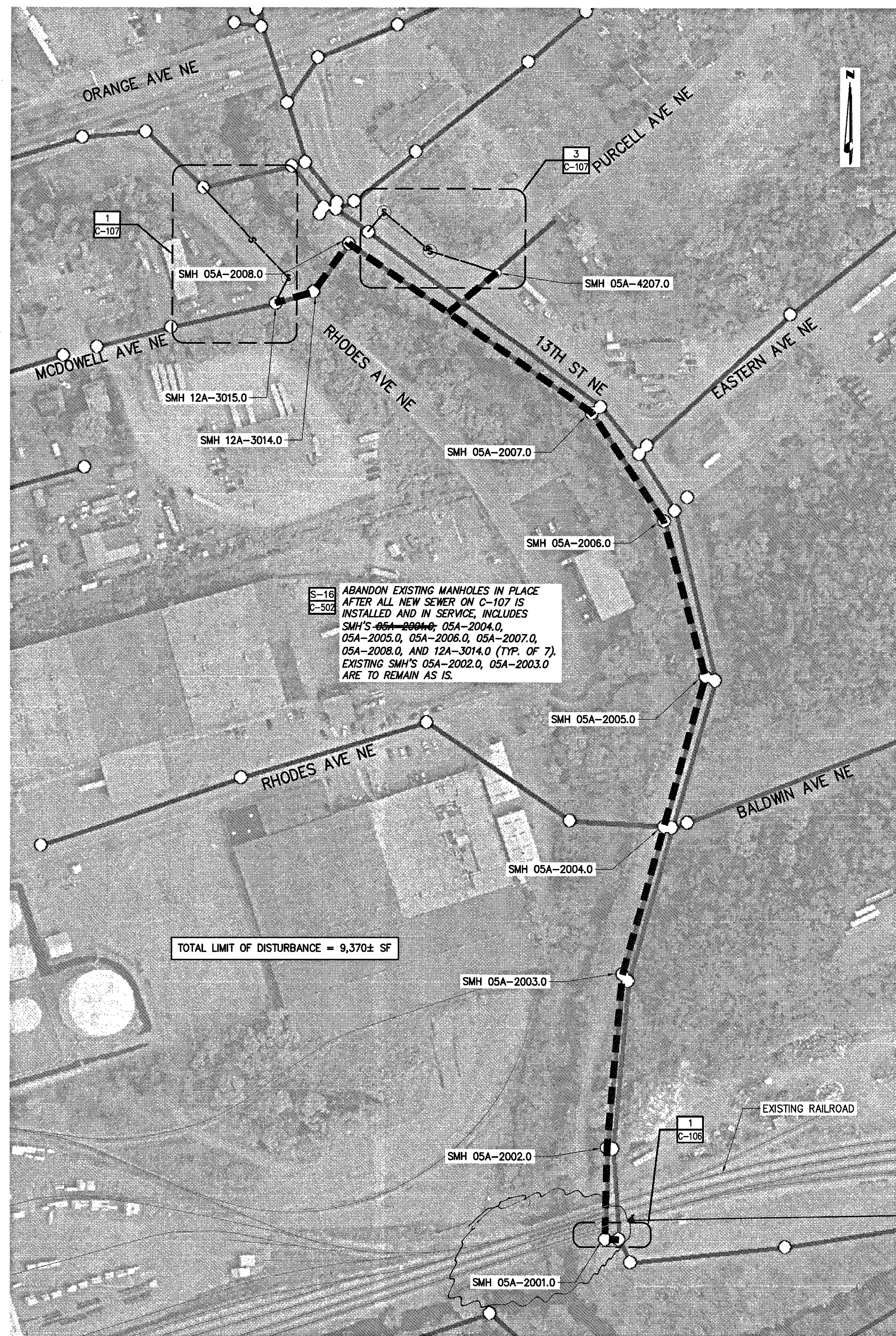
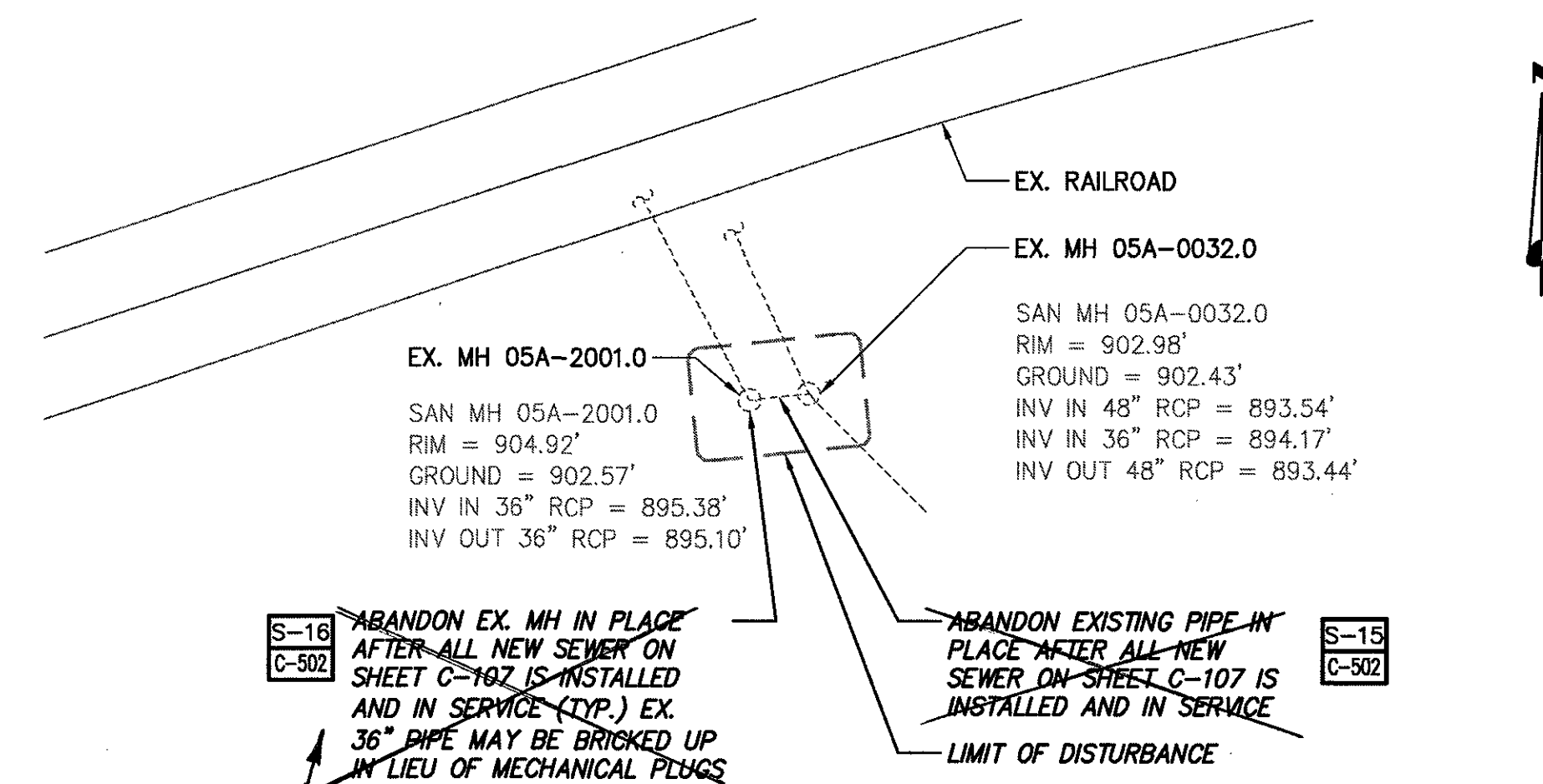


File: V:\PROJECTS\BVA\31237\CADD\C2-C106_31237.DWG
Saved: 10/14/2016 10:23:39 AM Plotted: 10/14/2016 10:44:39 AM Current User: Miller, Cory Last Saved By: 4646



OVERALL SITE PLAN
SCALE: 1" = 100'



1 SOUTHERN ABANDONMENT PLAN
SCALE: 1" = 30'

NOTES:

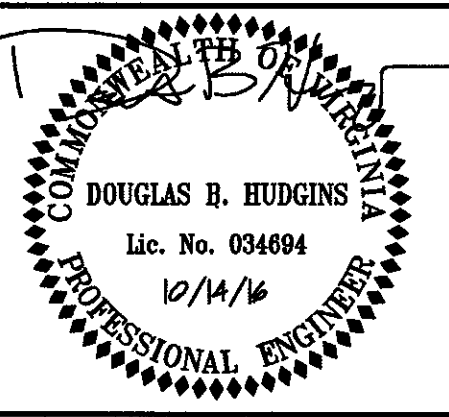
- ALL DISTURBED GRASS AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE FOLLOWING V.A. E&S HANDBOOK SECTIONS:
TOPSOILING - 3.30
PERMANENT SEEDING - 3.32
MULCHING - 3.35
- THIS WORK IS LOCATED IN NORFOLK SOUTHERN (NS) RIGHT OF WAY. CONTRACTOR SHALL CONTACT NS TO SCHEDULE MAINTENANCE WITHIN AND ACCESS ACROSS THE RIGHT OF WAY.
- BYPASS PUMPING WILL BE NECESSARY TO ABANDON THE LINE BETWEEN MH 05A-0032.0 AND 05A-2001.0. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND OPERATION OF THE BYPASS PUMPING SYSTEM. CONTRACTOR SHALL PROVIDE PUMP TYPE AND PUMP CURVE FOR EACH PUMP AS WELL AS A PLAN TO SECURE ALL PUMPS, PIPING, AND OTHER EQUIPMENT IN A MANNER TO MINIMIZE DAMAGE TO PROPERTY AS WELL AS ENSURING SYSTEM INTEGRITY. THE PLAN SHALL INCLUDE A BACKUP PUMP, WHICH AT A MINIMUM, WILL HAVE A PUMPING CAPACITY AS GREAT AS THAT OF THE LARGEST CAPACITY PUMP PROPOSED. THE BYPASS PUMPING PLAN SHALL BE SUBMITTED TO THE AUTHORITY FOR APPROVAL.
- THE CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THIS SYSTEM INCLUDING, BUT NOT LIMITED TO, MATERIAL AND EQUIPMENT COSTS; LABOR, MAINTENANCE, AND ENERGY COSTS; AND ANY COSTS CAUSED BY FAILURE OF THE SYSTEM. SYSTEM FAILURE MAY RESULT IN REMEDIATION, PUNITIVE (FINE), AND CONTRACT DELAY COSTS WHICH SHALL ALL BE AT NO ADDITIONAL EXPENSE TO THE AUTHORITY.
- BY-PASS PUMPING EQUIPMENT SHALL BE SIZED BASED UPON ONE OF THE FOLLOWING:
 - SIZE PUMPS TO CONVEY 150% OF THE PEAK FLOW OBSERVED DURING A TWO-WEEK MONITORING PERIOD WITH FLOWS RECORDED AT LEAST ONCE EVERY 15 MINUTES THROUGHOUT THE MONITORING PERIOD. FLOW MONITORING SHALL BE BY CONTRACTOR AT NO COST TO OWNER.
 - SIZE PUMPS TO CONVEY THE FULL PIPE CAPACITY OF THE LINE BEING BYPASSED. THE FULL PIPE CAPACITY SHALL BE BASED UPON THE FOLLOWING EQUATION, WHICH IS THE MANNING EQUATION WITH $N=0.014$ AND UNITS RESOLVED:
 $Q=14,800D^{2.67}S^{0.5}$, WHERE Q IS FLOW IN GALLONS PER MINUTE, D IS PIPE DIAMETER IN FEET, AND S IS PIPE SLOPE IN FT/FT.
- WHERE THE PRIMARY PUMP POWER IS DERIVED BY INTERNAL COMBUSTION, REFUELING SUPPLIES SHALL BE MAINTAINED ON SITE SUCH THAT EVERY FUEL RESERVOIR CAN BE FILLED ONCE AT ANY TIME. WHERE THE PRIMARY PUMP POWER IS ELECTRIC, EITHER A GENERATOR OR AN INTERNAL COMBUSTION BACK-UP PUMPING SYSTEM SHALL BE PROVIDED. THE GENERATOR SHALL BE FULLY FUELED AND READY TO RUN AT ALL TIMES. SUFFICIENT REFUELING SUPPLIES SHALL BE MAINTAINED ONSITE TO OPERATE THE GENERATOR FOR EIGHT HOURS.

NOTE: SMH 05A-2001.0 WAS NOT ABANDONED. EXISTING CONCRETE PIPE UPSTREAM OF SMH 05A-2001.0 WAS ABANDONED PER DETAIL S-15. MASONRY BULKHEAD WAS CONSTRUCTED AND GREEN-STREAK WATER STOP WAS APPLIED ON DOWNSTREAM SIDE OF BULKHEAD AND FINISHED WITH CONCRETE. WORK COMPLETED ON 03-16-17 & 03-17-17.
OTHER ABANDONMENT PERFORMED PER PLAN.

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CHA
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WESTERN VIRGINIA
WATER AUTHORITY



IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION ALLOWED BY FOLLOWING BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

WESTERN VIRGINIA
WATER AUTHORITY
CONTRACT 2 - FY16
SANITARY SEWER
REPLACEMENTS

No.	Submittal / Revision	App'd.	By	Date
	BID ISSUE		DBH	10/14/16

TINKER CREEK
INTERCEPTOR
ABANDONMENT -
OVERALL SITE PLAN

Designed By: JRM	Drawn By: GLM	Checked By: DBH
Issue Date: 10-14-16	Project No: 31237	Scale: AS NOTED

Drawing No.:

C-106