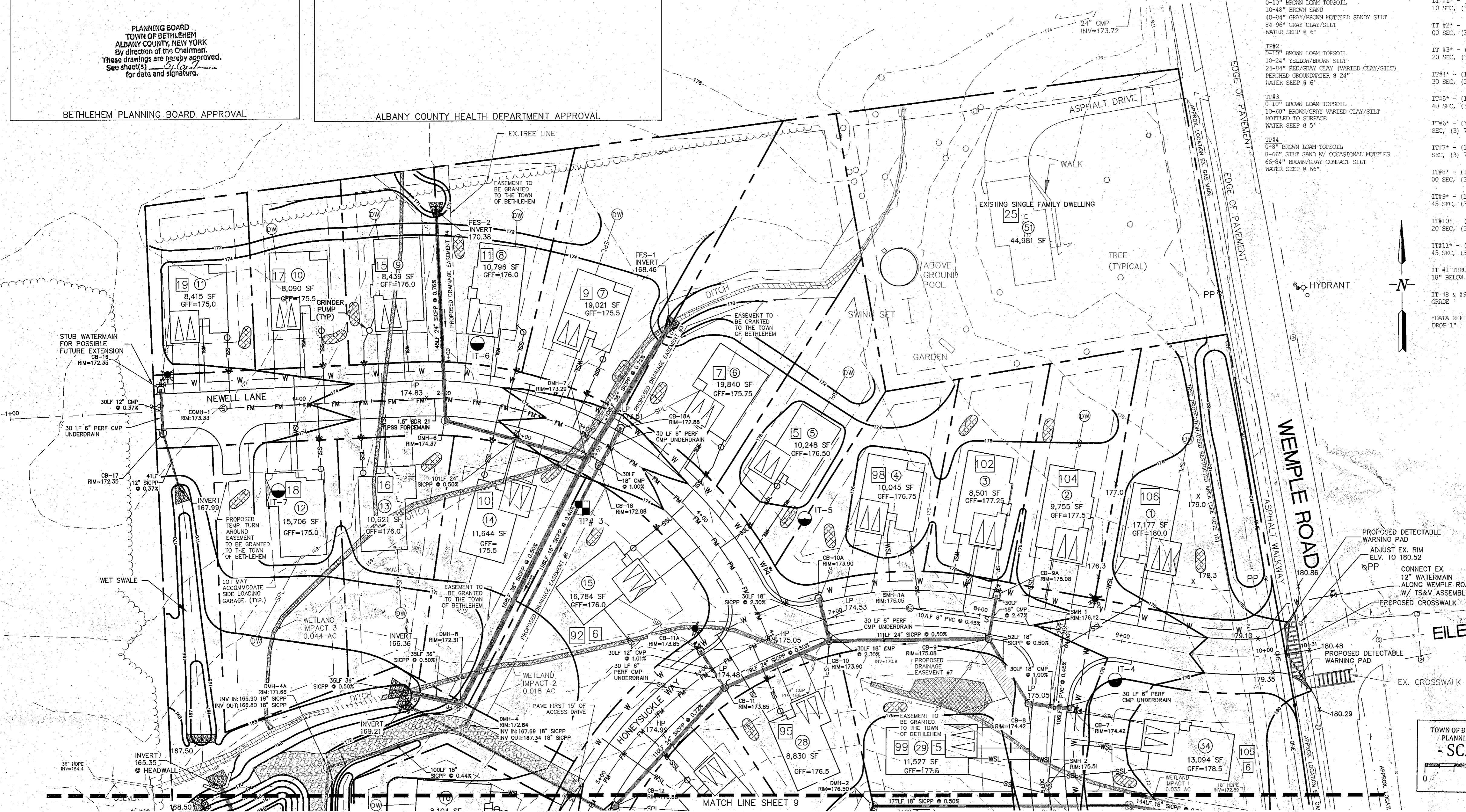


PLANNING BOARD  
TOWN OF BETHLEHEM  
ALBANY COUNTY, NEW YORK  
By direction of the Chairman.  
These drawings are hereby approved.  
See sheet(s) 3, 4, 5, 6, 7, 8, 9, 10  
for date and signature.

BETHLEHEM PLANNING BOARD APPROVAL

ALBANY COUNTY HEALTH DEPARTMENT APPROVAL



### SANITARY NOTES

1. ALL GRAVITY PIPE SHALL BE SDR-26 SEWER PIPE SHALL MEET ASTM D-2241

2. INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS, TOWN OF BETHLEHEM SPECIFICATIONS, AGENCY REQUIREMENTS, AND ALL APPLICABLE MANUFACTURERS SPECIFICATIONS.

3. BEDDING AND BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR DENSITY. ALL BACKFILL MATERIAL SHALL BE NYSDOT ITEM 203.07.

4. PRIOR TO ANY WORK ON THE SANITARY SEWER, THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FROM THE TOWN SEWER DEPARTMENT.

5. PIPE MATERIAL FOR THE LOW PRESSURE SANITARY FORCE MAIN SHALL BE PVC WATER PIPE SDR-21 (200 PSI RATING) CONFORMING TO ASTM D-2241.

6. ALL FORCE MAIN TO BE INSTALLED AT SIX-FOOT MINIMUM DEPTH.

7. INSTALL LOCATOR WIRE IN FORCE MAIN TRENCH USING #12 AWG SINGLE CONDUCTOR STRANDED COPPER WITH TW 600 VOLT INSULATION ACCORDING TO TOWN STANDARD SPECIFICATIONS.

9. ALSO PRIOR TO INFILTRATION / EXFILTRATION TESTING, ALL PLASTIC PIPE, IN THE TEST SECTION, SHALL BE TESTED FOR DEFLECTION. DEFLECTION TESTING SHALL INVOLVE THE PULLING OF A RIGID BALL OR MANDREL, WHOSE DIAMETER IS 95 PERCENT OF THE PIPE INSIDE DIAMETER, THROUGH THE PIPE. ANY LENGTH OF PIPE WITH A DEFLECTION GREATER THAN 5 PERCENT SHALL BE REPLACED. THE TEST SECTION SHALL BE FLUSHED JUST PRIOR TO DEFLECTION TESTING. THE TEST SHALL NOT BE PERFORMED WITH A MECHANICAL PULLING DEVICE.

10. ALL FORCE MAINS SHALL BE SUBJECTED TO HYDROSTATIC PRESSURE OF 150 PERCENT OF THE NORMAL OPERATING PRESSURE. THE DURATION OF THE TEST, AT PRESSURE, SHALL BE AT LEAST 2 HOURS. BEFORE CONDUCTING THE TEST, THE PIPE SHALL BE FILLED WITH WATER AND ALL AIR SHALL BE EXPELLED. DURING THE TEST, WATER SHALL BE ADDED, AS NEEDED, TO MAINTAIN THE TEST PRESSURE. THE AMOUNT OF WATER ADDED SHALL BE RECORDED AS THE CALCULATED LEAKAGE RATE. LEAKAGE SHALL NOT EXCEED 22 GALLONS PER DAY PER MILLIMETER INCH INTERNAL PIPE DIAMETER. DURING THE TEST, THE OWNER AND THE SUPERINTENDENT SHALL WALK THE ROUTE OF THE FORCE MAIN AND EXAMINE THE EXPOSED PIPE AND THE GROUND COVERING ANY BACKFILLED PIPE TO DISCOVER LEAKS. LEAKAGE IN EXCESS OF THAT SPECIFIED ABOVE SHALL BE CORRECTED WITH NEW MATERIAL AT THE OWNER'S EXPENSE AND THE TEST REPEATED. ANY OBSERVED LEAKS SHALL BE REPAIRED AT THE OWNER'S EXPENSE. EACH TEST SECTION LENGTH SHALL BE AS APPROVED BY THE SUPERINTENDENT, BUT IN NO EVENT LONGER THAN ONE THOUSAND (1,000) FEET.

### ALBANY COUNTY DEPARTMENT OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH SERVICES

By direction of the Commissioner of Health, these plans are hereby approved. See first sheet for date and signature.

### TEST PIT DATA

SOIL TEST PITS OBSERVED BY  
INGALLS AND ASSOCIATES, LLP ON  
7/30/14

TP#1  
0-10" BROWN LOAM TOPSOIL  
10-18" BROWN SAND  
18-24" GRAY/BROWN MOTTLED SANDY SILT  
24-36" RED/GRAY CLAY (VARIED CLAY/SILT)  
PERCHED GROUNDWATER 24"  
WATER SEEP 6"

TP#2  
0-10" BROWN LOAM TOPSOIL  
10-24" YELLOW/BROWN SILT  
24-36" RED/GRAY CLAY (VARIED CLAY/SILT)  
PERCHED GROUNDWATER 24"  
WATER SEEP 9"

TP#3  
0-10" BROWN LOAM TOPSOIL  
10-60" BROWN GRAY VARIED CLAY/SILT  
MOTTLED SURFACE  
WATER SEEP 5"

TP#4  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#5  
0-10" BROWN LOAM TOPSOIL  
10-60" BROWN GRAY VARIED CLAY/SILT  
MOTTLED SURFACE  
WATER SEEP 5"

TP#6  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#7  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#8  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#9  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#10  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#11  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#12  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#13  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#14  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#15  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#16  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#17  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#18  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#19  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#20  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#21  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#22  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#23  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#24  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#25  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#26  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#27  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#28  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#29  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

TP#30  
0-10" BROWN LOAM TOPSOIL  
8-60" STUB GRAN. & OCCASIONAL MOTTLES  
60-84" BROWN GRAY COMPACT SILT  
WATER SEEP 6"

### INFILTRATION TEST DATA

SOIL TEST PERFORMED BY INGALLS AND ASSOCIATES, LLP ON  
5/06/15

PERCOLATION TESTS

IT #1\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
10 SEC, (3) 10 MIN 00 SEC

IT #2\* - (1) 10 MIN 20 SEC, (2) 11 MIN  
20 SEC, (3) 11 MIN 10 SEC

IT #3\* - (1) 6 MIN 00 SEC, (2) 6 MIN  
20 SEC, (3) 6 MIN 15 SEC

IT #4\* - (1) 14 MIN 00 SEC, (2) 14 MIN  
30 SEC, (3) 14 MIN 45 SEC

IT #5\* - (1) 13 MIN 00 SEC, (2) 13 MIN  
40 SEC, (3) 14 MIN 00 SEC

IT #6\* - (1) 6 MIN 00 SEC, (2) 7 MIN 00  
SEC, (3) 7 MIN 10 SEC

IT #7\* - (1) 7 MIN 00 SEC, (2) 7 MIN 20  
SEC, (3) 7 MIN 30 SEC

IT #8\* - (1) 25 MIN 00 SEC, (2) 26 MIN  
00 SEC, (3) 26 MIN 30 SEC

IT #9\* - (1) 29 MIN 00 SEC, (2) 30 MIN  
45 SEC, (3) 31 MIN 00 SEC

IT #10\* - (1) 6 MIN 00 SEC, (2) 6 MIN  
20 SEC, (3) 6 MIN 30 SEC

IT #11\* - (1) 11 MIN 00 SEC, (2) 11 MIN  
45 SEC, (3) 12 MIN 00 SEC

IT #12\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #13\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #14\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #15\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #16\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #17\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #18\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #19\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #20\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #21\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #22\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #23\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #24\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #25\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #26\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #27\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #28\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #29\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

IT #30\* - (1) 10 MIN 00 SEC, (2) 10 MIN  
45 SEC, (3) 10 MIN 30 SEC

NOTES:  
1. A MINIMUM 18"X24" SIGN STATING "STORMWATER  
MANAGEMENT PRACTICE - NAME OF THE PRACTICE, DO NOT  
REMOVE OR ALTER" SHALL BE ERECTED IN THE IMMEDIATE  
VICINITY OF ALL PRACTICES."

2. PROJECT IDENTIFICATION - (SPDES CONSTRUCTION PERMIT  
#, OTHER) MUST BE MAINTAINED IN ACCORDANCE WITH O&M  
PLAN

3. SOIL RESTORATION SHALL BE COMPLETED IN ALL AREAS OF  
CUT OR FILL. THESE AREAS SHALL RECEIVE AERATION AND AN  
ADDITIONAL 6 INCHES OF TOPSOIL.

4. SOIL RESTORATION SHALL BE COMPLETED IN ALL AREAS  
WHERE TOPSOIL IS STRIPPED. THIS SHALL INCLUDE THE  
REPLACEMENT OF A MINIMUM 6 INCHES OF TOPSOIL.

5. ALL GRADING TO BE 3:1 (HORIZONTAL: VERTICAL) MAXIMUM  
SLOPE. GRADED LAWN/YARD AREAS SHALL HAVE A MINIMUM SLOPE  
OF 2%.

6. UNLESS OTHERWISE NOTED, THE LOCATIONS AND FOOTPRINT  
CONFIGURATIONS OF PROPOSED DWELLINGS, DRIVEWAYS AND  
ASSOCIATED LOT LINES AS SHOWN ON THE PLAN ARE  
CONTRACTUAL AND ARE TO BE USED FOR MUNICIPAL PLANNING PURPOSES.  
ACTUAL BUILDING LOCATIONS AND CONFIGURATIONS, AND RELATED  
TOPOGRAPHY TO THIS END, NO FILL SHALL BE PLACED IN AREAS  
IDENTIFIED ON THESE PLANS AS CONTROLLED FILL AREAS UNTIL THE  
CERTIFYING SOILS ENGINEER HAS BEEN CONSULTED.

7. ALL CONTROLLED FILL SHALL BE CERTIFIED BY A LICENSED SOILS  
ENGINEER. THAT PLACEMENT OF THE MATERIAL WAS DONE IN A  
MANUFACTURED, PLACED AND COMPACTED IN ACCORDANCE WITH THE  
INSTALLATION OF WATER MAIN, SEWER LINES, AND SANITARY  
SEWERS. TO THIS END, NO FILL SHALL BE PLACED IN AREAS  
IDENTIFIED ON THESE PLANS AS CONTROLLED FILL AREAS UNTIL THE  
CERTIFYING SOILS ENGINEER HAS BEEN CONSULTED.

8. ALL PIPES AND APPURTENANCES SHALL BE INSTALLED ACCORDING  
TO THE TOWN OF BETHLEHEM WATER AND SEWER AUTHORITY  
STANDARD SPECIFICATIONS.

9. THE CONTRACTOR SHALL VERIFY SIZE, TYPE, HORIZONTAL AND  
VERTICAL LOCATION OF THE MAIN AT THE PROPOSED CONNECTION  
POINTS PRIOR TO CONSTRUCTION. CONFLICTS WITH OTHER UTILITIES  
TO BE CONSTRUCTED ARE TO BE AVOIDED. DISCREPANCIES OR OTHER  
CONFLICTS WITH EXISTING UTILITIES SHALL BE REPORTED TO THE  
WATER SUPERINTENDENT IMMEDIATELY.