S.D. KALLMAN, L.P.**  
*Engineers and Environmental Consultants*  
TBPE Firm Registration No. F-516  
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**CITY OF JOHNSON CITY, TEXAS**  
**FIRE HYDRANT AND GATE VALVE IMPROVEMENTS**  
TDA FY 2021/2022  
PROJECT #CDV21-0060  
PROJECT NO. 665-1789

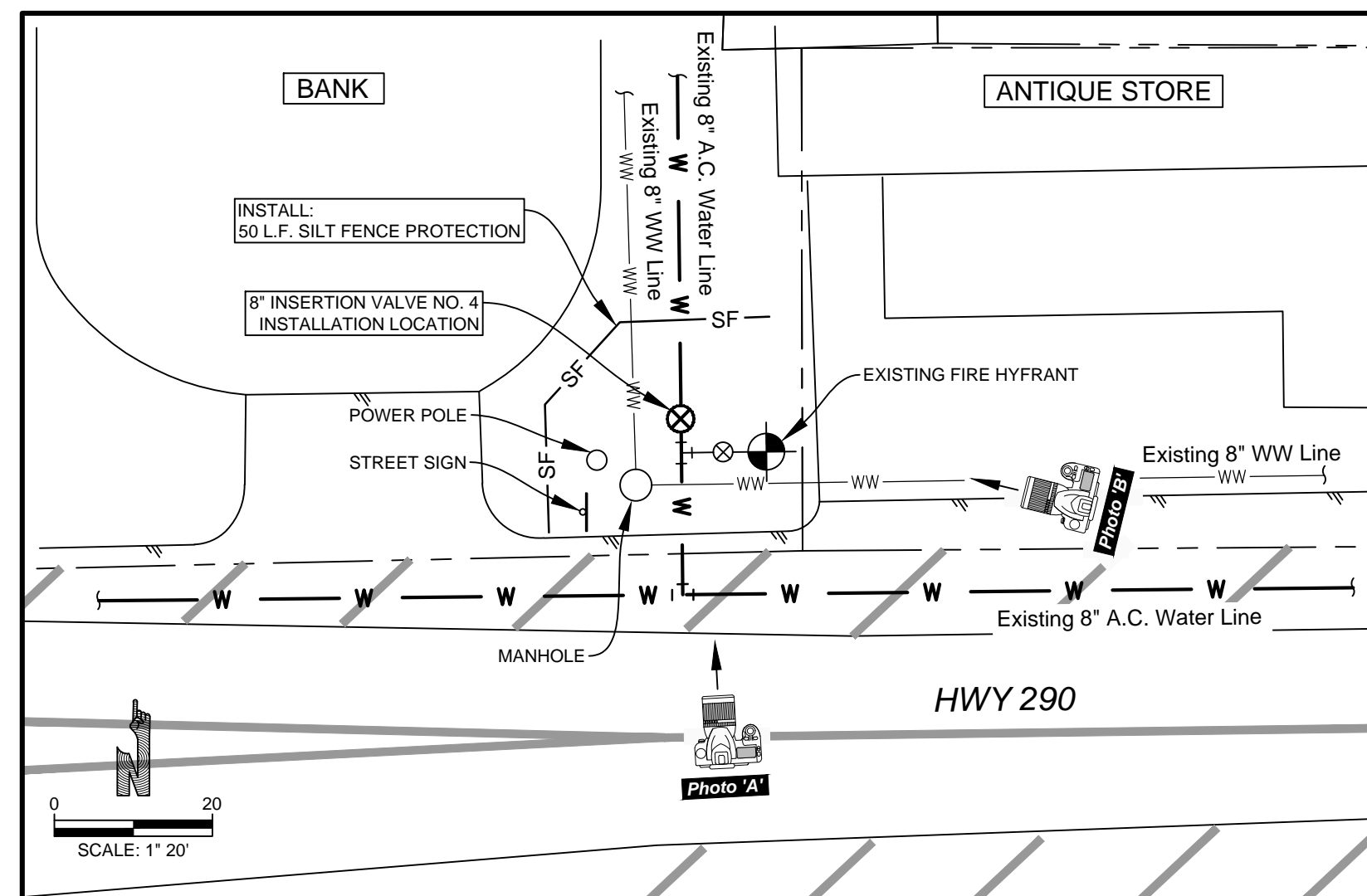
**PROJECT LOCATION DETAILS**  
(Sheet 2 of 3)

STEVEN D. KALLMAN  
40762  
01/25/2024

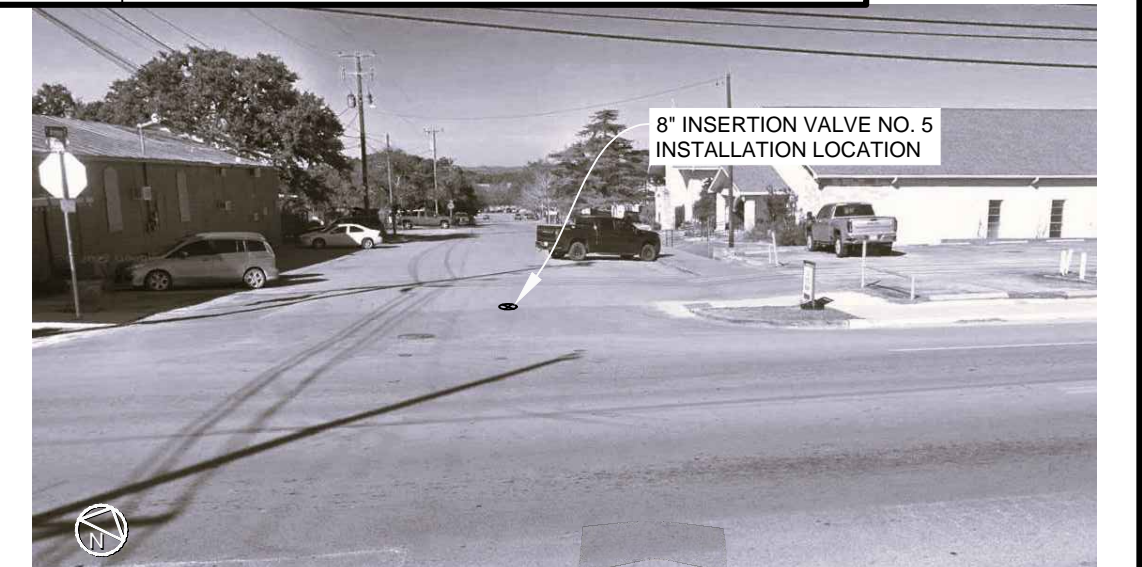
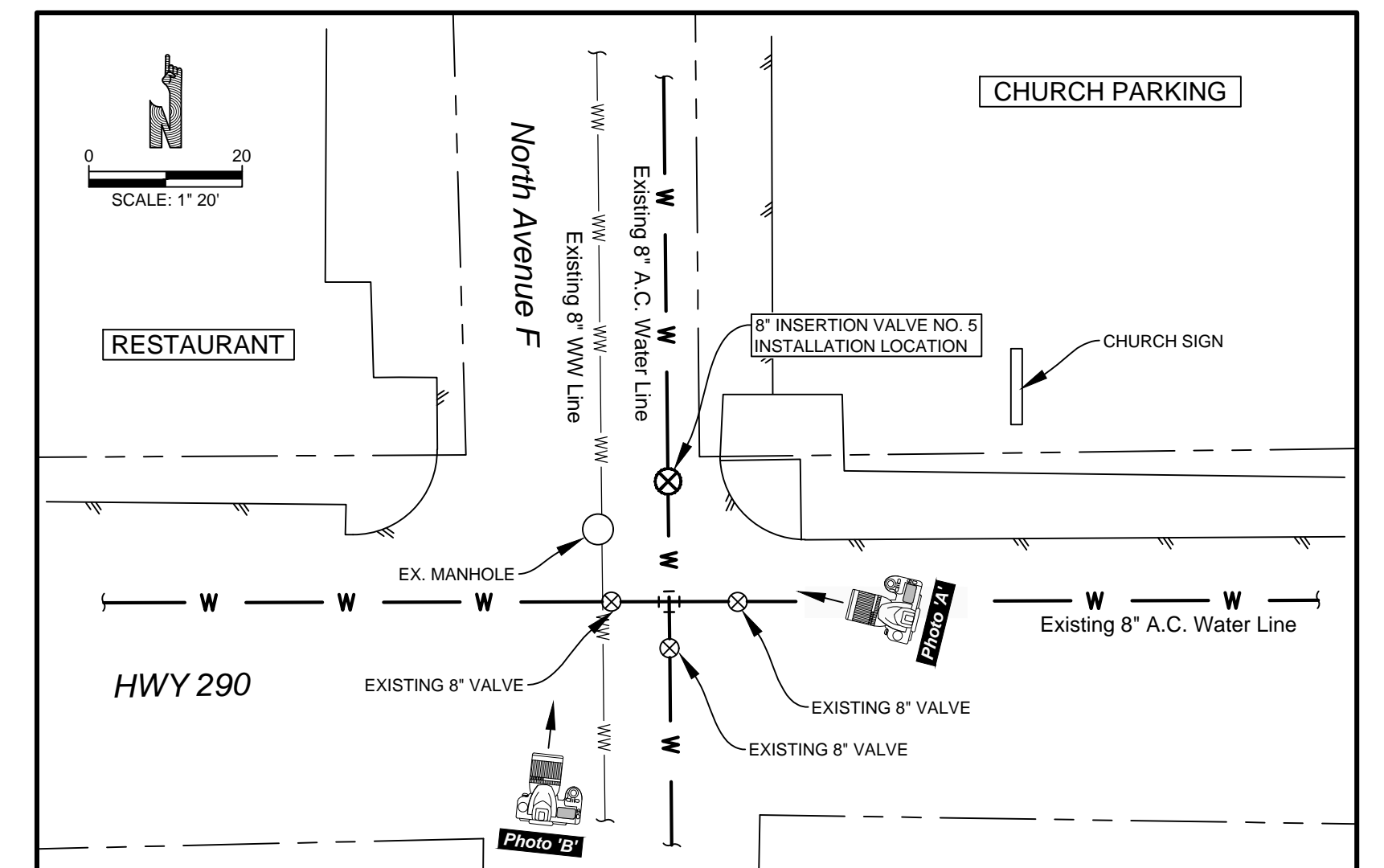




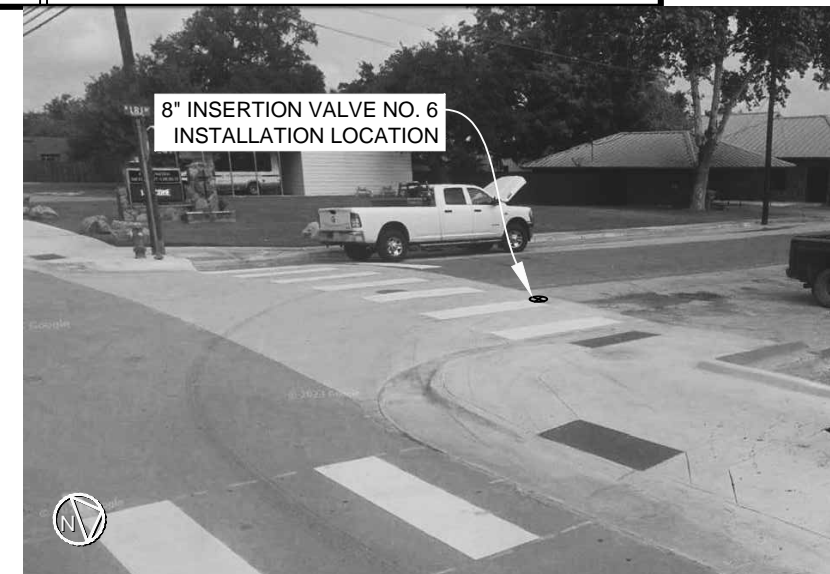
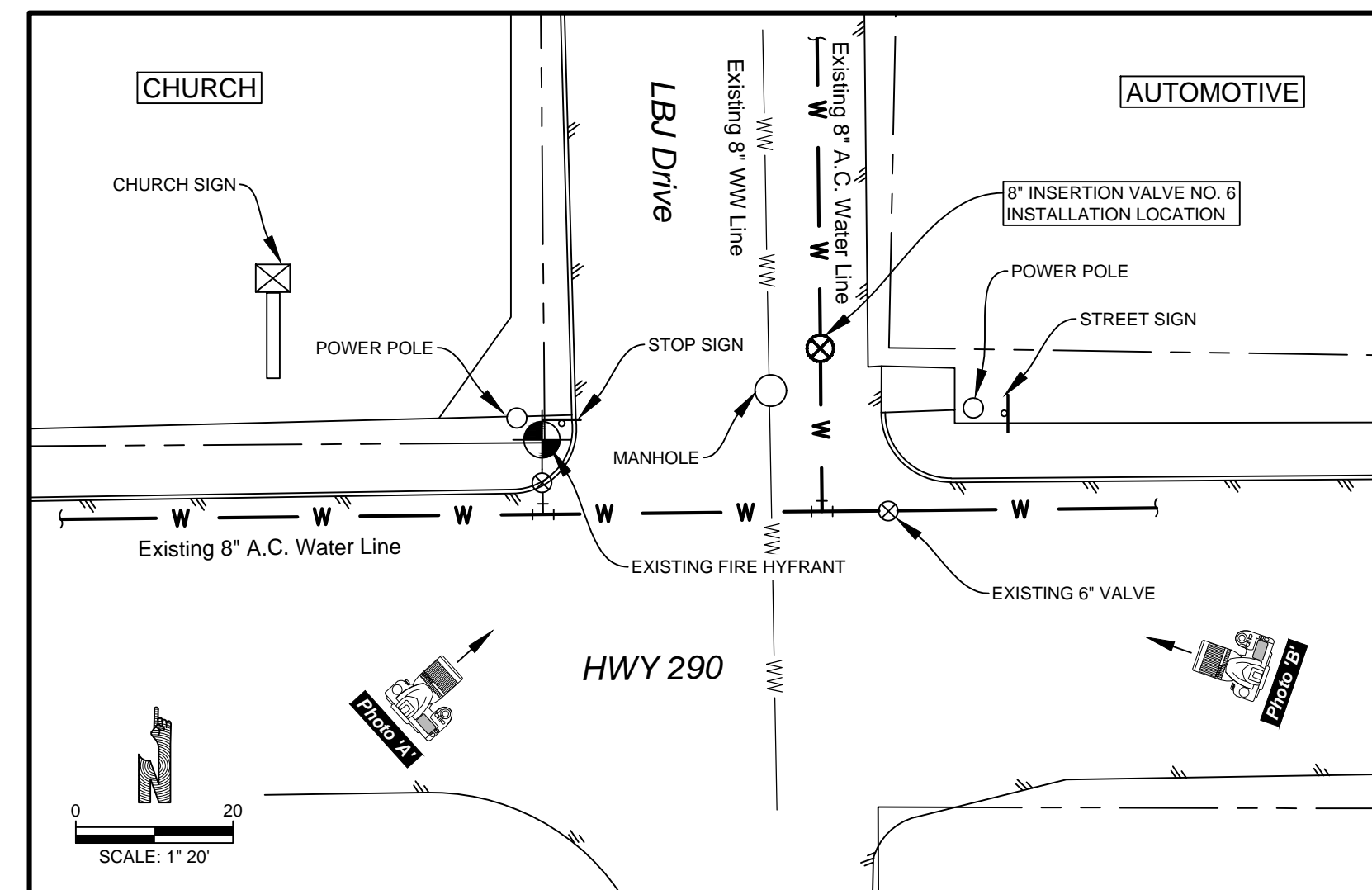
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(Corner of Plum Short and North Avenue N)



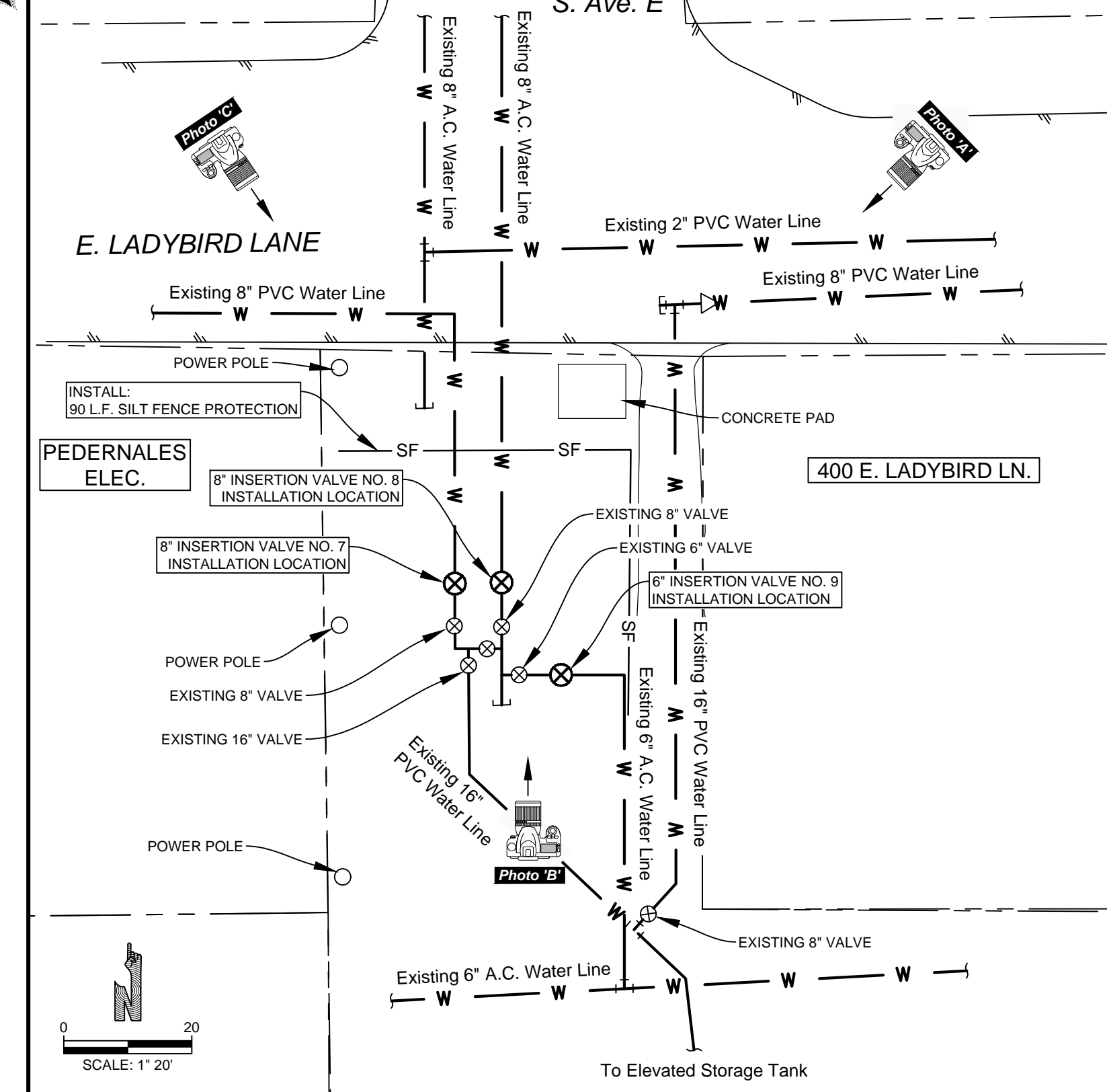
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(HWY 290)



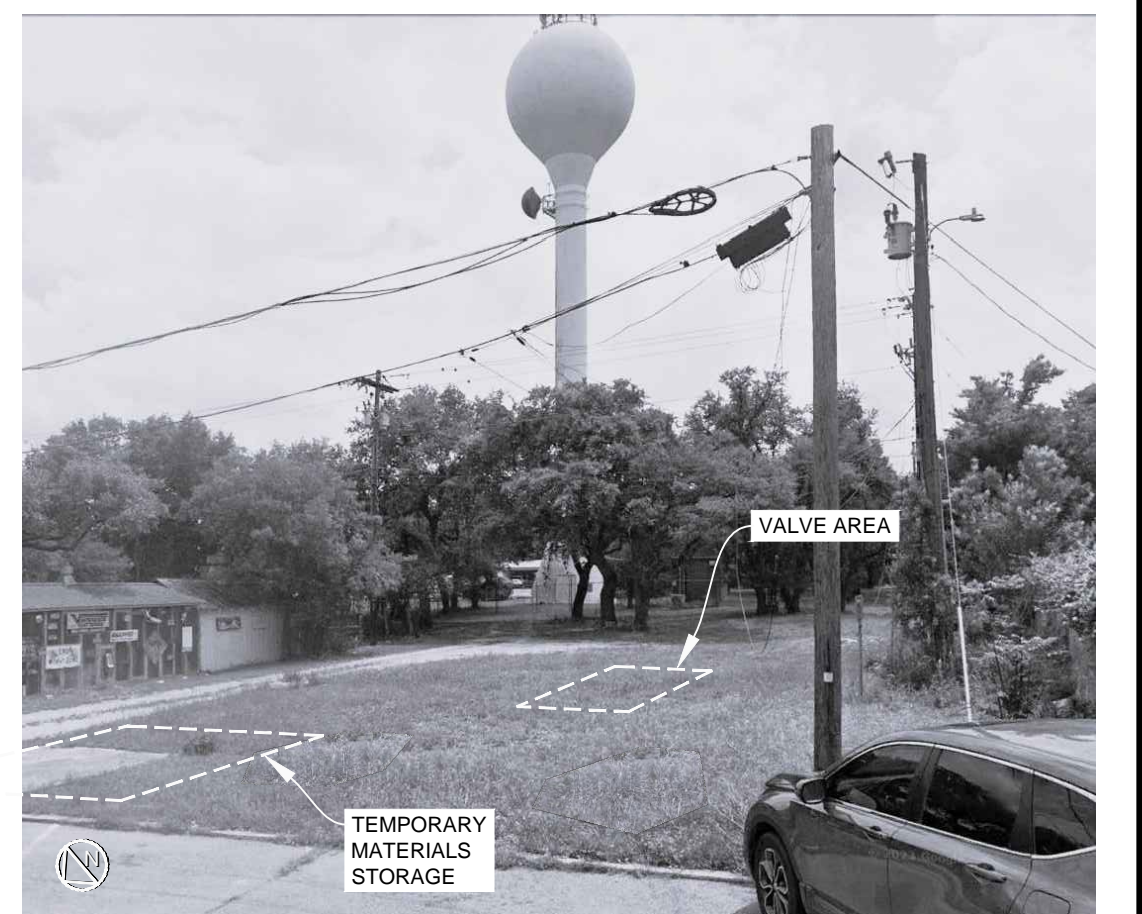
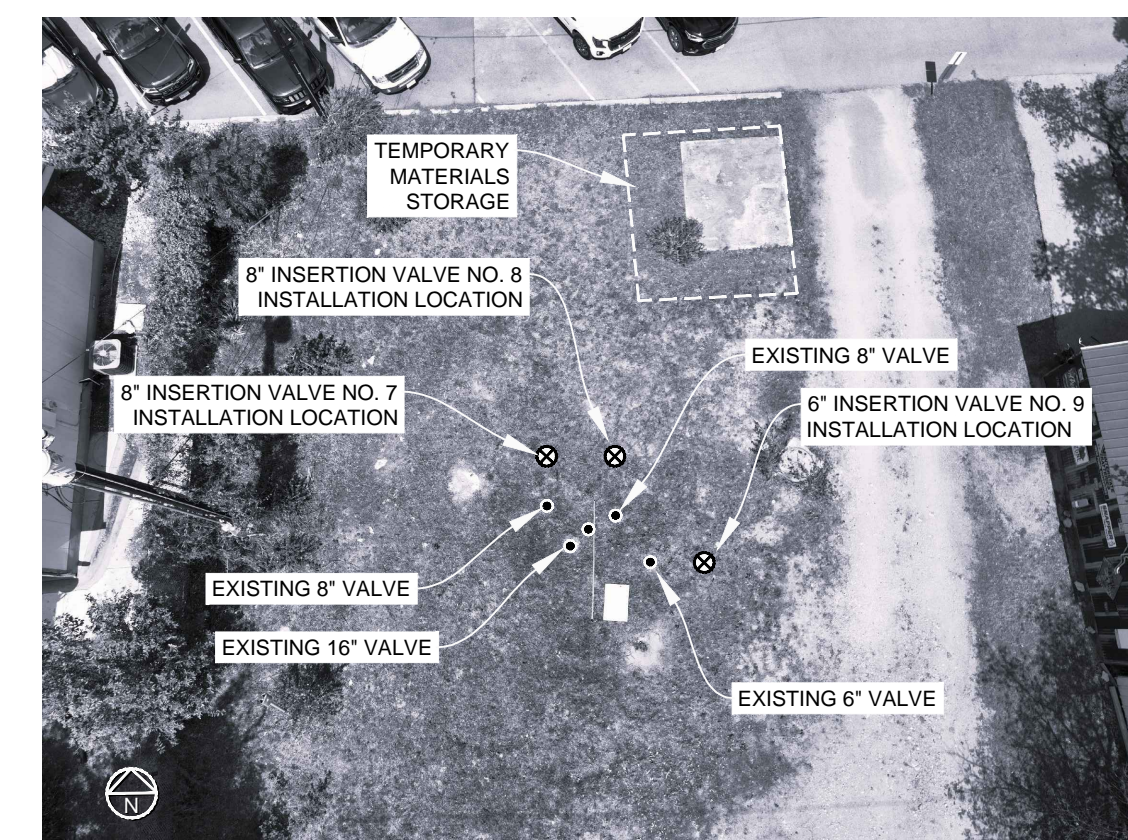
**INSERTION VALVE NO. 5 INSTALLATION**  
(HWY 290 AND NORTH AVE. F)



**INSERTION VALVE NO. 6 INSTALLATION**  
(HWY 290 at LBJ Drive)



**INSERTION VALVE NO'S. 7, 8 AND 9 INSTALLATION**  
**ELEVATED TANK SITE**  
(Ladybird Lane at Ave. E)



NOTES:  
1. EROSION AND SEDIMENTATION CONTROL NOTES AND TRAFFIC MARKING NOTES (SHEET 2) SHALL APPLY TO ALL LOCATIONS FOR THIS PROJECT.  
2. NO EXISTING VALVES ARE TO BE OPENED/CLOSED WITHOUT PRIOR NOTIFICATION AND CONSENT OF THE "PUBLIC WORKS DEPARTMENT AT THE CITY OF JOHNSON CITY".  
PUBLIC WORKS:  
LARRY BIBLE (830) 868-1711  
(LBIBLE@JOHNSONCITYTX.ORG)

**A**

**B**

**C**

**D**

**E**

PLAN REVISIONS			
NO.	DATE	DESCRIPTION	MADE BY

DESIGNED BY: SDK  
DRAWN BY: TJM  
CHECKED BY: SDK  
APPROVED BY: SDK  
SUBMITTAL:  
DATE: SEPTEMBER, 2019

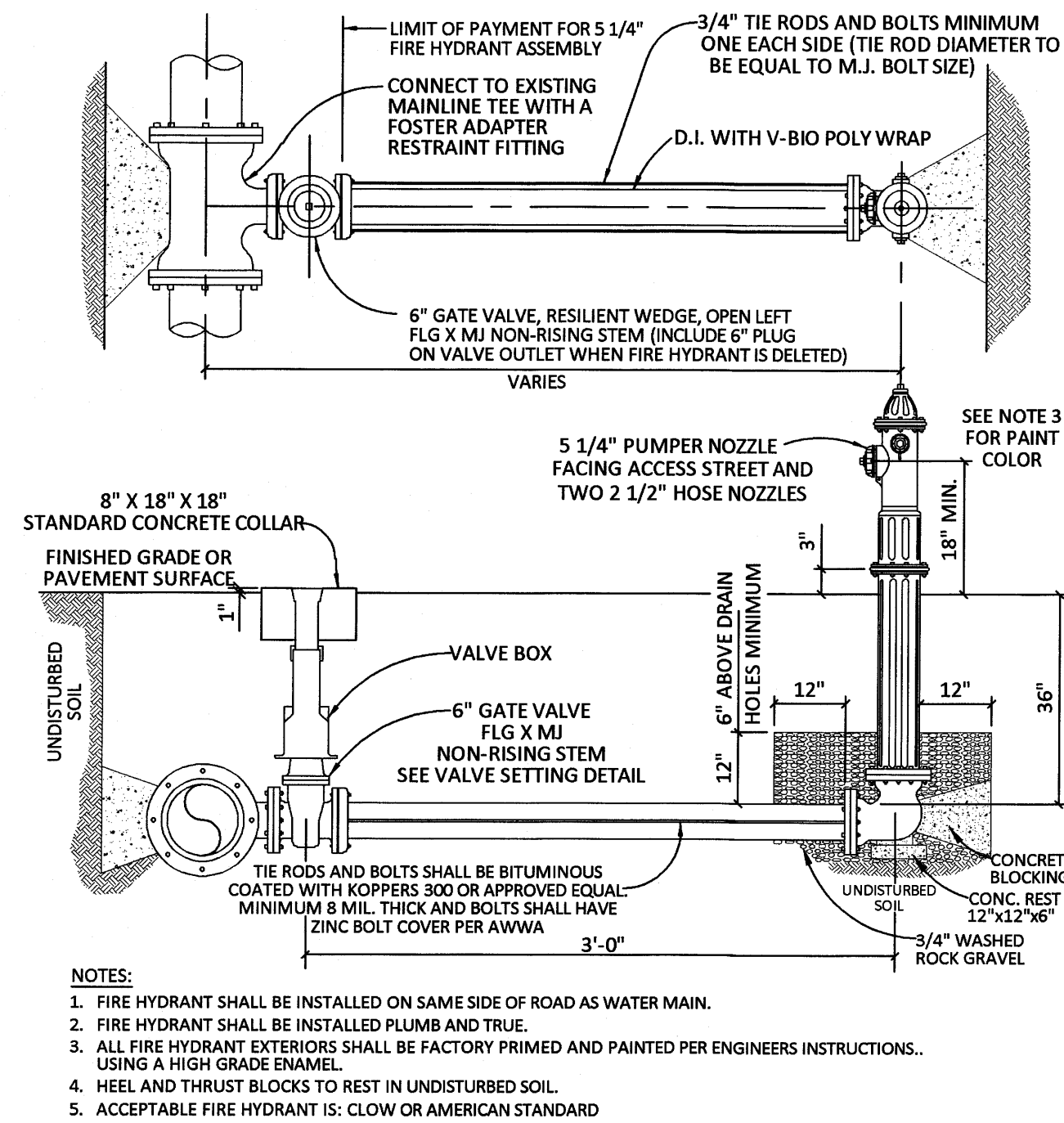
**S.D. KALLMAN, L.P.**  
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**FIRE HYDRANT AND GATE VALVE IMPROVEMENTS**  
TDA FY 2021/2022  
PROJECT #CDV21-0060  
PROJECT NO. 665-1789

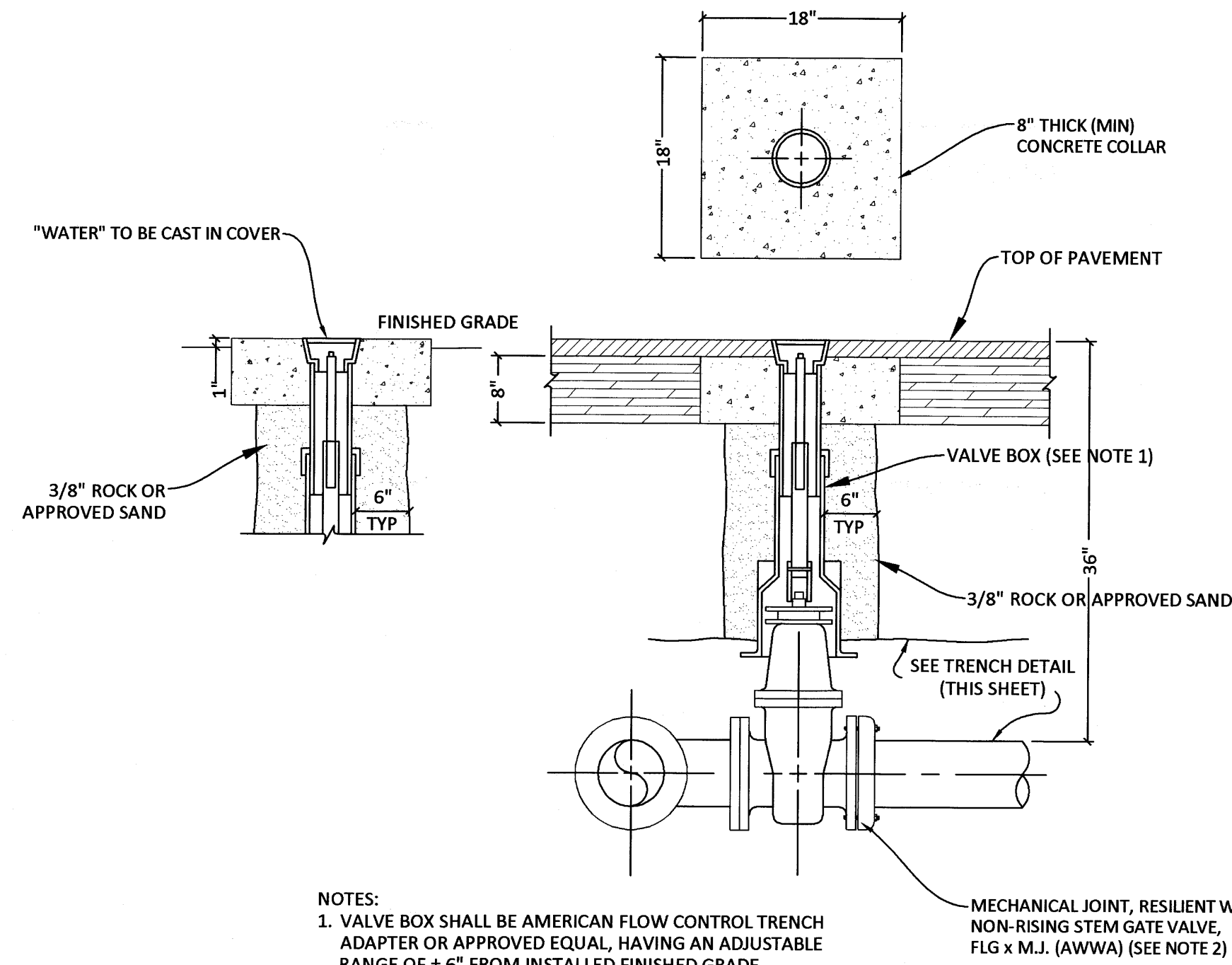
**PROJECT LOCATION DETAILS**  
(Sheet 3 of 3)

**STEVEN D. KALLMAN**  
40762  
01/25/2024  
**6**  
**7**

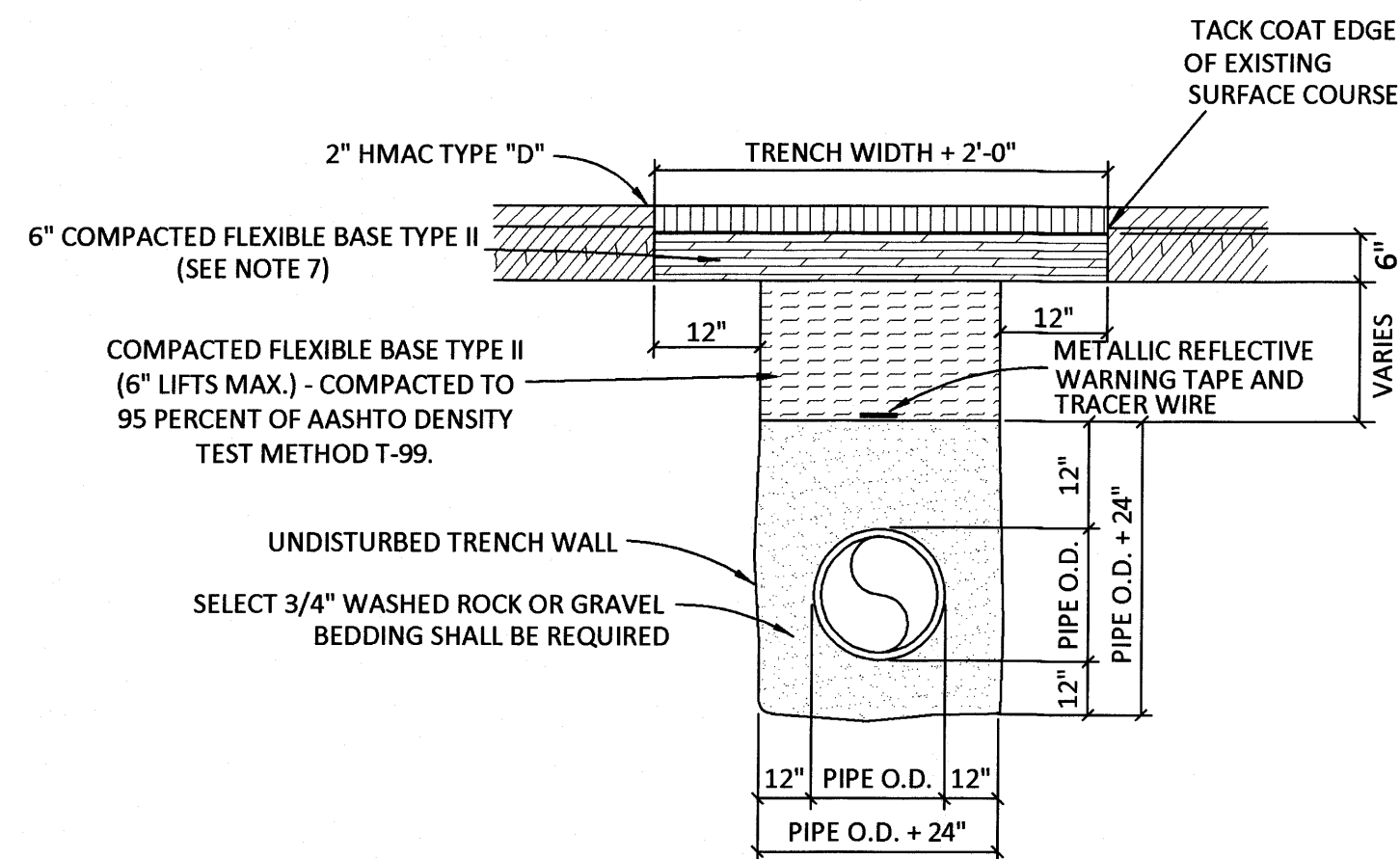




**TYPICAL FIRE HYDRANT  
INSTALLATION DETAIL**  
N.T.S.

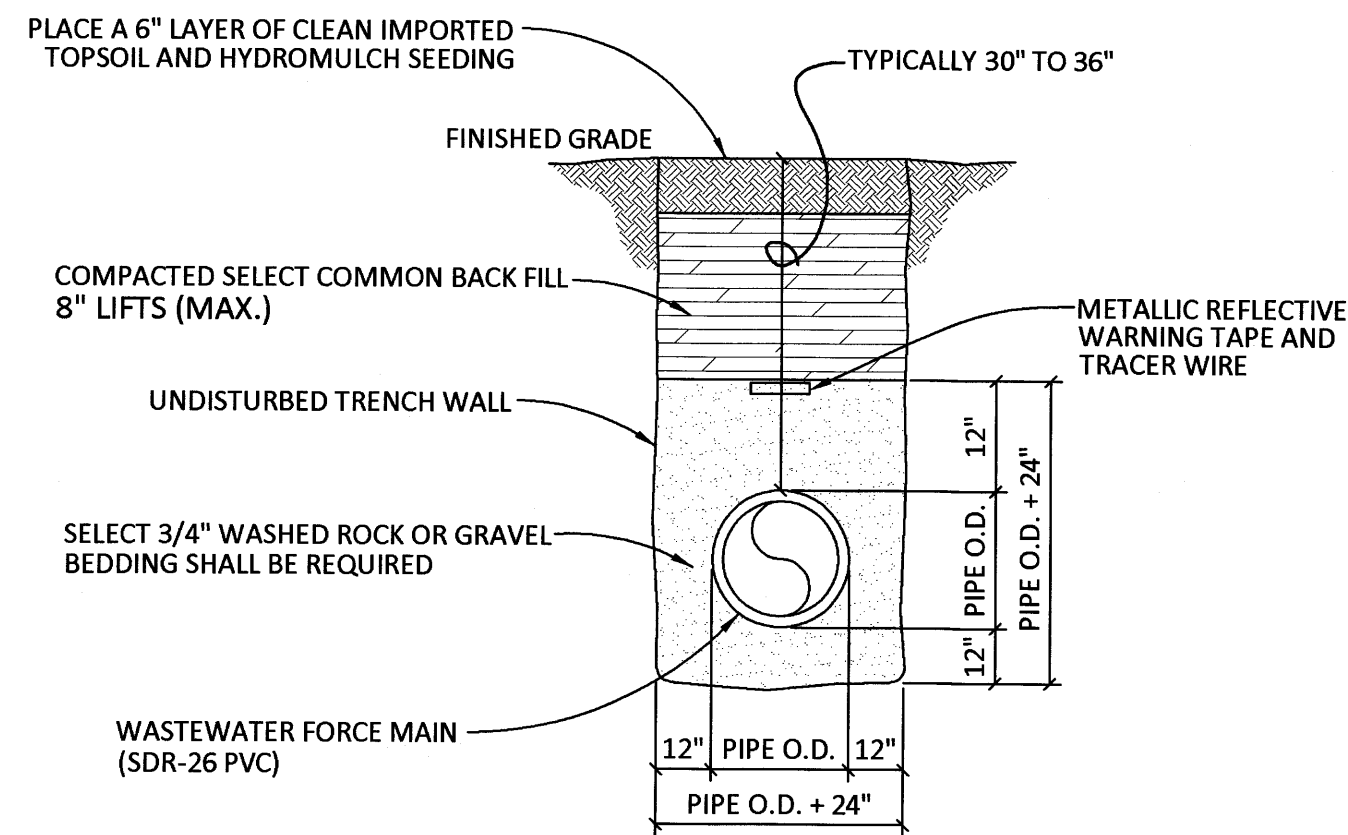


**TYPICAL VALVE SETTING  
DETAIL**  
N.T.S.



**OPEN-CUT TRENCH, EMBEDMENT  
AND PAVEMENT REPLACEMENT DETAIL**  
N.T.S.

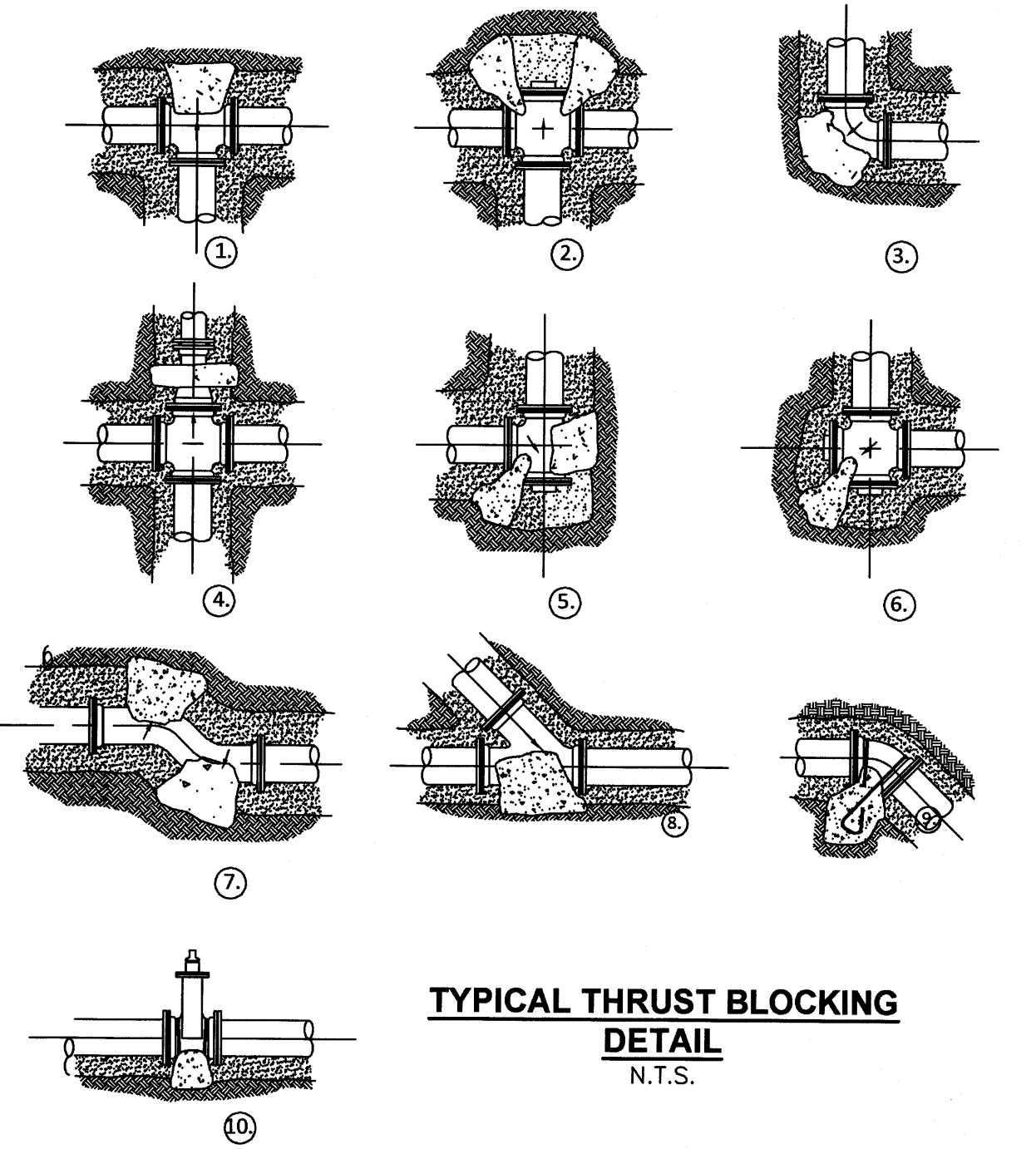
- NOTES:**
- REPLACED ROADWAY BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE AND MINIMUM 6" THICKNESS.
  - BASE MATERIAL SHALL BE PLACED IN TWO OR THREE LAYERS AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO SPECIFIED MAXIMUM DENSITY.
  - ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
  - SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE.
  - A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN FOR EVERY OPEN CUT CROSSING. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY.
  - THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE GOVERNING AGENCY.
  - FLEXIBLE BASE TYPE II: (ROADWAY BASE)  
TXDOT TYPE A - GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO 98% OF TXDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
  - FLEXIBLE BASE TYPE II: (TRENCH BACKFILL)  
TXDOT TYPE A - GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO MINIMUM 95% OF TXDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
  - CONTRACTOR OR ENGINEER MAY REQUEST FOR USE OF ALTERNATE BACKFILL MATERIAL. ALTERNATE MATERIALS AND TESTING PROTOCOL MUST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER PRIOR TO USE.



**TRENCH AND EMBEDMENT DETAIL  
UNDER NON-PAVED AREAS**  
N.T.S.

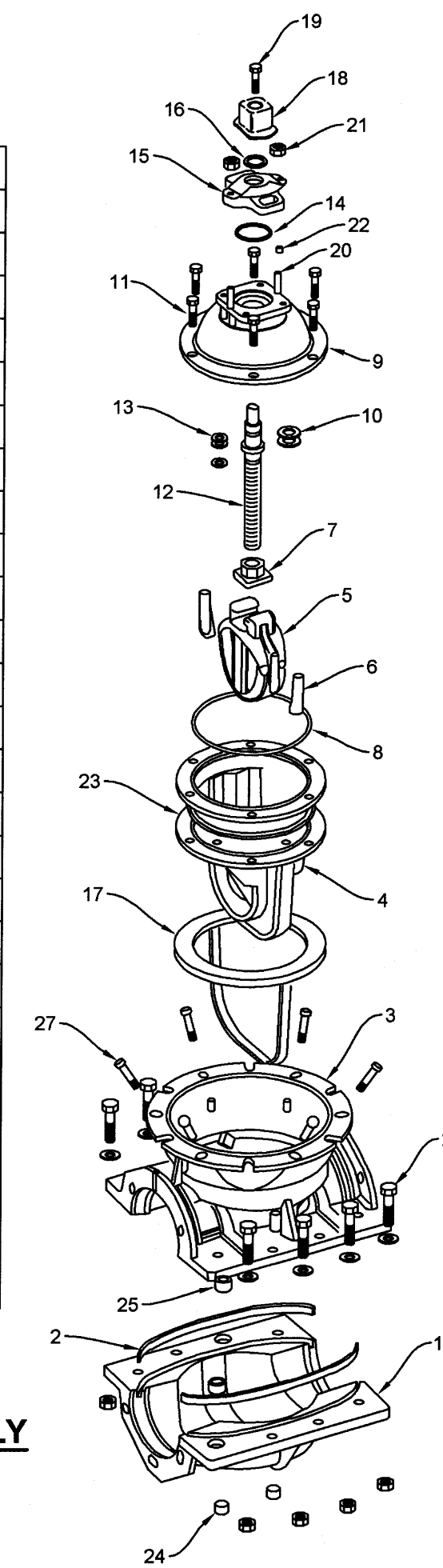
- NOTES:**
- Thru Line Connection, Tee
  - Thru Line connection, Cross Used As Tee
  - Directional Change, Elbow
  - Change Line Size, Reducer
  - Direction Change, Tee Used As Elbow
  - Direction Change, Cross Used As Elbow
  - Direction Change
  - Thru Line Connection
  - Direction Change Vertical, Bend Anchor
  - Valve Anchor

PIPE DIA.	FITTINGS	BLOCK DIMENSION HORIZ.	VERT.
2"	All Fittings	1.5	2.0
4"	All Fittings	1.5	2.0
6"	Tee, Cross, Valve	1.5	1.5
6"	90° Bend	1.5	2.0
8"	Tee, Cross, Valve	2.0	2.0
8"	90° Bend	2.0	2.5
10"	45° Bend	2.5	2.5
10"	90° Bend	2.5	2.5
12"	Tee, Valve	3.0	3.0
12"	90° Bend	4.5	2.5
12"	45° Bend	2.5	2.5
16"	Tee	4.5	3.0
18"	Valve		
18"	90° Bend		
18"	45°, 22° Bend		



**LEGEND**

ITEM	DESCRIPTION
1	Insert Valve Bottom Casing
2	Valve Side Gasket
3	Insert Valve Top Casing
4	Insert Valve Body
5	Encapsulated Disc - EPDM
6	Guide Cap
7	Disc Nut
8	Bonnet O-Ring - EPDM
9	Bonnet
10	Anti-Friction Washer
11	Hex Cap Screw
12	Everdur Stem
13	Stem O-Ring - EPDM
14	Stuffing Box O-Ring - EPDM
15	Stuffing Box
16	Wiper Ring EPDM
17	Valve Body Gasket
18	Wrench Nut
19	Hex Bolt
20	Hex Bolt
21	Hex Nut
22	Pipe Plug
23	Packing Ring Kit
24	Pipe Plug
25	Dowel Pin/Bushing
26	Sleeve Fastener Kit
27	Angular Bolt Kit



PLAN REVISIONS			
NO.	DATE	DESCRIPTION	MADE BY

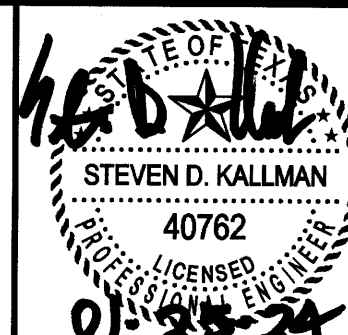
DESIGNED BY: SDK  
 DRAWN BY: TIM  
 CHECKED BY: SDK  
 APPROVED BY: SDK  
 SUBMITTAL:    
 DATE: SEPTEMBER, 2014

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FILE: Site Plan PROJECT NO. 724-1650

City of Johnson City, Texas  
 FIRE HYDRANT IMPROVEMENTS  
 TDA FY 2021/2022 GRANT

GENERAL CONSTRUCTION DETAILS



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