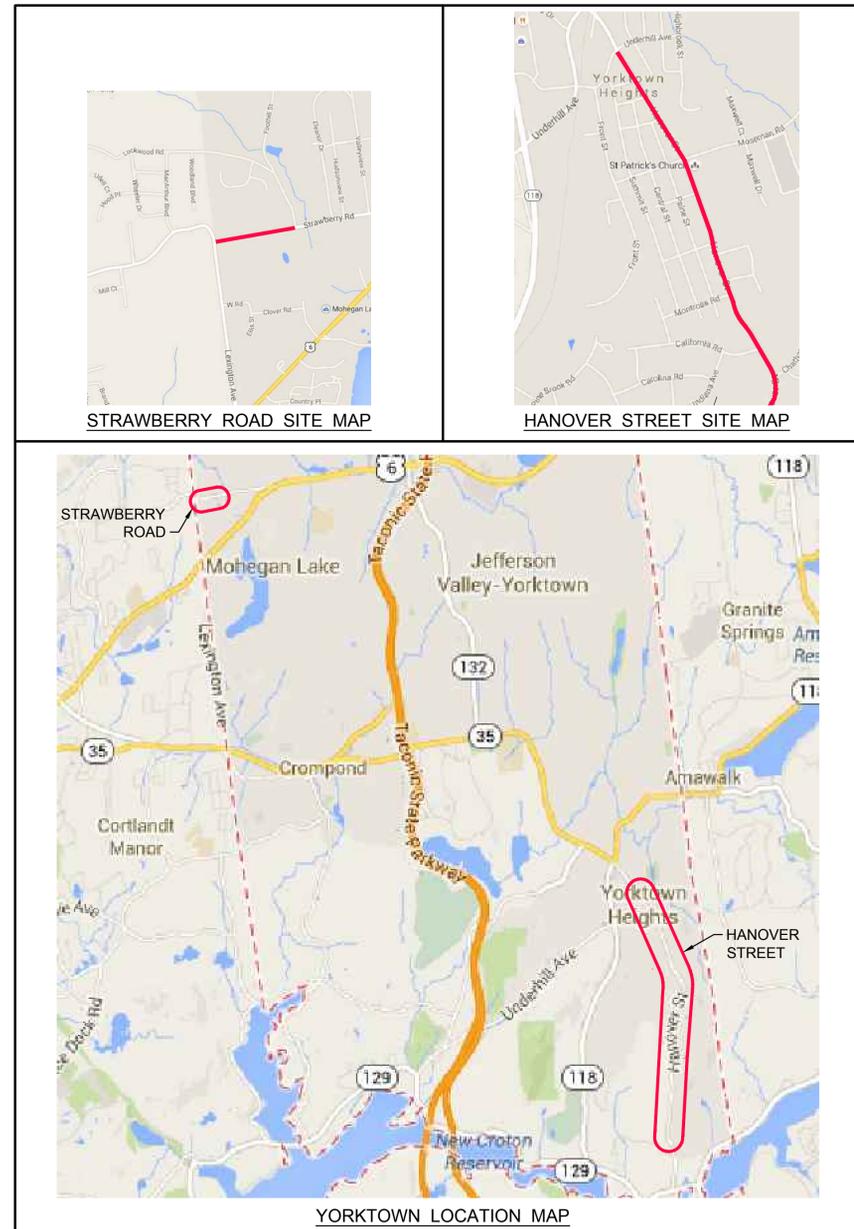


TOWN OF YORKTOWN, NEW YORK CLEANING AND CEMENT MORTAR LINING OF WATER MAIN ALONG STRAWBERRY ROAD AND HANOVER STREET

**WATER SUPERINTENDENT
KEN RUNDLE**

**ASSISTANT SUPERINTENDENT
PAUL VASILLO**

JUNE 2022



LOCATION MAPS
N.T.S.

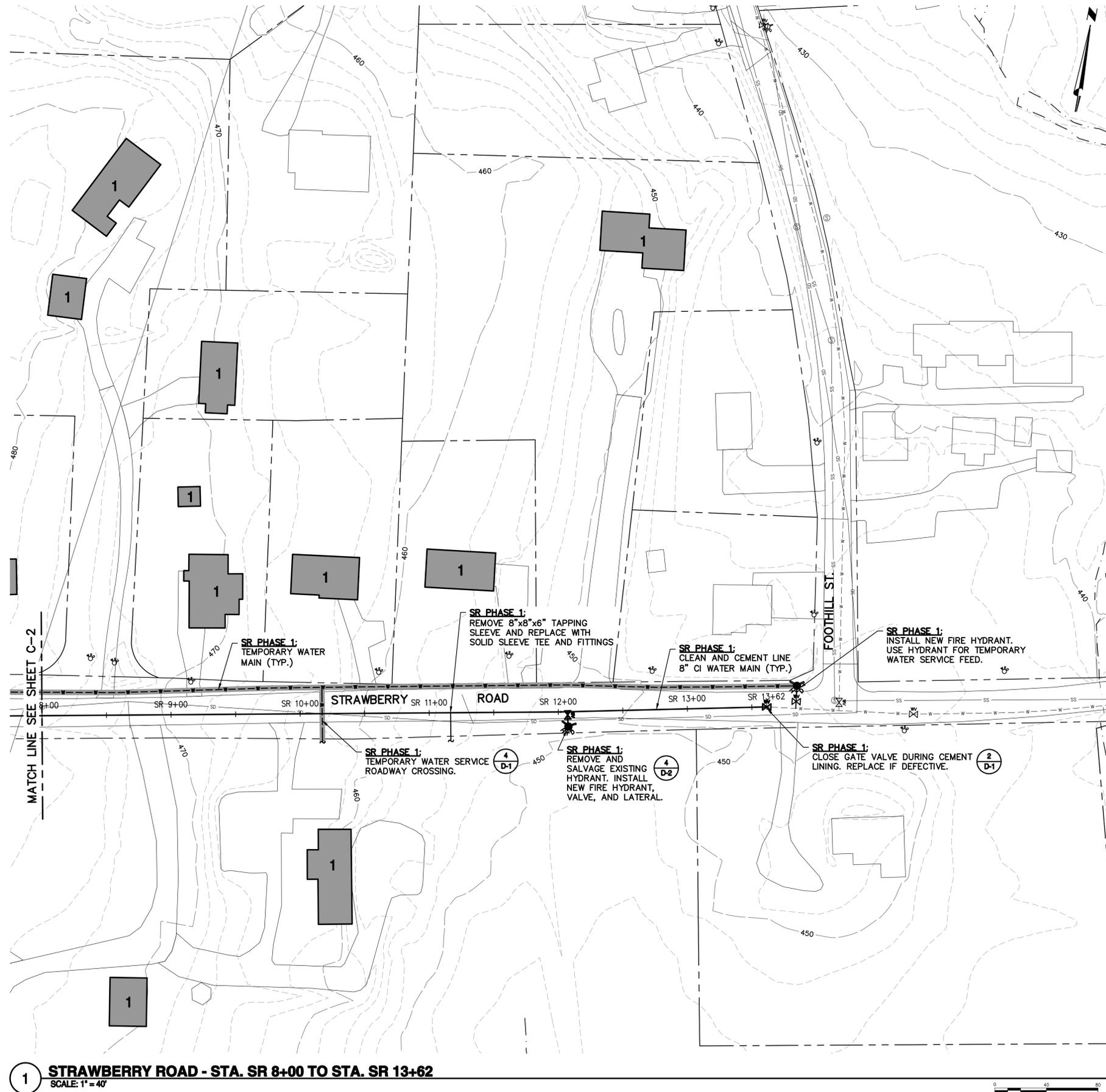
Sheet List Table				
Sheet No.	Sheet Title	Sheet	of	Total
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C-1	OVERALL LOCATION MAP - STRAWBERRY ROAD AND HANOVER STREET AREA	3	of	18
C-2	STRAWBERRY ROAD - STA. SR 0+00 TO STA. SR 8+00	4	of	18
C-3	STRAWBERRY ROAD - STA. SR 8+00 TO STA. SR 13+62	5	of	18
C-4	HANOVER STREET - STA. HS 0+00 TO STA. HS 8+42	6	of	18
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T-1	TRAFFIC MAINTENANCE AND PROTECTION	15	of	18
T-2	TRAFFIC MAINTENANCE AND PROTECTION	16	of	18
T-3	TRAFFIC MAINTENANCE AND PROTECTION	17	of	18
T-4	TRAFFIC MAINTENANCE AND PROTECTION	18	of	18



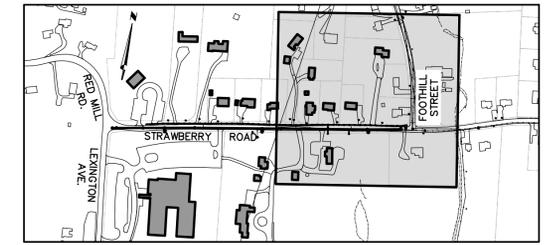
Weston & Sampson Engineers, PE, LS, LA, PC
100 South Bedford Road, Suite 340
Mount Kisco, NY 10549
914.200.1077 800.SAMPSON
www.westonandsampson.com



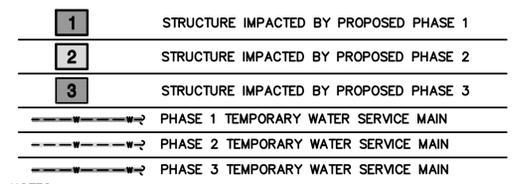
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- NOTES:**
1. NORMAL WATER MAIN OPERATING PRESSURE FOR STRAWBERRY LANE IS 115 PSI.
 2. INSERTION GATE VALVE TO BE RESTRAINED.
 3. ALL FITTINGS ALONG WATER MAIN TO BE CLEANED AND RELINED SHALL BE REMOVED AND REPLACED UPON COMPLETION OF WORK.
 4. ALL FITTINGS AND VALVES TO BE REMOVED AT MECHANICAL JOINTS WHENEVER POSSIBLE. IF FITTING OR VALVE NEEDS TO BE REMOVED BY CUTTING, SEE APPROPRIATE DETAILS ON SHEET D-1 AND SHEET D-2.



KEY PLAN - STRAWBERRY ROAD



- NOTES:**
1. BASED ON AVAILABLE RECORDS, BUILDINGS SHOWN WITH GRAY HATCH ARE BELIEVED TO BE CONNECTED TO A WATER MAIN THAT IS TO BE CLEANED AND CEMENT LINED. THE CONTRACTOR IS TO VERIFY ALL BUILDINGS THAT ARE CONNECTED TO WATER MAIN THAT IS TO BE CLEANED AND RELINED AND IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE TO ALL AFFECTED BUILDINGS FOR THE ENTIRE DURATION OF THE WORK.
 2. TEMPORARY WATER SERVICE MAIN CONNECTION LOCATIONS SHOWN ON THE DRAWINGS IN A PHASED APPROACH. CONTRACTOR TO PROVIDE A DETAILED PLAN PROPOSED STREET CROSSINGS AND CONNECTIONS BETWEEN CONNECTION LOCATIONS FOR APPROVAL OF THE ENGINEER. TEMPORARY SERVICE ROUTING SHOWN IS SCHEMATIC ONLY. ACTUAL LAYOUT SHALL BE REFLECTED IN CONTRACTOR'S DETAILED PLAN.

1 STRAWBERRY ROAD - STA. SR 8+00 TO STA. SR 13+62
SCALE: 1" = 40'



\\ves\apps\WSE\Projects\NY\Yorktown, NY\2246006 - Cement Lining of Water Main\CAD\WAS\C-3 STRAWBERRY ROAD - STA. SR 8+00 TO STA. SR 13+62.dwg

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6/22	JMZ	CWS	JFB	RELEASED FOR BIDDING	
No.	Date	Dr. By	Ch. By	App. By	Description
		A	P	R	O
		V	E	D	
					DATE
					REGISTERED PROFESSIONAL ENGINEER



TOWN OF YORKTOWN, NEW YORK

CLEANING AND CEMENT MORTAR LINING OF WATER MAIN

STRAWBERRY ROAD - STA. SR 8+00 TO STA. SR 13+62

CADD NO. C-3 AS NOTED

CONTRACT: ENG21-0417

SCALE: AS NOTED

DR. BY: JMZ

CHK. BY: JMZ

APP. BY: JFB

DATE: _____

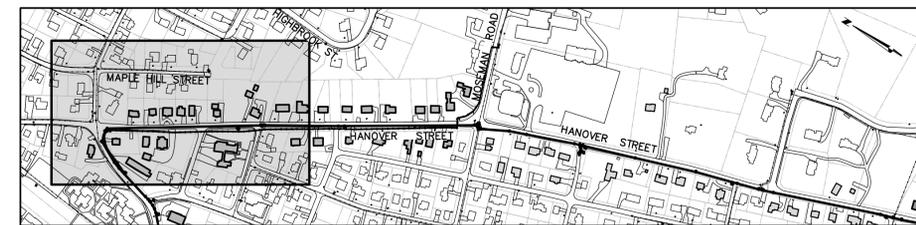
NOTES:

1. NORMAL WATER MAIN OPERATING PRESSURE RANGES FROM 100 PSI TO 115 PSI.
2. INSERTION GATE VALVE TO BE RESTRAINED.
3. ALL FITTINGS ALONG WATER MAIN TO BE CLEANED AND RELINED SHALL BE REMOVED AND REPLACED UPON COMPLETION OF WORK.
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5. PROPOSED HS PHASE 1: STA. HS 0+00 TO STA. HS 17+83.

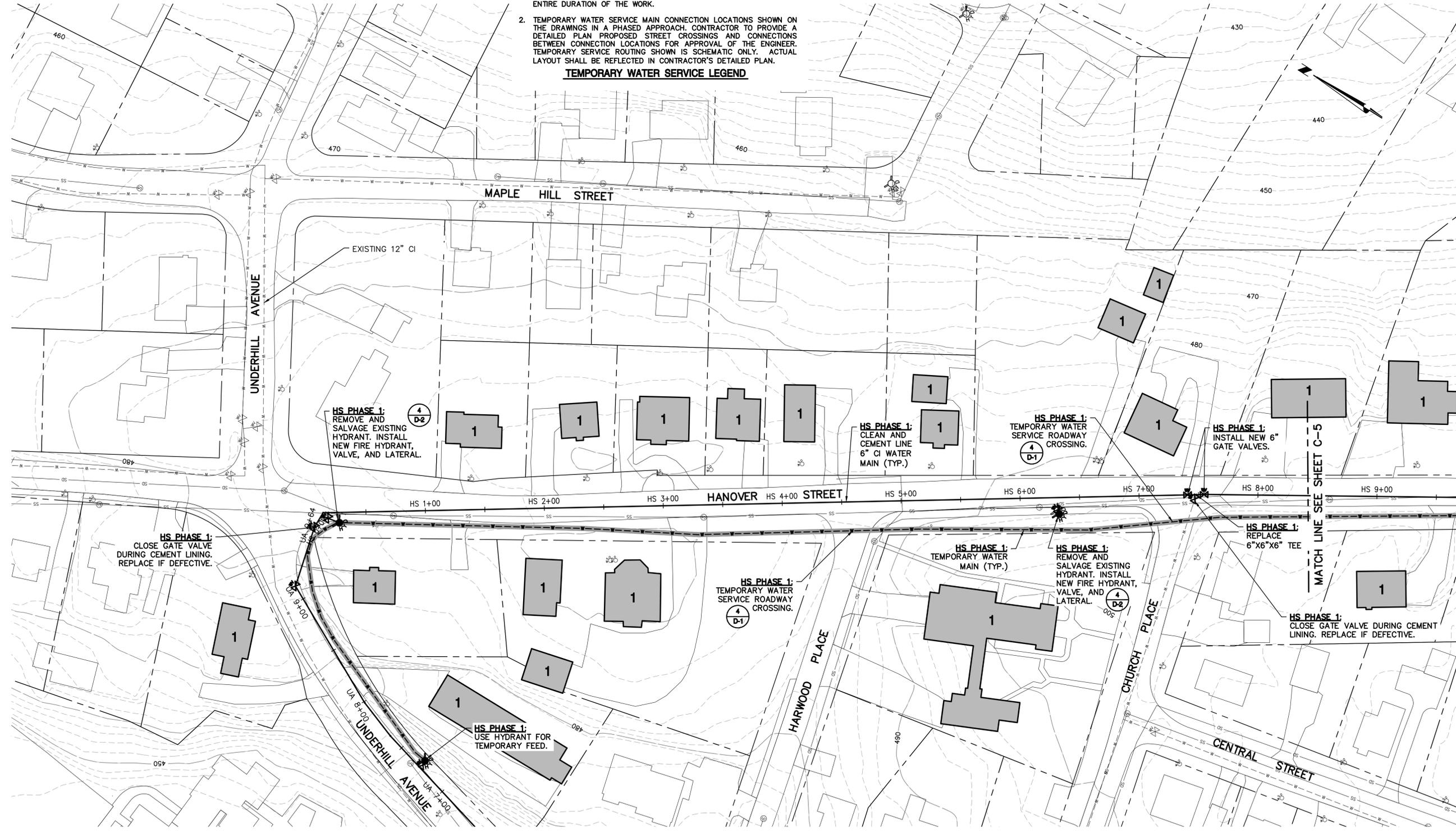
- 1** STRUCTURE IMPACTED BY PROPOSED PHASE 1
- 2** STRUCTURE IMPACTED BY PROPOSED PHASE 2
- 3** STRUCTURE IMPACTED BY PROPOSED PHASE 3
- PHASE 1 TEMPORARY WATER SERVICE MAIN
- PHASE 2 TEMPORARY WATER SERVICE MAIN
- PHASE 3 TEMPORARY WATER SERVICE MAIN

- NOTES:**
1. BASED ON AVAILABLE RECORDS, BUILDINGS SHOWN WITH GRAY HATCH ARE BELIEVED TO BE CONNECTED TO A WATER MAIN THAT IS TO BE CLEANED AND CEMENT LINED. THE CONTRACTOR IS TO VERIFY ALL BUILDINGS THAT ARE CONNECTED TO WATER MAIN THAT IS TO BE CLEANED AND RELINED AND IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE TO ALL AFFECTED BUILDINGS FOR THE ENTIRE DURATION OF THE WORK.
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TEMPORARY WATER SERVICE LEGEND



KEY PLAN - HANOVER STREET

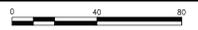


1 HANOVER STREET - STA. HS 0+00 TO STA. HS 8+42
SCALE: 1" = 40'

\\saw3\scad\WSE\Projects\NY\Yorktown, NY\22440006_Cement Lining of Water Main\CAD\WAS\C-4_HANOVER STREET - STA. HS 0+00 TO STA. HS 8+42.dwg

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6/22		JMZ	CWS	JFB	RELEASED FOR BIDDING
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					D

REGISTERED PROFESSIONAL ENGINEER DATE



TOWN OF YORKTOWN, NEW YORK
CLEANING AND CEMENT MORTAR LINING OF WATER MAIN
HANOVER STREET - STA. HS 0+00 TO STA. HS 8+42
CADD NO. C-4 AS NOTED
CONTRACT ENG21-0417
JOB NO. ENG21-0417
DR. BY: JMZ
CHK. BY: JMZ
APP. BY: JFB

- 1 STRUCTURE IMPACTED BY PROPOSED PHASE 1
- 2 STRUCTURE IMPACTED BY PROPOSED PHASE 2
- 3 STRUCTURE IMPACTED BY PROPOSED PHASE 3
- PHASE 1 TEMPORARY WATER SERVICE MAIN
- PHASE 2 TEMPORARY WATER SERVICE MAIN
- PHASE 3 TEMPORARY WATER SERVICE MAIN

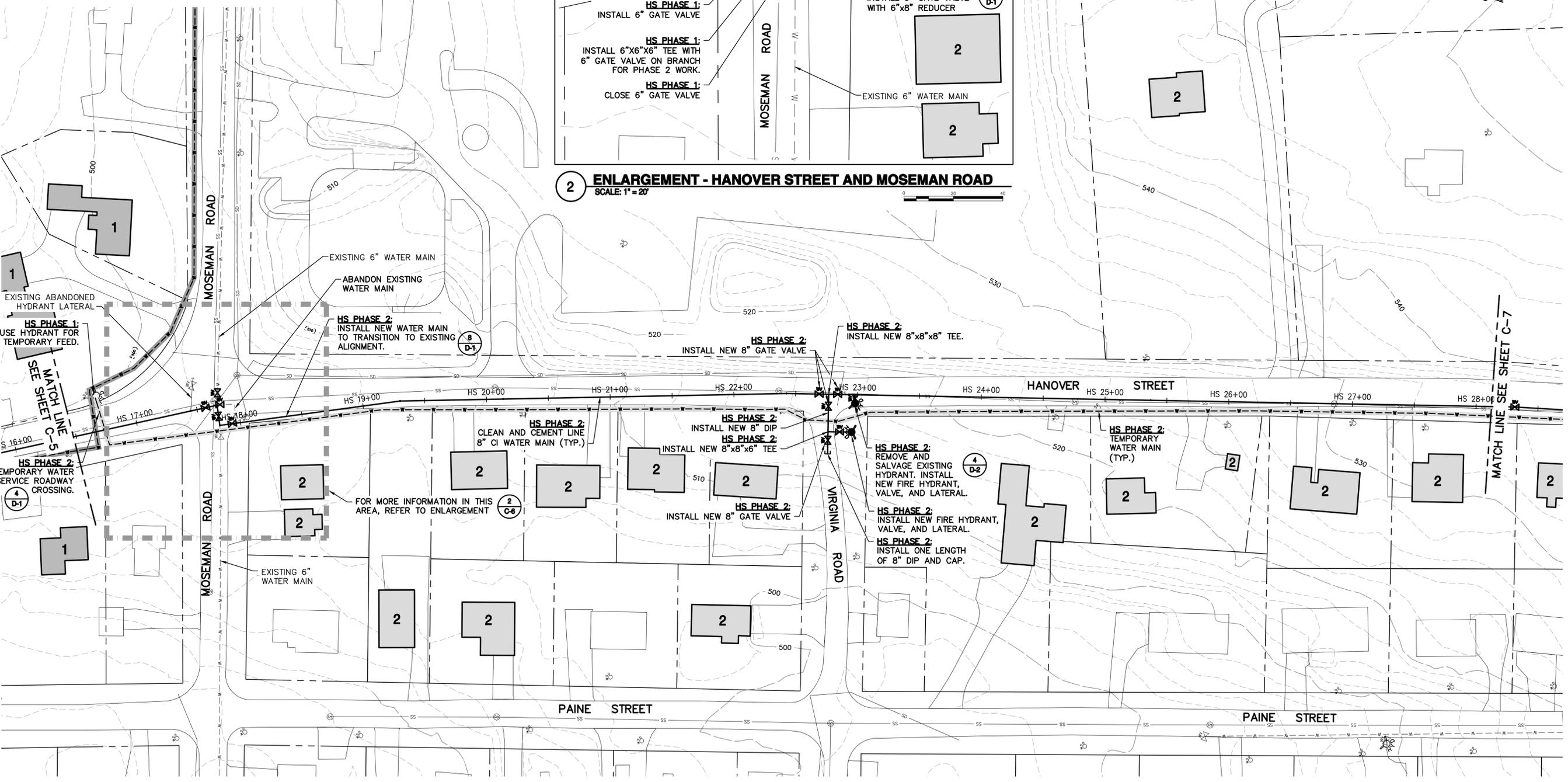
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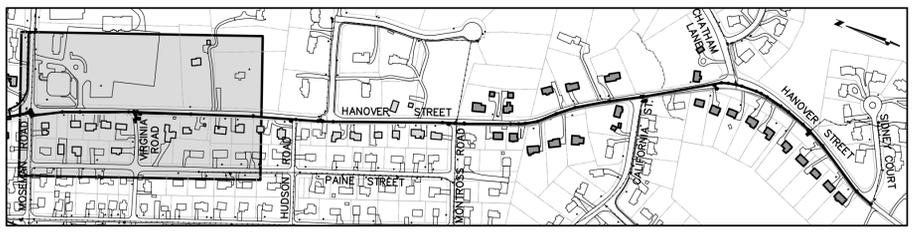
NOTES:

- NORMAL WATER MAIN OPERATING PRESSURE RANGES FROM 70 PSI TO 105 PSI.
- INSERTION GATE VALVE TO BE RESTRAINED.
- ALL FITTINGS ALONG WATER MAIN TO BE CLEANED AND RELINED SHALL BE REMOVED AND REPLACED UPON COMPLETION OF WORK.
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- PROPOSED HS PHASE 1: STA. HS 0+00 TO STA. HS 17+83. PROPOSED HS PHASE 2: STA. HS 17+83 TO STA. HS 37+87.

TEMPORARY WATER SERVICE LEGEND



2 ENLARGEMENT - HANOVER STREET AND MOSEMAN ROAD
SCALE: 1" = 20'



KEY PLAN - HANOVER STREET

1 HANOVER STREET - STA. HS 16+48 TO STA. HS 28+12
SCALE: 1" = 40'

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No.	Date	Dr. By	Ch. By	App. By
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NOTES:

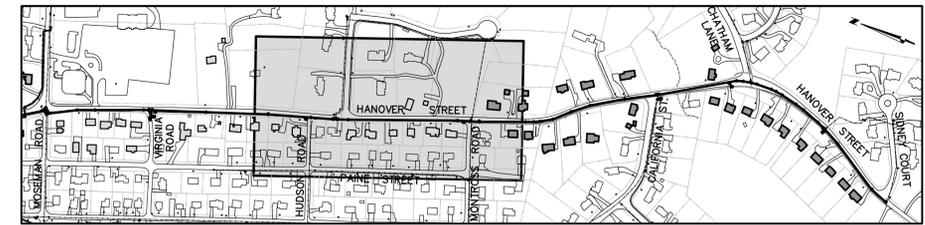
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5. PROPOSED HS PHASE 2: STA. HS 17+83 TO STA. HS 37+87. PROPOSED HS PHASE 3: STA. HS 37+87 TO STA. HS 59+98.

- | | |
|---|--|
| 1 | STRUCTURE IMPACTED BY PROPOSED PHASE 1 |
| 2 | STRUCTURE IMPACTED BY PROPOSED PHASE 2 |
| 3 | STRUCTURE IMPACTED BY PROPOSED PHASE 3 |
| -----> PHASE 1 TEMPORARY WATER SERVICE MAIN | |
| -----> PHASE 2 TEMPORARY WATER SERVICE MAIN | |
| -----> PHASE 3 TEMPORARY WATER SERVICE MAIN | |

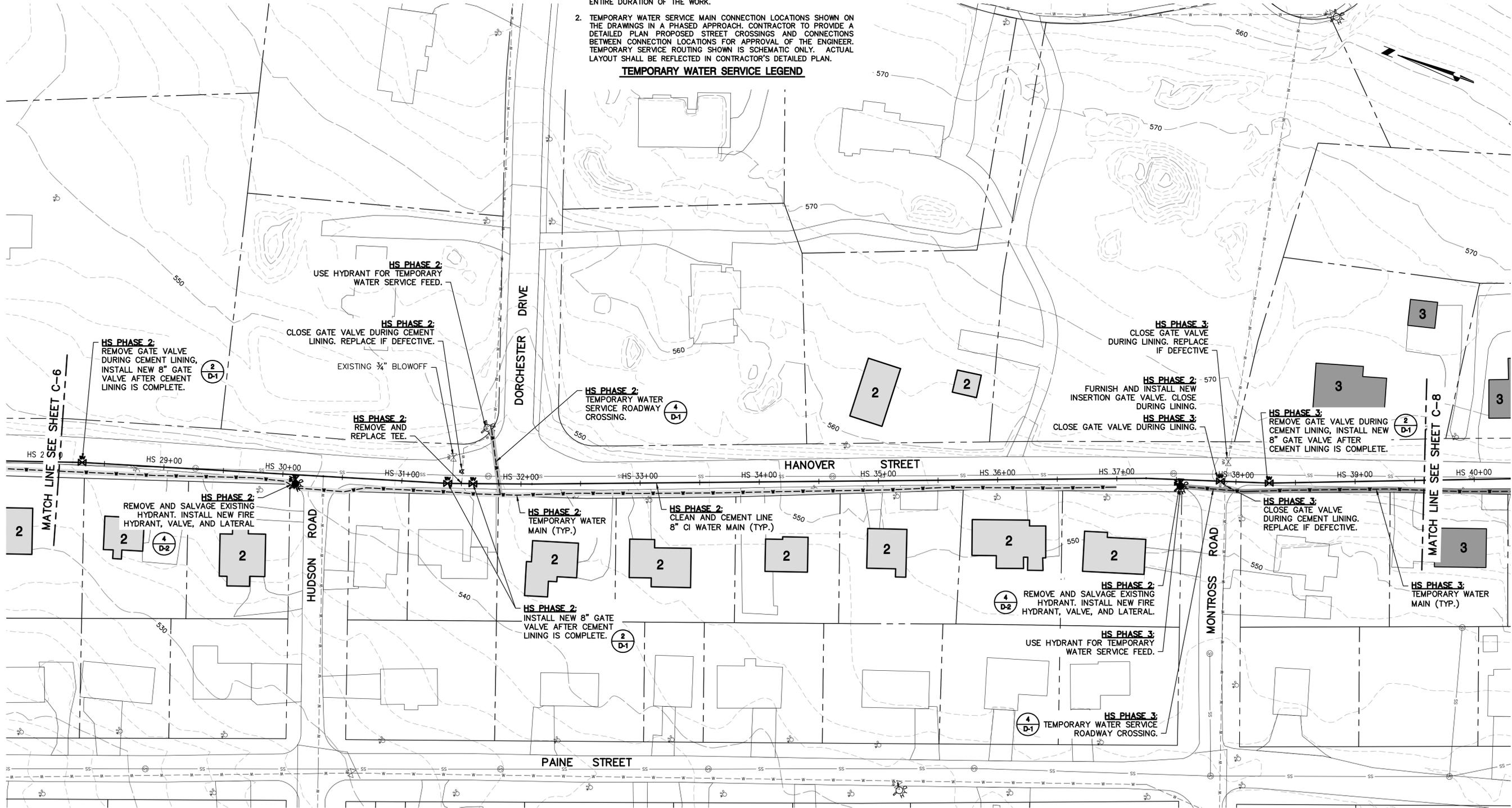
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TEMPORARY WATER SERVICE LEGEND



KEY PLAN - HANOVER STREET



1 HANOVER STREET - STA. HS 28+12 TO STA. HS 39+58
SCALE: 1" = 40'

\\weston\ssm\Projects\NY\Yorktown, NY\2246006 - Cement Lining of Water Main\CAD\WAS\7 - HANOVER STREET - STA. HS 28+12 TO STA. HS 39+58.dwg

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		V	E	D	
				REGISTERED PROFESSIONAL ENGINEER	DATE



TOWN OF YORKTOWN, NEW YORK
CLEANING AND CEMENT MORTAR LINING OF WATER MAIN
HANOVER STREET - STA. HS 28+12 TO STA. HS 39+58
CADD NO. C-7 AS NOTED
CONTRACT ENG21-0417
JOB NO. ENG21-0417
SCALE: AS NOTED
DR. BY: JMZ
CHK. BY: JMZ
APP. BY: JFB

NOTES:

1. NORMAL WATER MAIN OPERATING PRESSURE RANGES FROM 70 PSI TO 105 PSI.
2. ALL FITTINGS ALONG WATER MAIN TO BE CLEANED AND RELINED SHALL BE REMOVED AND REPLACED UPON COMPLETION OF WORK.
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4. PROPOSED HS PHASE 3: STA. HS 37+87 TO STA. HS 59+98.



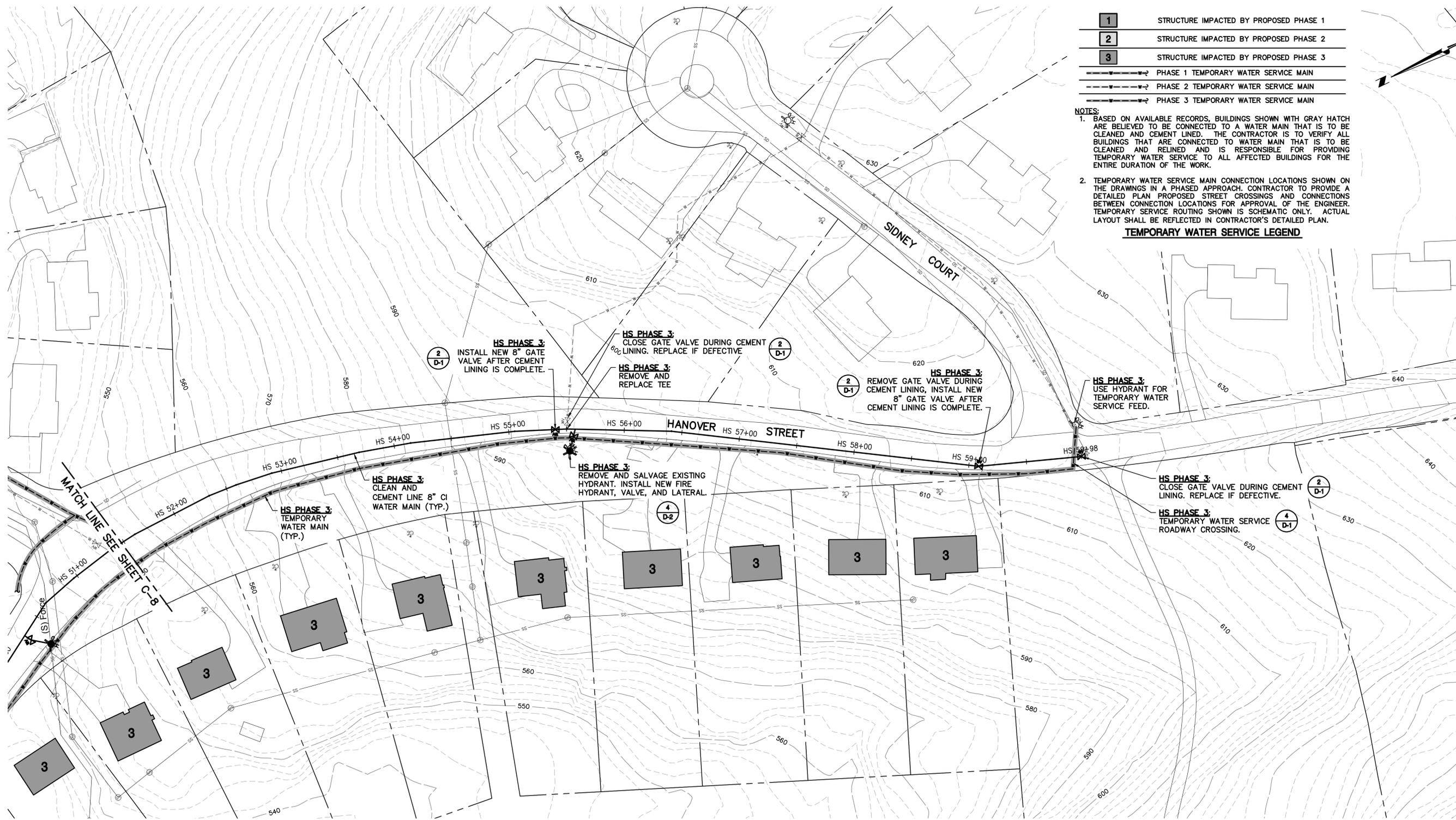
KEY PLAN - HANOVER STREET

- 1** STRUCTURE IMPACTED BY PROPOSED PHASE 1
- 2** STRUCTURE IMPACTED BY PROPOSED PHASE 2
- 3** STRUCTURE IMPACTED BY PROPOSED PHASE 3
- PHASE 1 TEMPORARY WATER SERVICE MAIN
- PHASE 2 TEMPORARY WATER SERVICE MAIN
- PHASE 3 TEMPORARY WATER SERVICE MAIN

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TEMPORARY WATER SERVICE LEGEND



1 HANOVER STREET - STA. HS 51+48 TO STA. HS 59+98
SCALE: 1" = 40'

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TOWN OF YORKTOWN, NEW YORK
CLEANING AND CEMENT MORTAR LINING OF WATER MAIN
HANOVER STREET - STA. HS 51+48 TO STA. HS 59+98
CADD NO. C-9 AS NOTED
CONTRACT: ENG21-047
JOB NO. ENG21-047
DR. BY: JMZ
CHK. BY: CWS
APP. BY: JFB

SUGGESTED EROSION CONTROL CONSTRUCTION SCHEDULE:

- FLAG THE GRADING LIMITS AND MARK A 10' BUFFER AREA BEYOND THE GRADING LIMITS FOR PROTECTION.
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE AT APPROXIMATE LOCATION OF DRIVEWAY IF DRIVEWAY STONE HAS NOT YET BEEN PLACED.
- INSTALL PROTECTIVE MEASURES AROUND TREES TO BE RETAINED WITHIN GRADING LIMITS.
- INSTALL BRIGHTLY COLORED CONSTRUCTION FENCE ALONG ROAD TO LIMIT VEHICULAR ACCESS TO STONE DRIVEWAY OR CONSTRUCTION ACCESS DRIVE.
- INSTALL INLET PROTECTION DEVICES AT CATCH BASINS DOWN SLOPE FROM THE SITE THAT ARE VULNERABLE TO SEDIMENT ACCUMULATIONS.
- COMPLETE SITE CLEARING, STOCKPILE SAVED MATERIALS IN DESIGNATED AREAS.
- INSTALL SILT FENCES IN LOCATIONS AROUND THE PERIMETER OF SITE WORK, STOCKPILE AREA AND ALONG THE CONTOUR OF ALL DISTURBED SLOPES AT A MINIMUM OF EVERY 50' OF HORIZONTAL DISTANCE OR AS SPECIFIED, MEASURED PERPENDICULAR TO THE SLOPE.
- ROUGH GRADE SWALES AROUND PROPOSED EARTHWORK AND STRUCTURES TO EXTENT POSSIBLE WITHIN GRADING LIMITS, INSTALL SILT FENCES, STRAW BALE DIKES, DIVERSION SWALES AND OTHER EROSION CONTROL MEASURES AS SHOWN ON PLANS, AND AS NECESSARY TO COMPLY WITH THE SWPPP AND ENSURE WATER QUALITY OF RUNOFF.
- CONTRACTOR MUST ROUTINELY INSPECT AND MAINTAIN EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S). DOCUMENT WEEKLY INSPECTIONS IN SEPARATE CONTRACTOR'S LOG.
- ROUTE ALL DEWATERING AND SUMP PUMP OUTFALLS, OF TURBID QUALITY, DIRECTLY TO SEDIMENT BASINS OR OTHER APPROPRIATE BMP.
- THE CONTRACTOR SHALL INITIATE STABILIZATION OF ANY BARE SOIL AREAS, AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN 14 DAYS AFTER INITIAL DISTURBANCE OF THE RESPECTIVE AREAS OF THE SITE. THE CONTRACTOR SHALL RETAIN SITE RECORDS OF THE EARTHWORK AND STABILIZATION WORK PERFORMED. EXCEPTIONS TO THIS POLICY CAN BE GRANTED UNDER NORMAL CONDITIONS IN THE FOLLOWING INSTANCES:
 - WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
 - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN TWENTY-ONE (21) DAYS, TEMPORARY STABILIZATION MEASURES NEED NOT BE INITIATED ON THAT PORTION OF THE SITE IF REQUESTED IN WRITING AND APPROVED BY THE ENGINEER.
- ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ATTAINED. REMOVAL OF ANY EROSION CONTROL MEASURES MUST FIRST BE APPROVED BY THE ENGINEER AND/OR THE JURISDICTION HAVING AUTHORITY.
- WHEN WEATHER CONDITIONS PROHIBIT SEED GERMINATION, DISTURBED GROUND SHOULD BE MULCHED WITH STRAW OR FIBER MULCH AND RECEIVE A BINDER/TACK APPLICATION OR EQUIVALENT.
- THE SCHEDULE DESCRIPTIONS ABOVE ARE SUGGESTIONS PROVIDED TO ASSIST THE CONTRACTOR(S) IN DEVELOPING THEIR STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SCHEDULE SPECIFIC TO THIS PROJECT. THE ACTUAL SCHEDULING AND IMPLEMENTATION OF THE SWPPP AND MAINTENANCE OF REQUIRED WATER QUALITY IS THE RESPONSIBILITY OF THE CONTRACTOR(S). THE EROSION AND SEDIMENT CONTROL PLAN AND DEVICES SHOWN ARE CONSIDERED TO COMPRISE THE MAJORITY OF EFFORTS NEEDED, BUT NOT NECESSARILY ALL THAT WILL BE REQUIRED. WEATHER, SITE AND UNFORESEEN CONDITIONS CAN DICTATE THAT GREATER EFFORTS WILL BE NECESSARY. IN THE CASE OF PROJECTS THAT DISTURB MORE THAN 1 ACRE OF LAND, THE OWNER, OR OWNER'S REPRESENTATIVE, WILL DEVELOP THE SWPPP WITH SUBMITTED CONTRIBUTIONS FROM THE ASSIGNED CONTRACTORS PERFORMING PROJECT SITE WORK. THESE CONTRIBUTIONS WILL CONSIST OF AN EROSION AND CONTROL SCHEDULE (AS SPECIFIED IN THE PROJECT MANUAL), SHORT NARRATIVE OF ANTICIPATED EROSION CONTROL ACTIVITIES, INSPECTION REPORTS AND LOGS AND SIGNED CERTIFICATION STATEMENTS AND PRE-CONSTRUCTION PHOTOGRAPHS AS SPECIFIED. THIS COMPETENT PERSON SHALL BE EITHER A LICENSED ENGINEER, LANDSCAPE ARCHITECT OR CERTIFIED EROSION CONTROL SPECIALIST.

GENERAL MAINTENANCE PLAN:

- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK, IN ACCORDANCE WITH THE SWPPP AND NYSDEC SPDES GENERAL PERMIT No. GP-0-10-01. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
- SEDIMENT WILL BE REMOVED FROM BEHIND STRAW BALE DIKES AND BEHIND SILT FENCES WHEN IT BECOMES 6" DEEP AT THE DIKE/FENCE OR WHEN ACCUMULATIONS HAVE ADVERSELY AFFECTED ITS FUNCTION. STRAW BALE DIKES AND SILT FENCES WILL BE REPAIRED BY REMOVING SILT AND SEDIMENTS AND THEN TAMPING LOOSE SOIL ALONG BASE, REPLACING DAMAGED OR WEAKENED POSTS AND STAKES, OR AS NECESSARY TO MAINTAIN A BARRIER.
- SEDIMENT WILL BE REMOVED AND FILTER DEVICES CLEANED OR REPLACED AT CATCH BASINS WHEN THE SEDIMENT POOL NO LONGER DRAINS FREELY. SEDIMENT ACCUMULATIONS WITHIN DRAINAGE STRUCTURES AND PIPING SHALL BE CLEANED OUT AT THE PROJECT COMPLETION AND AS ORDERED BY ENGINEER WHEN DETERMINED THAT PRE-COMPLETION INSTALLATIONS NO LONGER FUNCTION PROPERLY DUE TO SEDIMENT OR DEBRIS. EVENTUAL SYSTEM CLEANING IS NOT AN EXCUSE TO NOT IMPLEMENT APPROPRIATE CONTROLS UPSTREAM. THE ENGINEER SHALL BE THE FINAL JUDGE REGARDING WHETHER THE PIPING SYSTEM REQUIRES CLEANING. THE CONTRACTOR CAN MINIMIZE THE NECESSITY OF EXTENSIVE SILT AND SEDIMENT ACCUMULATION REMOVALS BY EFFECTIVE IMPLEMENTATION OF THE SWPPP.
- ALL DISTURBED AREAS WILL BE FERTILIZED, SEEDED AND MULCHED ACCORDING TO LANDSCAPE RESTORATION SPECIFICATIONS TO MAINTAIN VIGOROUS, DENSE VEGETATION. REPAIR ANY ERODED SLOPES, REAPPLY TOPSOIL, RESEED AND STABILIZE REPAIR AREA AS REQUIRED FOR PERMANENT OR TEMPORARY MEANS. REPAIR SOIL AREAS DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
- IMMEDIATELY REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION EQUIPMENT, MAINTENANCE OR OTHER ACTIVITY TO ANY EROSION CONTROL MEASURE, OR BEST MANAGEMENT PRACTICE OR DEVICE.
- THE PRIME CONTRACTOR(S) ARE RESPONSIBLE FOR THE PERFORMANCE AND COMPLIANCE OF THEIR SUB-CONTRACTOR'S ACTIVITIES RELATING TO THE SWPPP. THEY SHALL MAKE FREQUENT INSPECTIONS OF THEIR WORK AND COORDINATE APPROPRIATE INSTALLATION AND MAINTENANCE OF EROSION CONTROL AND WATER QUALITY DEVICES.
- EMPLOY POLLUTION PREVENTION MEASURES TO CONTROL LITTER, CONSTRUCTION CHEMICALS, SEDIMENT AND CONSTRUCTION DEBRIS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: SALVAGE AND REUSE OF MATERIALS, MINIMIZING PACKAGING WASTE, RECYCLING, PROPER DISPOSAL AT FREQUENT INTERVALS IN ACCORDANCE WITH PREVAILING LAWS, ONSITE INSTRUCTION REGARDING APPROPRIATE SEPARATION/HANDLING/RECYCLING, PERIODIC DEBRIS REMOVAL AT DRAINAGE STRUCTURES (GRATES AND SUMPS)/SEDIMENT TRAPS/FOREBAY AND OTHER BMP'S, PROPER MAINTENANCE OF SEDIMENT/ EROSION CONTROL SYSTEMS, ROUTINE AND EVENT RELATED INSPECTIONS OF DRAINAGE AND BMP SYSTEMS PER PERMIT REQUIREMENTS, PROVIDE APPROPRIATE SANITARY FACILITIES FOR ONSITE PERSONNEL, PICK UP TRASH AND DEBRIS FREQUENTLY AND USE WATER MIST, CALCIUM CHLORIDE OR OTHER LEGAL MEANS TO LIMIT THE SPREAD OF DUST AND SOIL PARTICLES.

PROTECTION OF TREES:

PROTECT EXISTING TREES WHICH ARE TO REMAIN AND WHICH MAY BE INJURED, BRUISED, DEFACED, OR OTHERWISE DAMAGED BY CONSTRUCTION OPERATIONS, UTILIZING STANDARD TREE PROTECTION CRITERIA INCLUDING:

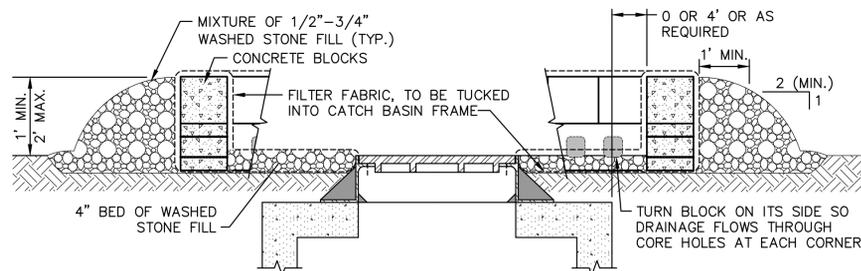
- INSTALLATION OF SAFETY ORANGE PLASTIC FENCING (MINIMUM 4' IN HEIGHT) AROUND INDIVIDUAL TREES DESIGNED FOR PROTECTION. FENCING SHALL BE INSTALLED AT THE OUTWARD LIMIT OF THE TREE'S DRIPLINE OR EXTENT OF CANOPY COVER.
- INSTALLATION OF SAFETY ORANGE PLASTIC FENCING (MINIMUM 4' IN HEIGHT) AROUND GROUPS OF TREES DESIGNATED FOR PROTECTION.
- TREE AND/OR SHRUB BRANCHES IN THE WAY OF EQUIPMENT SHALL BE TRIMMED ACCORDING TO PROFESSIONAL HORTICULTURAL STANDARDS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR AND SUB-CONTRACTORS USE EQUIPMENT TO DEMOLISH BRANCHES AS WORK PROCEEDS.

REQUIRED FENCING SHALL BE INSTALLED PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND SHALL BE REMOVED AT THE CONCLUSION OF CONSTRUCTION. REMOVE DISPLACED ROCKS FROM UNCLEARED AREAS. BY APPROVED EXCAVATION, REMOVE TREES WITH 30 PERCENT OR MORE OF THEIR ROOT SYSTEMS DESTROYED. REMOVAL OF TREES AND THE PROCEDURE FOR REMOVAL REQUIRES APPROVAL OF THE CONTRACTING OFFICER. TREES DESIGNATED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT WILL NOT IMPACT ADJACENT TREES.

LANDSCAPE REPLACEMENT:

REMOVE TREES AND OTHER LANDSCAPE FEATURES SCARRED OR DAMAGED BY EQUIPMENT OPERATIONS, AND REPLACE WITH EQUIVALENT, UNDAMAGED TREES AND LANDSCAPE FEATURES. OBTAIN CONTRACTING OFFICER'S APPROVAL BEFORE REPLACEMENT. REPLACEMENT OF TREES SHALL OCCUR ON A ONE-TO-ONE BASIS. REGIONALLY NATIVE PLANTS AS SPECIFIED BY THE STATION "INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN" (INRMP) SHALL BE USED AS REPLACEMENT LANDSCAPE FEATURES.

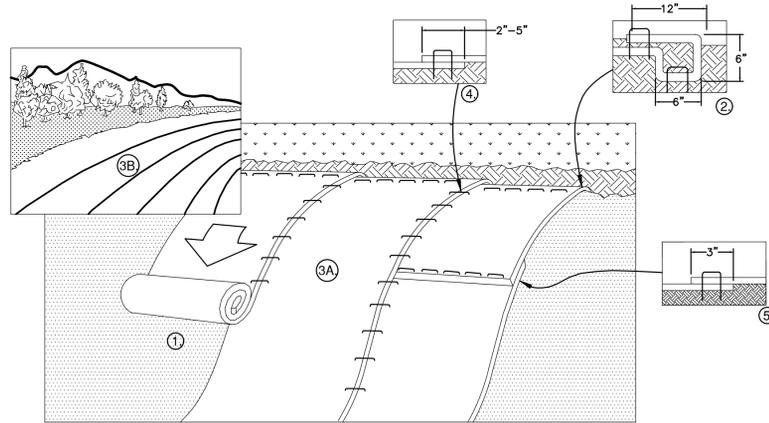
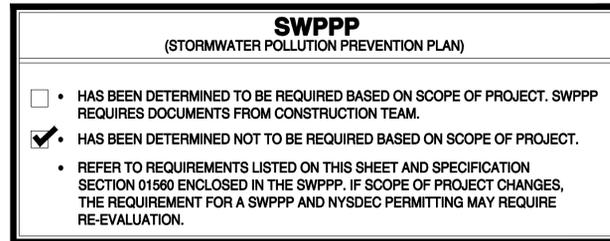
1 PROTECTION AND REPLACEMENT OF TREES SCALE: N.T.S.



2 STONE AND BLOCK DROP INLET PROTECTION STRUCTURE SCALE: N.T.S.

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1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
NOTE: WHEN USING CELL-0--SEED DO NOT SEED PREPARED AREA. CELL-0--SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

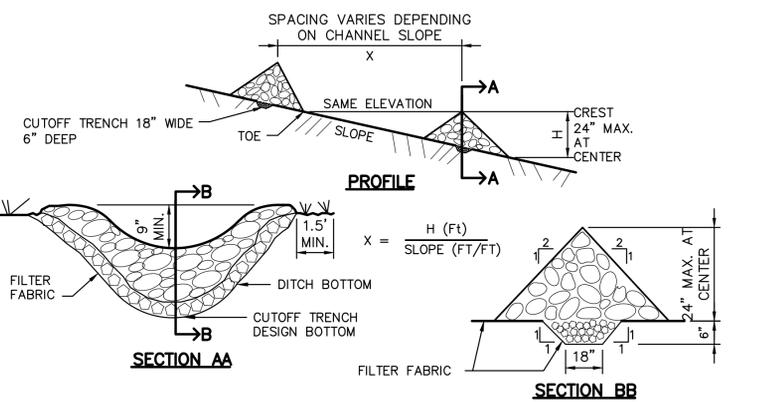
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.

3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON RECP'S TYPE.

5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE ON RECP'S TYPE.
NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

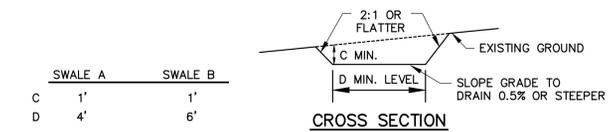
3 SLOPE STABILIZATION MATTING INSTALLATION DETAIL SCALE: N.T.S.



CONSTRUCTION SPECIFICATIONS

- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
- SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
- ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA = 2 ACRES.
- STONE SHALL BE A WELL GRADED STONE MIXTURE 2 TO 9 INCHES IN SIZE. (NYSDOT LIGHT STONE FILL MEETS THESE REQUIREMENTS).

4 STONE CHECK DAM DETAIL SCALE: N.T.S.



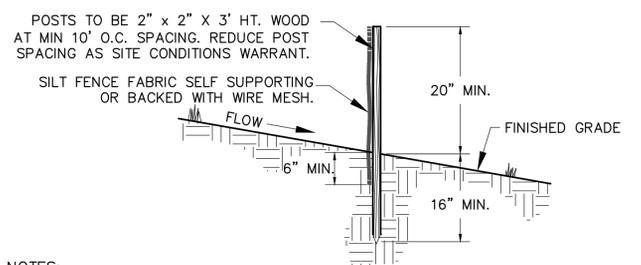
- ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
- THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
- FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
- ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
- STABILIZATION SHALL BE AS PER THE CHART BELOW:

MINIMUM FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	SWALE A (50c. OR LESS)	SWALE B (50c.-100c.)
1	0.5 - 3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1 - 5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3	5.1 - 8.0%	SEED WITH JUTE OR EXCELSIOR; SOD	LINED RIP-RAP 4-8" RECYCLED CONCRETE EQUIVALENT
4	8.1 - 20%	LINED 4-8" RIP-RAP	ENGINEERED DESIGN

- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
- FLOW CHANNEL STABILIZATION SHOWN ABOVE WILL REQUIRE SUBSEQUENT MAINTENANCE AND ATTENTION, SINCE RUNOFF PATTERNS, QUANTITY, QUALITY AND SEDIMENT CONTENT VARY WIDELY FROM SITE TO SITE. ACTUAL STABILIZATION MAY EXCEED THAT SHOWN IN THE CONTRACT DOCUMENTS. REMOVE SILT ACCUMULATIONS ROUTINELY AND DISPOSE OF PROPERLY SUCH THAT WATER QUALITY IS NOT IMPAIRED. DO NOT INTRODUCE SILT INTO TOPSOIL/RESTORATION AREAS.
- REMOVE TEMPORARY SWALE WHEN SITE IS SUBSTANTIALLY OR COMPLETELY STABILIZED AND SWALE IS NO LONGER REQUIRED. PERFORM FINAL GRADING AND ESTABLISH VEGETATION AT ALL DISTURBED AREAS.

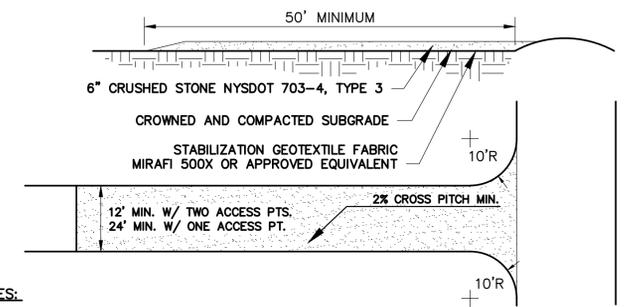
5 DIVERSION SWALE DETAIL SCALE: N.T.S.



NOTES:

- SILT FENCE FABRIC SHALL BE FIRMLY ATTACHED TO POSTS USING WIRE TIES OR STAPLES.
- EMBED FILTER CLOTH A MINIMUM OF 6" BELOW FINISHED GRADE.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED A MINIMUM OF SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE "GENERAL MAINTENANCE PLAN" OR WHEN BULGES OF MATERIAL DEVELOP IN FENCES.
- ENCIRCLE ALL SOIL STOCKPILES, TEMPORARY OR PERMANENT.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUIVALENT.

6 SILT FENCE DETAIL SCALE: N.T.S.



NOTES:

- STABILIZATION FABRIC SHALL BE PLACED OVER THE ENTIRE ENTRANCE AREA PRIOR TO PLACING OF STONE. OVERLAP FABRIC PER MANUFACTURER'S SPECIFICATIONS.
- ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE ROAD.
- WHEN EQUIPMENT WASHING IS REQUIRED IT SHALL BE DONE ON A SEPARATE AREA ADJACENT TO THE ENTRANCE ROAD AND STABILIZED WITH STONE. EQUIPMENT WASHING WILL BE REQUIRED IF ROAD RECEIVES SIGNIFICANT SOILS OR DEBRIS ACCORDING TO JUDGMENT BY OWNER OR OWNER'S REPRESENTATIVE.
- KEEP ROADS CLEAR OF STONES, MUD, AND OTHER CONSTRUCTION DEBRIS. CLEAN PAVEMENT AS ACCUMULATIONS WARRANT AND AS ORDERED BY ENGINEER.
- REMOVE SILT ACCUMULATIONS ROUTINELY AND DISPOSE OF PROPERLY SUCH THAT WATER QUALITY IS NOT IMPAIRED. DO NOT INTRODUCE SILT INTO DRAINAGE SYSTEM OR TOPSOIL/RESTORATION AREAS.

7 STABILIZED CONSTRUCTION ENTRANCE PAD DETAIL SCALE: N.T.S.

RELEASED FOR BIDDING	JFB	CWS	JMZ	6/22	No.	Date	Dr. By	Ch. By	App. By	Description



**TABLE NY1-A
BARRIER VEHICLE USE REQUIREMENTS
(LONG TERM, INTERMEDIATE TERM, AND SHORT TERM STATIONARY CLOSURES)**

CLOSURE TYPE	EXPOSURE CONDITION ¹	USE REQUIREMENTS ^{4,5}			
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)		
			w 45 MPH	35-40 MPH	1 30 MPH
LANE CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED ³	REQUIRED ³	REQUIRED ³	OPTIONAL ²
	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED ³	REQUIRED ³	OPTIONAL ²	OPTIONAL ²
SHOULDER CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED ³	REQUIRED ³	OPTIONAL ²	OPTIONAL ²
	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED ³	OPTIONAL ²	OPTIONAL ²	OPTIONAL ²

1. THE EXPOSURE CONDITIONS DESCRIBED IN TABLE NY1-A ASSUMES THERE IS NO POSITIVE PROTECTION (TEMPORARY TRAFFIC BARRIER) PRESENT. WHERE WORKERS OR HAZARDS ARE PROTECTED BY A TEMPORARY TRAFFIC BARRIER, BARRIER VEHICLES ARE NOT REQUIRED.
2. WHERE THE REQUIREMENT IS "OPTIONAL", EITHER A BARRIER VEHICLE OR THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
3. REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE BARRIER VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE BARRIER VEHICLE SHALL BE REPOSITIONED ACCORDINGLY. BARRIER VEHICLES PROTECTING NON-TRAVERSABLE HAZARDS SHALL REMAIN IN PLACE DURING BOTH WORKING AND NON-WORKING HOURS UNTIL THE HAZARD NO LONGER EXISTS. EXCEPTIONS TO THESE REQUIREMENTS MAY BE MADE, AS APPROVED BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE, WHERE BARRIER VEHICLE PLACEMENT WOULD BE INEFFECTIVE OR WOULD INTERFERE WITH THE SAFE OPERATION OF TRAFFIC.
4. BARRIER VEHICLES ARE NOT REQUIRED FOR MILLING AND/OR PAVING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
5. BARRIER VEHICLES ARE NOT REQUIRED FOR FLAGGING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.

**TABLE NY1-B
SHADOW VEHICLE USE REQUIREMENTS
(MOBILE CLOSURES)**

CLOSURE TYPE	EXPOSURE CONDITION	USE REQUIREMENTS			
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)		
			w 45 MPH	35-40 MPH	1 30 MPH
LANE CLOSURE	WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}
SHOULDER CLOSURE	WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}	REQUIRED ^{2,4}

1. A MOBILE CLOSURE SHALL BE USED FOR ANY WORK ACTIVITY THAT MOVES CONTINUOUSLY OR INTERMITTENTLY ALONG THE TRAVELED WAY OR SHOULDER SLOWER THAN THE PREVAILING SPEED OF TRAFFIC. CHANNELIZING DEVICES ARE NOT USED FOR MOBILE CLOSURES.
2. SHADOW VEHICLES SHALL BE EQUIPPED WITH AN APPROVED REAR MOUNTED ATTENUATOR (TRUCK MOUNTED OR TRAILER MOUNTED) FOR THE FOLLOWING MOBILE CLOSURES: LANE CLOSURES ON FREEWAYS, LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 35 MPH OR MORE, SHOULDER CLOSURES ON FREEWAYS, AND SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE.
3. FOR MOBILE LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 30 MPH OR LESS AND MOBILE SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 40 MPH OR LESS, SHADOW VEHICLES ARE NOT REQUIRED TO BE EQUIPPED WITH A REAR MOUNTED ATTENUATOR.
4. A SHADOW VEHICLE IS USED TO PROTECT EXPOSED WORKERS (ON FOOT OR IN A VEHICLE) AND SHALL BE REQUIRED FOR ALL MOBILE CLOSURES. SHADOW VEHICLE REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE SHADOW VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. ADDITIONAL SHADOW VEHICLES MAY BE REQUIRED TO PROMOTE THE SAFE OPERATION OF TRAFFIC AND THE INCREASED PROTECTION OF EXPOSED WORKERS, AS DIRECTED BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE.

TABLE 6H-4 FORMULAS FOR DETERMINING TAPER LENGTHS

SPEED LIMIT (S) (MPH)	TAPER LENGTH (L) (FT.)
(40 MPH) OR LESS	$L = WS^2 / 60$
(45 MPH) OR MORE	$L = WS$

L = TAPER LENGTH
W = WIDTH OF OFFSET (FT.)
S = PRECONSTRUCTION POSTED SPEED LIMIT (MPH)

STANDARD TAPER LENGTHS

LATERAL SHIFT OF TRAFFIC FLOW PATH	TEMPORARY TRAFFIC CONTROL ZONE POSTED SPEED LIMIT									
	(25 MPH)	(30 MPH)	(35 MPH)	(40 MPH)	(45 MPH)	(50 MPH)	(55 MPH)	(60 MPH)	(65 MPH)	(70 MPH)
4	45	60	85	110	180	200	220	240	260	280
5	55	75	105	135	225	250	275	300	325	350
6	65	90	125	160	270	300	330	360	390	420
7	75	105	145	190	315	350	385	420	455	490
8	85	120	165	215	360	400	440	480	520	560
9	95	135	185	240	405	450	495	540	585	630
10	105	150	205	270	450	500	550	600	650	700
11	115	165	225	295	495	550	605	660	715	770
12	125	180	245	320	540	600	660	720	780	840

**TABLE 6C-2
LONGITUDINAL BUFFER SPACE**

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	DISTANCE
25	155 FT.
30	200 FT.
35	250 FT.
40	305 FT.
45	360 FT.
50	425 FT.
55	495 FT.
60	570 FT.
65	645 FT.

**TABLE NY2-A
PLACEMENT DISTANCE FOR BARRIER VEHICLES**

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	PLACEMENT DISTANCE (FT.)			
	BARRIER VEHICLES*			
	(18000 LBS.)		(24000 LBS.)	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
> 55	100 FT.	200 FT.	100 FT.	200 FT.
45 - 55	100 FT.	200 FT.	85 FT.	165 FT.
< 45	85 FT.	165 FT.	50 FT.	100 FT.

* AS DEFINED IN NYSOT STANDARD SPECIFICATION 619:

BARRIER VEHICLE - VEHICLE USED FOR STATIONARY SHOULDER CLOSURES, LANE CLOSURES, AND OTHER STATIONARY WORK ZONES.

MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

**TABLE NY2-B
PLACEMENT DISTANCE FOR SHADOW VEHICLES**

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	PLACEMENT DISTANCE (FT.)			
	SHADOW VEHICLES**			
	(18000 LBS.)		(24000 LBS.)	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
> 55	230 FT.	330 FT.	180 FT.	280 FT.
45 - 55	180 FT.	280 FT.	150 FT.	250 FT.
< 45	100 FT.	200 FT.	100 FT.	200 FT.

* AS DEFINED IN NYSOT STANDARD SPECIFICATION 619:

SHADOW VEHICLE - VEHICLE USED FOR MOBILE OR SHORT DURATION WORK OPERATIONS.

MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

**TABLE 6C-3
TAPER LENGTH FOR TEMPORARY TRAFFIC CONTROL ZONES**

TYPE OF TAPER	TAPER LENGTH (L)
MERGING TAPER	L
SHIFTING TAPER	L/2
SHOULDER TAPER	L/3
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT. MAXIMUM
DOWNSTREAM TAPER	100 FT. PER LANE

**TABLE 619-4
FLARE RATES FOR POSITIVE BARRIER**

TYPE OF POSITIVE BARRIER	POSTED SPEED LIMIT				
	30 MPH	40 MPH	50 MPH	55 MPH	65 MPH
TEMPORARY CONCRETE BARRIER	8:1	11:1	14:1	16:1	20:1
BOX BEAM OR HEAVY POST CORRUGATED BEAM	7:1	9:1	11:1	12:1	15:1

**TABLE NY6H-3
ADVANCE WARNING SIGN SPACING**

ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (≤ 30 MPH*)	100	100	100	AHEAD	AHEAD
URBAN (35-40 MPH*)	200	200	200	AHEAD	AHEAD
URBAN (w 45 MPH*)	350	350	350	1000 FT.	AHEAD
RURAL	500	500	500	1500 FT.	1000 FT.
EXPRESSWAY / FREEWAY	1000	1500	2640	1 MILE	? MILE

* PRECONSTRUCTION POSTED SPEED LIMIT

URBAN: (MEETS MORE THAN 1 OF THE FOLLOWING CRITERIA) SIDEWALKS, BICYCLE USAGE, CURBING, CLOSED DRAINAGE SYSTEMS, DRIVEWAY DENSITIES GREATER THAN 24 DRIVEWAYS PER MILE, MINOR COMMERCIAL DRIVEWAY DENSITIES OF 10 DRIVEWAYS PER MILE OR GREATER, MAJOR COMMERCIAL DRIVEWAYS, NUMEROUS RIGHT OF WAY CONSTRAINTS, HIGH DENSITY OF CROSS STREETS, 85TH PERCENTILE SPEEDS OF 45 MPH OR LESS.

RURAL: ANY AREA NOT EXHIBITING MORE THAN ONE OF THE ABOVE CHARACTERISTICS.

EXPRESSWAY: DIVIDED HIGHWAYS FOR TRAFFIC WITH FULL OR PARTIAL CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS AT MAJOR CROSSROADS.

FREEWAYS/INTERSTATE: LOCAL OR INTER REGIONAL HIGH-SPEED, DIVIDED, HIGH-VOLUME FACILITIES WITH FULL OR PARTIAL CONTROL OF ACCESS.

WORK DURATION DEFINITIONS

LONG-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS.

INTERMEDIATE-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.

SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

WORK ZONE TRAFFIC CONTROL LEGEND

SYMBOL	DESCRIPTION
	ARROW PANEL
	ARROW PANEL, CAUTION MODE
	ARROW PANEL TRAILER OR SUPPORT
	CHANGEABLE MESSAGE SIGN (PVMS)
	CHANNELIZING DEVICE
	CRASH CUSHION/TEMPORARY IMPACT ATTENUATOR
	DIRECTION OF TEMPORARY TRAFFIC DETOUR
	DIRECTION OF TRAFFIC
	FLAGGER
	FLAG TREE
	LUMINAIRE
	PAVEMENT MARKINGS THAT SHALL BE REMOVED FOR A LONG TERM PROJECT
	SIGN, TEMPORARY
	TEMPORARY BARRIER
	TEMPORARY BARRIER WITH WARNING LIGHTS
	TRAFFIC OR PEDESTRIAN SIGNAL
	TYPE III BARRICADE
	WARNING LIGHTS
	WORK SPACE
	WORK VEHICLE
	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR

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WORK ZONE TRAFFIC CONTROL SIGN TABLE

SIGN	SIGN DESIGNATION	COLOR CODE	CONVENTIONAL ROAD	EXPRESSWAY	FREEWAY
	E5-1	C	-----	72"x60"	72"x60"
	G20-1	A	36"x18"	48"x24"	48"x24"
	G20-2	A	36"x18"	48"x24"	48"x24"
	G20-4	A	36"x18"	-----	-----
	G20-5aP	A	24"x18"	36"x24"	36"x24"
	M1-1	G	1 OR 2 DIGITS 24"x24"	36"x36"	36"x36"
	M1-1t	G	3 DIGITS 30"x24"	45"x36"	45"x36"
	M1-4	B	1 OR 2 DIGITS 24"x24"	36"x36"	36"x36"
	M1-4t	B	3 DIGITS 30"x24"	45"x36"	45"x36"
	M3-1	SEE NOTE 3	24"x12"	36"x18"	36"x18"
	M3-2				
	M3-3				
	M3-4				
	M4-8	A	24"x12"	36"x18"	36"x18"
	M4-8a	A	24"x18"	24"x18"	24"x18"
	M4-9	A	30"x24"	48"x36"	48"x36"
	M4-9L				
	M4-9R				
	M4-9a	A	30"x24"	30"x24"	-----
	M4-9b	A	30"x24"	30"x24"	-----
	M4-9c	A	30"x24"	30"x24"	-----
	M4-10L	A	48"x18"	48"x18"	48"x18"
	M4-10R				
	M5-1	SEE NOTE 3	21"x15"	30"x21"	30"x21"
	M5-2	SEE NOTE 3	21"x15"	30"x21"	30"x21"
	M6-1	SEE NOTE 3	21"x15"	30"x21"	30"x21"
	M6-2				
	M6-3				
	M6-4				
	NYM3-1	B	24"x24"	36"x36"	36"x36"
	NYM3-2	B	30"x24"	45"x36"	45"x36"
	NYM3-3	B	30"x24"	45"x36"	45"x36"

WORK ZONE TRAFFIC CONTROL SIGN TABLE

SIGN	SIGN DESIGNATION	COLOR CODE	CONVENTIONAL ROAD	EXPRESSWAY	FREEWAY
	NYR9-11	B	24"x42"	48"x84"	48"x84"
	NYR9-12	B	24"x36"	36"x54"	48"x72"
	NYW4-17	A	36"x36"	48"x48"	48"x48"
	NYW8-30	A	48"x24"	48"x24"	48"x24"
	NYW8-31	A	48"x24"	48"x24"	48"x24"
	NYW8-32	A	48"x24"	48"x24"	48"x24"
	NYW8-33	A	48"x24"	48"x24"	48"x24"
	R1-1	D	36"x36"	36"x36"	48"x48"
	R1-2	E	36"x36"x36"	48"x48"x48"	60"x60"x60"
	R2-1	B	24"x30" OR 30"x36" (SEE NOTE 5)	36"x48"	36"x48"
	R2-11	B	24"x30"	36"x48"	36"x48"
	R2-12	B	24"x36"	36"x54"	36"x54"
	R4-1	B	24"x30"	36"x48"	36"x48"
	R4-7	B	24"x30"	36"x48"	36"x48"
	R4-7c	B	18"x30"	-----	-----
	R4-8	B	24"x30"	36"x48"	36"x48"
	R4-8c	B	18"x30"	-----	-----
	R4-9	B	24"x30"	36"x48"	36"x48"
	R5-1	E	36"x36"	36"x36"	48"x48"
	R9-8	B	36"x18"	36"x18"	-----
	R9-9	B	24"x12"	24"x12"	-----
	R9-10L	B	24"x12"	24"x12"	-----
	R9-10R				
	R9-11L	B	24"x18"	24"x18"	-----
	R9-11R				
	R9-11aL	B	24"x12"	24"x12"	-----
	R9-11aR				
	R10-6	B	24"x36"	24"x36"	-----
	R11-2	B	48"x30"	48"x30"	48"x30"

WORK ZONE TRAFFIC CONTROL SIGN TABLE

SIGN	SIGN DESIGNATION	COLOR CODE	CONVENTIONAL ROAD	EXPRESSWAY	FREEWAY
	R11-3a	B	60"x30"	60"x30"	-----
	W1-4L	A	36"x36"	48"x48"	48"x48"
	W1-4R				
	W1-4bL	A	36"x36"	48"x48"	48"x48"
	W1-4bR				
	W1-4cL	A	36"x36"	48"x48"	48"x48"
	W1-4cR				
	W1-6L	A	48"x24"	60"x30"	60"x30"
	W1-6R				
	W1-8L	A (NO BORDER)	18"x24"	30"x36"	30"x36"
	W1-8R	A (NO BORDER)			
	W3-1	A ⁴	36"x36"	48"x48"	48"x48"
	W3-2	A ⁴	36"x36"	48"x48"	48"x48"
	W3-3	A ⁴	36"x36"	48"x48"	48"x48"
	W3-4	A	36"x36"	48"x48"	48"x48"
	W3-5	A ⁴	36"x36"	48"x48"	48"x48"
	W4-1L	A	36"x36"	48"x48"	48"x48"
	W4-1R				
	W4-2L	A	36"x36"	48"x48"	48"x48"
	W4-2R				

ROADWAY DEFINITIONS:
 CONVENTIONAL ROAD - A STREET OR HIGHWAY OTHER THAN A FREEWAY, OR EXPRESSWAY.
 EXPRESSWAY - A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
 FREEWAY - A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

CODE	DESCRIPTION
A	BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND
B	BLACK LEGEND AND BORDER ON A WHITE BACKGROUND
C	WHITE LEGEND AND BORDER ON A GREEN BACKGROUND
D	WHITE LEGEND AND BORDER ON A RED BACKGROUND
E	RED LEGEND AND BORDER ON A WHITE BACKGROUND
F	BLACK LEGEND AND BORDER ON A FLOURESCENT YELLOW GREEN BACKGROUND
G	WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND

- NOTES:
- DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
 - FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
 - COLORS FOR DIRECTION PLAQUES, ADVANCE TURN ARROWS, AND DIRECTIONAL ARROWS SHALL MATCH THE ROUTE OR INTERSTATE SIGN THAT THEY SUPPLEMENT AS PER THE M.U.T.C.D.
 - MULTICOLORED SYMBOL IMPOSED ON SIGN WITH BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND.
 - FOR R2-1 SIGN LARGER DIMENSIONS SHALL BE USED WHEN SIGN FACES MULTIPLE LANES ON A CONVENTIONAL ROAD.

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6/22 RELEASED FOR BIDDING

6/22	JMZ	CWS	JFB
------	-----	-----	-----

No. _____ Date _____ App. By _____ Description _____
 A P P R O V E D
 REGISTERED PROFESSIONAL ENGINEER DATE _____

TOWN OF YORKTOWN, NEW YORK
 CLEANING AND CEMENT MORTAR LINING OF WATER MAIN
TRAFFIC MAINTENANCE AND PROTECTION

SCALE: T-3 AS NOTED
 CONTRACT: ENG21-0417
 JOB NO. _____
 DR. BY: _____ DS. BY: _____ CHK. BY: _____ APP. BY: _____
 CADD NO. _____

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	CONVENTIONAL ROAD	EXPRESSWAY	FREEWAY
	W5-1	A	36"x36"	48"x48"	48"x48"
	W5-4	A	36"x36"	48"x48"	48"x48"
	W6-3	A	36"x36"	48"x48"	48"x48"
	W7-3aP	A	24"x18"	36"x30"	36"x30"
	W8-1	A	36"x36"	48"x48"	48"x48"
	W8-3	A	36"x36"	48"x48"	48"x48"
	W8-7	A	36"x36"	48"x48"	48"x48"
	W8-8	A	36"x36"	48"x48"	48"x48"
	W8-9	A	36"x36"	48"x48"	48"x48"
	W8-12	A	36"x36"	-----	-----
	W8-14	A	36"x36"	48"x48"	48"x48"
	W8-15	A	36"x36"	48"x48"	48"x48"
	W8-17p	A	36"x36"	48"x48"	48"x48"
	W8-23	A	36"x36"	48"x48"	48"x48"
	W8-24	A	36"x36"	48"x48"	48"x48"
	W9-3	A	36"x36"	48"x48"	48"x48"
	W11-1L W11-1R	A OR F	36"x36"	36"x36"	-----
	W11-2L W11-2R	F	36"x36"	36"x36"	-----
	W11-15L W11-15R	F	36"x36"	36"x36"	-----

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	CONVENTIONAL ROAD	EXPRESSWAY	FREEWAY
	W13-1P	A	24"x24"	30"x30"	30"x30"
	W14-3	A	36"x36"	36"x36"	36"x36"
	W13-4P	A	48"x48"x36"	-----	-----
	W16-1P	SEE NOTE 3 A OR F	18"x24"	24"x30"	-----
	W16-2P	A	24"x18"	30"x24"	-----
	W16-4P	SEE NOTE 3 A OR F	30"x24"	-----	-----
	W16-5PL W16-5PR	A	24"x18"	-----	-----
	W16-7PL W16-7PR	SEE NOTE 3 A OR F	24"x12"	30"x18"	-----
	W16-9P	SEE NOTE 3 A OR F	24"x12"	30"x18"	-----
	W20-1	A	36"x36"	48"x48"	48"x48"
	W20-2	A	36"x36"	48"x48"	48"x48"
	W20-3	A	36"x36"	48"x48"	48"x48"
	W20-4	A	36"x36"	48"x48"	48"x48"
	W20-5	A	36"x36"	48"x48"	48"x48"
	W20-5a	A	36"x36"	48"x48"	48"x48"
	W20-7	A	36"x36"	48"x48"	48"x48"

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	CONVENTIONAL ROAD	EXPRESSWAY	FREEWAY
	W21-1	A	36"x36"	48"x48"	48"x48"
	W21-4	A	36"x18"	48"x24"	48"x24"
	W21-5	A	36"x36"	48"x48"	48"x48"
	W21-5aL W21-5aR	A	36"x36"	48"x48"	48"x48"
	W21-5bL W21-5bR	A	36"x36"	48"x48"	48"x48"
	W21-8	A	36"x36"	48"x48"	48"x48"
	W22-1	A	36"x36"	48"x48"	48"x48"
	W22-2	A	42"x36"	42"x36"	42"x36"
	W22-3	A	42"x36"	42"x36"	42"x36"
	W23-2	A	36"x36"	48"x48"	48"x48"
	W24-1L W24-1R	A	36"x36"	48"x48"	48"x48"
	W24-1aL W24-1aR	A	36"x36"	48"x48"	48"x48"
	W24-1bL W24-1bR	A	36"x36"	48"x48"	48"x48"

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 EXPRESSWAY - A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
 FREEWAY - A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

COLOR CODE LEGEND	
CODE	DESCRIPTION
A	BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND
B	BLACK LEGEND AND BORDER ON A WHITE BACKGROUND
C	WHITE LEGEND AND BORDER ON A GREEN BACKGROUND
D	WHITE LEGEND AND BORDER ON A RED BACKGROUND
E	RED LEGEND AND BORDER ON A WHITE BACKGROUND
F	BLACK LEGEND AND BORDER ON A FLOURESCENT YELLOW GREEN BACKGROUND
G	WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND

NOTES:
 1. DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
 2. FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
 3. WHEN USED IN CONJUNCTION WITH A BICYCLE SIGN (W11-1) OR PEDESTRIAN CROSSING (W11-2) COLOR CODE SHALL MATCH.

\\weston\ssaw\WES\Projects\NY\Yorktown, NY\22440006 Cement Lining of Water Main\CAD\WAST-4 TRAFFIC MAINTENANCE AND PROTECTION.dwg

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Weston & Sampson
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 Mount Kisco, NY 10549
 914.200.1077
 www.westonandsampson.com

6/22	JMZ	CWS	JFB	RELEASED FOR BIDDING
No.	Date	Dr. By	Ch. By	App. By
		A	P	R
		O	V	E
		D		
				DATE
				REGISTERED PROFESSIONAL ENGINEER



TOWN OF YORKTOWN, NEW YORK
 CLEANING AND CEMENT MORTAR LINING OF WATER MAIN
TRAFFIC MAINTENANCE AND PROTECTION
 SCALE: T-4 AS NOTED
 CONTRACT: ENG21-0417
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 DR. BY: JMZ
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 APP. BY: JFB

T-4
 SHEET 18 OF 18