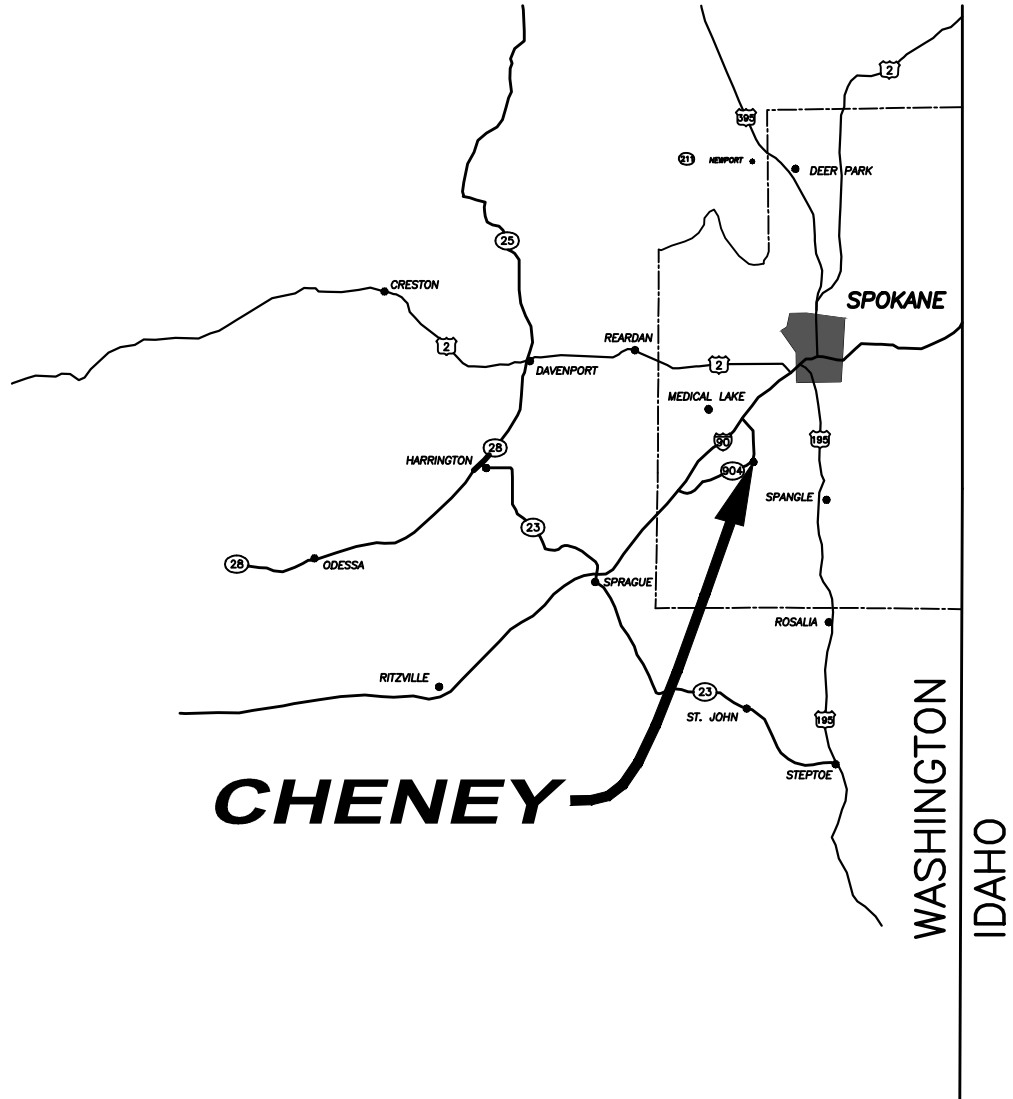


EASTERN WASHINGTON UNIVERSITY

CHENEY, WASHINGTON

APRIL, 2021

SHEET INDEX



AREA MAP

NOT TO SCALE

GENERAL NOTE

CONTRACTOR SHALL OBTAIN RIGHT-OF-WAY PERMITS FROM THE CITY OF CHENEY PUBLIC WORKS DEPARTMENT PRIOR TO ANY WORK WITHIN THE CITY RIGHT-OF-WAY.

UTILITY LOCATE

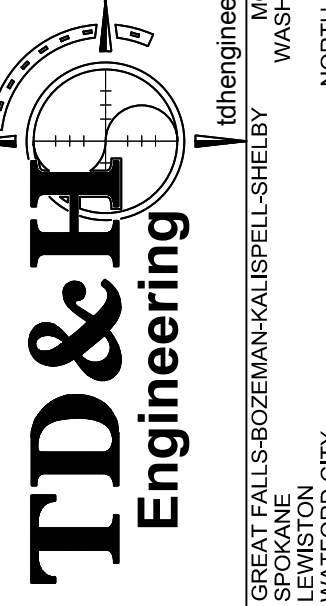
THE LOCATION OF UNDERGROUND UTILITIES REPRESENTED ON THIS DRAWING HAVE BEEN DETERMINED FROM A FIELD SURVEY. THE NUMBER AND LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL MAKE HIS OWN INVESTIGATION TO DETERMINE THE EXACT INFORMATION NECESSARY TO PROTECT OR ACCESS ALL UNDERGROUND UTILITIES.



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LEGEND

NEW	EXISTING	DESCRIPTION
		BARRIER POST
		BUILDING
		BUSH OR SHRUB
		CABLE TV RISER
		CABLE TV RISER FLUSH
		CENTERLINE MONUMENT
		CLEANOUT
		CONCRETE
		CONTOUR
		CONTROL POINT
		CURB BOX
		CURB & GUTTER
		CULVERT
		DELINEATOR POST
		DITCH
		EDGE OF ASPHALT
		EDGE OF GRAVEL
		ELECTRICAL BOX
		ELECTRICAL BOX FLUSH
		ELECTRICAL OUTLET
		FENCE - CHAIN LINK
		FENCE - WIRE
		FENCE - WOOD
		FIRE HYDRANT
		GAS
		GAS METER
		GATE
		GUARD RAIL
		GUY WIRE
		HEDGE
		HOT WATER
		INLET
		INLET & INLET APRON
		IRRIGATION VALVE
		LIGHT POLE
		MAILBOX
		MANHOLE
		MONITOR WELL
		OVERHEAD CABLE TV
		OVERHEAD ELECTRIC
		OVERHEAD FIBER-OPTIC
		OVERHEAD TELEPHONE
		PAINT STRIPE
		PARKING BLOCKS
		PARKING METER
		POWER POLE
		PROPERTY PIN
		RETAINING WALL
		SANITARY SEWER
		SATELLITE DISH
		SPOT ELEVATIONS
		SPRINKLER
		STEAM PIPE
		STORM DRAIN
		TELEPHONE RISER
		TELEPHONE RISER FLUSH
		TEMPORARY BENCHMARK
		TRAFFIC SIGN
		TREE - CONIFEROUS
		TREE - DECIDUOUS
		TREE - SMALL
		TREE - STUMP
		TREE LINE
		UNDERGROUND CABLE TV
		UNDERGROUND COMMUNICATION
		UNDERGROUND ELECTRIC
		UNDERGROUND FIBER-OPTIC
		UNDERGROUND TELEPHONE
		VALVE
		WALL HYDRANT
		WALL LIGHT
		WATER EDGE
		WATERLINE
		WATER METER
		WATER WELL
		WETLAND
		WINDOW WELL



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DATE: 04/13/2022
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EWU NO. CP105

CONSTRUCT SEWER MONITORING STATIONS
EASTERN WASHINGTON UNIVERSITY

COVER SHEET

SHEET C0

GENERAL NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS SET FORTH BY EASTERN WASHINGTON UNIVERSITY, THE CITY OF CHENEY, SPOKANE COUNTY, AND THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. ALL CONFLICTS SHALL BE RESOLVED BY ABIDING BY THE MOST STRINGENT REQUIREMENT AS SPECIFIED BY THE ABOVE ENTITIES.
- LOCATIONS OF EXISTING UTILITIES SHOWN IN PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND PROTECTING THEM DURING CONSTRUCTION.
- ANY ARCHEOLOGICAL FINDINGS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND EASTERN WASHINGTON UNIVERSITY (EWU).
- A COPY OF THE MOST UP TO DATE, APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- THE CONTRACTOR SHALL MAINTAIN AN ACCURATE SET OF AS-BUILT DRAWINGS TO SUBMIT TO THE OWNER (EWU) UPON COMPLETION OF CONSTRUCTION.
- IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER AND EWU.
- CONTRACTOR TO ENSURE THAT ACCESS TO ALL BUILDINGS IS MAINTAINED THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE PUBLIC DURING CONSTRUCTION. PRIOR TO CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO PUBLIC WORKS. THE TRAFFIC CONTROL PLAN MUST BE APPROVED BY PUBLIC WORKS PRIOR TO THE START OF WORK WITHIN THE RIGHT-OF-WAY.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS.
- CONTRACTOR SHALL OBTAIN RIGHT-OF-WAY PERMITS FROM THE CITY OF CHENEY PUBLIC WORKS DEPARTMENT PRIOR TO ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
- CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AT POINTS OF CONNECTION AND CROSSINGS PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ACTUAL LOCATION OR ELEVATION IS DIFFERENT THAN SHOWN.
- CONTRACTOR TO MATCH NEW CONCRETE, PAVERS, AND ASPHALT PAVEMENT TO EXISTING SURROUNDING GRADES.
- CONTRACTOR SHALL PROTECT EXISTING ASPHALT, CONCRETE, CURB, FENCING, GATES, ELECTRICAL POLES, RISERS, GUY WIRES, TREES AND LANDSCAPING UNLESS INDICATED TO BE REMOVED. ANY DAMAGE TO EXISTING SURFACE OR SITE FEATURES SHALL BE REPAIRED AT CONTRACTORS OWN EXPENSE.
- CONTRACTOR SHALL COORDINATE ALL BUILDING OR RETAINING WALL CONDUIT ENTRY LOCATIONS AND CONDUIT ROUTING WITH EWU TO AVOID POTENTIAL UTILITY CONFLICTS.

EWU SITE WORK STANDARDS:

- SIDEWALK CONSTRUCTION SHALL BE A MINIMUM 6-INCHES THICK 3000 PSF CONCRETE. REINFORCING STEEL SHALL BE EITHER #3 BARS AT 18" ON-CENTER OR #4 BARS AT 24" ON-CENTER EACH WAY. SUB-BASE SHALL BE 6-INCHES CRUSHED SURFACING TOP COURSE COMPACTED TO 95% DRY DENSITY OVER PROOF-ROLLED NATIVE SOIL.
- IRRIGATION SYSTEMS SHALL BE REPLACED AS NEEDED PER EWU STANDARD SPECIFICATIONS. AS A GENERAL RULE, AREAS WHERE MODIFICATION TO AN EXISTING IRRIGATION ZONE WOULD SEEM NECESSARY, IT IS THE UNIVERSITY'S PREFERENCE TO REPLACE THE ENTIRE ZONE WITH A NEW.
- ALL NEW LAWNS SHALL BE SOD INSTALLED OVER AMENDED SOILS. ALL LAWN AREAS INSIDE THE FENCED AREA OF CONSTRUCTION AND ALL OTHER AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED WITH NEW SOD.

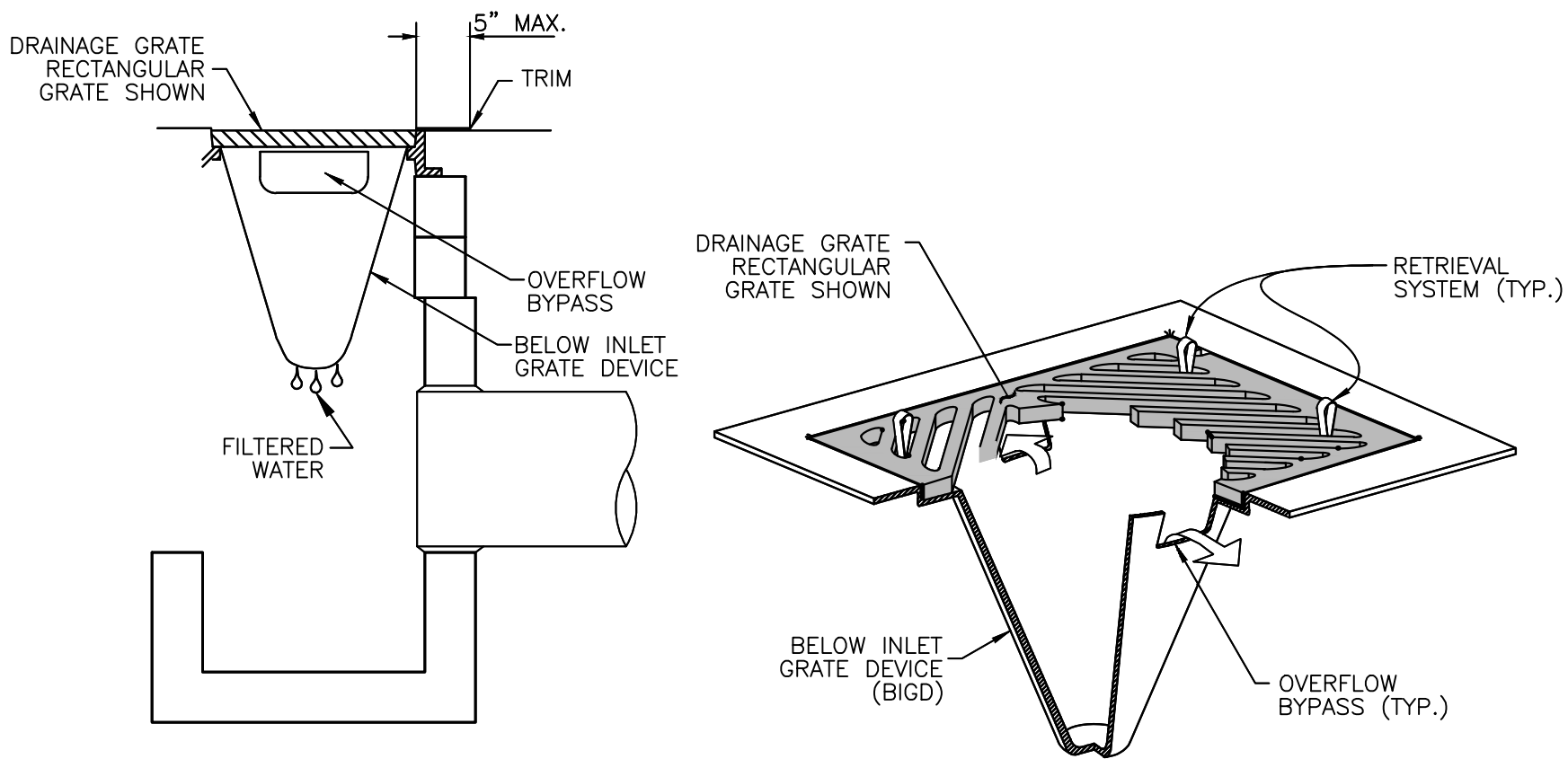
SEWER CONSTRUCTION NOTES

- CONTRACTOR SHALL COORDINATE ALL CONNECTIONS TO EXISTING UTILITIES WITH GOVERNING PURVEYORS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO ADJACENT EXISTING PROPERTIES OR IMPROVEMENTS. CONTRACTOR IS RESPONSIBLE FOR CLEAN-UP OF ANY AREAS DISTURBED BY HIS ACTIVITIES.
- RESTORATION OF DAMAGED ROAD SURFACING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND CITY OF CHENEY REQUIREMENTS.
- CONTRACTOR SHALL REPLACE PAVEMENT IN THE RIGHT OF WAY PER THE INLAND NORTHWEST REGIONAL PAVEMENT CUT POLICY. THE PAVEMENT SHALL BE SAWCUT A MIN. OF 2' ON EACH SIDE OF THE EXCAVATED TRENCH REQUIRED TO CONNECT TO THE EXISTING SANITARY SEWER LINE.
- THE CONTRACTOR SHALL INSTALL IDENTIFYING TAPE WITH ALL UTILITIES. IF COORDINATION WITH PURVEYOR TO HOOK UP UTILITIES CANNOT BE SEQUENCED FOR DIRECT CONNECTION, THEN MARK THE ENDS OF ALL UTILITY STUBS.
- SEWER MANHOLE RINGS AND COVERS SHALL COMPLY WITH WSDOT STANDARD PLAN B-30.70-01. MANHOLE LIDS SHALL BE MARKED WITH CITY OF CHENEY LOGO AND LABELED "SEWER". THE EXCEPTION SHALL BE FOR THE PRE-FABRICATED MONITORING MANHOLES LOCATED IN THE GRASSY AREAS WHERE PEDESTRIAN RATED LIDS ARE PROVIDED BY THE MANHOLE MANUFACTURER.
- MANHOLES CONNECTING TO EXISTING SEWER MAINS SHALL BE MADE WITH SAND COLLARS AND NON-SHRINK GROUT. GROUT SHALL BE SEALED WITH SEALANT.

EROSION CONTROL NOTES:

- THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE FOLLOWED IN ORDER TO BEST MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION CONTROL PROBLEMS:
(A) CLEAR AND GRUB SUFFICIENTLY FOR INSTALLATION OF TEMPORARY ESC BMP'S;
(B) INSTALL TEMPORARY ESC BMP'S, CONSTRUCTING SEDIMENT TRAPPING BMP'S AS ONE OF THE FIRST STEPS PRIOR TO GRADING;
(C) CLEAR, GRUB AND ROUGH GRADE FOR ROADS, TEMPORARY ACCESS POINTS AND UTILITY LOCATIONS;
(D) STABILIZE ROADWAY APPROACHES AND TEMPORARY ACCESS POINTS WITH THE APPROPRIATE CONSTRUCTION ENTRY BMP;
(E) CLEAR, GRUB AND GRADE INDIVIDUAL LOTS OR GROUPS OF LOTS;
(F) TEMPORARILY STABILIZE, THROUGH RE-VEGETATION OR OTHER APPROPRIATE BMP'S, LOTS OR GROUPS OF LOTS IN SITUATIONS WHERE SUBSTANTIAL CUT OR FILL SLOPES ARE A RESULT OF THE SITE GRADING;
(G) CONSTRUCT ROADS, BUILDINGS, PERMANENT STORMWATER FACILITIES (IE. INLETS, PONDS, UIC FACILITIES, ETC.);
(H) PROTECT ALL PERMANENT STORMWATER FACILITIES UTILIZING THE APPROPRIATE BMP'S;
(I) INSTALL PERMANENT ESC CONTROLS, WHEN APPLICABLE; AND,
(J) REMOVE TEMPORARY ESC CONTROLS WHEN:

* PERMANENT ESC CONTROLS, WHEN APPLICABLE, HAVE BEEN COMPLETELY INSTALLED;
* ALL LAND-DISTURBING ACTIVITIES THAT HAVE THE POTENTIAL TO CAUSE EROSION OR SEDIMENTATION PROBLEMS HAVE CEASED; AND,
* VEGETATION HAD BEEN ESTABLISHED IN THE AREAS NOTED AS REQUIRING VEGETATION ON THE ACCEPTED ESC PLAN ON FILE WITH THE LOCAL JURISDICTION.
- INSPECT ALL ROADWAYS, AT THE END OF EACH DAY, ADJACENT TO THE CONSTRUCTION ACCESS ROUTE. IF IT IS EVIDENT THAT SEDIMENT HAS BEEN TRACKED OFF SITE AND/OR BEYOND THE ROADWAY APPROACH, CLEANING IS REQUIRED.
- IF SEDIMENT REMOVAL IS NECESSARY PRIOR TO STREET WASHING, IT SHALL BE REMOVED BY SHOVELING OR PICKUP SWEEPING AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- IF STREET WASHING IS REQUIRED TO CLEAN SEDIMENT TRACKED OFF SITE, ONCE SEDIMENT HAS BEEN REMOVED, STREET WASH WASTEWATER SHALL BE CONTROLLED BY PUMPING BACK ON-SITE OR OTHERWISE PREVENTED FROM DISCHARGING INTO SYSTEMS TRIBUTARY TO WATERS OF THE STATE.
- RESTORE CONSTRUCTION ACCESS ROUTE EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION.
- RETAIN THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICAL.
- INSPECT SEDIMENT CONTROL BMPS WEEKLY AT A MINIMUM, DAILY DURING A STORM EVENT, AND AFTER ANY DISCHARGE FROM THE SITE (STORMWATER OR NON-STORMWATER). THE INSPECTION FREQUENCY MAY BE REDUCED TO ONCE A MONTH IF THE SITE IS STABILIZED AND INACTIVE.
- CONTROL FUGITIVE DUST FROM CONSTRUCTION ACTIVITY IN ACCORDANCE WITH THE STATE AND/OR LOCAL AIR QUALITY CONTROL AUTHORITIES WITH JURISDICTION OVER THE PROJECT AREA.
- STABILIZE EXPOSED UNWORKED SOILS (INCLUDING STOCKPILES), WHETHER AT FINAL GRADE OR NOT, WITHIN 10 DAYS DURING THE REGIONAL DRY SEASON (JULY 1 THROUGH SEPTEMBER 30) AND WITHIN 5 DAYS DURING THE REGIONAL WET SEASON (OCTOBER 1 THROUGH JUNE 30). SOILS MUST BE STABILIZED AT THE END OF A SHIFT BEFORE A HOLIDAY WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST. THIS TIME LIMIT MAY ONLY BE ADJUSTED BY A LOCAL JURISDICTION WITH A "QUALIFIED LOCAL PROGRAM," IF IT CAN BE DEMONSTRATED THAT THE RECENT PRECIPITATION JUSTIFIES A DIFFERENT STANDARD AND MEETS THE REQUIREMENTS SET FORTH IN THE CONSTRUCTION STORMWATER GENERAL PERMIT.
- PROTECT INLETS, DRYWELLS, CATCH BASINS AND OTHER STORMWATER MANAGEMENT FACILITIES FROM SEDIMENT, WHETHER OF NOT FACILITIES ARE OPERABLE.
- KEEP ROADS ADJACENT TO INLETS CLEAN.
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGNATING A LOCATION WHERE CONCRETE TRUCK EQUIPMENT CAN BE WASHED OUT. THIS AREA SHALL NOT BE LOCATED NEAR OR DRAINING INTO A STORM DRAINAGE AREA, TREATMENT AREA, OR FACILITY. CONCRETE WASHOUT AREA SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION WHEN NO LONGER NEEDED. REFER TO BMP C233 OF THE STORMWATER MANAGEMENT MANUAL FOR EASTERN WASHINGTON FOR MORE INFORMATION.
- STOCKPILE MATERIALS (SUCH AS TOPSOIL) ON SITE, KEEPING OFF OF ROADWAY AND SIDEWALKS.
- COVER, CONTAIN AND PROTECT ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCT, AND NON-INERT WASTES PRESENT ON SITE FROM VANDALISM (SEE CHAPTER 173-304 WAC FOR THE DEFINITION OF INERT WASTE), USE SECONDARY CONTAINMENT FOR ON-SITE FUELING TANKS.
- CONDUCT MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM REPAIRS, SOLVENT AND DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CLEAN ALL CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. IF RAINING OVER EQUIPMENT OR VEHICLE, PERFORM EMERGENCY REPAIRS ON SITE USING TEMPORARY PLASTIC BENEATH THE VEHICLE.
- CONDUCT APPLICATION OF AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, IN SUCH A MANNER, AND AT APPLICATION RATES, THAT INHIBITS THE LOSS OF CHEMICALS INTO STORMWATER RUNOFF FACILITIES. AMEND MANUFACTURE'S RECOMMENDED APPLICATION RATES AND PROCEDURES TO MEET THIS REQUIREMENT, IF NECESSARY.
- REMOVE TEMPORARY ESC BMPS WITHIN 30 DAYS AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED. PERMANENTLY STABILIZE AREAS THAT ARE DISTURBED DURING THE REMOVAL PROCESS.



NOTES

- SIZE THE BELOW INLET GRATE DEVICE (BIGD) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
- THE BIGD SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
- THE RETRIEVAL SYSTEM MUST ALLOW REMOVAL OF THE BIGD WITHOUT SPILLING THE COLLECTED MATERIAL.
- PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).


STORM DRAIN INLET PROTECTION DETAIL

SCALE : NTS

1



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CONNECTICUT
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DATE:	04/13/2021
JOB NO.	S19-182
EWU NO.	CP1051

CONSTRUCT SEWER MONITORING STATIONS
EASTERN WASHINGTON UNIVERSITY

NOTES

STAGING AREA IN
P12 PARKING LOT

SM-B1
PROPOSED MONITORING MANHOLE.
SEE SHEET C4.

SM-B2
PROPOSED MONITORING STATION
IN EXISTING MANHOLE.
SEE SHEET C5.

SM-B3
EXISTING MONITORING
MANHOLE. REPLACE EQUIPMENT.
SEE SHEET C6.

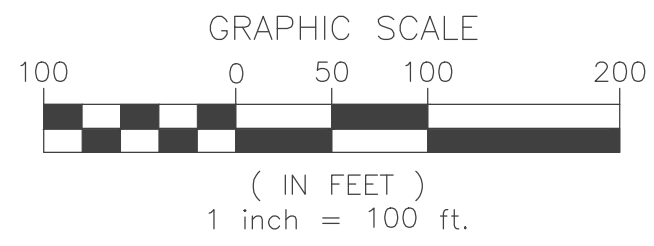
SM-B4
PROPOSED MONITORING STATION
IN EXISTING MANHOLE.
SEE SHEET C6.

SM-B5
PROPOSED MONITORING STATION
IN EXISTING MANHOLE. SEE SHEET C7.

SM-B7
EXISTING MONITORING
MANHOLE. REPLACE EQUIPMENT.
SEE SHEET C6.

SM-B6
PROPOSED MONITORING STATION
IN EXISTING MANHOLE. SEE SHEET C7.

MATCHLINE SHEET C3



REV	DATE	REVISION

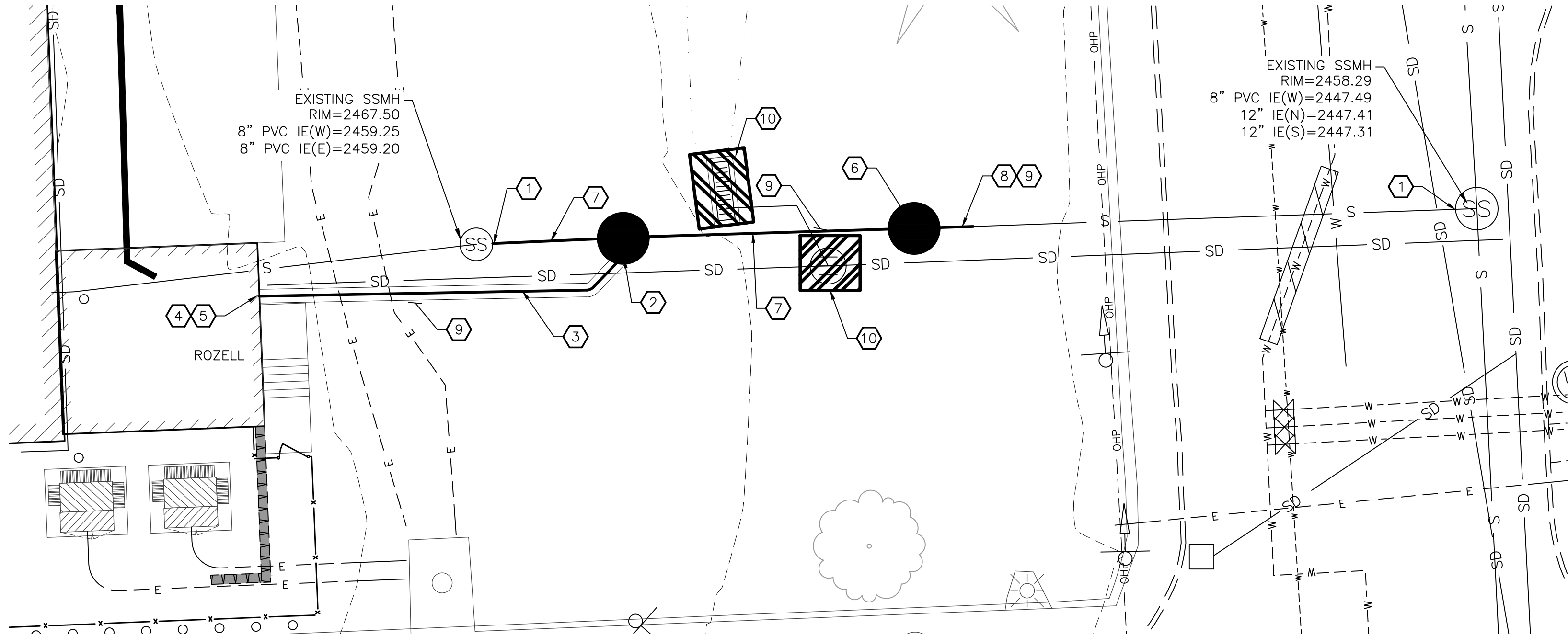
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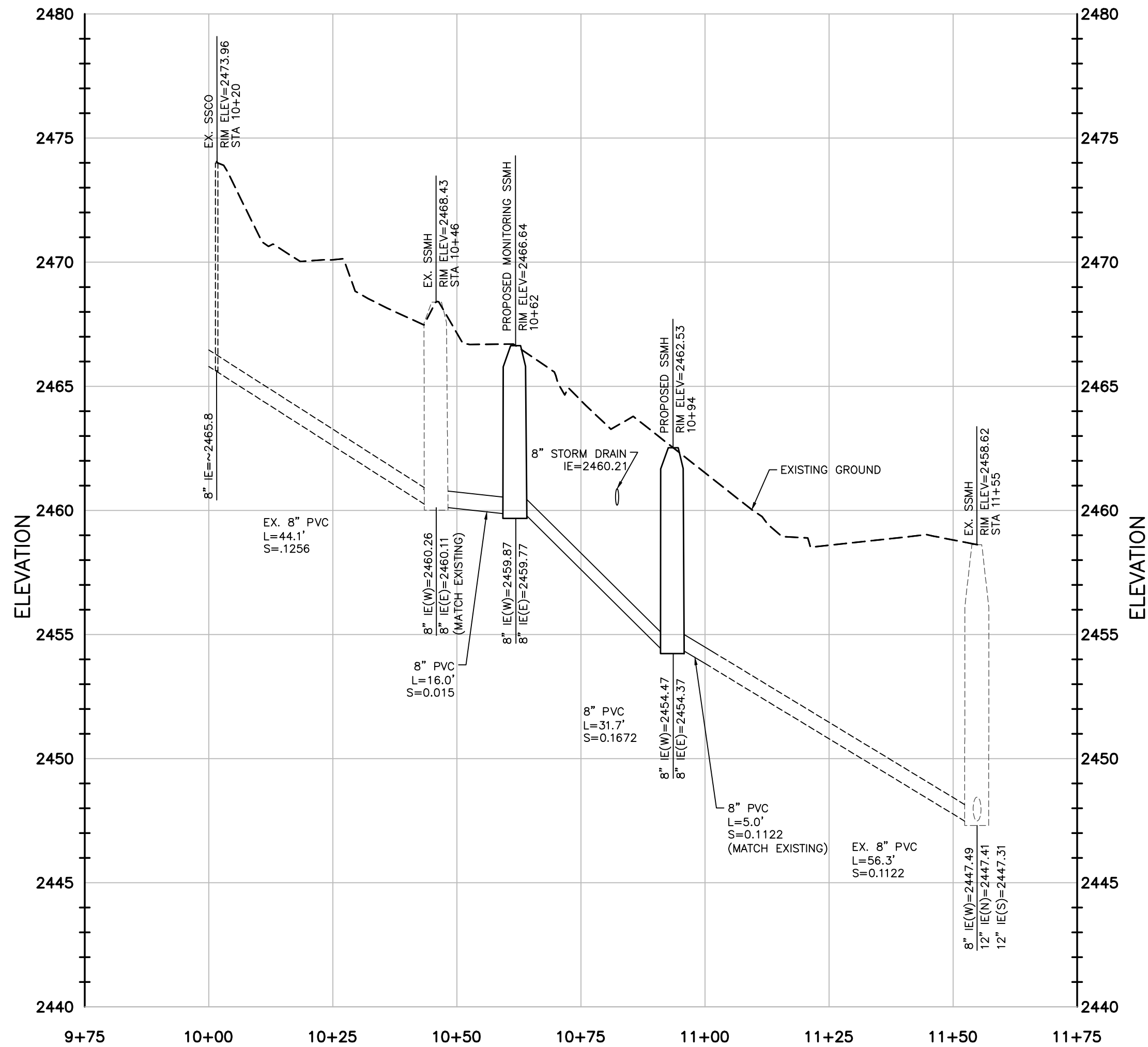
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CONSTRUCT SEWER MONITORING STATIONS
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KEY PLAN (NORTH)



SM-B1 - ROZELL PLANT

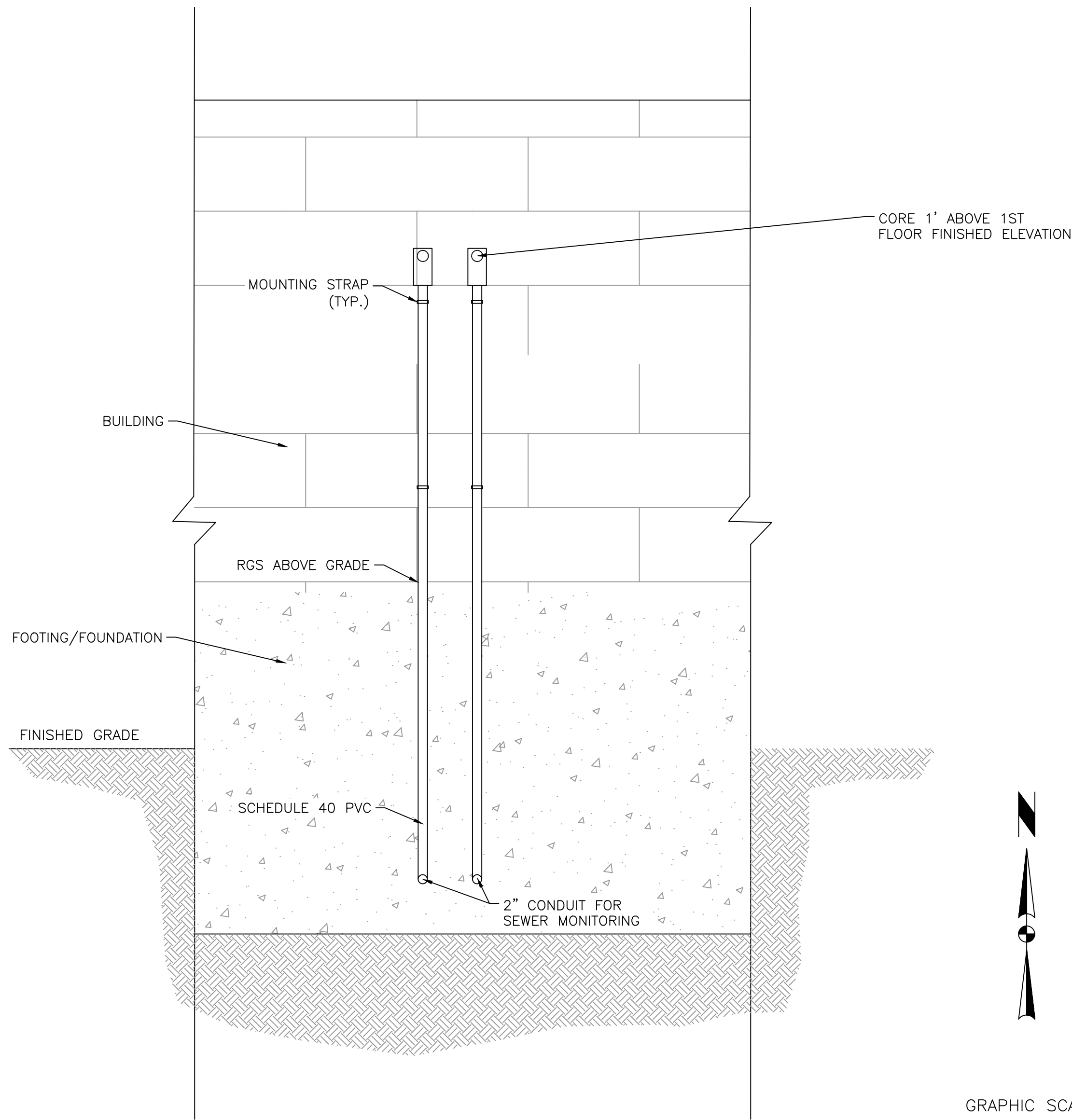


SM-B1 - ROZELL SEWER PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

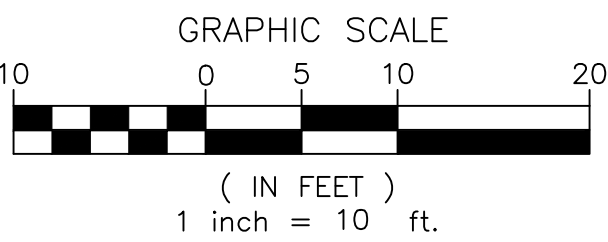
CONSTRUCTION NOTES

- 1 FIELD VERIFY LOCATION, PIPE TYPE, SIZE, AND DEPTH OF INVERTS OF EXISTING SEWER MANHOLES PRIOR TO ORDERING MATERIALS AND CONSTRUCTION.
- 2 48" PACKAGED FIBERGLASS METERING MANHOLE WITH LARGE 60 DEGREE TRAPEZOIDAL FLUME PER MANUFACTURER'S RECOMMENDATIONS. SEE DETAIL 3, SHEET C11. INSTALL PER PLAN AND PROFILE, THIS SHEET.
- 3 INSTALL TWO 2" INCH CONDUIT FROM METERING MANHOLE TO BUILDING FOR MONITORING EQUIPMENT SUCTION AND SAMPLING LINE. MINIMUM 1% SLOPE TO BUILDING. REFER TO ELECTRICAL PLANS TO COORDINATE WHERE TO ENTER BUILDING. SEE SHEET C10, DETAIL 1 FOR TRENCH DETAIL.
- 4 CORE THROUGH EXISTING CONCRETE WALL. COORDINATE BUILDING ENTRANCE LOCATION WITH OWNER. EXPOSED CONDUIT SHALL BE WEATHER TIGHT RGS. PROVIDE MOUNTING TO BUILDING STRUCTURE AS REQUIRED. SEE BUILDING PROFILE VIEW, THIS SHEET.
- 5 MOUNT ISCO 4230 SIGNATURE 'BUBBLER' FLOW METER SYSTEM ON INTERIOR WALL PER MANUFACTURER SPECIFICATIONS. CONNECT 1/8" BUBBLE TUBE, PH AND TEMPERATURE SENSOR AND 3/8" VINYL SUCTION LINE IN FLUME HOLDER PER MANUFACTURER'S INSTRUCTION.
- 6 48" TYPE 1 MANHOLE PER WSDOT STANDARD PLAN B-15.20-01 AND RING AND COVER PER WSDOT STANDARD PLAN B-30.70-04. INSTALL PER PLAN AND PROFILE, THIS SHEET.
- 7 REMOVE AND REPLACE 8" D3034 SDR 35 SANITARY SEWER PIPE WITH 2% MAXIMUM SLOPE. LENGTH AND SLOPE PER PROFILE. SEE TYPICAL TRENCH DETAIL, DETAIL 1, SHEET C10.
- 8 5LF OF 8" D3034 SDR 35 SANITARY SEWER PIPE TO CONNECT TO EXISTING SEWER PIPE. SEE TYPICAL TRENCH DETAIL, DETAIL 1, SHEET C10.
- 9 RESTORE LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN ALL DISTURBED AREAS.
- 10 STORM DRAIN INLET PROTECTION PER DETAIL 1, SHEET C1.

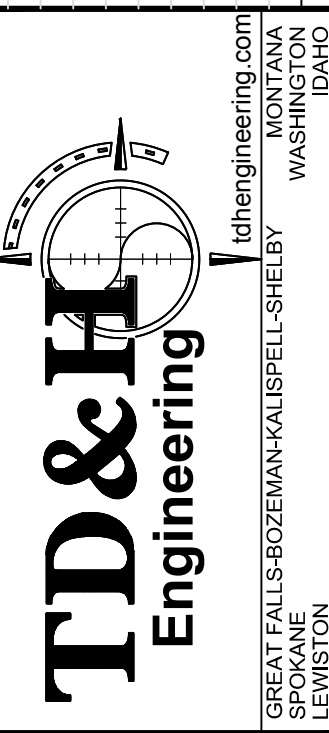


SM-B2 - ROZELL BUILDING PROFILE

SCALE: NOT TO SCALE

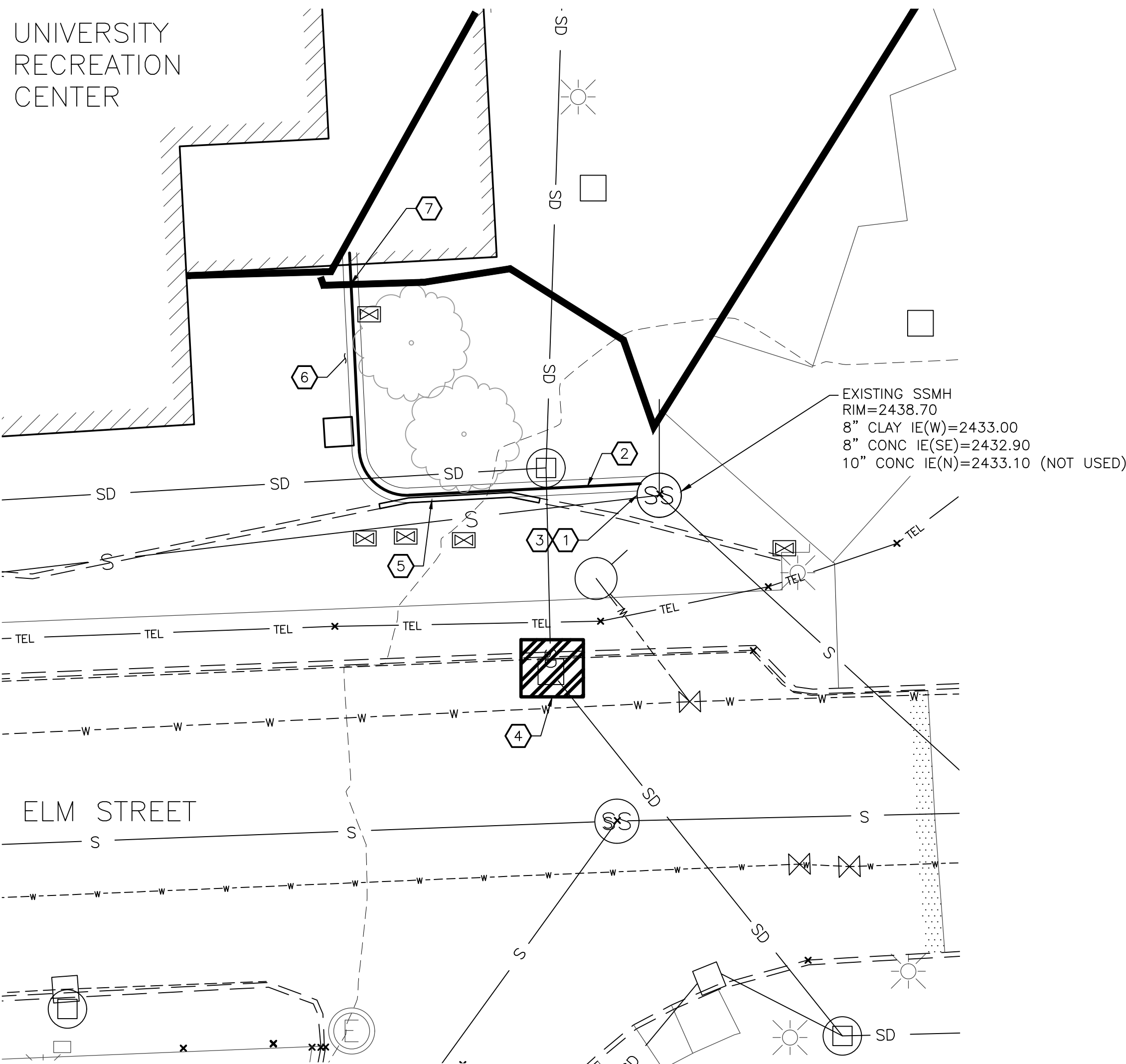


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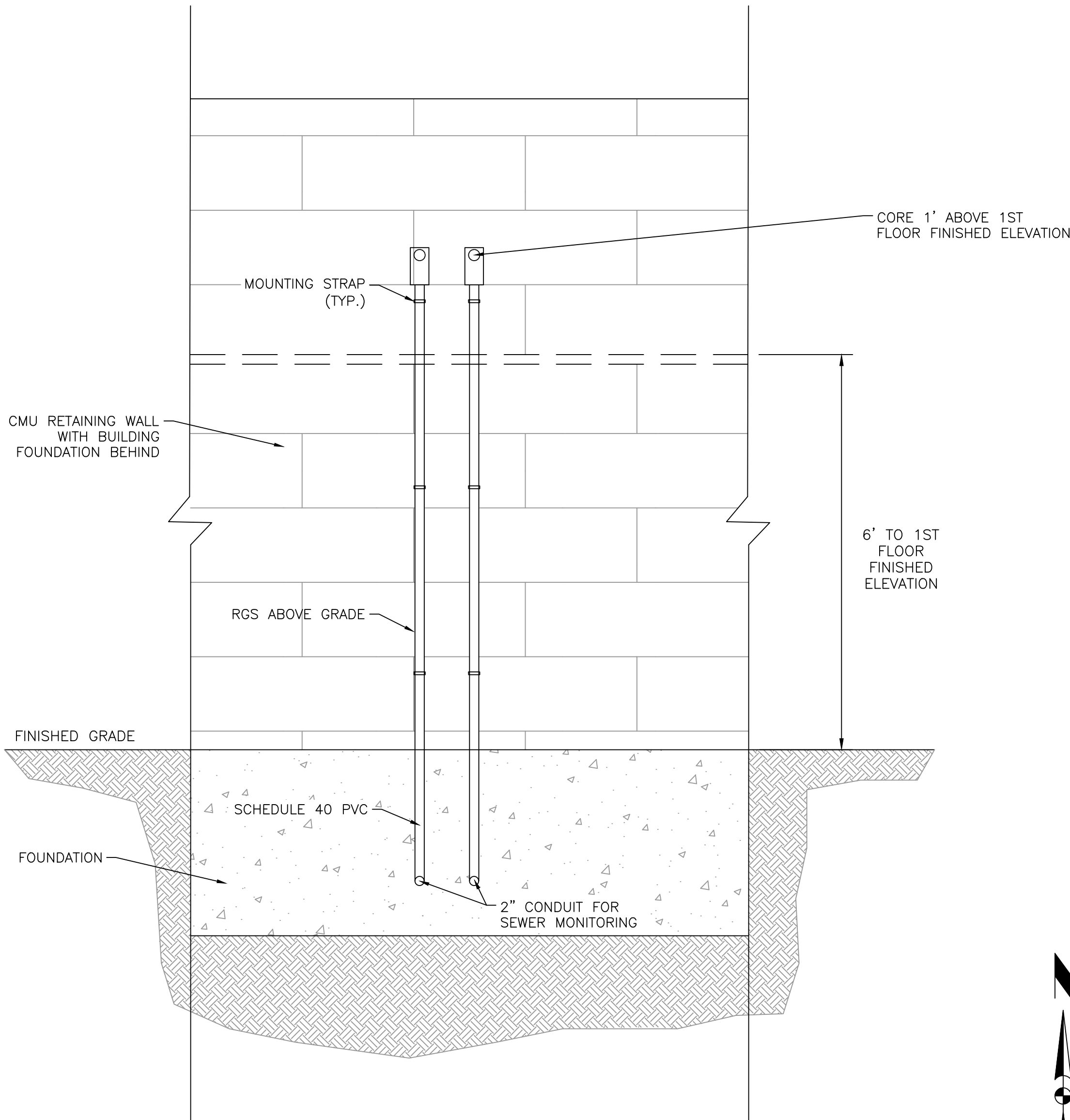


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CONSTRUCT SEWER MONITORING STATIONS
EASTERN WASHINGTON UNIVERSITY
SEWER PLAN AND PROFILE
SM-B1 - ROZELL



SM-B2 - UNIVERSITY RECREATION CENTER

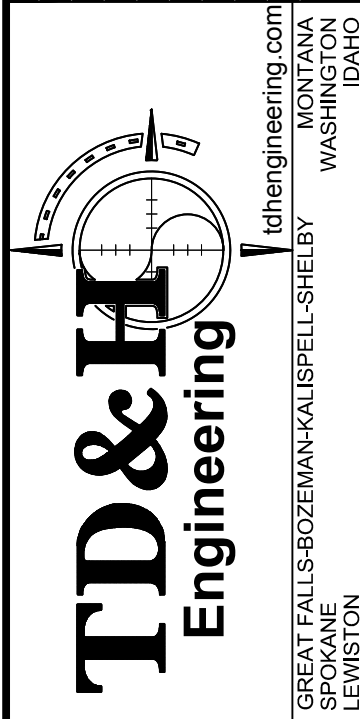
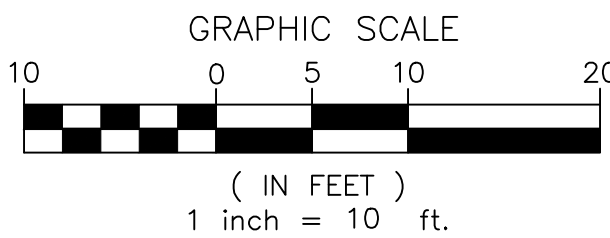


SM-B2 - URC BUILDING PROFILE

SCALE: NOT TO SCALE

CONSTRUCTION NOTES

- 1 FIELD VERIFY LOCATION AND DEPTH OF INVERTS OF EXISTING SEWER MANHOLES PRIOR TO CONSTRUCTION.
- 2 INSTALL TWO 2" CONDUIT FROM METERING MANHOLE TO BUILDING FOR MONITORING EQUIPMENT SUCTION AND SAMPLING LINE. MINIMUM 1% SLOPE TO BUILDING. REFER TO ELECTRICAL PLANS TO COORDINATE WHERE TO ENTER BUILDING. SEE SHEET C10, DETAIL 1 FOR TRENCH DETAIL.
- 3 INSTALL SIGNATURE SERIES AREA VELOCITY FLOW 8 INCH BAND & SENSOR IN WEST (UPSTREAM) INLET. SAMPLING SUCTION LINE TO LAY IN CHANNEL.
- 4 INSTALL STORM DRAIN INLET PROTECTION PER DETAIL 1, SHEET C1.
- 5 REPLACE LANDSCAPING CURB AS REQUIRED WITH NEW LANDSCAPING CURB TO MATCH EXISTING, 12" WIDE X 8" THICK WITH (2) #4 BARS. LANDSCAPING CURB DAMAGE OUTSIDE OF LIMITS SHOWN SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- 6 RESTORE LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN ALL DISTURBED AREAS.
- 7 CORE THROUGH EXISTING CMU WALL AND FOUNDATION WALL. COORDINATE BUILDING ENTRANCE LOCATION WITH OWNER. EXPOSED CONDUIT SHALL BE WEATHER TIGHT RGS. PROVIDE MOUNTING TO BUILDING STRUCTURE AS REQUIRED. SEE BUILDING PROFILE VIEW, THIS SHEET.

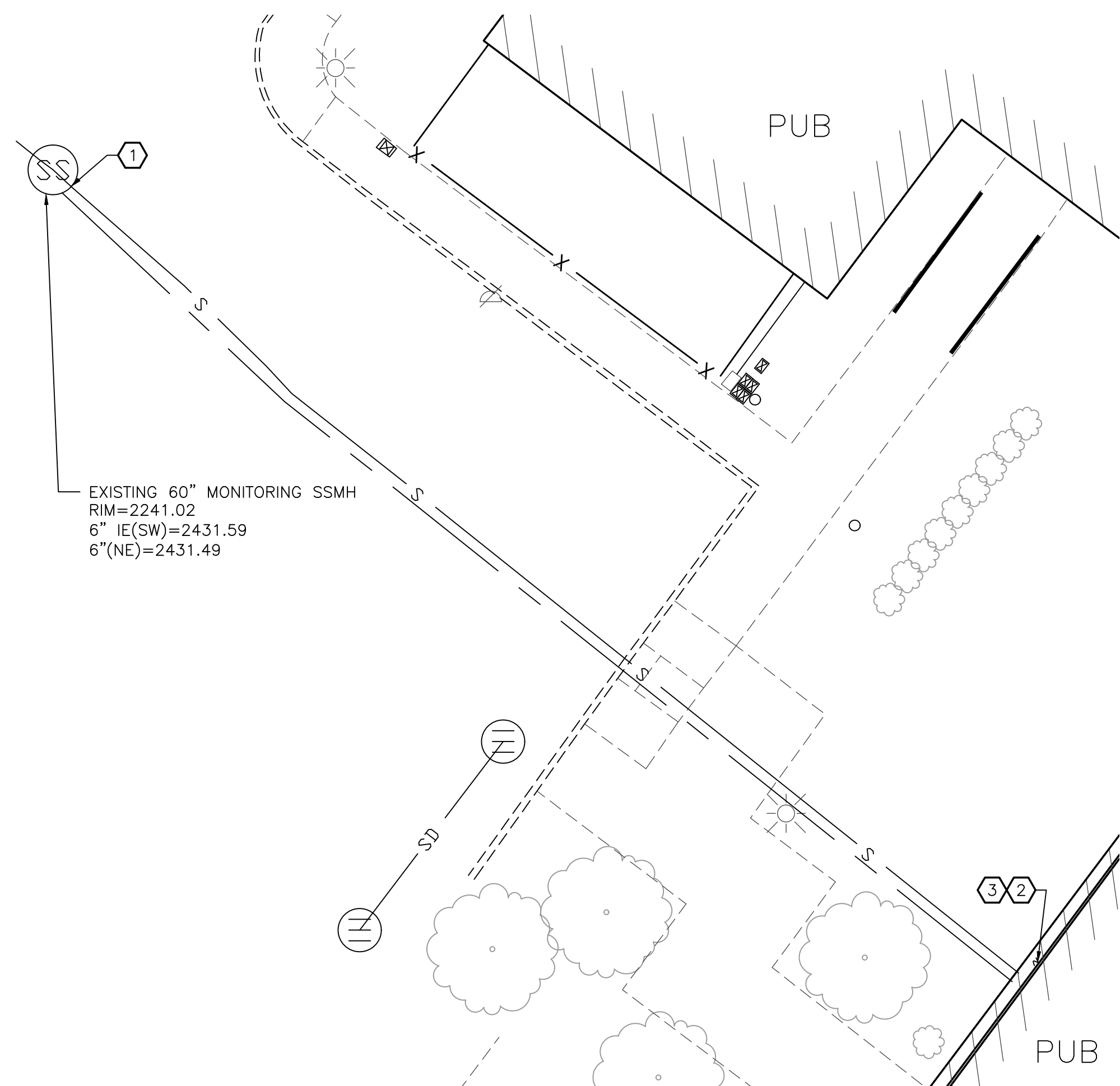


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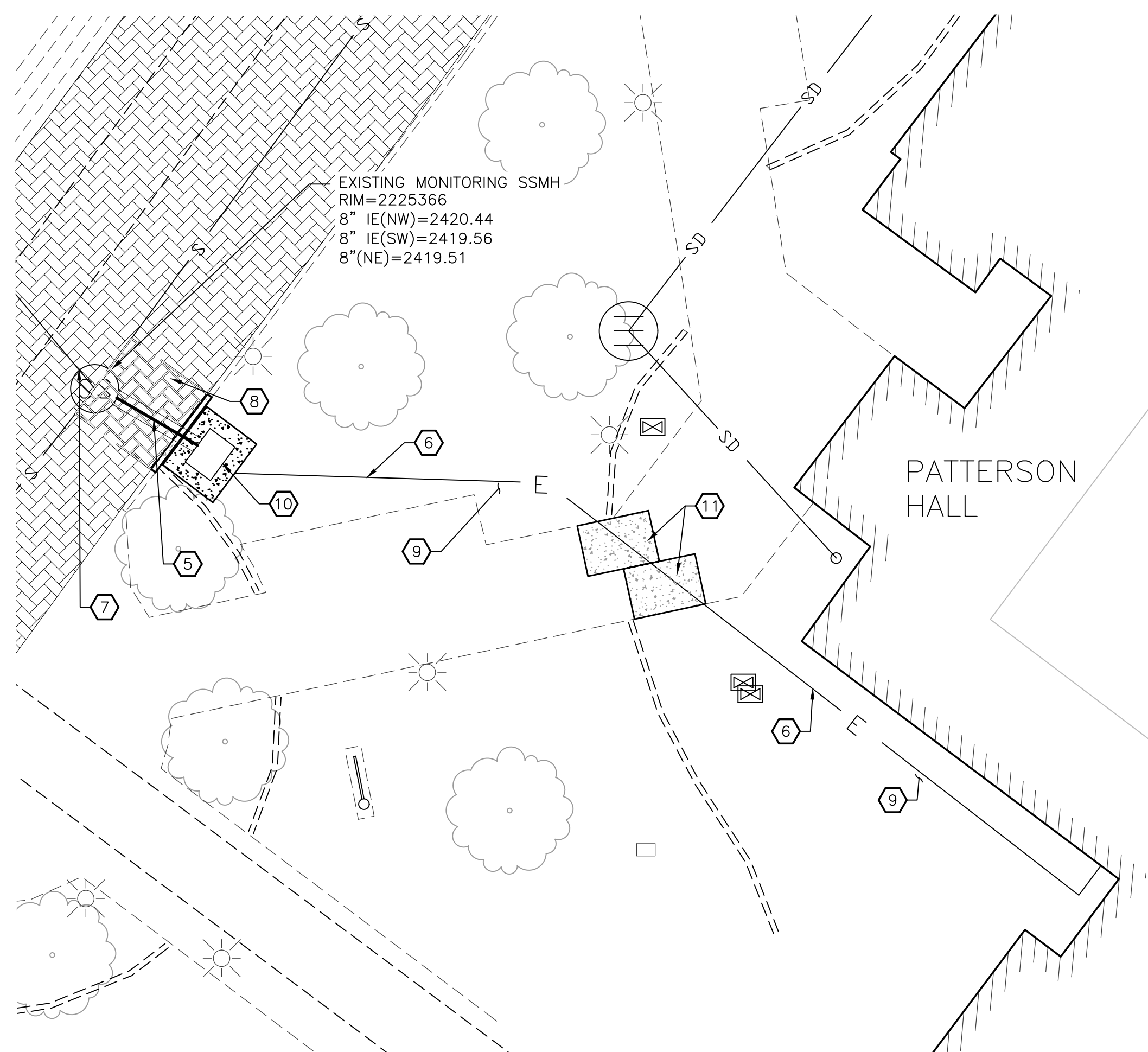
CONSTRUCT SEWER MONITORING STATIONS
EASTERN WASHINGTON UNIVERSITY
SEWER PLAN AND PROFILE
SM-B2 - URC

- 1 FIELD VERIFY LOCATION AND CONDITION OF EXISTING SEWER MONITORING MANHOLE PRIOR TO CONSTRUCTION.
- 2 REMOVE PREVIOUSLY INSTALLED ISCO 4230 "BUBBLER" SERIES FLOW METER AND BUBBLE LINE. REFER TO ELECTRICAL PLANS FOR LOCATION INSIDE BUILDING.
- 3 INSIDE PUB, INSTALL SIGNATURE SERIES FLOW METER SYSTEM WITH BUBBLE LINE, SAMPLER INTERFACE CABLE AND SAMPLING SUCTION LINE. RE-USE EXISTING 2" CONDUIT TO RUN LINES FROM PUB TO MONITORING MANHOLE. PLACE GLACIER SAMPLER ON THE FLOOR UNDER THE FLOW METER AND CONNECT TO POWER AND THE FLOW METER. REFER TO ELECTRICAL PLANS FOR INTERIOR ELECTRICAL WORK.
- 4 INSIDE HUSTON HALL, INSTALL SIGNATURE SERIES FLOW METER SYSTEM WITH BUBBLE LINE, SAMPLER INTERFACE CABLE AND SAMPLING SUCTION LINE. RE-USE EXISTING 2" CONDUIT TO RUN LINES FROM HUSTON HALL TO MONITORING MANHOLE. PLACE GLACIER SAMPLER ON THE FLOOR UNDER THE FLOW METER AND CONNECT TO POWER AND THE FLOW METER. REFER TO ELECTRICAL PLANS FOR INTERIOR ELECTRICAL WORK.
- 5 TWO 2" SCH. 40 PVC CONDUIT FROM MANHOLE TO SHELTER FOR MONITORING EQUIPMENT SUCTION AND SAMPLING LINES. MINIMUM 1% SLOPE TO SHELTER. SEE SHEET C10, DETAIL 1 FOR TYPICAL TRENCH DETAIL.

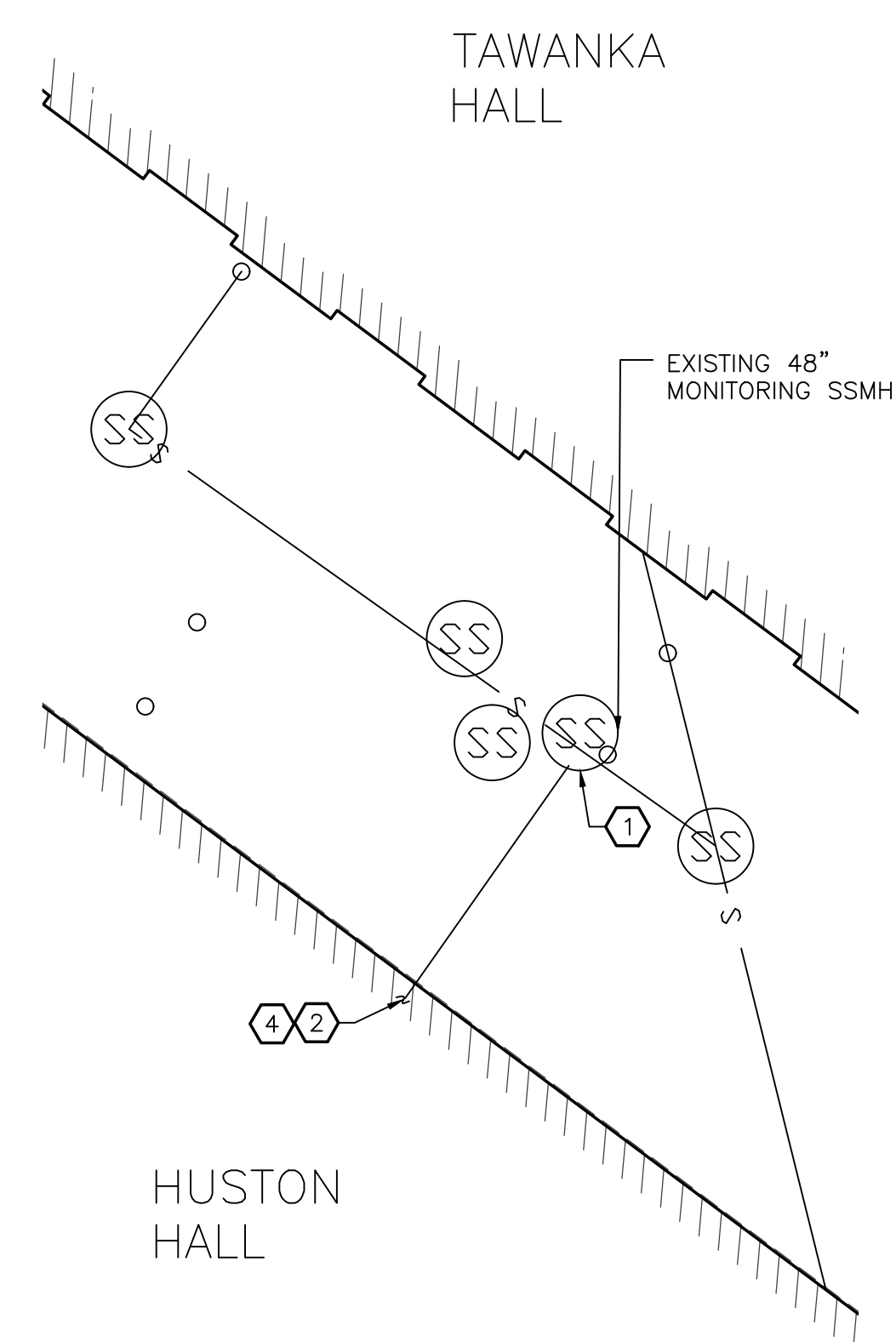
- 6 ELECTRICAL CONDUITS PER ELECTRICAL PLAN SHEETS.
- 7 SIGNATURE SERIES AREA VELOCITY FLOW 8 INCH BAND & SENSOR IN NORTHEAST (UPSTREAM FROM PUB) INLET. SAMPLING SUCTION LINE TO LAY IN CHANNEL.
- 8 REMOVE AND REPLACE CONCRETE PAVER SIDEWALK WITH CURB TO LIMITS SHOWN. SEE DETAIL 2, SHEET C11.
- 9 RESTORE LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN ALL DISTURBED AREAS.
- 10 SHELTER ENCLOSURE INSTALLED ON CONCRETE PAD, SEE DETAIL 2, SHEET C10. INSTALL MONITORING EQUIPMENT INSIDE SHELTER PER APPENDIX A.
- 11 REMOVE AND REPLACE CONCRETE SIDEWALK PER DETAIL 1, SHEET C11.



SM-B3 - PUB - WEST LOCATION



SM-B4 - PUB - EAST LOCATION



SM-B7 - TAWANKA - HUSTON LOCATION



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SPOKANE	WASHINGTON
LEWISTON	IDAHO

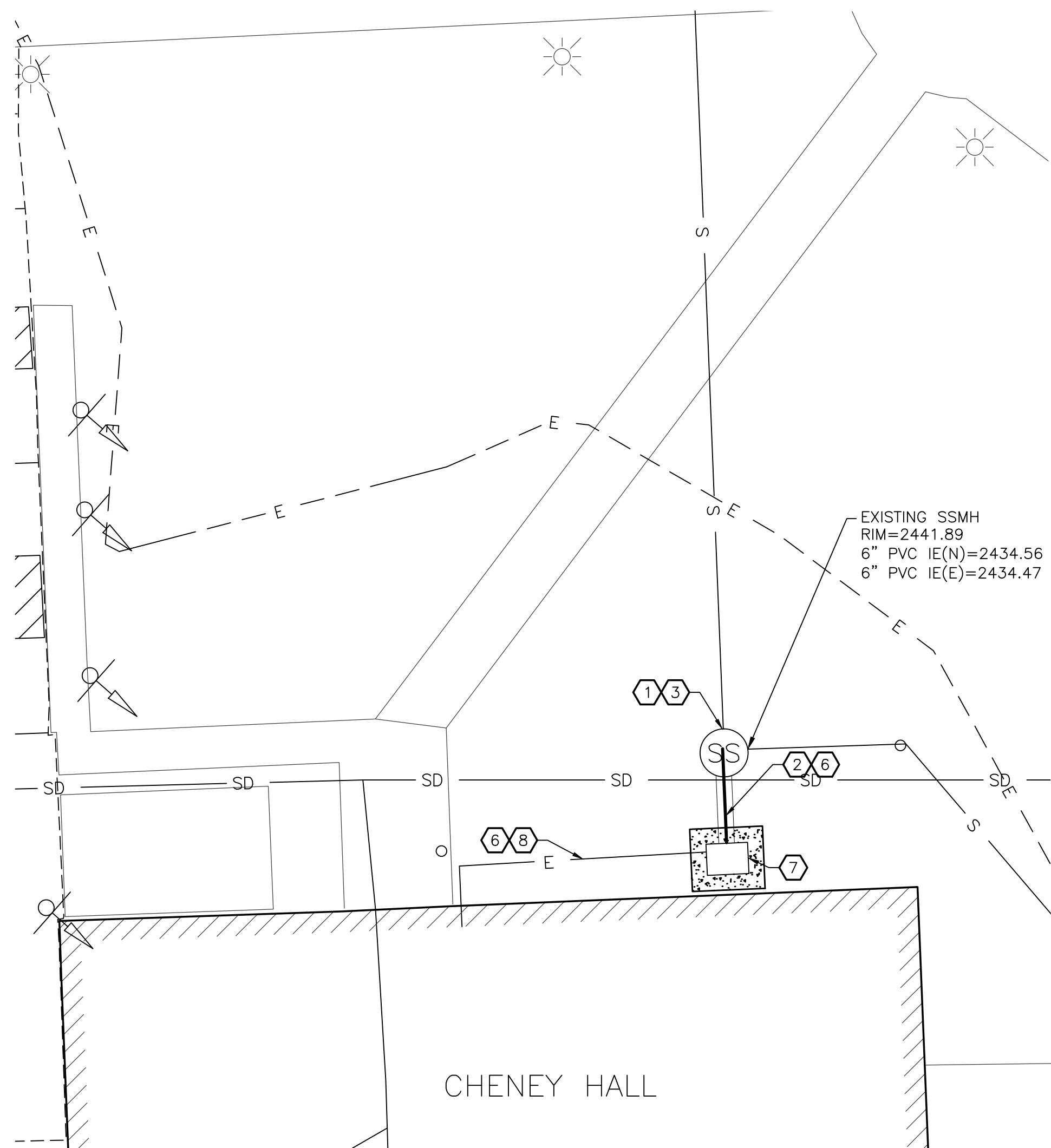
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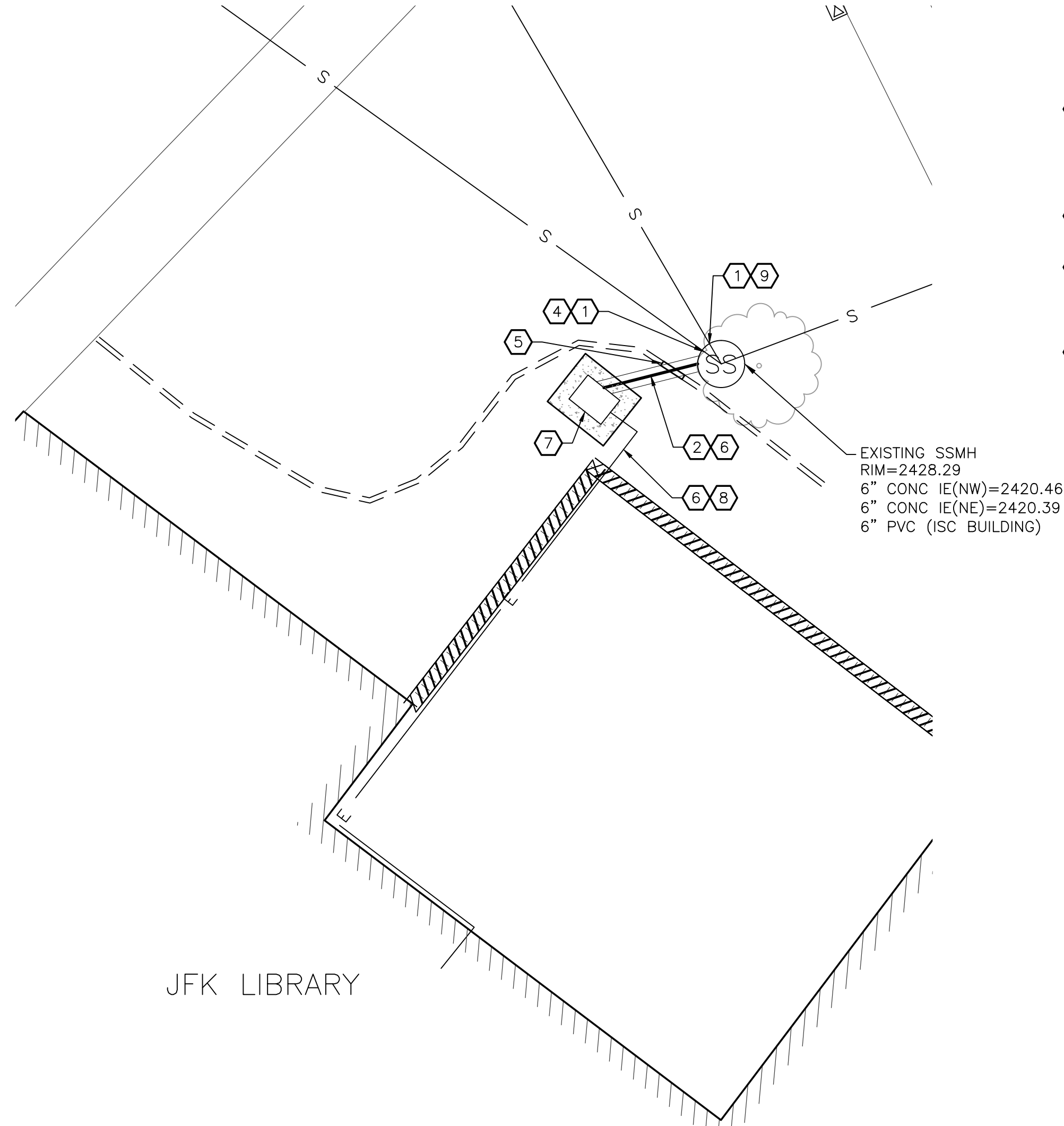
SEWER PLAN AND PROFILE

SHEET C6





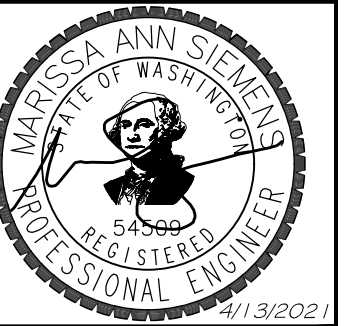
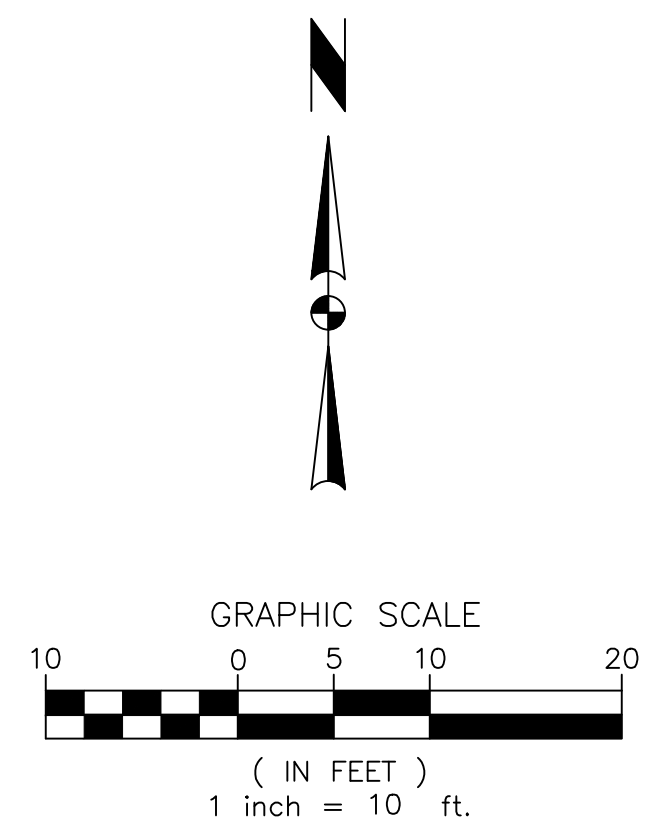
SM-B6 – SCIENCE BUILDING – SOUTH
MONITORING STATION AT CHENEY HALL



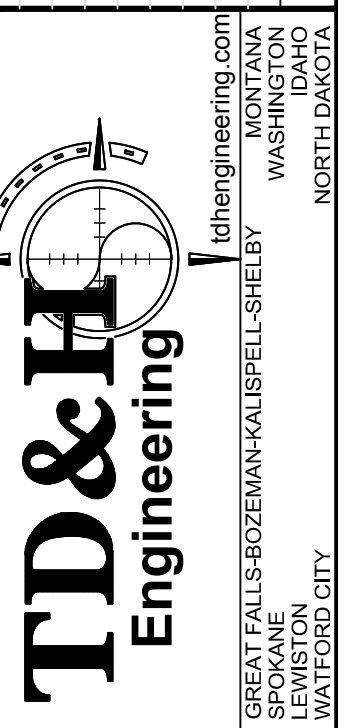
SM-B5 – ISC & SCIENCE BUILDING – EAST
MONITORING STATION AT JFK LIBRARY

CONSTRUCTION NOTES

- 1 FIELD VERIFY LOCATION, DEPTH OF INVERTS, AND CONDITION OF EXISTING SEWER MANHOLE PRIOR TO CONSTRUCTION.
- 2 TWO 2" SCH. 40 PVC CONDUIT FROM MANHOLE TO SHELTER FOR MONITORING EQUIPMENT SUCTION AND SAMPLING LINE. MINIMUM 1% SLOPE TO SHELTER. SEE SHEET C10, DETAIL 1 FOR TRENCH DETAIL.
- 3 SIGNATURE SERIES AREA VELOCITY FLOW 6 INCH BAND & SENSOR IN NORTH (UPSTREAM) INLET. SAMPLING SUCTION LINE TO LAY IN CHANNEL.
- 4 SIGNATURE SERIES AREA VELOCITY FLOW 6 INCH BAND & SENSOR IN NORTHWEST (UPSTREAM) INLET. SAMPLING SUCTION LINE TO LAY IN CHANNEL.
- 5 REPLACE LANDSCAPING CURB AS REQUIRED WITH NEW LANDSCAPING CURB TO MATCH EXISTING, 12" WIDE X 8" THICK WITH (2) #4 BARS. LANDSCAPING CURB DAMAGE OUTSIDE OF LIMITS SHOWN SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- 6 RESTORE LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN ALL DISTURBED AREAS.
- 7 SHELTER ENCLOSURE INSTALLED ON CONCRETE PAD, SEE DETAIL 2, SHEET C10. INSTALL MONITORING EQUIPMENT INSIDE SHELTER PER APPENDIX A.
- 8 ELECTRICAL CONDUITS FROM SHELTER TO BUILDING. SEE ELECTRICAL PLAN.
- 9 SIGNATURE SERIES AREA VELOCITY FLOW 6 INCH BAND & SENSOR IN NORTH-NORTHWEST (UPSTREAM) INLET.



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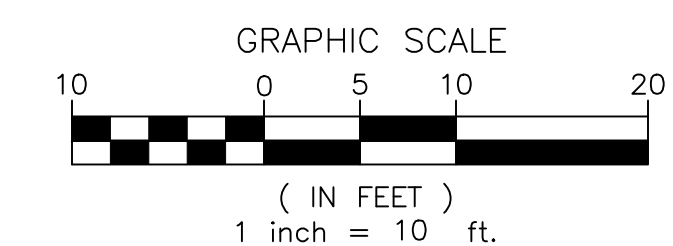
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CONSTRUCT SEWER MONITORING STATIONS
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SEWER PLAN

SM-B5 & SM-B6 - SCIENCE - SOUTH & EAST

SHEET C7



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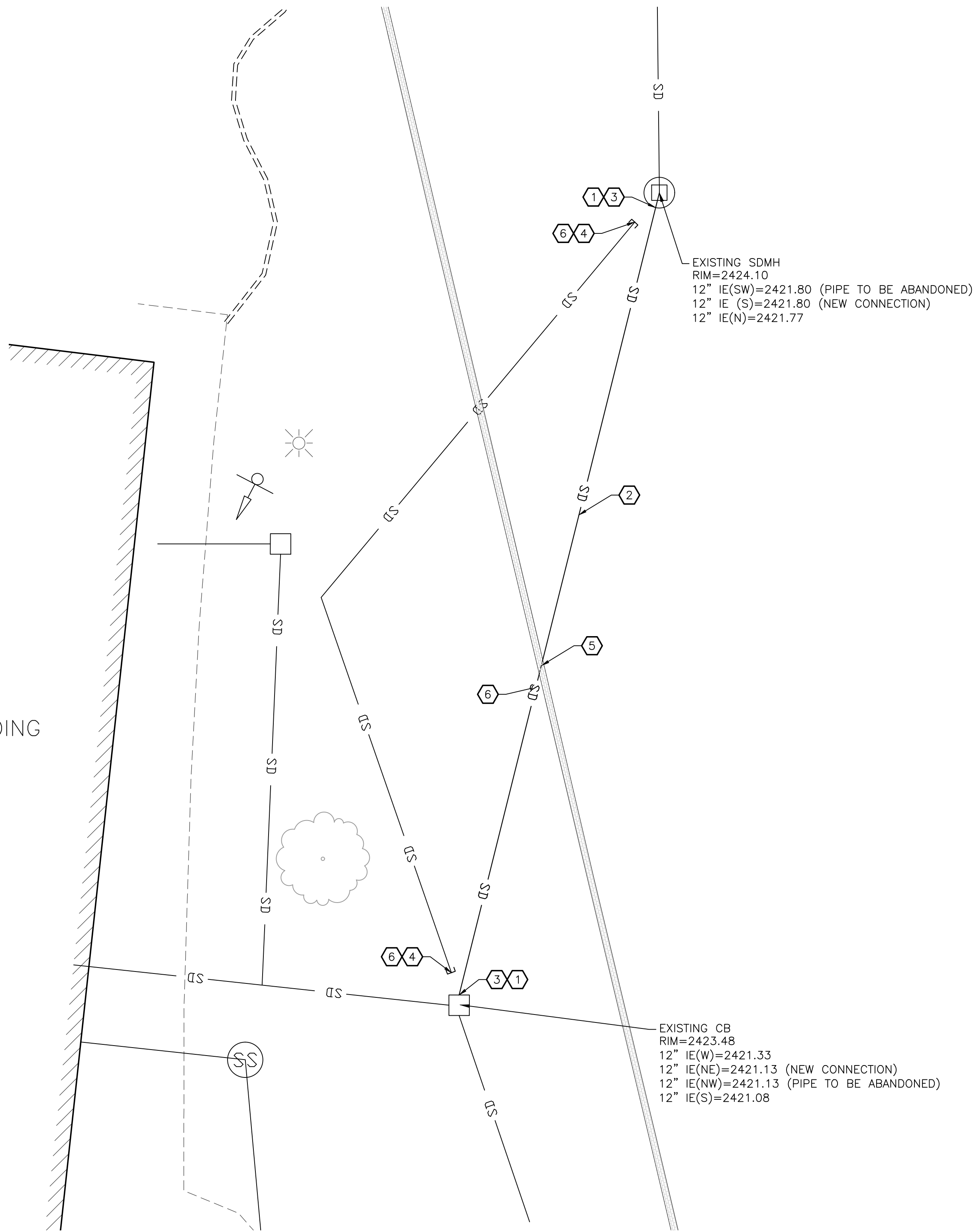
**SEWER MANHOLE REPLACEMENT
7TH STREET & UNION STREET**

SHEET C8



UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
811
CALL TWO BUSINESS DAYS
BEFORE YOU DIG

COMPUTING &
ENGINEERING BUILDING



CONSTRUCTION NOTES

- 1 FIELD VERIFY LOCATION, DEPTH OF INVERTS, AND CONDITION OF EXISTING STORM MANHOLE AND CATCHBASIN PRIOR TO CONSTRUCTION.
- 2 12" DIA. PVC STORM PIPE. SLOPE AND INVERT ELEVATIONS PER THIS SHEET. SEE TYPICAL TRENCH DETAILS, DETAIL 1, SHEET C10.
- 3 CORE NEW HOLE, CONNECT NEW 12" PVC STORM PIPE TO EXISTING CATCHBASIN OR MANHOLE. INVERT ELEVATION PER THIS SHEET. GROUT AND SEAL CONNECTION.
- 4 REMOVE 5LF OF EXISTING 12" PVC STORM PIPE FROM EXISTING CATCHBASIN OR MANHOLE. PLUG ABANDONED STORM PIPE WITH GROUT.
- 5 REPAIR AND RESTORE BRICK LANDSCAPE FEATURE TO MATCH ORIGINAL CONDITION.
- 6 RESTORE LANDSCAPING AND IRRIGATION TO MATCH EXISTING IN ALL DISTURBED AREAS.

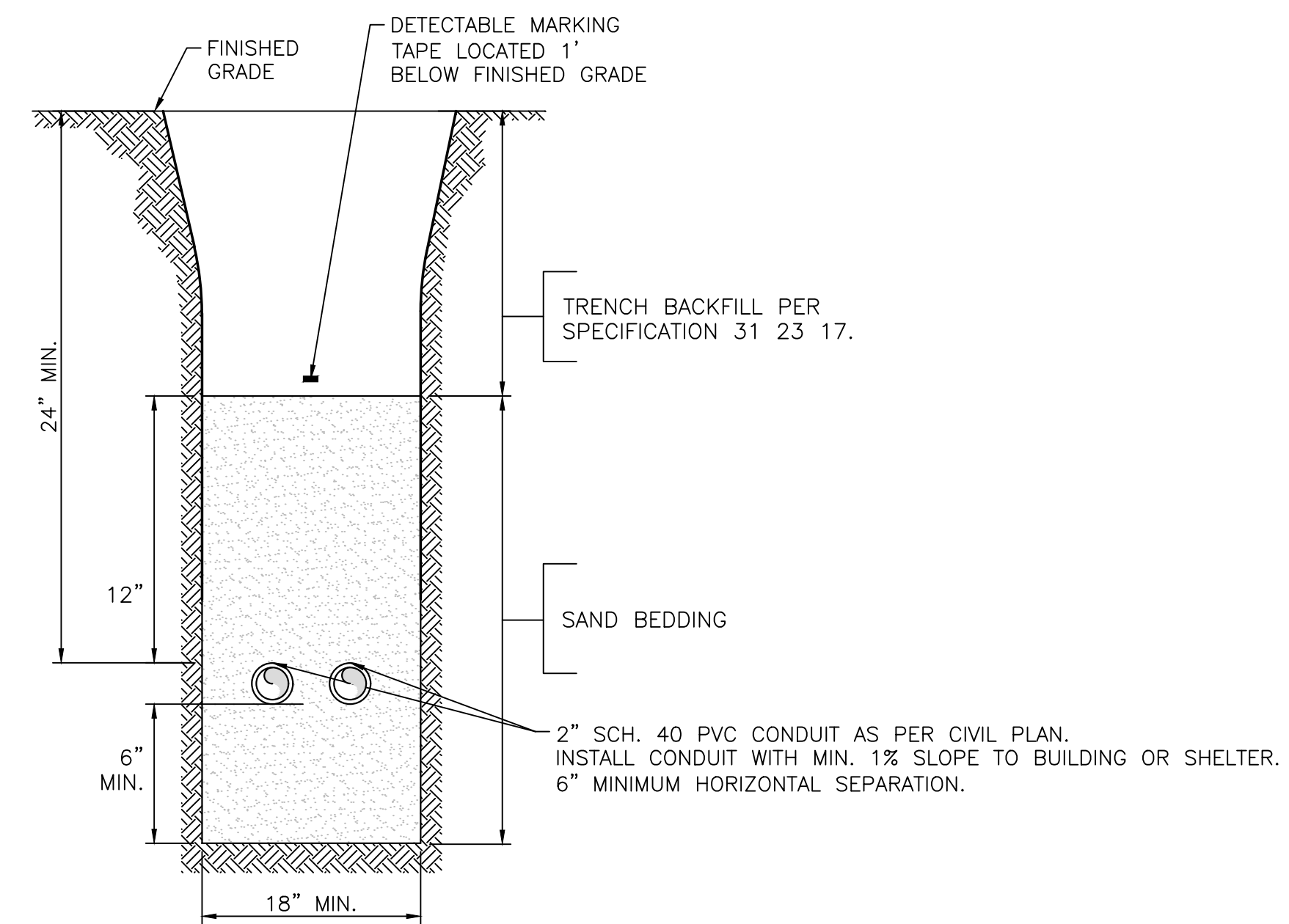
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STORMDRAIN PLAN & PROFILE
COMPUTING & ENGINEERING BUILDING

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TYPICAL CONDUIT TRENCH
(MANHOLE TO SHELTER OR BUILDING)

1. SEE O.S.H.A. CONSTRUCTION STANDARDS FOR EXCAVATIONS, SEC. 1926, SUBPART P

1

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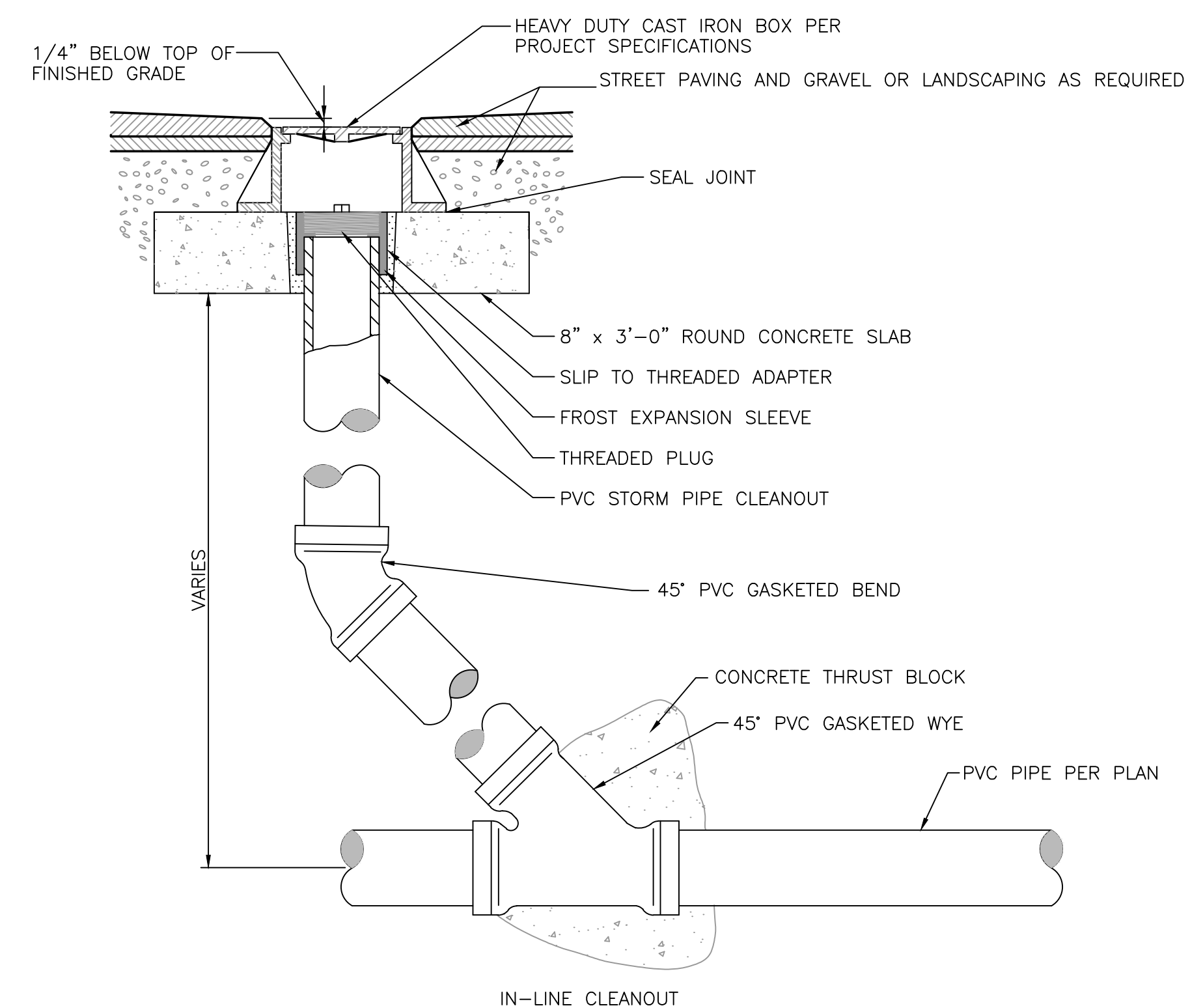


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2

3

NOT TO SCALE

DETAILS

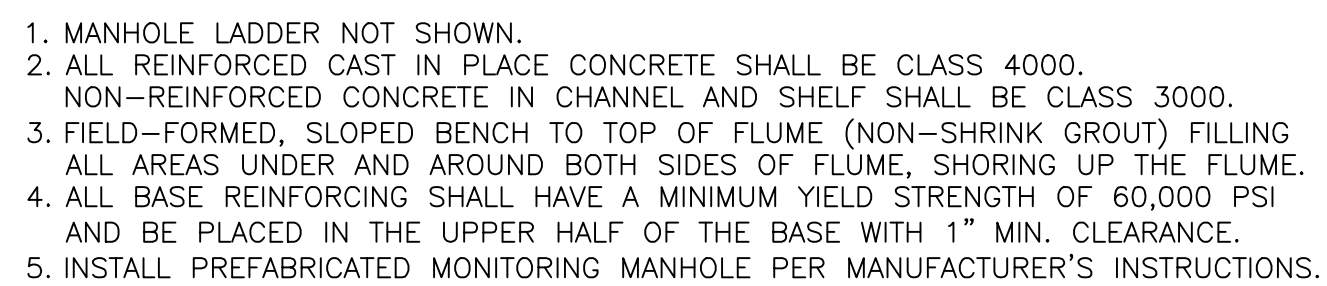


1



TYPICAL CONCRETE PAVER PATCH

2



MONITORING MANHOLE

3

