



**CONSTRUCTION NOTES:**

1. DRIVEWAYS AND ENTRANCES TO BUILDINGS, REAL PROPERTY, AND THE LIKE SHALL NOT BE BLOCKED EXCEPT FOR SHORT DURATIONS AND ONLY WHEN APPROVED BY THE ENGINEER. VEHICULAR AND PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL NECESSARY DRIVEWAY CLOSURES WITH THE PROPERTY OWNER(S) AND RESIDENT(S) IN THE AREAS OF CONSTRUCTION.
2. THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND SERVICE LEADS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
3. LOCATION AND DEPTH OF UTILITIES AS DEPICTED ON THE PLANS IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE AHEAD AND ADJUST DEPTH OF CONFLICT UTILITIES ACCORDINGLY. ANY DAMAGE TO UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY TO AVOID AND/OR REPAIR AS NECESSARY.
4. THE CONTRACTOR IS TO TAKE SPECIAL CARE TO PROTECT THE EXISTING SEWER MAIN AND BE RESPONSIBLE FOR MAINTAINING CONSISTENT SEWER SERVICE.
5. DURING NON-WORKING HOURS NO MORE THAN TEN (10) FEET OF TRENCH SHALL REMAIN OPEN; ANY OPEN TRENCH SHALL BE PROPERLY SECURED WITH PROTECTIVE FENCING. THIS WORK SHALL BE INCLUDED IN THE ITEMS OF WORK BEING UNDERTAKEN AND WILL NOT BE PAID FOR SEPARATELY.
6. TRENCHES FOR NEW SEWER SERVICES SHALL BE EXCAVATED TO MIOSHA AND CITY OF ANN ARBOR FIELD SERVICES REQUIREMENTS.
7. THE CONTRACTOR SHALL BACKFILL TRENCHES IN ACCORDANCE WITH TRENCH DETAIL SPECIFIED ON PLANS.
8. THE CONTRACTOR SHALL CONSTRUCT, FLUSH, AND BACTERIOLOGICALLY TEST THE WATER MAIN PER DETAILED SPECIFICATION "WATER MAIN INSTALLATION AND TESTING" AND AS APPROVED BY THE ENGINEER. ALL CHLORINATED WATER SHALL BE DISCHARGED DIRECTLY INTO AN APPROVED SANITARY SEWER. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY HOSES, FITTINGS AND THE LIKE TO ACCOMPLISH THIS WORK.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUOUS MAINTENANCE OF THE TEMPORARY ROAD SURFACE AND SOIL EROSION CONTROL MEASURES WITHIN THE CONSTRUCTION AREA UNTIL THE FULL COMPLETION OF THE PROJECT. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS".
10. THE LOCATION OF MATERIAL STOCK PILES AND ON-SITE STAGING AREAS TO BE APPROVED BY THE ENGINEER.
11. ALL STRUCTURES SHALL RECEIVE NEW CASTINGS AS DIRECTED BY THE ENGINEER, AS SPECIFIED ON THE STANDARD CASTING SCHEDULE. THE EXISTING CASTINGS ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL DELIVER TO CITY OF ANN ARBOR FIELD OPERATIONS AND MAINTENANCE FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD.
12. ALL STRUCTURES SHALL RECEIVE NEW CASTINGS, EITHER TYPE B, TYPE Q, OR TYPE R AS SPECIFIED ON THE STANDARD CASTING SCHEDULE. THE EXISTING CASTINGS SHALL BE NEATLY STACKED ON-SITE IN A SINGLE LOCATION SO THAT CITY OF ANN ARBOR FORCES CAN RETRIEVE THEM AT A LATER DATE. THE CONTRACTOR SHALL ASSIST CITY FORCES BY LOADING THEM INTO THEIR CITY TRUCKS. ALL COSTS ASSOCIATED WITH STORING, STOCKPILING, AND LOADING CASTINGS INTO CITY VEHICLES SHALL BE INCLUDED IN THE ITEM OF WORK MOBILIZATION, MAX, AND WILL NOT BE PAID FOR SEPARATELY.

**GENERAL NOTES:**

- NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.
1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
  2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
  3. DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
  4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
  5. ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
  6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, LANDSCAPING SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
  7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
  8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
  9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLATIVE AS REQUIRED.
  10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
  11. THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
  12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.
- SEQUENCE OF EROSION CONTROL MEASURES:**
1. THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

**SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:**

- 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. REMOVE EXISTING PAVEMENT, CURB AND GUTTER AND STRIP AND STOCKPILE TOPSOIL AS NEEDED. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.4. COMPLETE PAVEMENT RESTORATION WORK OPERATIONS IN ACCORDANCE WITH CONSTRUCTION SEQUENCE CONTAINED WITHIN THE SPECIAL PROVISION ENTITLED "MAINTAINING TRAFFIC AND CONSTRUCTION METHOD AND SEQUENCING" CONTAINED IN THE CONTRACT PROPOSAL.
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.7. CLEAN OUT STORM SEWER SYSTEMS.
- 1.8. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.9. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

**TEMPORARY SEEDING:**

1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$3,000

ESTIMATE OF EXCAVATION AND FILL FROM EXISTING TO FINAL GRADE:

- EXCAVATION = 0 CY, FILL = 0 CY


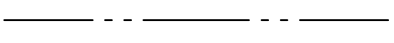

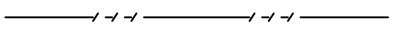

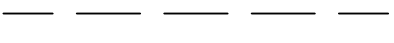

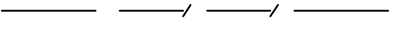

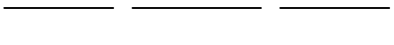

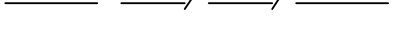

















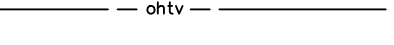

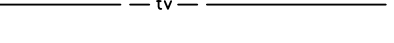





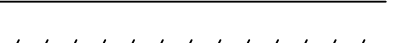









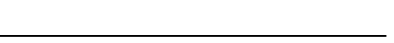




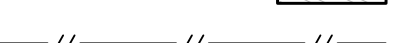

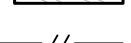
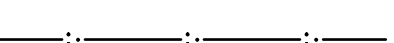

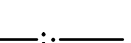
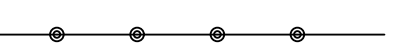

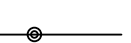



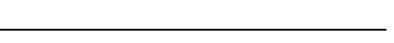

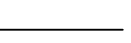



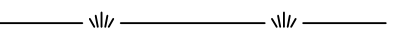

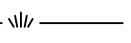







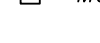
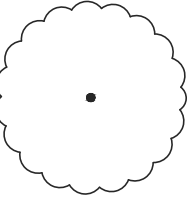


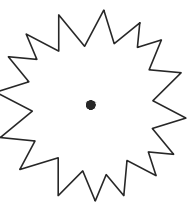





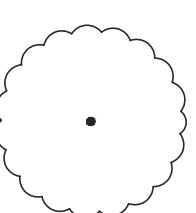

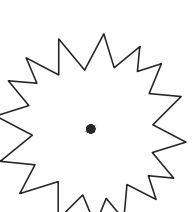
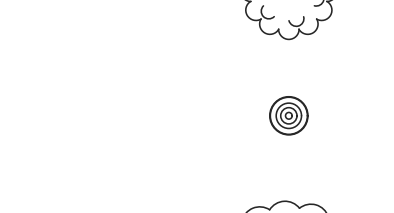
ON SITE SOILS PER THE USDA SOIL SURVEY OF WASHTENAW COUNTY, MICHIGAN:

- Sb - SEBEWA LOAM - IN DEPRESSION AREAS, BROAD LOW-LYING AREA, AND DRAINAGEWAYS OF OUTWASH PLAINS, VALLEY TRAINS, AND TERRACES. SLOPE IS 0% TO 2%.
- FoB - FOX SANDY LOAM - IN UPLAND AREAS AND ON OUT WASH PLAINS, KAMES, VALLEY TRAINS, TERRACES, AND MORAINES. SLOPES ARE UNIFORM OR SHORT AND COMPLEX.
- MdA - MATHERTON SANDY LOAM - IN DEPRESSION AREAS, BROAD LOW-LYING AREAS, AND ALONG DRAINAGEWAYS, OUTWASH PLAINS, VALLEY TRAINS, AND TERRACES. NEARLY LEVEL TO GENTLY SLOPING.
- MfA - METAMORA SANDY LOAM - IN DEPRESSION AREAS, BROAD, LOW-LYING AREAS, AND ALONG DRAINAGEWAYS OF TILL PLAINS AND MORAINES.
- NoB - NAPPANEE SILTY CLAY LOAM - ON FOOT SLOPES AND ALONG DRAINAGEWAYS OF TILL PLAINS, MORAINES, AND LAKE PLAINS. NEARLY LEVEL TO GENTLY SLOPING.


**STRUCTURE TABLE**

MH#	Rim	Invert	Diameter	Costing
1	822.67	809.36	4'	Type B
2	822.67	809.66	4'	Type B
3	823.31	810.17	4'	Type B

**EXISTING LEGEND**

- |   |                           |   |   |   |
|---|---------------------------|---|---|---|
|    | FIRE HYDRANT              |   |    | WATER MAIN  |
|    | GATE VALVE IN BOX         |   |    | WATER MAIN ABANDONED  |
|    | GATE VALVE IN WELL        |   |    | STORM SEWER   |
|    | STOP BOX                  |   |    | STORM SEWER ABANDONED   |
|    | WATER VAULT               |   |    | SANITARY SEWER  |
|    | WELL                      |   |    | SANITARY SEWER ABANDONED  |
|    | CATCH BASIN (SQ)          |   |    | GAS MAIN  |
|    | CATCH BASIN (RD)          |   |    | GAS MAIN (DEAD)   |
|    | STORM MANHOLE             |   |    | ELECTRICAL OVER HEAD  |
|    | NON-CURB CATCH BASIN (SQ) |   |    | ELECTRICAL UNDER GROUND   |
|    | END SECTION               |   |    | ELECTRICAL DUCT BANK  |
|    | SANITARY MANHOLE          |   |    | TELEPHONE OVER HEAD   |
|    | CLEAN-OUT                 |   |    | TELEPHONE UNDER GROUND  |
|    | POST                      |   |    | TELEPHONE DUCT BANK   |
|    | PEDESTRIAN SIGNAL         |   |    | CABLE TV OVER HEAD  |
|    | SIGN                      |   |    | CABLE TV UNDER GROUND   |
|    | HAND HOLE                 |   |    | FIBER OPTIC   |
|    | ORNAMENTAL LIGHT          |   |    | FIBER OPTIC DUCT BANK   |
|    | FLOOD LIGHT               |   |    | BOUNDARY  |
|    | UNKNOWN MANHOLE           |   |    | BUILDING  |
|    | TELEPHONE MANHOLE         |   |    | CENTERLINE OF DITCH   |
|    | GAS VALVE                 |   |    | CENTERLINE/CROWN OF ROAD  |
|    | GAS VENT                  |   |    | CONTOUR MAJOR   |
|    | GAS BOX                   |   |    | CONTOUR MINOR   |
|    | ELECTRICAL RISER          |   |    | EDGE OF WATER   |
|    | TRANSFORMER               |    |    | FLOODPLAIN  |
|    | UTILITY POLE              |    |    | FENCE   |
|    | LAMP POLE                 |    |    | GRAVEL  |
|    | GUY ANCHOR                |    |    | GUARDRAIL   |
|    | GUY POLE                  |    |    | STONE WALL  |
|    | MONITORING WELL           |    |    | R.O.W.  |
|    | MAILBOX                   |    |    | TREELINE  |
|    | SOIL BORING               |    |    | WETLAND   |
|   | TRAVERSE POINT            |    |   | EDGE OF BRUSH   |
|  | BENCH MARK                |   |  | HEDGE   |
|  | IRON PIPE                 |  |  | TREE (DECIDUOUS)  |
|  | MON BOX                   |  |  | TREE (CONIFEROUS)   |
|   |                           |  |  | SHRUB (DECIDUOUS)   |
|   |                           |  |  | STUMP   |
|   |                           |  |  | TREE TO REMAIN & PROTECT (DECIDUOUS) CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10  |
|   |                           |  |  | TREE TO REMAIN & PROTECT (CONIFEROUS) CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10 |

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**CITY OF ANN ARBOR PUBLIC SERVICES**  
301 EAST HURON STREET  
ANN ARBOR, MI 48107-8647  
734-794-6410  
www.aigo.org

BY	DATE	DESCRIPTION

**CITY OF ANN ARBOR PUBLIC WORKS**  
485 ROCK CREEK DR  
SANITARY SEWER REPAIR

**LEGEND & GENERAL NOTES**

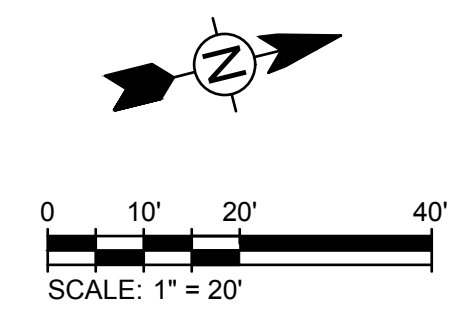
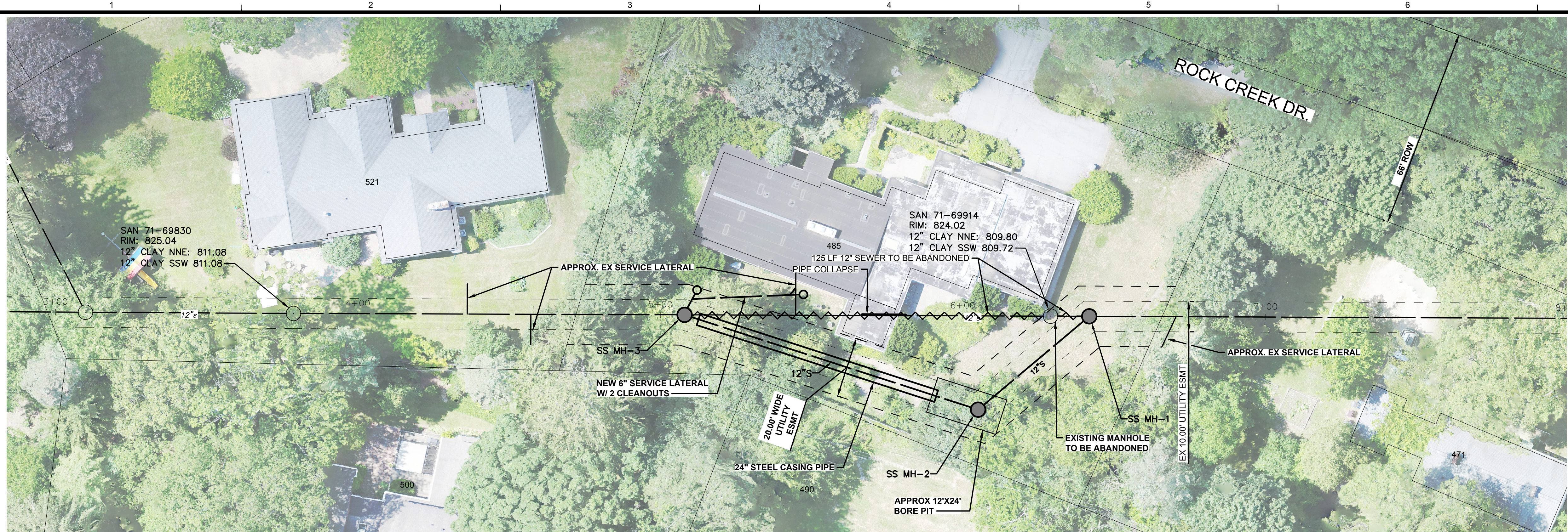
Project No.: 200-31537-17004  
Designed By: J. SIWEK  
Drawn By: S. GOTHA  
Checked By:

**2**

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Bar Measures 1 inch



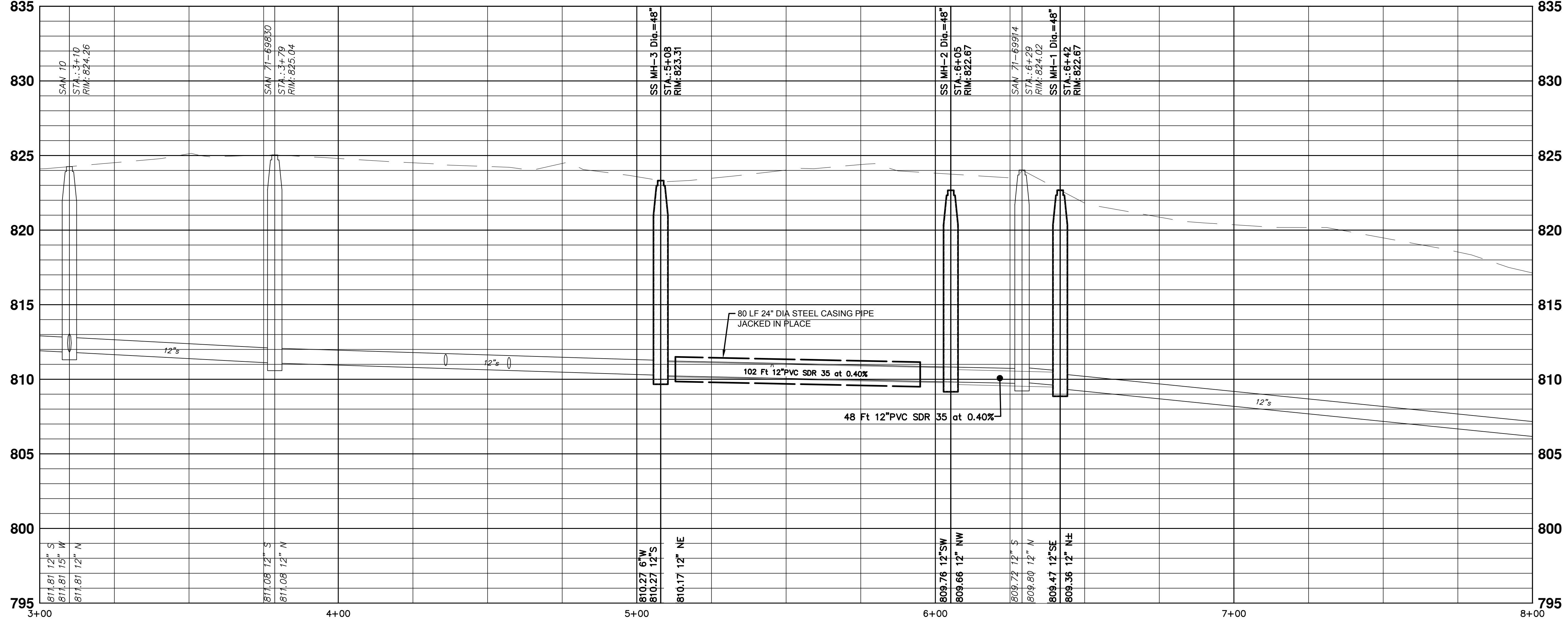
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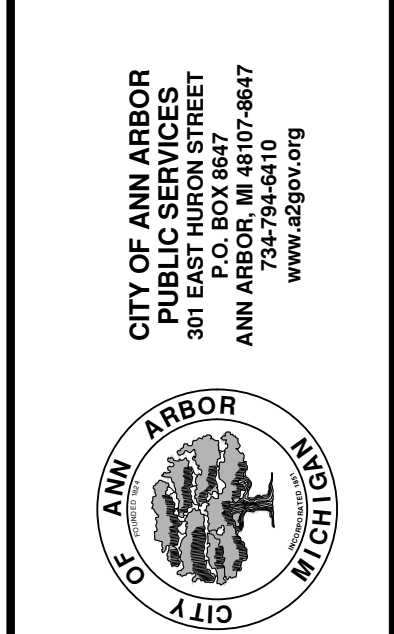
**NOTES:**

1. SILT FENCE TO BE PLACED ON DOWN SLOPE SIDE OF ALL EXCAVATIONS AND AREAS OF DISRUPTION OR STOCK PILED SOILS.
2. CONTRACTOR TO PLACE INLET FILTERS ALONG ANY PAVED AREAS SUSCEPTIBLE TO SOIL TRACKING FROM SITE.
3. PROTECTIVE FENCE TO BE PLACED ALONG PERIMETER OF ALL VEGETATION TO BE PROTECTED BY ADJACENT CONSTRUCTION ACTIVITIES.
4. STEEL CASING PIPE TO BE MINIMUM OF 3/8" THICK.
5. CONNECT SERVICE LATERAL FOR 485 ROCK CREEK DIRECTLY TO SS MH-3.

**EX SEWER C.L.**



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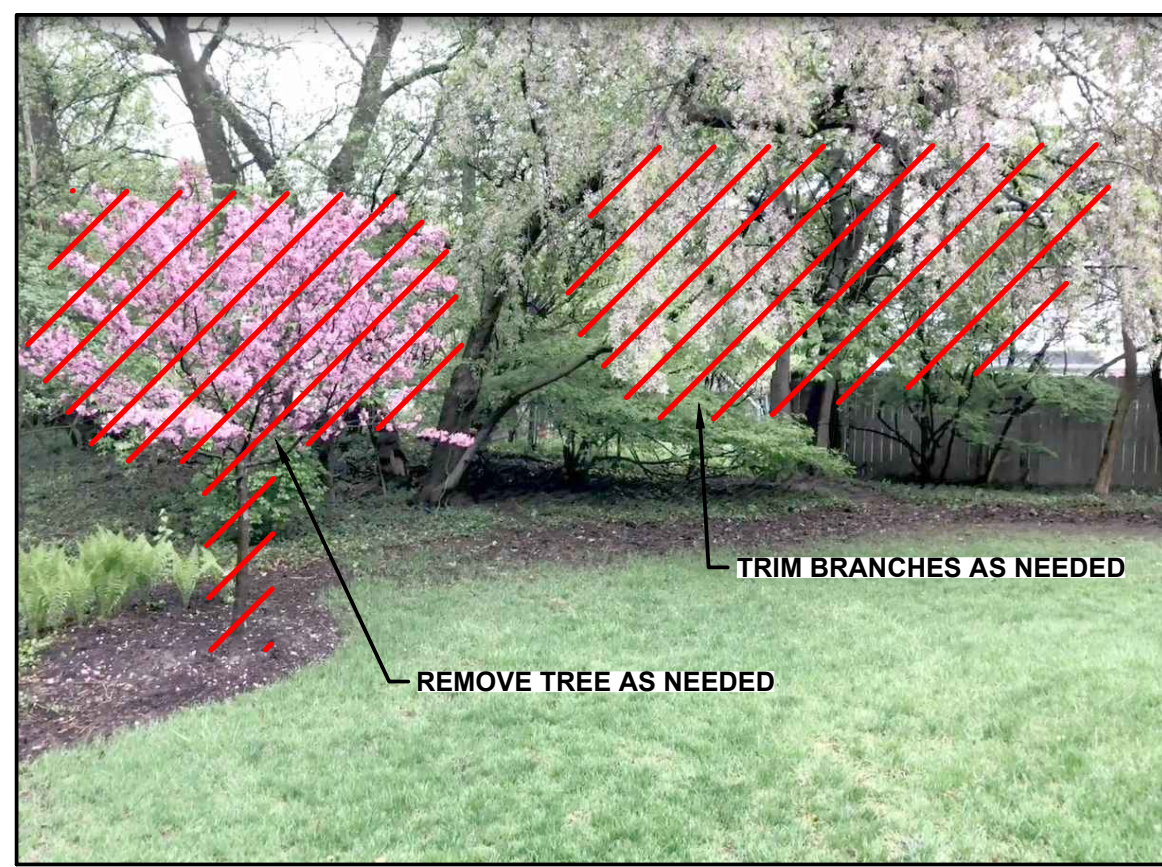
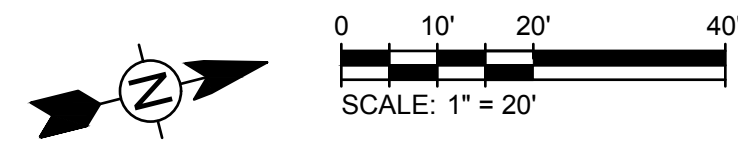
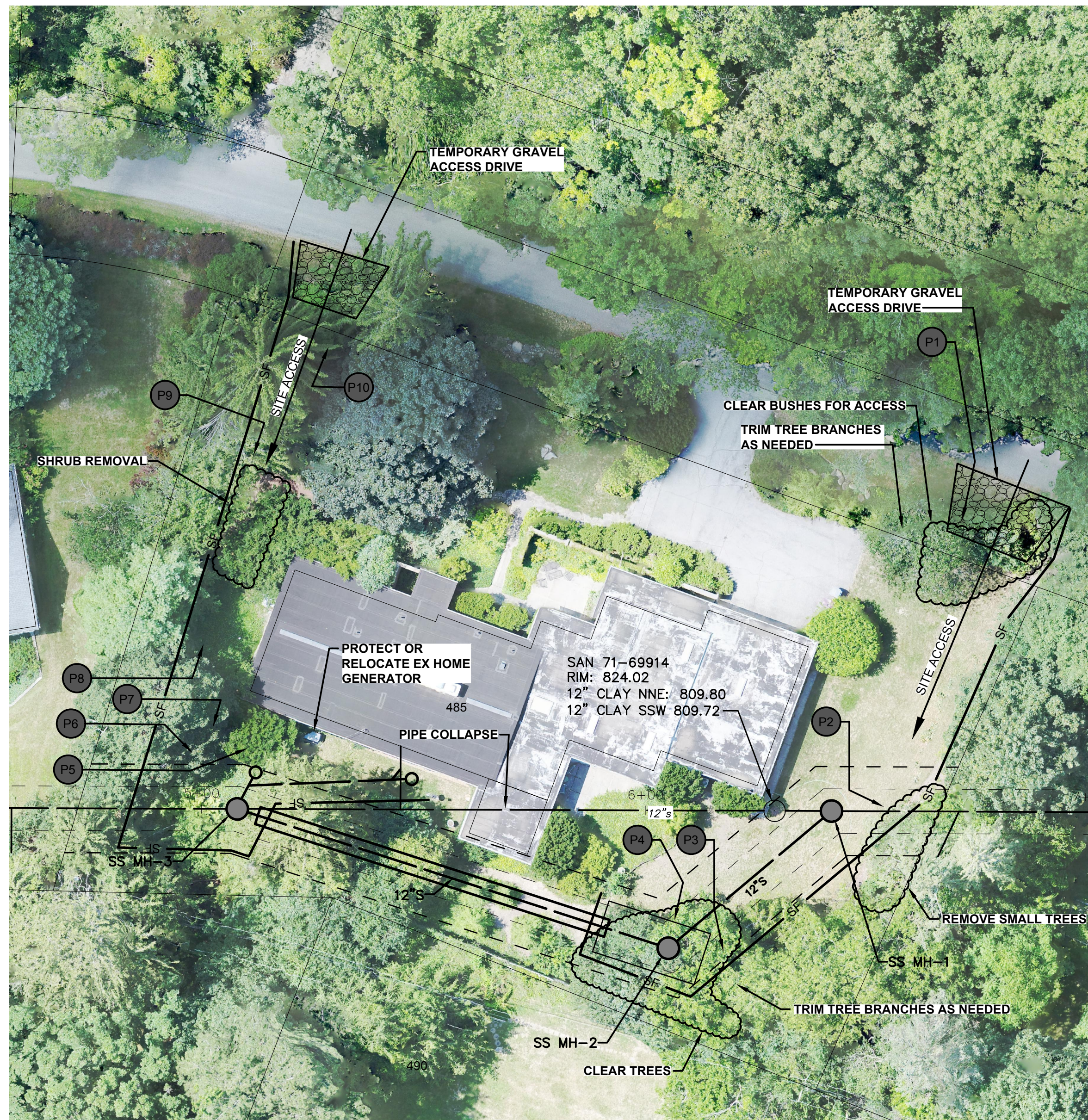
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CITY OF ANN ARBOR PUBLIC WORKS  
485 ROCK CREEK DR  
SANITARY SEWER REPAIR  
**SITE PLAN**

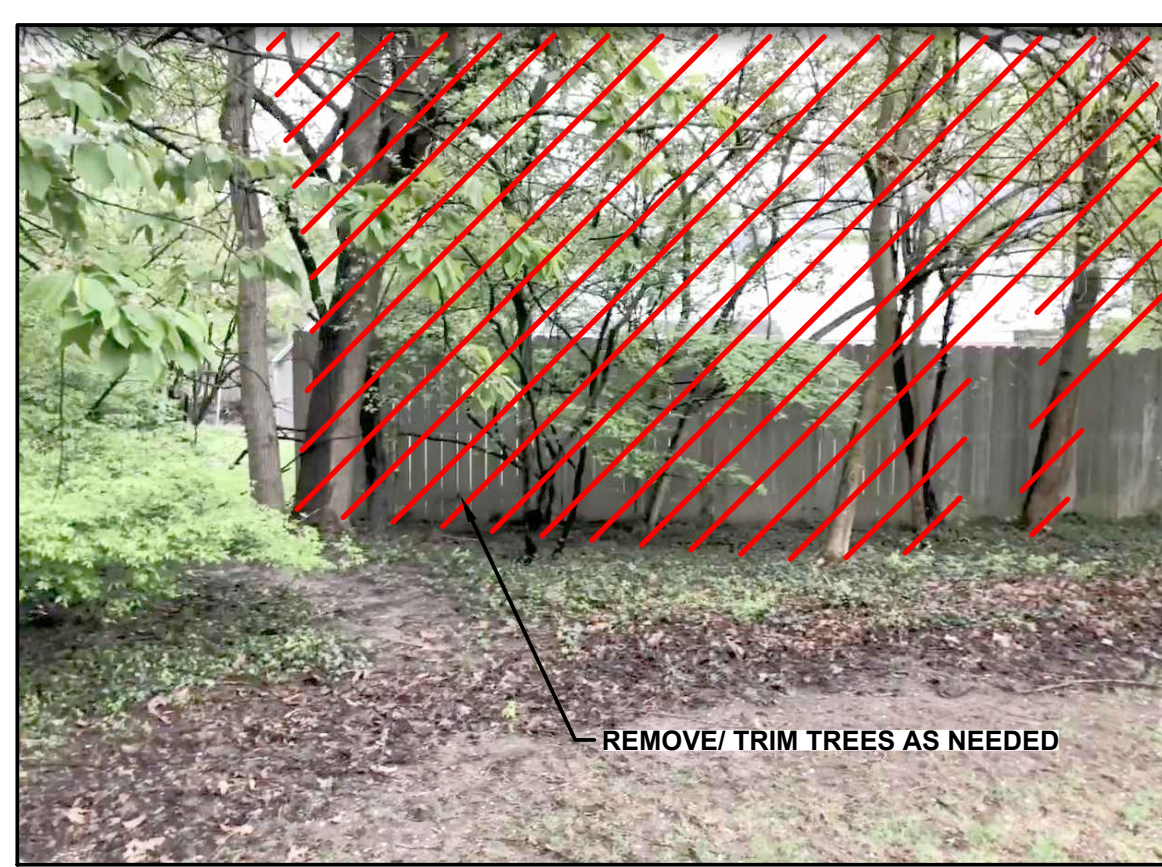
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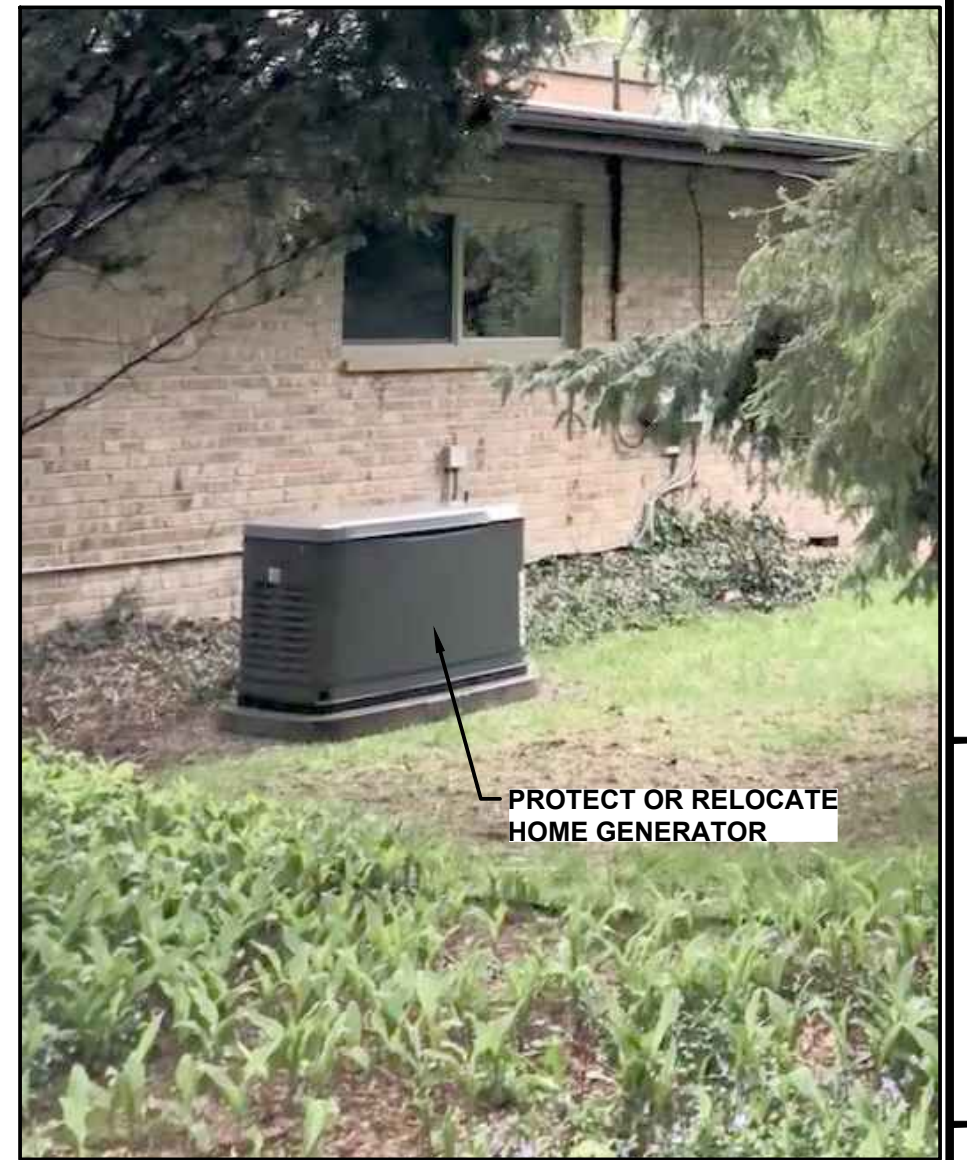
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P3 PICTURE - 3



P4 PICTURE - 4



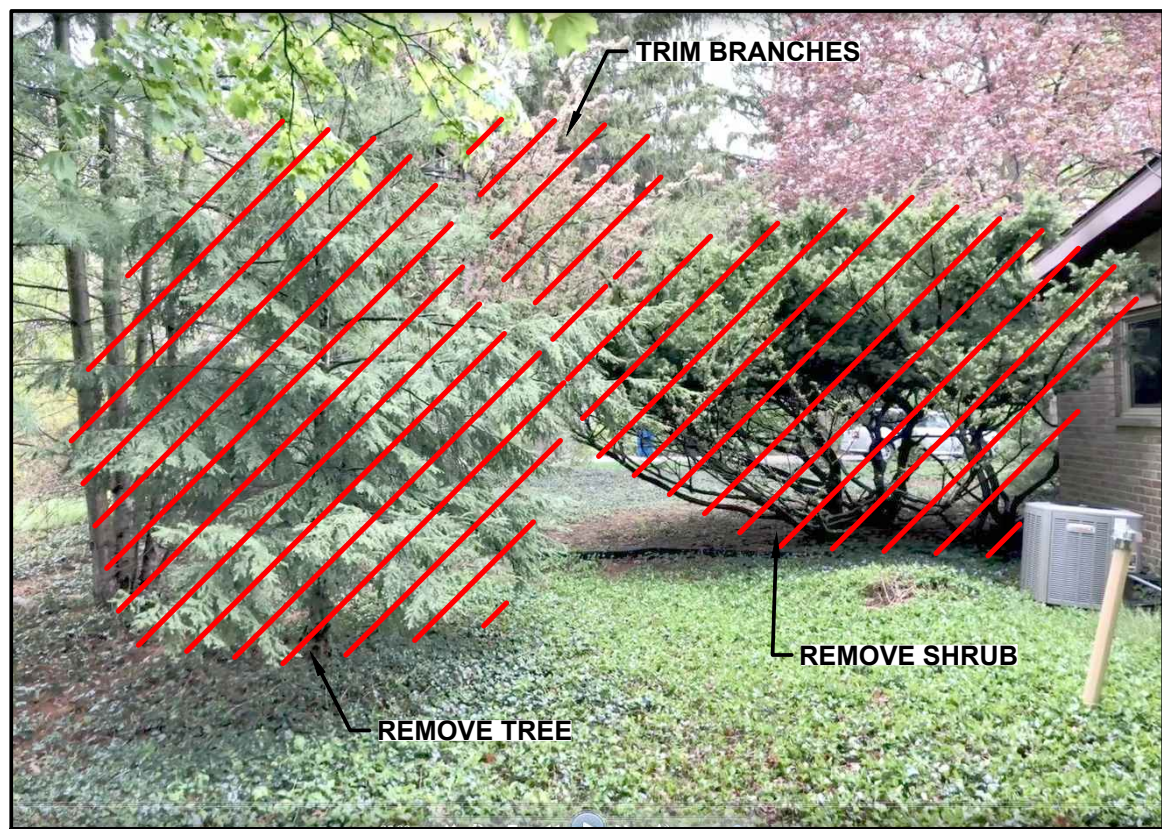
P5 PICTURE - 5



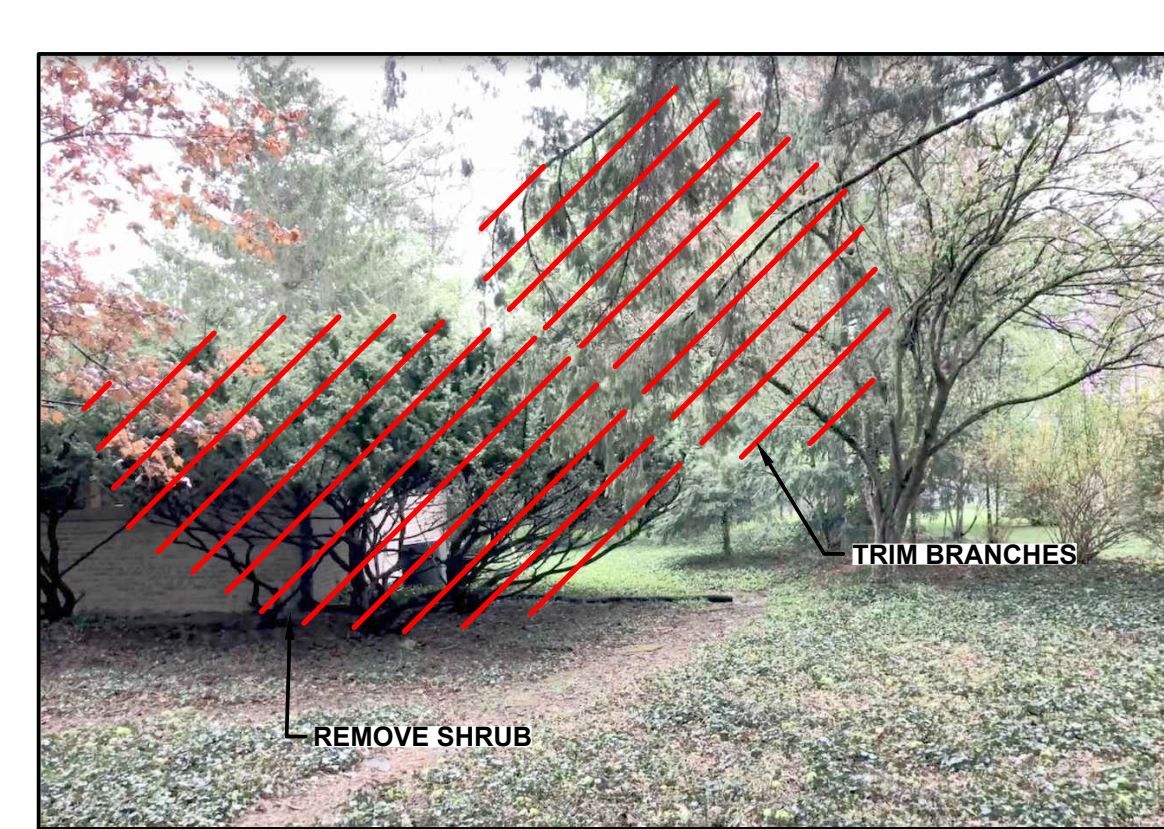
P6 PICTURE - 6



P7 PICTURE - 7



P8 PICTURE - 8



P9 PICTURE - 9



P1 PICTURE - 1



P2 PICTURE - 2



P10 PICTURE - 10

**NOTES:**

1. AREAS WHERE REMOVALS ARE INDICATED HAVE BEEN APPROVED THROUGH AN AGREEMENT BETWEEN THE CITY AND OWNER. ANY PROPOSED CHANGES TO THE ACCESS PLAN MUST BE APPROVED BY THE CITY.
2. PRIOR TO REMOVALS CONTRACTOR SHALL INVENTORY ALL SPECIFIC PLANTS AND SHRUBS TO BE REMOVED. PLANTS THAT CAN BE SAFELY TEMPORARILY RELOCATED MAY BE RE-PLANTED. ALL NEW REPLACEMENT PLANTINGS SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH AND PLANT. WORK TO BE PAID FOR BY THE PAY ITEM FOR LANDSCAPING. EXISTING GROUND SURFACE COVER OR PLANTINGS SHALL BE MATCHED UPON COMPLETION OF THE PROJECT. WORK TO BE PAID FOR BY THE PAY ITEM FOR RESTORATION, SPECIAL.
- 3.



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CITY OF ANN ARBOR  
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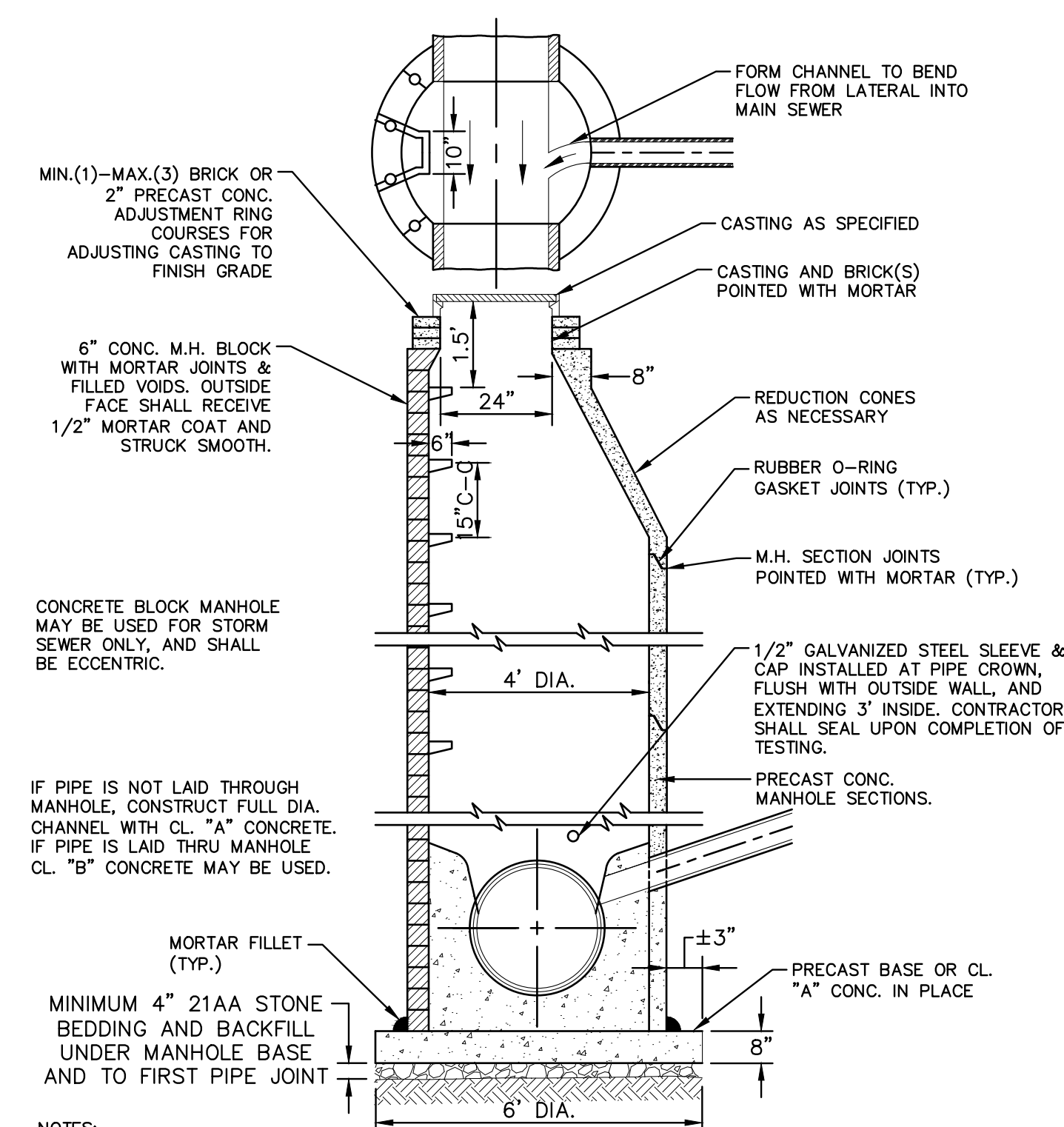
CITY OF ANN ARBOR PUBLIC WORKS  
485 ROCK CREEK DR  
SANITARY SEWER REPAIR  
**SITE ACCESS PLAN**

Project No.: 200-31537-17004  
Designed By: J. SIWEK  
Drawn By: S. GOTHA  
Checked By:



F  
E  
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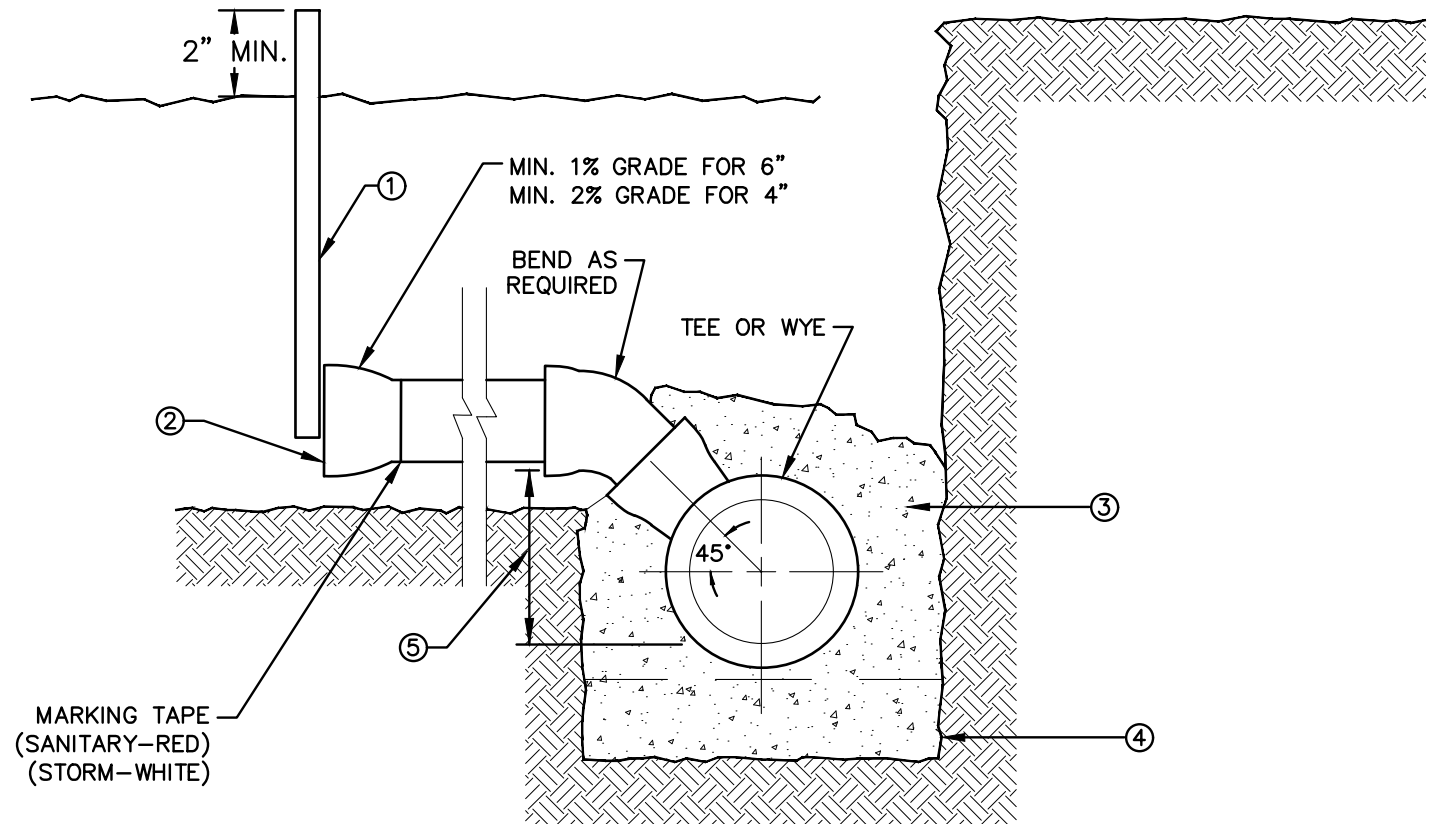
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- NOTES:
1. ALL SANITARY MANHOLES SHALL BE PRECAST CONCRETE.
  2. ALL MANHOLES MUST HAVE ECCENTRIC CONES - BOTH STORM AND SANITARY
  3. ALL SANITARY SEWER OPENINGS SHALL BE PRECAST WITH RUBBER BOOT CONNECTIONS.
  4. 2' SUMP REQUIRED ON ALL DRAINAGE STRUCTURES.

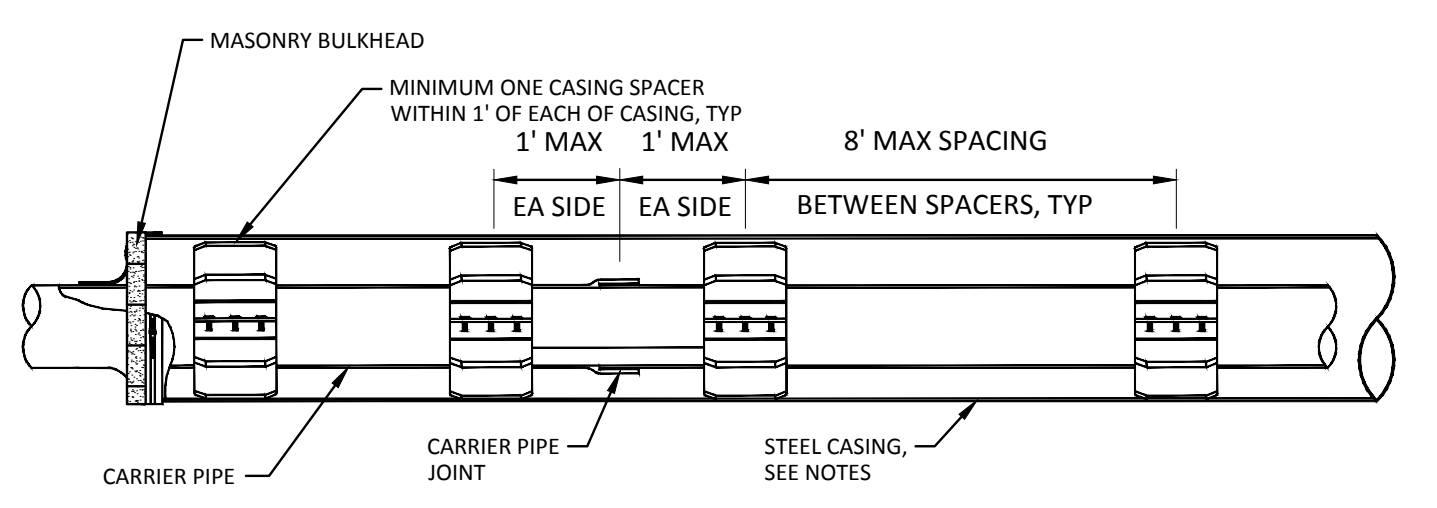
STANDARD MANHOLE (TYPE 1) SD-S-1

1. MIN. 2" X 2" CEDAR TREATED LUMBER, MARKED (SANITARY-RED., STORM-WHITE), SET VERTICALLY.
2. CAP WITH SOLVENT WELDED CAP OR PLUG
3. CLASS "X" CONCRETE TO EXTEND MIN. 1.0' BEYOND TEE OR WYE JOINTS. (D.I.P. TEE OR WYE NOT ENCASED)
4. CLASS II GRANULAR MATERIAL, COMPACTED TO 95% MAXIMUM DENSITY PER CITY OF ANN ARBOR STANDARDS.
5. 8"x 4" TEE INVERT - ADD 0.83' TO MAIN INVERT 8"x 6" TEE INVERT - ADD 0.87' TO MAIN INVERT



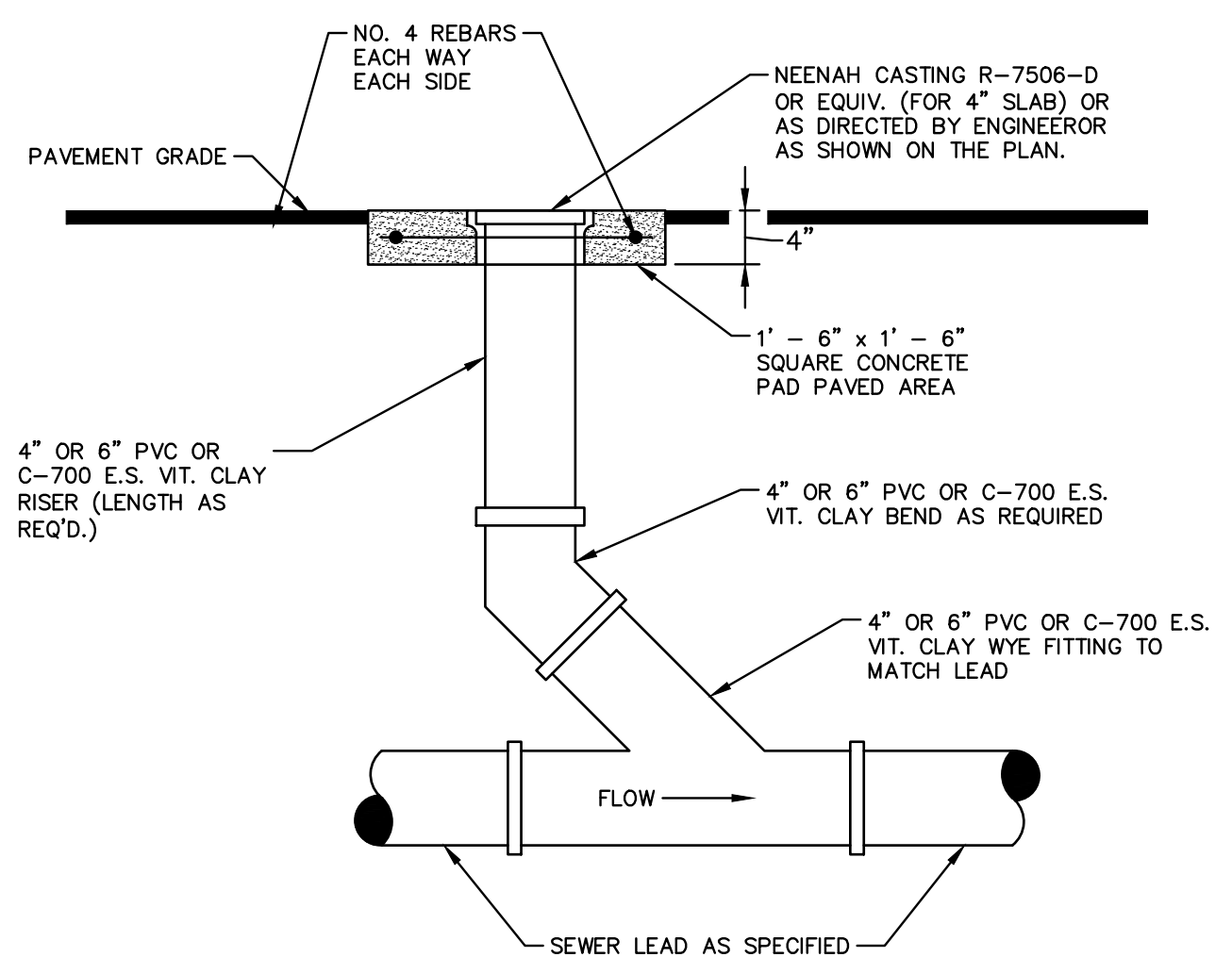
- NOTES:
- TAPS INTO EXISTING SEWERS SHALL BE DONE ONLY BY CITY UTILITIES DEPARTMENT.

SEWER CONNECTION SD-S-6



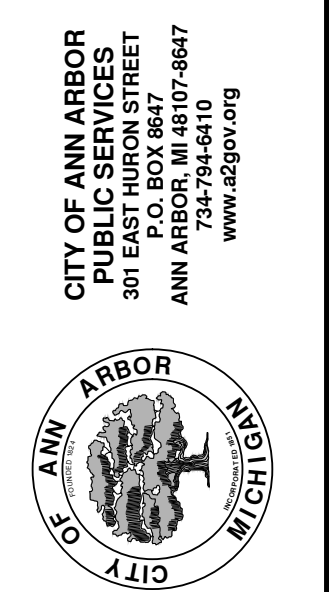
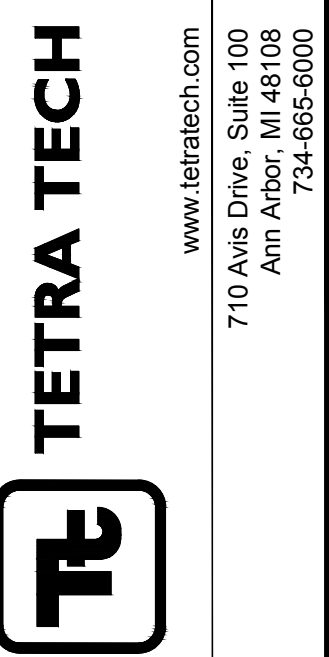
- NOTES:
1. THE AREA BETWEEN THE CASING PIPE AND WATER MAIN SHALL BE LEFT OPEN EXCEPT FOR SOLID BRICK MASONRY BULKHEAD AT EACH END, AND MANUFACTURED SPACERS WHEN REQUIRED.
  2. EACH JOINT OF CASING PIPE SHALL BE WELDED TOGETHER ALONG ENTIRE CIRCUMFERENCE OF PIPE.
  3. MANUFACTURED SPACERS SHALL BE USED.
  4. WOOD BLOCK SPACERS ARE NOT ALLOWED.
  5. BORING SHALL BE AT 90 DEGREES TO ALL CROSSINGS UNLESS OTHERWISE APPROVED. THE BORING OF THE HOLE AND INSTALLATION OF THE CASING PIPE SHALL BE SIMULTANEOUS. BORE HOLE DIAMETER SHALL ESSENTIALLY BE THE SAME AS THE OUTSIDE DIAMETER OF THE CASING PIPE TO BE INSTALLED.
  6. STEEL PIPE CASING SHALL BE SMOOTH STEEL PIPE FABRICATED IN SECTIONS IN ACCORDANCE WITH ASTM A53, TYPE E OR S, GRADE B OR ASTM A139, GRADE B. LENGTHS OF CASING PIPE SHALL BE AS LONG AS PRACTICAL FOR SITE CONDITIONS.
  7. JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM. JOINTS BETWEEN SECTIONS SHALL BE COMPLETELY WELDED TO THE PRECEDING SECTIONS. PRIOR TO WELDING JOINTS, THE CONTRACTOR SHALL ENSURE THAT BOTH ENDS OF THE CASING SECTIONS BEING WELDED ARE SQUARE.
  8. STEEL PIPE CASING SIZE AND WALL THICKNESS SHALL BE AS SPECIFIED IN ARTICLE I OF THESE STANDARDS. VERIFY CASING SIZES PRIOR TO ORDERING AND SIZING CASING INSULATORS.
  9. CASING SPACERS SHALL BE RESTRAINED-TYPE BOLTED SPACERS AND SHALL HAVE A MAXIMUM SPACING AS SHOWN, OR AS RECOMMENDED BY MANUFACTURER, WHICHEVER IS CLOSER.

TYPICAL PIPE CASING DETAIL



- NOTE:
- CONCRETE SLAB IS NOT REQUIRED IF CLEANOUT IN GREENBELT AREA.

SANITARY SEWER LEAD CLEANOUT SD-S-8



BY	DATE	DESCRIPTION

CITY OF ANN ARBOR PUBLIC WORKS

485 ROCK CREEK DR

**SANITARY SEWER REPAIR**

**DETAILS**

Project No.: 200-31537-17004

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