

7/30/26 08:10 AGARRISON C:\USERS\AGARRISON\BOX\JENG_PROJECTS\OCOALUFTEE\02_SITE\2025 WATERLINE REPLACEMENT\DWGS\OCO 2026 WATERLINE DRAWINGS.DWG;

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE

SOUTHERN REGION

GREAT SMOKEY
MOUNTAINS NP
OCONALUFTEE JOB
CORPS CENTER

SWAIN COUNTY, NORTH
CAROLINA

OCO WATERLINE REPLACEMENT

PROJECT
LOCATION



U.S. LOCATION MAP

INDEX

SUB		TITLE OF SHEET	BUILDING
SHEET	SHEET		
1.	T1.0	TITLE SHEET	GENERAL
2.	G1.0	CAMPUS MAP	GENERAL
3.	G1.1	LEGEND AND NOTES	GENERAL
4.	C0.1	EXISTING CONDITIONS	SITE
5.	C0.2	PHOTOS	SITE
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JOB CORPS
NATIONAL OFFICE

STAMPS, LOGOS, AND SEALS



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PROJECT NAME
**OCO WATERLINE
REPLACEMENT**

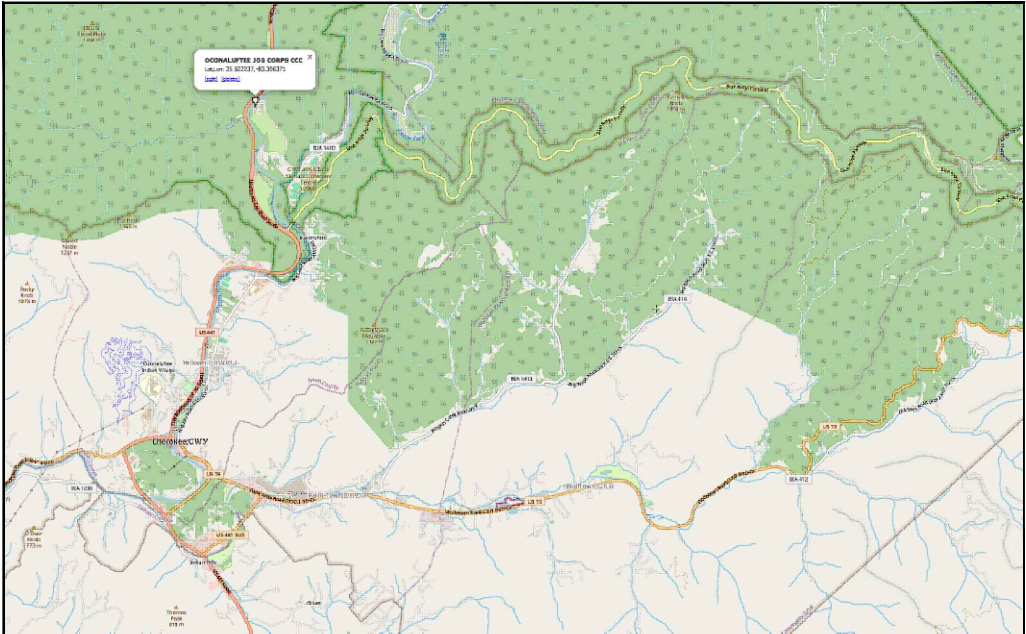
**OCONALUFTEE JOB
CORPS
CIVILIAN CONSERVATION
CENTER**

SMOKEY MOUNTAINS NATIONAL PARK

DRAWING TITLE

TITLE SHEET

ARCHIVE NO.	
DESIGNER A. GARRISON, PE	SUB SHEET NO. T1.0
CHECKED D. VALLES, PE	
DATE 06/2026	SHEET 01 OF 11



PROJECT ADDRESS
502 OCONALUFTEE JOB CORPS RD,
CHEROKEE, NC 28719

PROJECT LOCATION
(NO SCALE), SOURCE GPS VISUALIZER



Oconaluftee Civilian Conservation Center
Cherokee, North Carolina

BUILDINGS

- 1 - ADMINISTRATION
- 2 - DORMITORY A
- 2A - STAFF OFFICES
- 3 - DORMITORY B
- 4 - DORMITORY C
- 5 - DORMITORY E
- 6 - DORMITORY D
- 7 - EDUCATION
- 8 - MULTI-PURPOSE & BUS/CLER VOCATION
- 9 - DINING HALL
- 10 - HARD VOCATION
- 11 - HEALTH OCCUPATION / VACANT
- 12 - VACANT
- 13 - STORAGE
- 14 - WAREHOUSE/SUPPLY
- 15 - WELLNESS CENTER
- 16 - GYMNASIUM
- 18 - HARD VOCATION
- 20 - STUDENT LAUNDRY

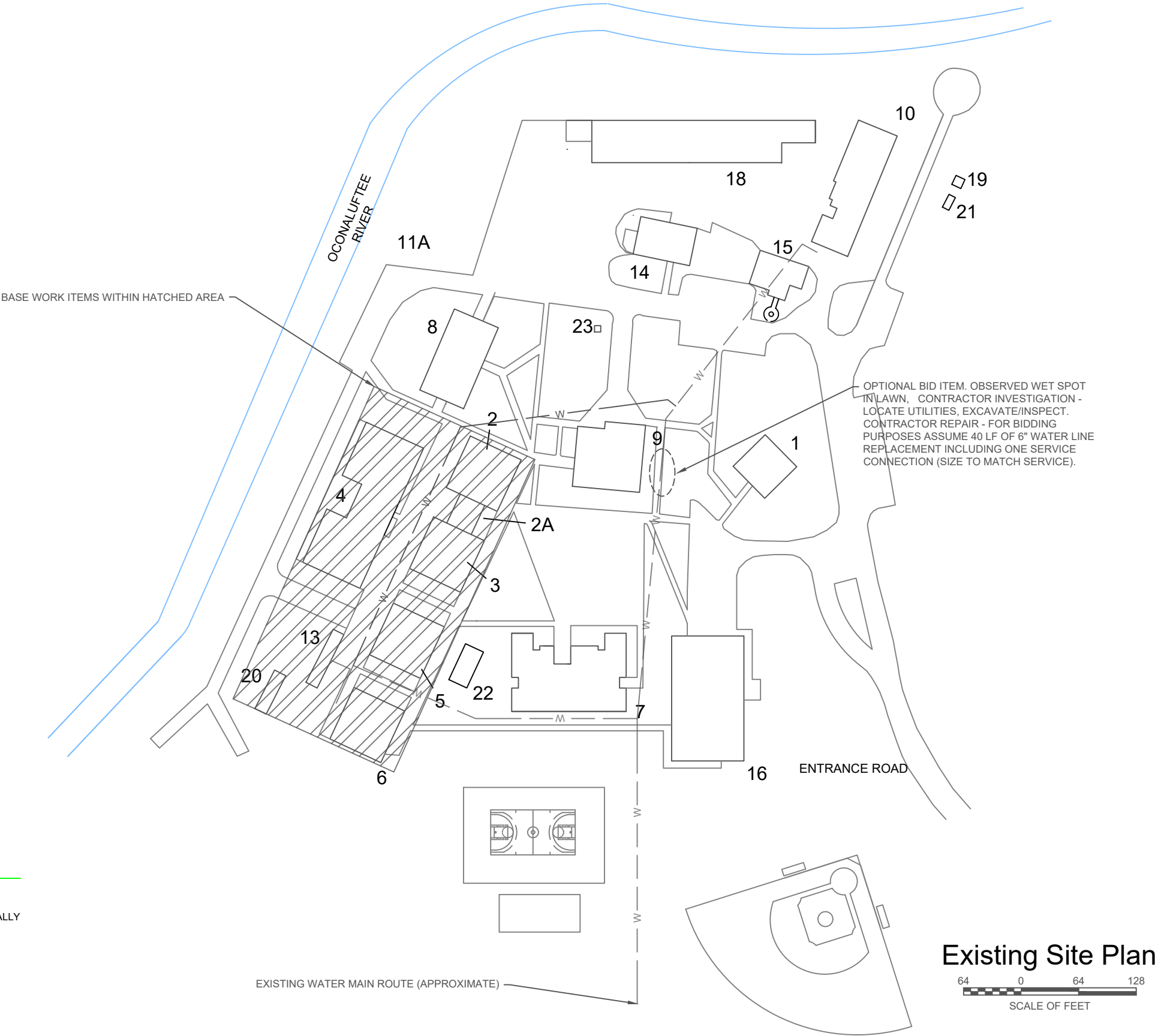
STRUCTURES

- 19 - FLAMMABLE STORAGE
- 21 - HAZARDOUS MATERIALS STORAGE
- 22 - PAVILION



UTILITY LOCATION

- 1. PLANS SHOWING EXISTING BURIED UTILITIES ARE NOT AVAILABLE, WHERE THEY ARE INDICATED THIS IS BASED ON ABOVE GROUND VISUAL INSPECTION AND ARE NOT PHYSICALLY VERIFIED OR FROM AS-BUILT PLANS. CONTRACTOR SHALL LOCATE PUBLIC **AND PRIVATE UTILITIES** PRIOR TO COMMENCING GROUND D DISTURBING ACTIVITIES, WITHIN LOCATION UTILITY TOLERANCE ZONES AND WHERE SITE UTILITIES CANNOT BE ACCURATELY LOCATED, UTILIZE NON-DESTRUCTIVE EXCAVATION TECHNIQUES.



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GENERAL NOTES

1. EXISTING SITE UTILITY PLANS ARE NOT AVAILABLE. FOR EITHER ABOVE OR BELOW GROUND UTILITIES.
2. THE CONTRACTOR SHALL LOCATE BOTH PRIVATE AND PUBLIC (UTILITY OWNED) BURIED UTILITIES PRIOR TO STARTING GROUND DISTURBING ACTIVITIES AND UTILIZE NON-DESTRUCTIVE EXCAVATION METHODS FOR THE PRECISE DEPTH/LOCATION CONFIRMATION WHERE CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED EXCAVATION IS TO OCCUR.
3. INCLUDE ALL IDENTIFIED BURIED UTILITIES WITHIN PROJECT AREA ON A-BUILT UTILITY DRAWINGS.
4. THE CONTRACTOR SHALL AVOID DAMAGING EXISTING UTILITIES TO REMAIN IN SERVICE DURING CONSTRUCTION, IF DAMAGE OCCURS THEY SHALL IMMEDIATELY BEGIN MAKING REPAIRS TO THE DAMAGED UTILITY AT NO ADDITIONAL COST TO THE GOVERNMENT, NOTIFY THE CONTRACTING OFFICERS REPRESENTATIVE AND CENTER STAFF OF THE DAMAGE, AND DOCUMENT THE REPAIRS METHODS USED IN THEIR WEEKLY PROGRESS REPORTS - SEE SPECIFICATION SECTION 010150.
5. THE EXISTING WATER SYSTEM MUST REMAIN IN SERVICE UNTIL THE NEW WATER PIPE INSTALLATION HAS BEEN COMPLETED INCLUDING PRESSURE TESTING, DISINFECTION, AND CORRECTION OF ANY LEAKS DETECTED DURING TESTING.
6. FLUSH NEW WATER LINES THOROUGHLY PRIOR TO CONNECTION TO BUILDING WATER LINES OR EXISTING WATER MAINS.

LEGEND

- ⌵

WATER VALVE - EXISTING
- ⌵

WATER VALVE - NEW
- ◐

FIRE HYDRANT - EXISTING
- Ⓡ

FIRE HYDRANT - NEW
- W

WATERLINE - EXISTING
- _"W

WATERLINE - PROPOSED W/ SIZE
- SS

SANITARY SEWER - EXISTING
- ◄

REDUCER
- ⒶB

TRACER WIRE ACCESS BOX - NEW
- Ⓑ

BLOW OFF VALVE



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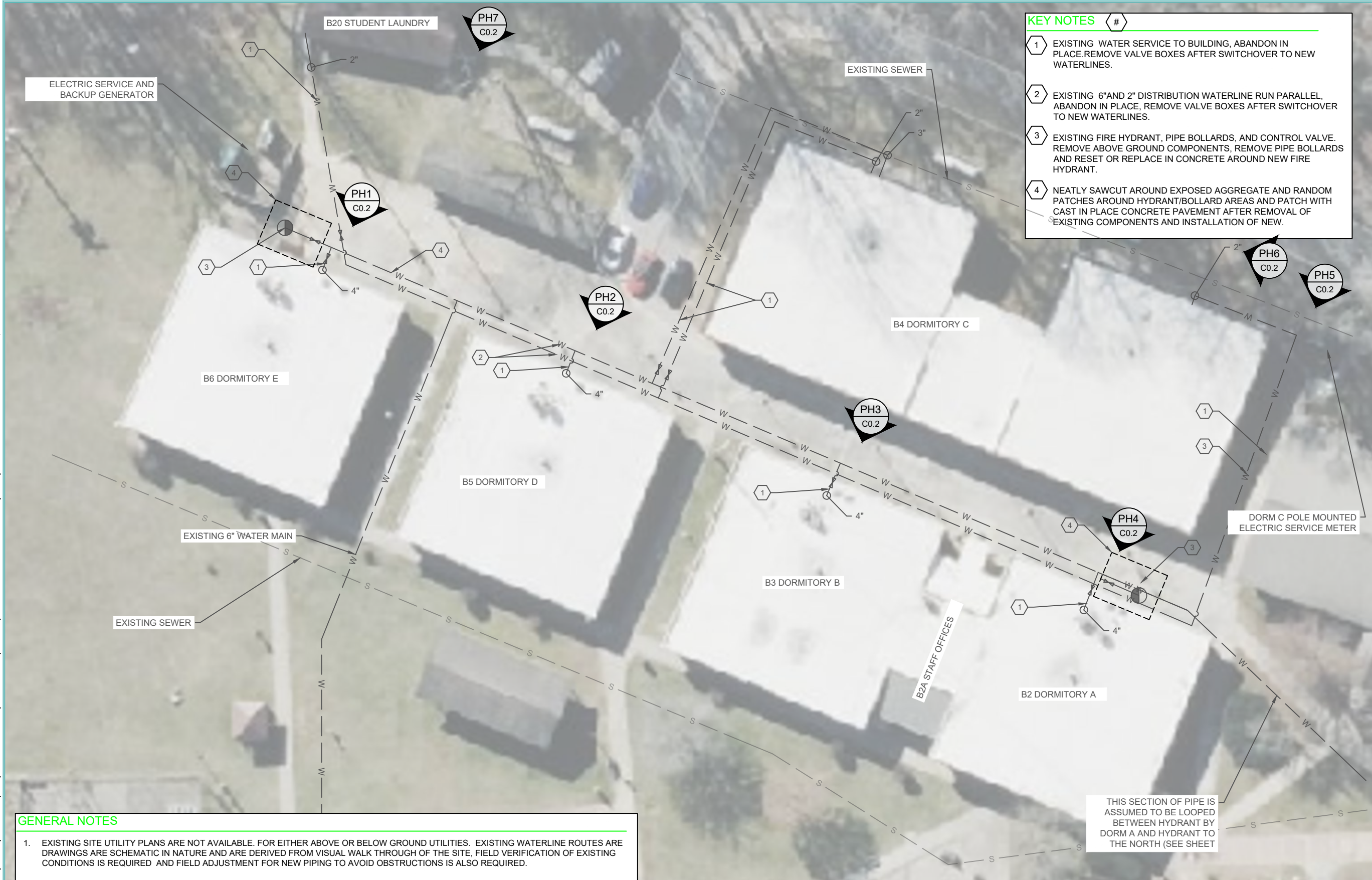
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LEGEND AND NOTES

ARCHIVE NO.

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GENERAL NOTES

- EXISTING SITE UTILITY PLANS ARE NOT AVAILABLE. FOR EITHER ABOVE OR BELOW GROUND UTILITIES. EXISTING WATERLINE ROUTES ARE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE DERIVED FROM VISUAL WALK THROUGH OF THE SITE, FIELD VERIFICATION OF EXISTING CONDITIONS IS REQUIRED AND FIELD ADJUSTMENT FOR NEW PIPING TO AVOID OBSTRUCTIONS IS ALSO REQUIRED.
- THE CONTRACTOR SHALL LOCATE BOTH PRIVATE AND PUBLIC (UTILITY OWNED) BURIED UTILITIES PRIOR TO STARTING GROUND DISTURBING ACTIVITIES AND UTILIZE NON-DESTRUCTIVE EXCAVATION METHODS FOR THE PRECISE DEPTH/LOCATION CONFIRMATION WHERE CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED EXCAVATION IS TO OCCUR.
- THE CONTRACTOR SHALL AVOID DAMAGING EXISTING UTILITIES TO REMAIN IN SERVICE DURING CONSTRUCTION, IF DAMAGE OCCURS THEY SHALL IMMEDIATELY BEGIN MAKING REPAIRS TO THE DAMAGE UTILITY AT NO ADDITIONAL COST, NOTIFY THE CO AND CENTER STAFF OF THE DAMAGE, AND DOCUMENT THE REPAIRS METHODS USED IN THEIR WEEKLY PROGRESS REPORTS - SEE SPECIFICATION SECTION 010150.
- THE EXISTING WATER SYSTEM MUST REMAIN IN SERVICE UNTIL THE NEW WATER PIPE INSTALLATION HAS BEEN COMPLETED INCLUDING PRESSURE TESTING, DISINFECTION, AND ACCEPTANCE BY THE CO.

KEY NOTES

- EXISTING WATER SERVICE TO BUILDING, ABANDON IN PLACE.REMOVE VALVE BOXES AFTER SWITCHOVER TO NEW WATERLINES.
- EXISTING 6"AND 2" DISTRIBUTION WATERLINE RUN PARALLEL, ABANDON IN PLACE. REMOVE VALVE BOXES AFTER SWITCHOVER TO NEW WATERLINES.
- EXISTING FIRE HYDRANT, PIPE BOLLARDS, AND CONTROL VALVE. REMOVE ABOVE GROUND COMPONENTS, REMOVE PIPE BOLLARDS AND RESET OR REPLACE IN CONCRETE AROUND NEW FIRE HYDRANT.
- NEATLY SAWCUT AROUND EXPOSED AGGREGATE AND RANDOM PATCHES AROUND HYDRANT/BOLLARD AREAS AND PATCH WITH CAST IN PLACE CONCRETE PAVEMENT AFTER REMOVAL OF EXISTING COMPONENTS AND INSTALLATION OF NEW.



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EXISTING CONDITIONS

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C0.1

SHEET
04 OF **11**

DASHED AREA, FIELD VERIFY DEGRADED CONCRETE AREA AND PATCH CONCRETE IN ADDITION TO PATCHING REQUIRED FOR REMOVAL OF EXISTING SURFACE WATER SYSTEM COMPONENTS



PH1 B6 EXTERIOR BACKFLOW, HYDRANT, CONCRETE PATCHING
C0.2 NO SCALE



PH2 B5 EXTERIOR BACKFLOW ENCLOSURE
C0.2 NO SCALE



PH3 B3 EXTERIOR BACKFLOW ENCLOSURE
C0.2 NO SCALE



PH4 B2 EXTERIOR BACKFLOW, HYDRANT, CONCRETE PATCHING
C0.2 NO SCALE



PH5 B4 EXTERIOR
C0.2 NO SCALE



PH6 B4 EXTERIOR
C0.2 NO SCALE



PH7 B20 EXTERIOR
C0.2 NO SCALE



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PHOTOS

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PROPOSED CONDITIONS

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- KEY NOTES** #
- 1 4" WATER SERVICE PIPE, WITH ISOLATION VALVE - SEE DETAIL.
 - 2 NEW FIRE HYDRANT WITH CONTROL VALVE, AND BOLLARD PROTECTION- SEE DETAIL.
 - 3 ASSUMED TIE-IN LOCATION, FIELD LOCATE EXISTING WATERLINES, NOTIFY CO IF LOCATED EXISTING WATERLINE VARIES FROM ASSUMED LOCATION.



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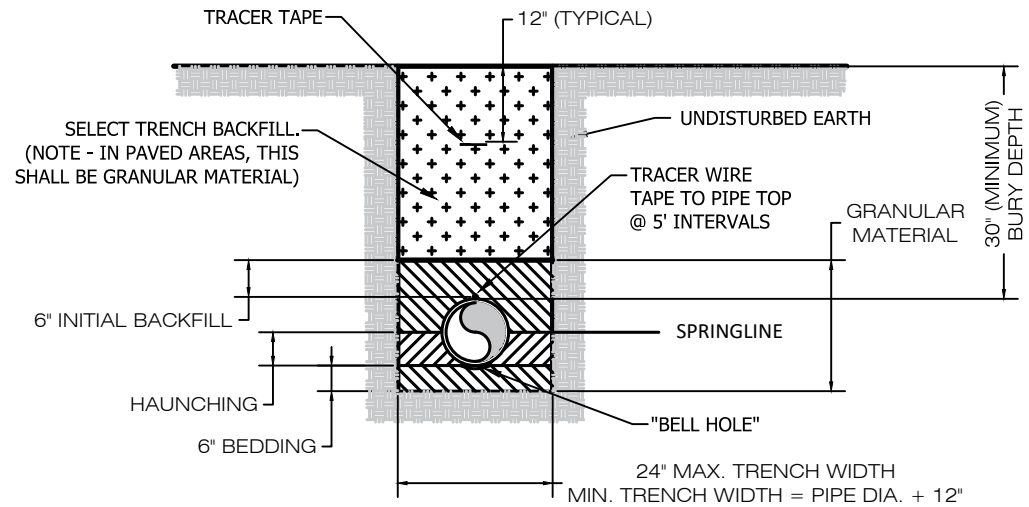
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DRAWING TITLE
PROPOSED OPTIONAL WORK AREA

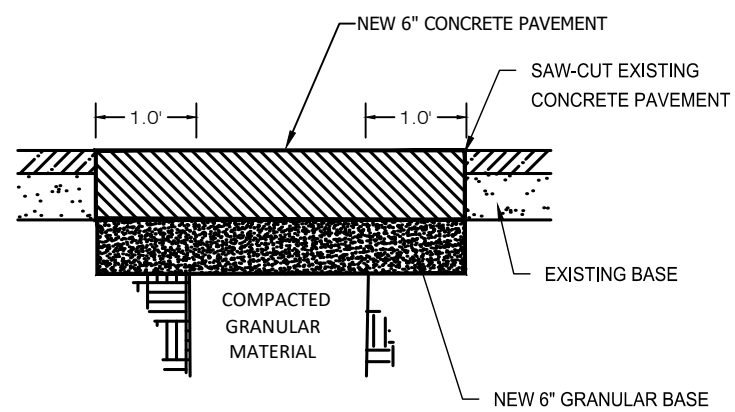
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- GENERAL NOTES**
1. EXISTING INFORMATION SHOWN ON DRAWINGS HAS BEEN TAKEN FROM LIMITED FIELD OBSERVATIONS. PHOTOS ARE INTENDED TO SHOW GENERAL EXISTING CONDITIONS AROUND THE AREAS FOR NEW WORK. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK.
 2. DIMENSIONS/SCALES INDICATED ARE FOR GENERAL SCOPING ONLY,THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS FOR COORDINATION WITH MATERIAL, EQUIPMENT, AND SHOP DRAWING REQUIREMENTS.
 3. DRAWINGS ARE SCHEMATIC IN NATURE WITH LINEWORK OFFSET FOR CLARITY, TRACER WIRE SYSTEMS SHALL BE DIRECT BURIED WITH ALL NEW PIPING PER SPECIFICATION/DETAILS. NEW PIPE SHALL BE OFFSET FROM EXISTING AS REQUIRED FOR NEW PIPE INSTALL AND TO ALLOW EXISTING WATERLINE TO BE USED UNTIL NEW IS READY FOR USE.

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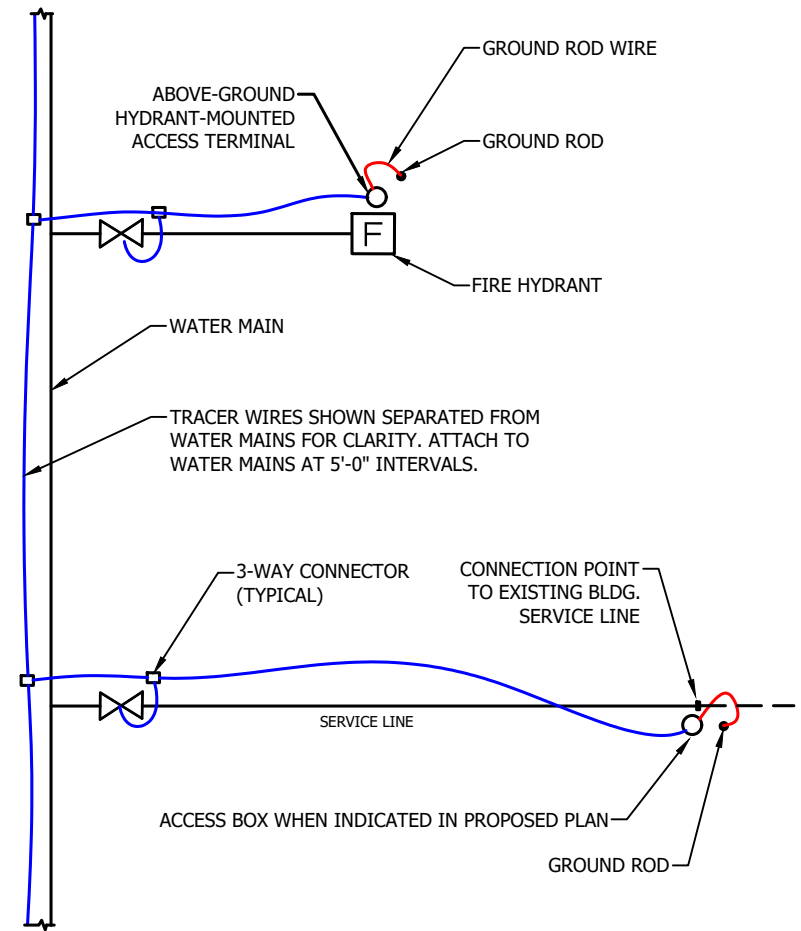


1
C2.1
TYPICAL SECTION - PIPE BEDDING AND INITIAL BACKFILL FOR PVC AND HDPE PIPE
NOT TO SCALE

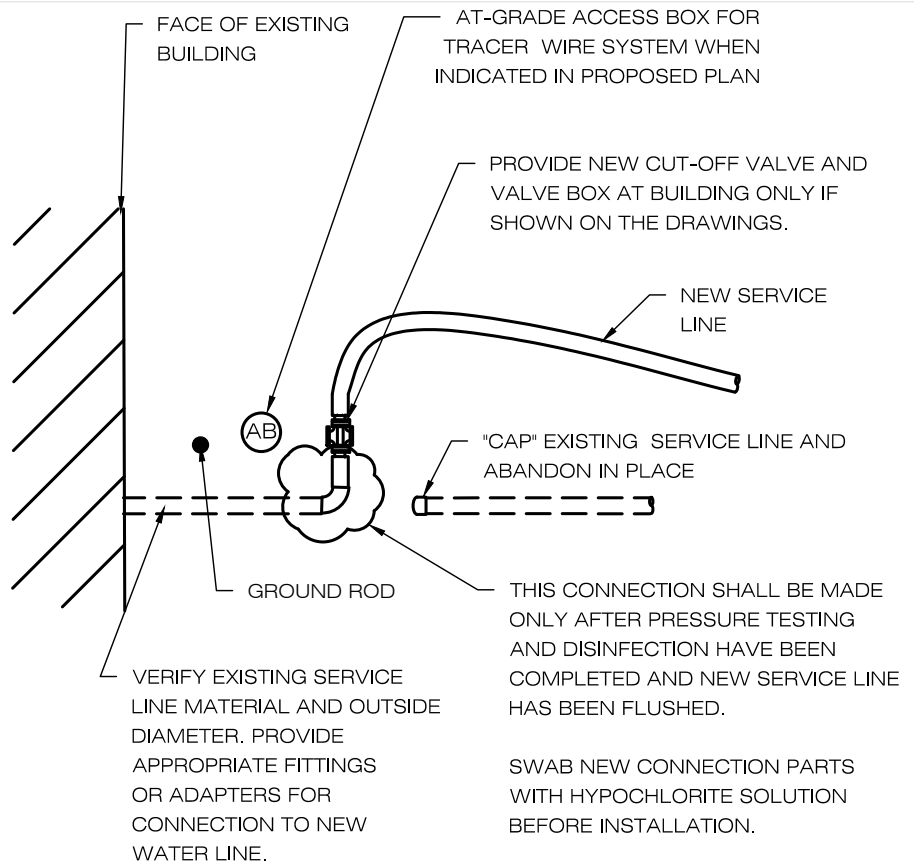


NOTE: FINISHED PAVEMENT SURFACE SHALL NOT DEVIATE FROM A 10-FT STRAIGHTEDGE AT ANY POINT B Y MORE THAN 1/4" FOR DRIVING SURFACES OR MORE THAN 1/8" FOR WALKING SURFACES.

2
C2.1
PAVEMENT REPAIR DETAILS
NOT TO SCALE



3
C2.1
TRACER WIRE SCHEMATIC
NOT TO SCALE



4
C2.1
CONNECTION OF NEW SERVICE LINE TO EXISTING BUILDING SERVICE LINE (TYPICAL)
NOT TO SCALE



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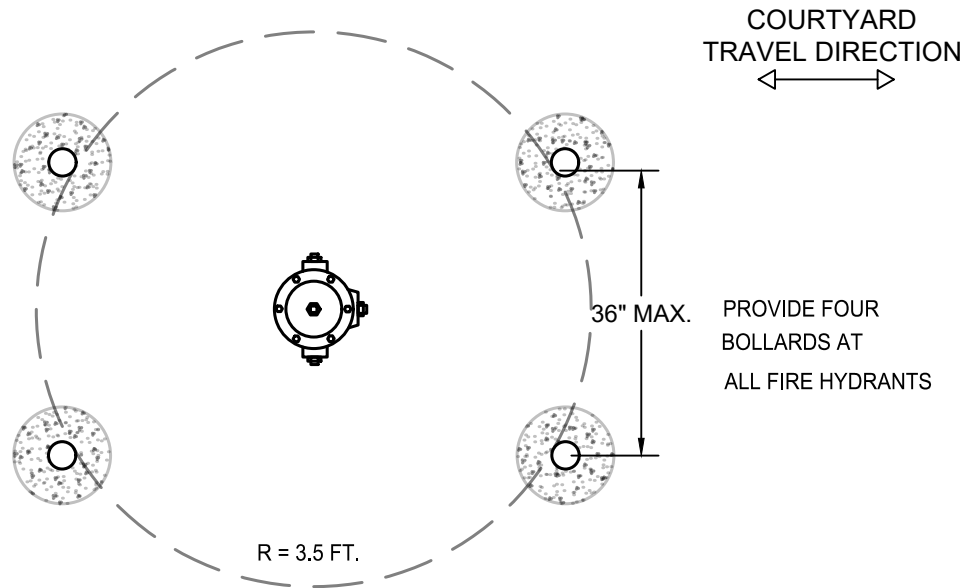
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DETAILS

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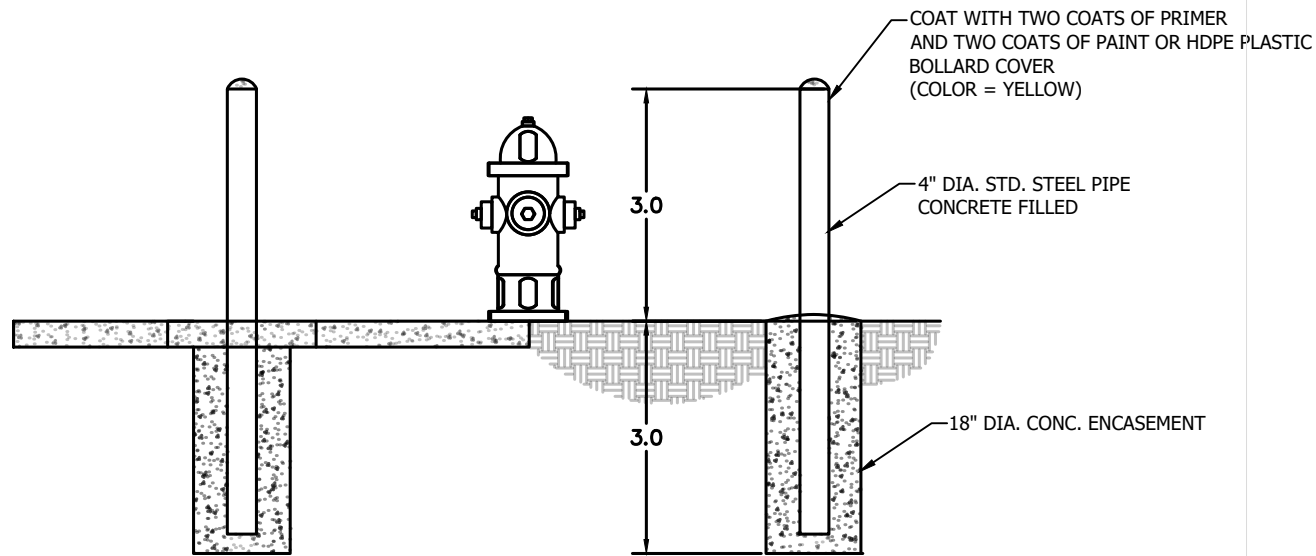
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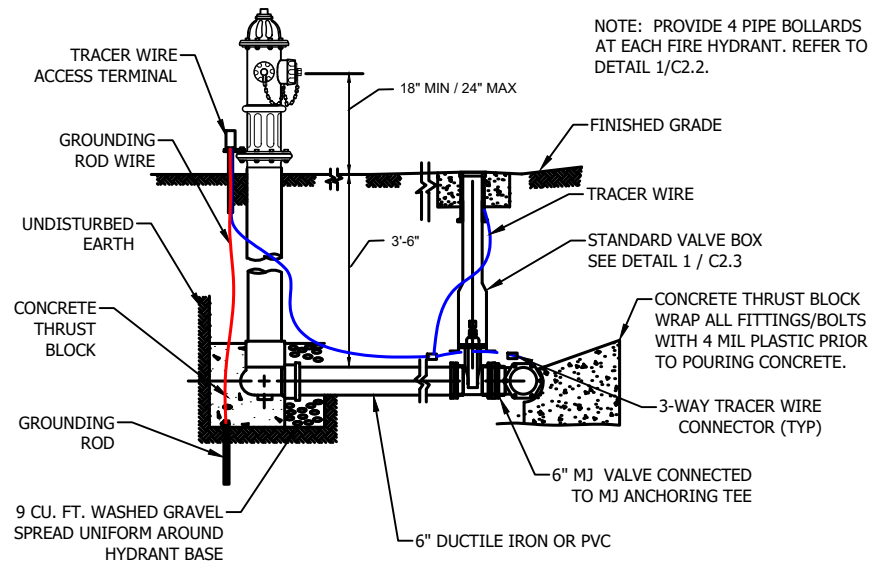
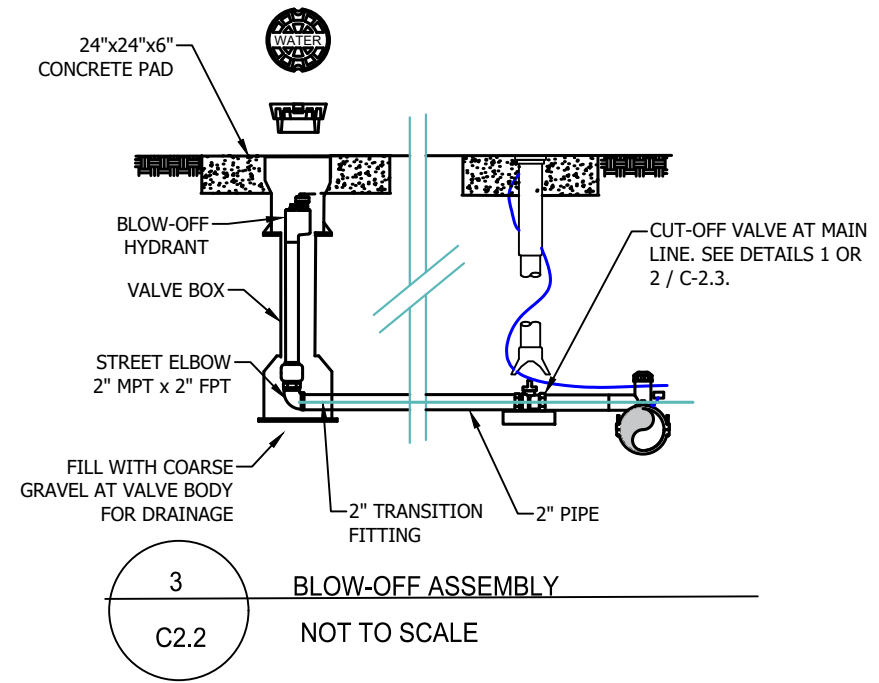


TYPICAL BOLLARD SETTING PLAN

NOT TO SCALE



1 BOLLARD DETAIL
C2.2 NOT TO SCALE



2 FIRE HYDRANT & VALVE BOX DETAIL
C2.2 NOT TO SCALE



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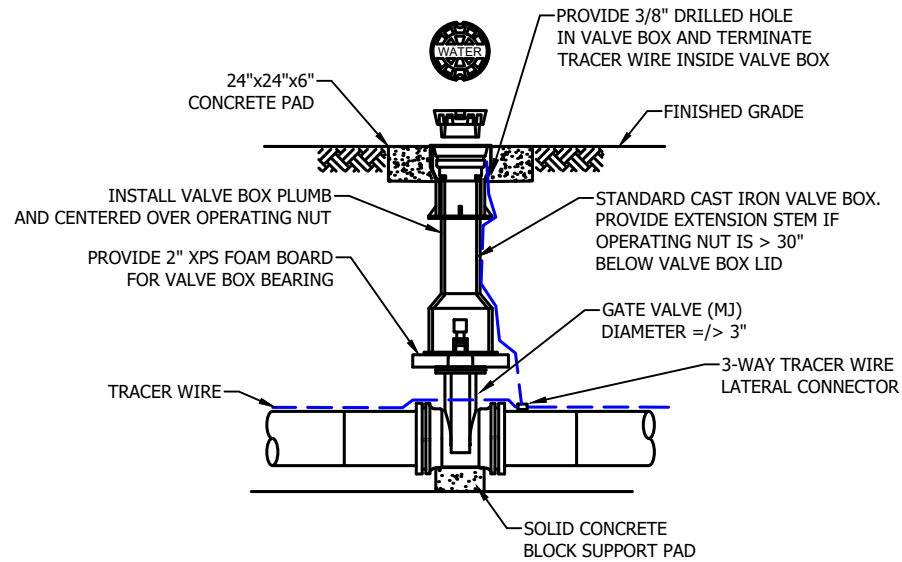
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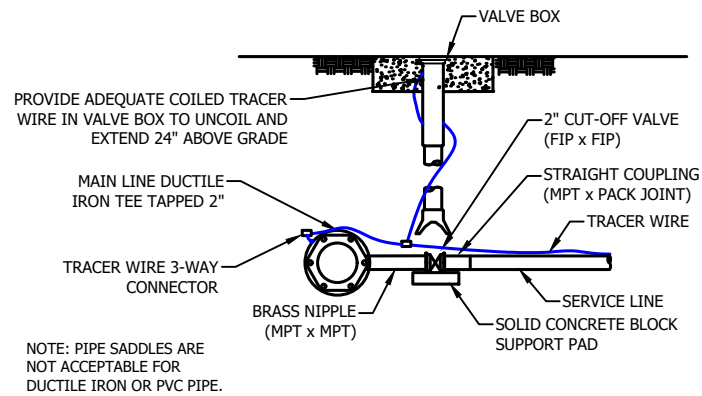
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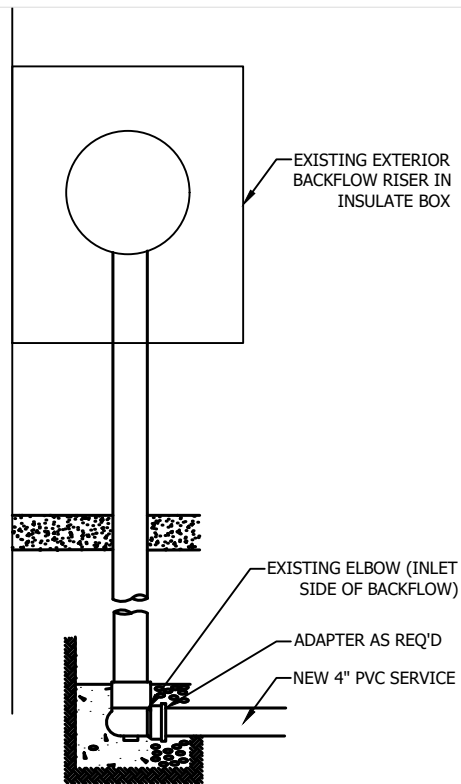
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1
C2.3
CUT-OFF VALVE & VALVE BOX DETAIL - MAIN LINES
NOT TO SCALE



2
C2.3
2" CUT-OFF VALVE FOR SERVICE LINES
DUCTILE IRON OR PVC MAIN LINE
NOT TO SCALE



3
C2.3
SERVICE CONNECTION FOR EXTERIOR BACKFLOW DEVICE
NOT TO SCALE



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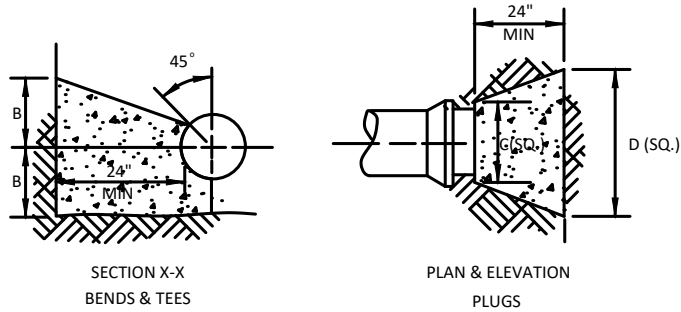
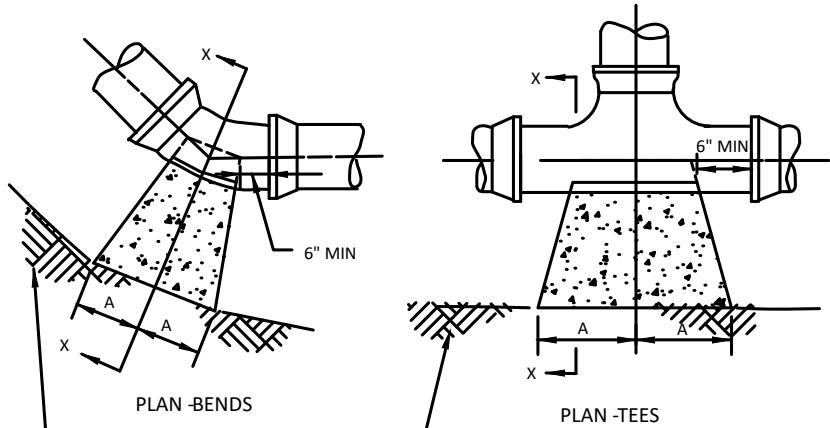
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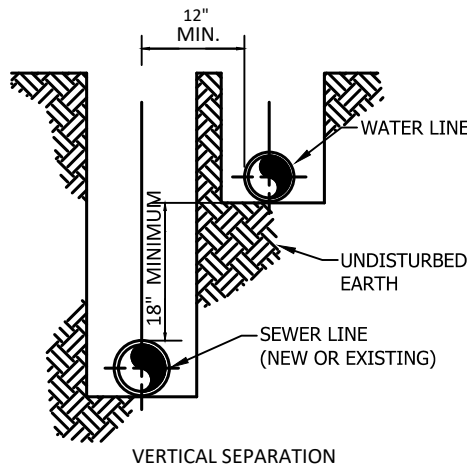
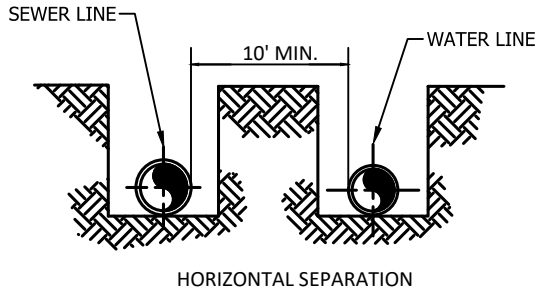
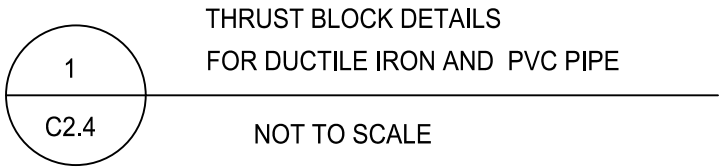
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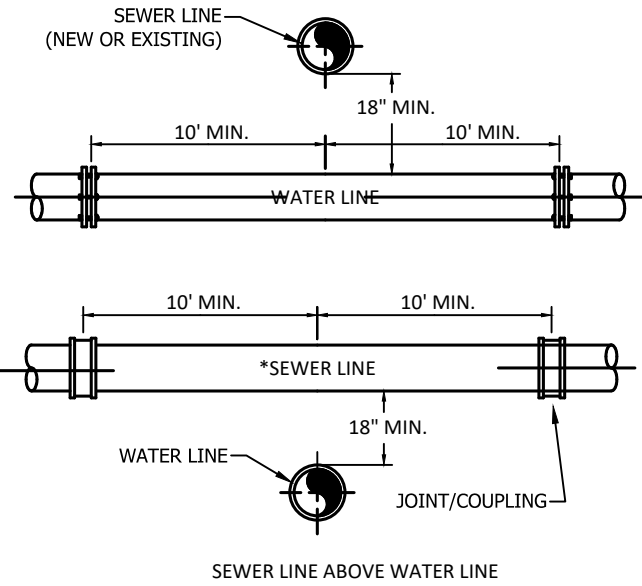
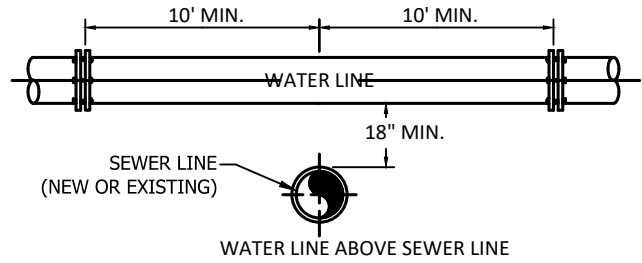
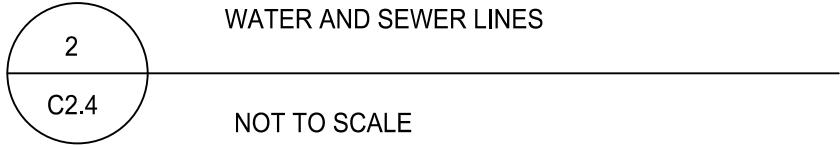


SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
4"	16"	8"	12"	6"	8"	4"	12"	6"	12"	18"
6"	26"	13"	20"	10"	16"	8"	22"	11"	12"	30"
8"	34"	17"	24"	12"	18"	9"	30"	15"	12"	40"
10"	42"	21"	30"	15"	24"	12"	36"	18"	14"	48"

250 PSI - 2,000 PSF BEARING PRESSURE



MINIMUM REQUIREMENTS FOR SEPARATION OF WATER AND SEWER LINES



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DETAILS

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DESIGNER A. GARRISON, PE	SUB SHEET NO. C2.4
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