



*Capital Region  
Development Authority*

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April 2, 2019

**Addendum #2**

Brackett Knoll, Naugatuck Street Extension  
CRDA Project # 18-009

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This addendum dated April 2, 2019 forms a part of the Contract Documents and modifies the original Bidding Documents. Please acknowledge receipt of this Addendum below and submit with bid package. Failure to do so may subject the submitter to disqualification.

**Please note the following change to Bid Date:**

**Bids Due: April 5, 2019 at 1:00 pm**

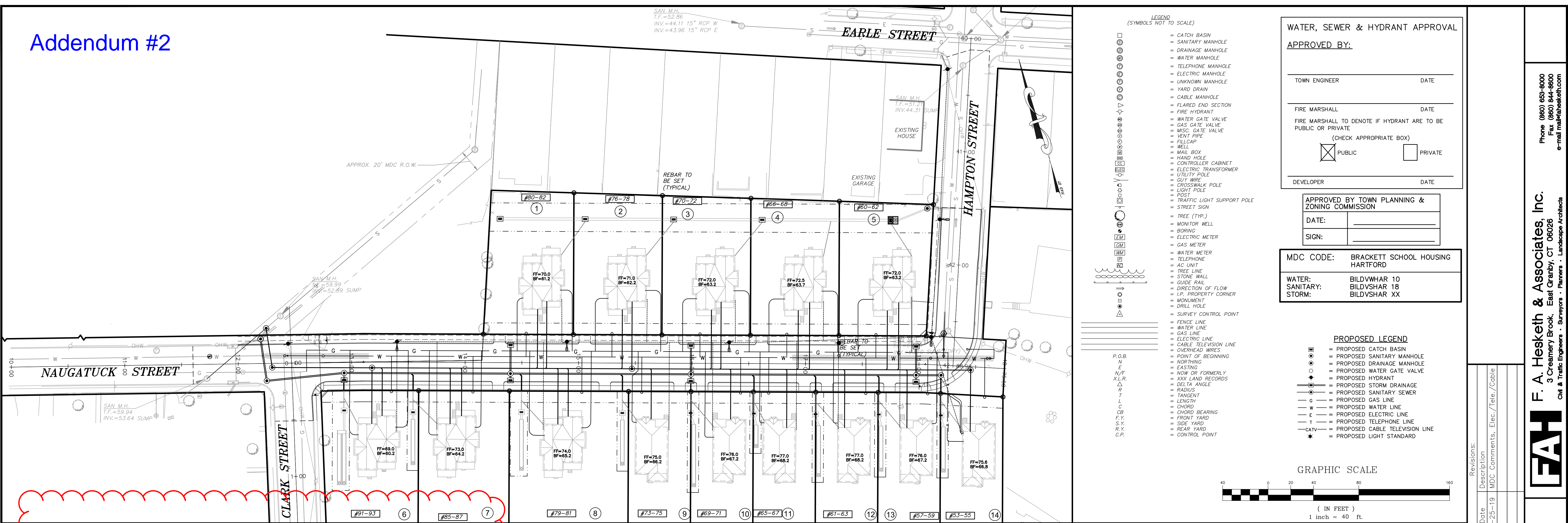
**Attachments:** Drawings, Rev. 4/01/19

MD-3  
UT-1  
SD-1  
NT-1

\_\_\_\_\_  
Bidder:

\_\_\_\_\_  
Signature:

# Addendum #2



**WATER, SEWER & HYDRANT APPROVAL**

APPROVED BY:

TOWN ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

FIRE MARSHALL \_\_\_\_\_ DATE \_\_\_\_\_

FIRE MARSHALL TO DENOTE IF HYDRANT ARE TO BE PUBLIC OR PRIVATE (CHECK APPROPRIATE BOX)

PUBLIC  PRIVATE

DEVELOPER \_\_\_\_\_ DATE \_\_\_\_\_

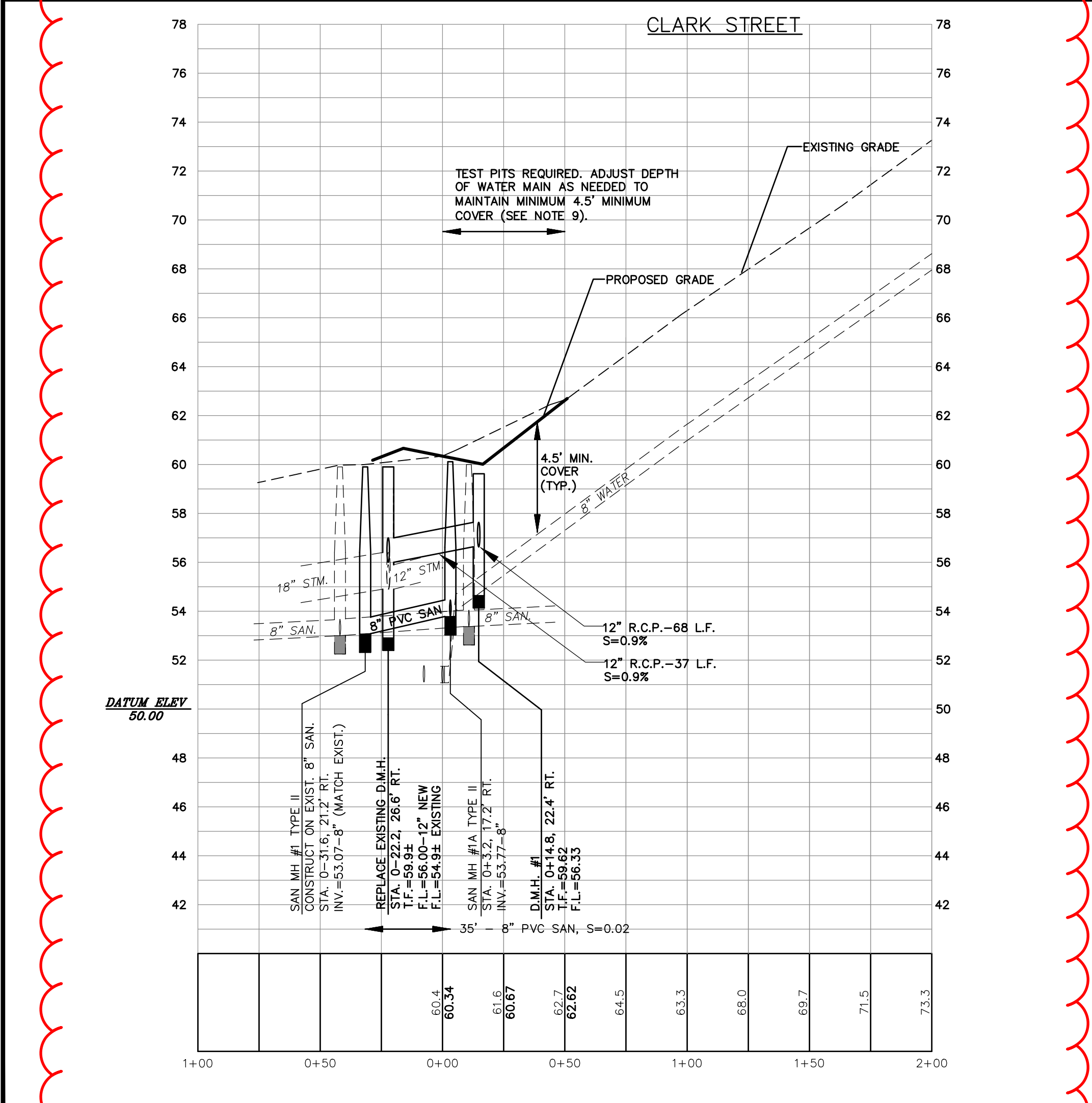
APPROVED BY TOWN PLANNING & ZONING COMMISSION

DATE: \_\_\_\_\_

SIGN: \_\_\_\_\_

MDC CODE: BRACKETT SCHOOL HOUSING HARTFORD

WATER: BILDVWHAR 10  
SANITARY: BILDVSHAR 18  
STORM: BILDVSHAR XX



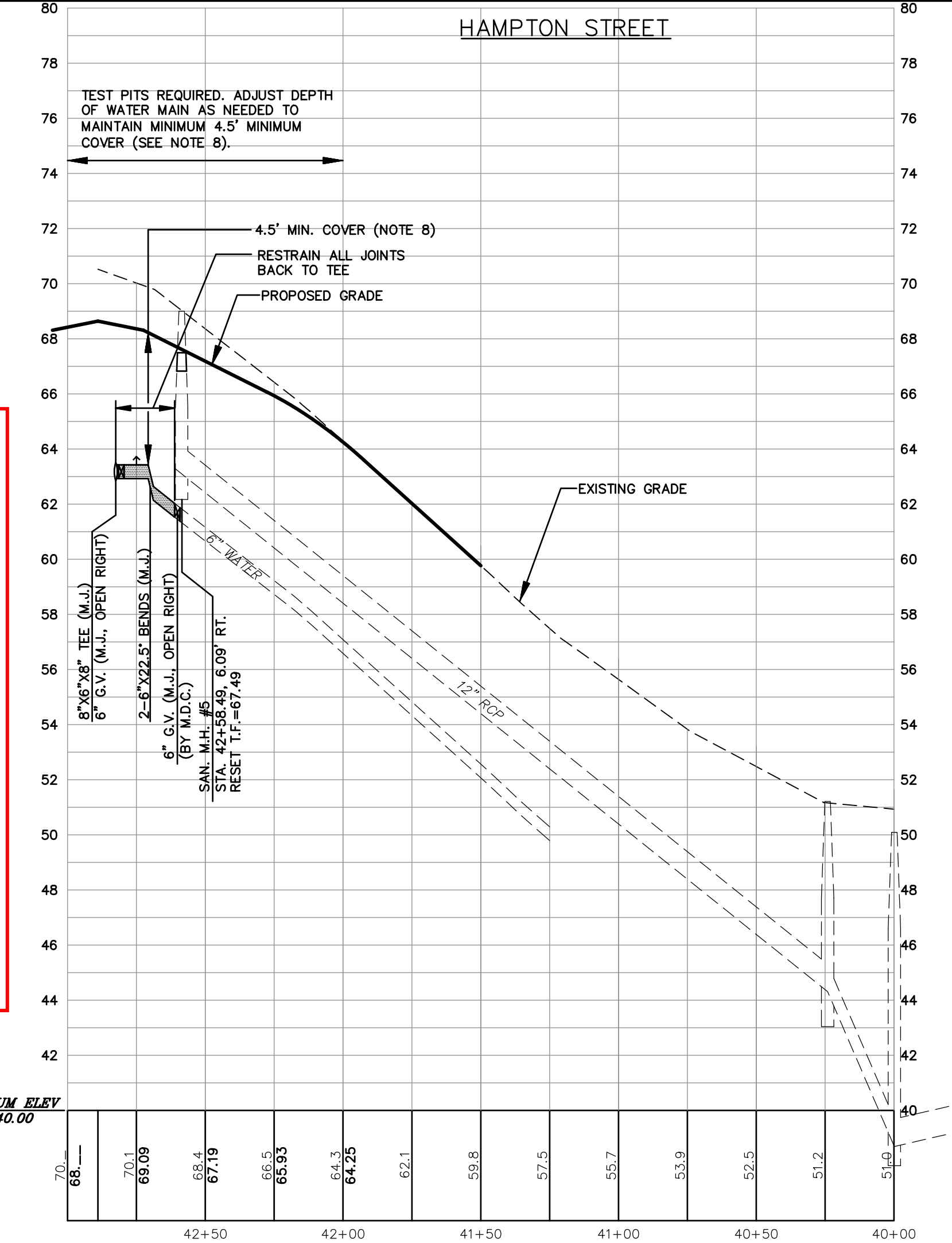
SEE SHEET MD-1 FOR NAUGATUCK STREET PROFILE

**REVISED SURVEY NOTE (DOES NOT AFFECT DESIGN OR COST)**

**GENERAL NOTE REFERENCE TO MD-1 (DOES NOT AFFECT DESIGN OR COST)**

**EXPANDED CLARKE ST PROFILE TO INCLUDE STORM AND SANITARY AT CONNECTION POINTS (DOES NOT AFFECT DESIGN OR COST, ALL INFO IS ON MD-1 AND MD-2)**

**SCALE**  
HORIZ.: 1" = 40'  
VERT.: 1" = 4'



BEARINGS AND COORDINATES DEPICTED HEREON REFER TO THE 1927 NORTH AMERICAN DATUM (NAD 27). MDC MON #77184 N=348,434.23, E=621,305.12 AND MDC MON #77185 N=347910.62, 620917.27 WERE USED TO CALCULATED THE NAD 27 COORDINATES FOR MDC MON # 85003, N=348,626.21, E=619,914.01. MDC 77184 AND 85003 WERE USED FOR ORIENTATION.

ELEVATIONS DEPICTED HEREON REFER TO THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD88) BASED ON GPS RAPID STATIC OBSERVATIONS TAKEN ON JULY 20, 2017 AND OPUS PROCESSING RESULTS ON HARTFORD MDC STATION #HH-115 ELEVATION = 78.73.

SEE NOTES ON SHEET MD-1

ELEVATIONS ARE BASED ON NAVD88 DATUM

**Revisions:**

No.	Date	Description
1	05-31-06	City Comments
2	03-13-08	City Comments
3	04-03-08	City Comments
4	05-09-08	City Comments
5	08-07-17	Datum
6	08-02-18	MDC Comments
7	10-16-18	MDC Comments
8	01-15-19	MDC Comments

**PLAN AND PROFILE**  
CLARKE AND HAMPTON STREETS  
PREPARED FOR  
**CITY OF HARTFORD**  
NAUGATUCK STREET EXTENSION  
HARTFORD, CONNECTICUT

Date: 05-19-06  
Drawn by: CAD  
Checked by: DSZ  
Sheet no.: 2 OF 2  
Scale: 1" = 40'

**F.A.H.**  
F. A. Hesketh & Associates, Inc.  
3 Creamery Brook, East Granby, CT 06026  
Civil & Traffic Engineers • Surveyors • Landscape Architects

Phone (860) 653-8000  
Fax (860) 644-8600  
e-mail: fah@fahcorp.com



**NOTES:**

- ALL WORK WITHIN THE CITY OF HARTFORD R.O.W. SHALL CONFORM TO THE CITY OF HARTFORD PUBLIC IMPROVEMENTS SPECIFICATIONS, THE MDC, & CUSTODIAL UTILITY COMPANY REQUIREMENTS.
- SEE SHEETS MDC -1 AND MDC-2 FOR STORM, SANITARY AND WATER DETAILS.
- ROADWAY CONTRACTOR TO INSTALL:

**WATER (MDC)**

- WATER MAIN IN NAUGATUCK
- WATER SERVICE TO CURB BOX AND CURB BOX (1 EACH HOUSE)

**SANITARY (MDC)**

- 8" SANITARY SEWER, MANHOLES, ETC. IN NAUGATUCK
- 6" SANITARY LATERAL TO PROPERTY LINE (2 EACH HOUSE)

**STORM (MDC)**

- STORM SEWERS, MANHOLES, CATCH BASINS, ETC. IN NAUGATUCK
- 6" STORM DRAINS TO PROPERTY LINE (LOTS 6-14)

**GAS (CNG)**

- TRENCHING AND BACKFILL FOR GAS MAIN IN NAUGATUCK
- TRENCHING AND BACKFILL TO PROPERTY LINE FOR GAS SERVICE (2 EACH HOUSE)

- ELECTRIC, TELEPHONE AND CABLE SERVICES SHALL BE OVERHEAD BY UTILITY COMPANY.
- STORM DRAINAGE ON HOUSE LOTS TO BE INSTALLED BY THE SITE DEVELOPER OR LOT CONTRACTOR.
- WATER, SEWER AND GAS CONNECTION FROM HOUSE TO STREET BY THE LOT DEVELOPER.

**GENERAL UTILITY NOTES:**

- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND ARE BASED ON AVAILABLE AS-BUILT INFORMATION FROM UTILITY COMPANY RECORDS, THE PROPERTY OWNER, AND LIMITED SURVEY DATA. ALL EXISTING UTILITIES MAY NOT BE SHOWN AND THOSE SHOWN MAY NOT BE ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES ON THE SITE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY AND NOTIFYING THE DESIGN SITE ENGINEER OF POTENTIAL CONFLICTS WITH PROPOSED ALIGNMENT AND GRADE AND/OR ANY ADJUSTMENTS TO THE PLANS WHICH ARE NECESSARY. TEST PITS WILL BE REQUIRED AT ALL PROPOSED UTILITY CROSSINGS IN ORDER TO DETERMINE UNDERGROUND UTILITY LOCATIONS AND TO IDENTIFY POTENTIAL CONFLICTS WITH VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN ON THE PLANS. TEST PITS SHALL BE COMPLETED BY THE CONTRACTOR AT HIS EXPENSE.
- CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO MARK THE LOCATION OF ALL UNDERGROUND UTILITIES AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- A PRE-CONSTRUCTION MEETING WITH TOWN STAFF SHALL BE HELD PRIOR TO START OF CONSTRUCTION.
- REMOVE/ABANDON EXISTING UTILITIES AS REQUIRED FOR CONSTRUCTION OF THE IMPROVEMENTS WHETHER OR NOT SHOWN ON THESE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH CUSTODIAL UTILITY COMPANY REQUIREMENTS. CONSULT WITH CUSTODIAL UTILITY COMPANY AND ENGINEER PRIOR TO ABANDONING UTILITIES.
- ALL MATERIALS AND INSTALLATION ARE TO BE IN ACCORDANCE WITH THE CITY OF HARTFORD, CONN. D.O.T. FORM 817, OR CUSTODIAL UTILITY COMPANY SPECIFICATIONS AS APPROPRIATE.
- ALL UTILITIES TO BE INSTALLED IN ACCORDANCE WITH UTILITY COMPANY APPLICABLE REQUIREMENTS. FINAL LOCATION OF UTILITY CONNECTIONS IS SUBJECT TO REVISION BY INDIVIDUAL UTILITY COMPANIES PRIOR TO THE INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK WITH THE APPLICABLE UTILITY COMPANIES.
- FLOW LINE AND INVERT ELEVATIONS OF ALL STORM AND SANITARY SEWERS MUST BE COORDINATED WITH FINAL HOUSE DRAWINGS. NOTIFY DESIGN ENGINEER OF CONFLICTS PRIOR TO START OF CONSTRUCTION.
- ALL WORK RELATED TO GAS, ELECTRIC, TELEPHONE AND COMMUNICATION SERVICE SHALL BE IN ACCORDANCE WITH THE CUSTODIAL UTILITY COMPANY STANDARDS AND SPECIFICATIONS.
- RELOCATE OR RESET, AS APPROPRIATE, ALL ELECTRIC, TELEPHONE, COMMUNICATION SERVICE HANDHOLES, MANHOLES, PULL BOXES, ETC., AS REQUIRED, FOR COMPLETION OF WORK. COORDINATE RELOCATIONS OR RESETTING WITH CUSTODIAL UTILITY COMPANY REPRESENTATIVES.

**LEGEND**  
(SYMBOLS NOT TO SCALE)

- CATCH BASIN
- SANITARY MANHOLE
- DRAINAGE MANHOLE
- WATER MANHOLE
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- UNKNOWN MANHOLE
- YARD DRAIN
- CABLE MANHOLE
- FLARED END SECTION
- FIRE HYDRANT
- WATER GATE VALVE
- GAS GATE VALVE
- MISC. GATE VALVE
- VENT PIPE
- FILLCAP
- WELL
- MAIL HOLE
- HAND HOLE
- CONTROLLER CABINET
- ELECTRIC TRANSFORMER
- UTILITY POLE
- QUY WIRE
- CROSSWALK POLE
- LIGHT POLE
- POST
- TRAFFIC LIGHT SUPPORT POLE
- STREET LIGHT
- TREE (TYP.)
- MONITOR WELL
- BORING
- ELECTRIC METER
- GAS METER
- WATER METER
- TELEPHONE
- AC UNIT
- TREE LINE
- STONE WALL
- GUIDE RAIL
- DIRECTION OF FLOW
- I.P. PROPERTY CORNER
- MONUMENT
- DRILL HOLE
- SURVEY CONTROL POINT
- FENCE LINE
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- CABLE TELEVISION LINE
- OVERHEAD WIRES
- POINT OF BEGINNING
- NORTHING
- EASTING
- NOW OR FORMERLY
- XXX LAND RECORDS
- DELTA ANGLE
- RADIUS
- TANGENT
- LENGTH
- CHORD
- CHORD BEARING
- FRONT YARD
- SIDE YARD
- REAR YARD
- CONTROL POINT

**PROPOSED LEGEND**

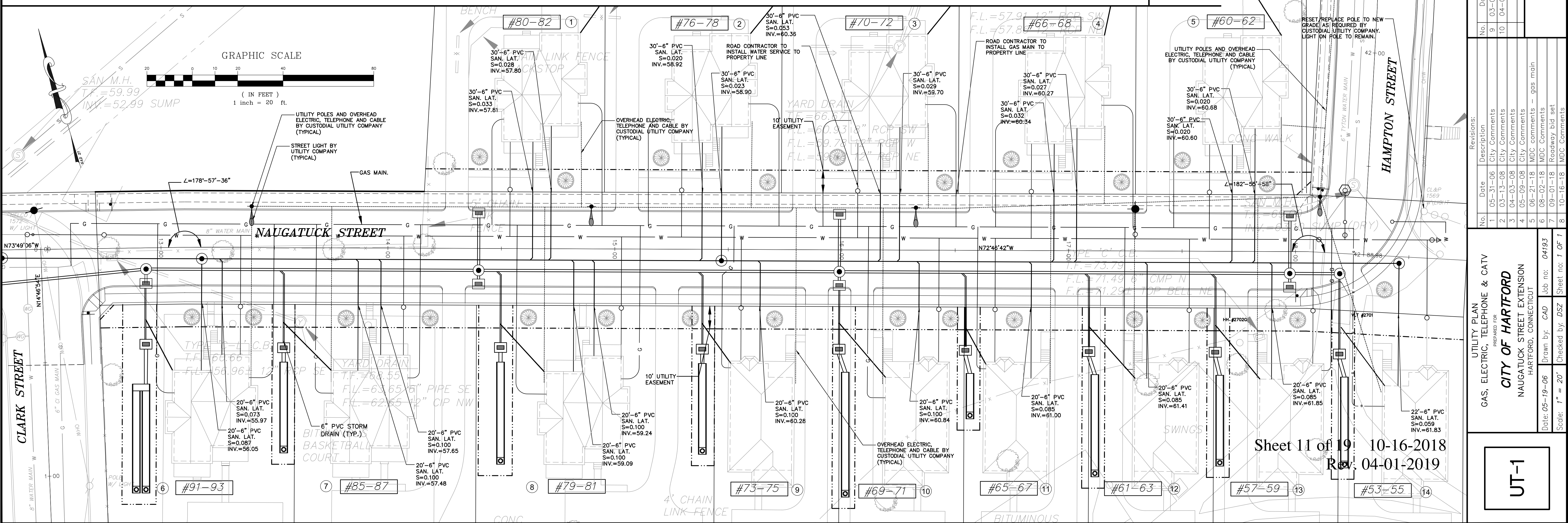
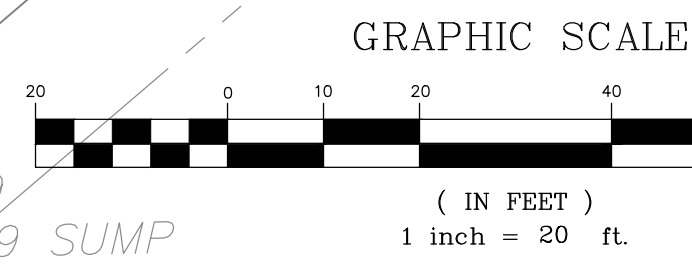
- CATCH BASIN
- SANITARY MANHOLE
- DRAINAGE MANHOLE
- WATER GATE VALVE
- HYDRANT
- STREET LIGHT
- STORM DRAINAGE
- SANITARY SEWER
- GAS LINE
- WATER LINE
- TELEPHONE LINE
- CATV LINE
- PROPOSED STREET LIGHT LINE
- PRIMARY ELECTRIC LINE
- SECONDARY ELECTRIC LINE
- ELECTRIC LINE
- ELECTRIC TRANSFORMER
- ELECTRIC PULL BOX
- TELEPHONE PULL BOX
- CATV PULL BOX

APPROVED BY TOWN PLANNING & ZONING COMMISSION

DATE: \_\_\_\_\_  
SIGN: \_\_\_\_\_

MDC CODE: BRACKETT SCHOOL HOUSING  
HARTFORD

WATER: BILDVWHAR 10  
SANITARY: BILDVSHAR 18  
STORM: BILDVSHAR XX



Sheet 11 of 19  
Rev. 04-01-2019

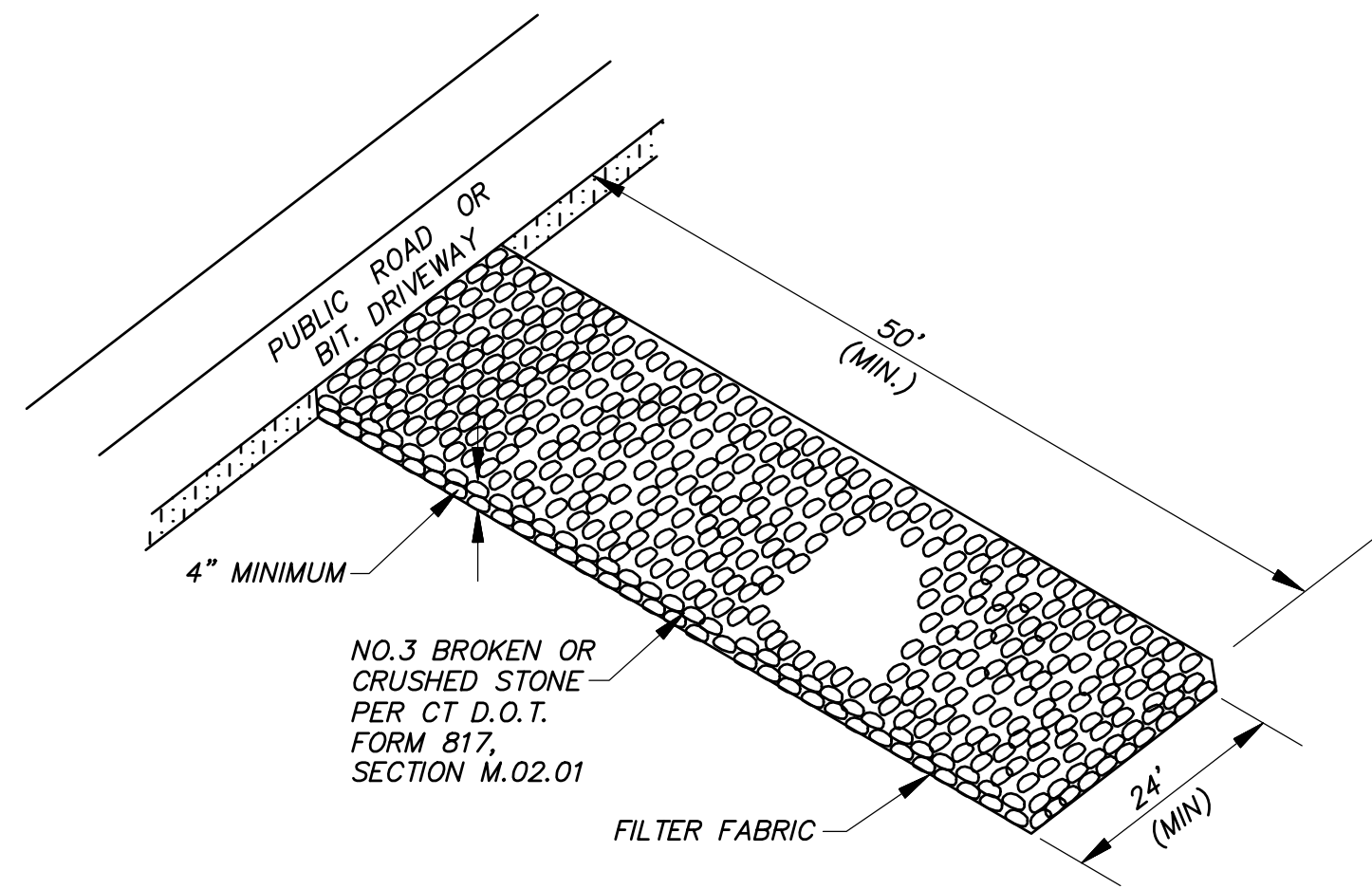
No.	Date	Description
1	05-31-06	City Comments
2	03-13-08	City Comments
3	04-03-08	City Comments
4	05-09-08	City Comments - gas main
5	06-21-08	MDC comments - gas main
6	08-02-08	MDC Comments
7	09-01-08	Roadway bid set
8	10-16-08	MDC Comments
9	03-08-19	Revised Bid Set
10	04-01-19	MDC Comments

UTILITY PLAN  
GAS, ELECTRIC, TELEPHONE & CATV  
PREPARED FOR  
**CITY OF HARTFORD**  
NAUGATUCK STREET EXTENSION  
HARTFORD, CONNECTICUT  
Date: 05-19-06  
Drawn by: CAD  
Job no: 04193  
Checked by: DSZ  
Sheet no: 7 OF 7  
Scale: 1" = 20'  
MDC\NAUT05.dwg, UT-1, Mar. 29, 2019 - 9:19:09 AM

**UT-1**

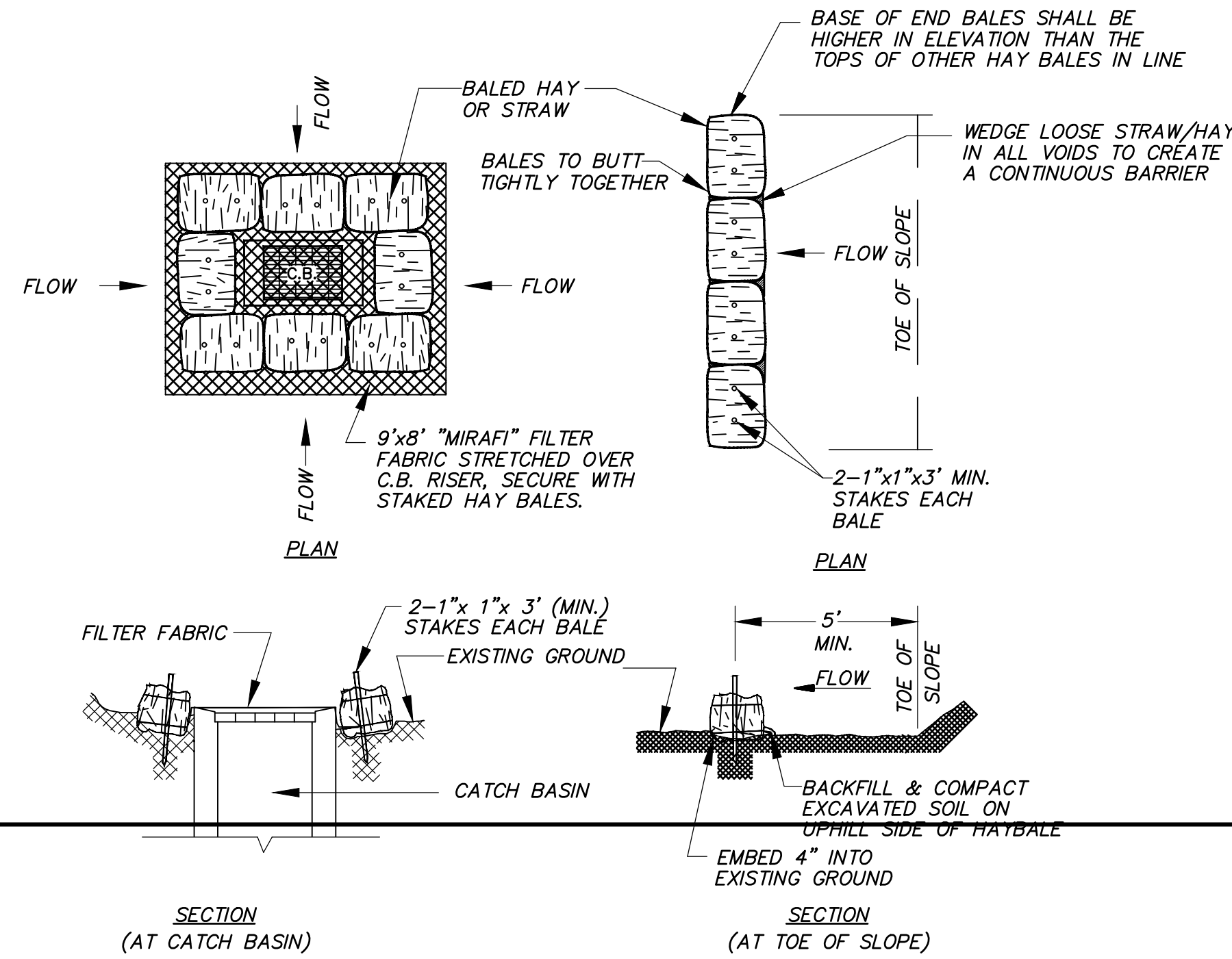
**FAH**  
F. A. Hesketh & Associates, Inc.  
3 Creamery Brook, East Granby, CT 06026  
Phone (860) 653-8000  
Fax (860) 344-8000  
e-mail: fah@fahsketh.com  
Civil & Traffic Engineers • Planners • Landscape Architects





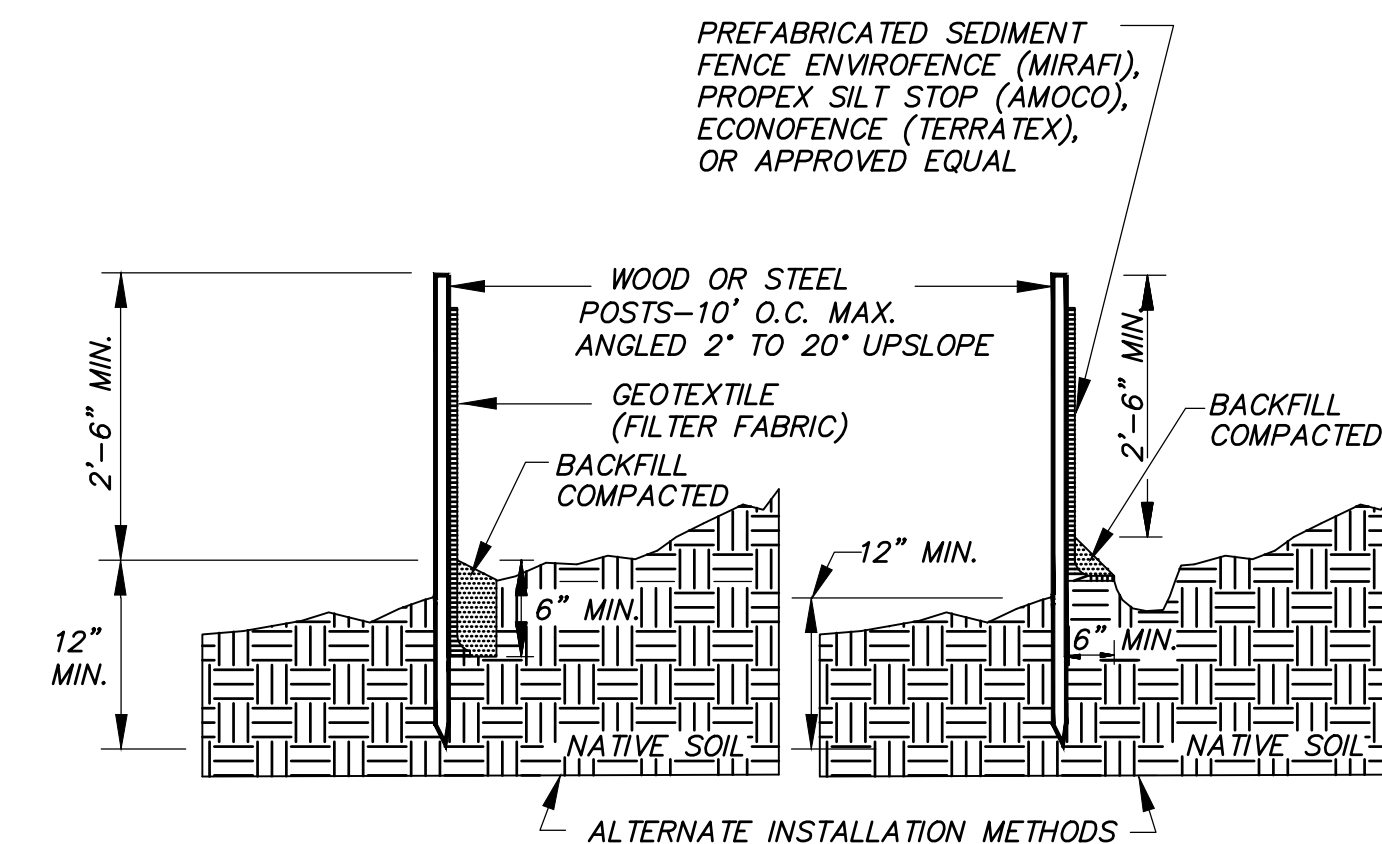
**CONSTRUCTION EXIT (CE)**

N.T.S.



**HAYBALE EROSION CONTROL (HBEC)**

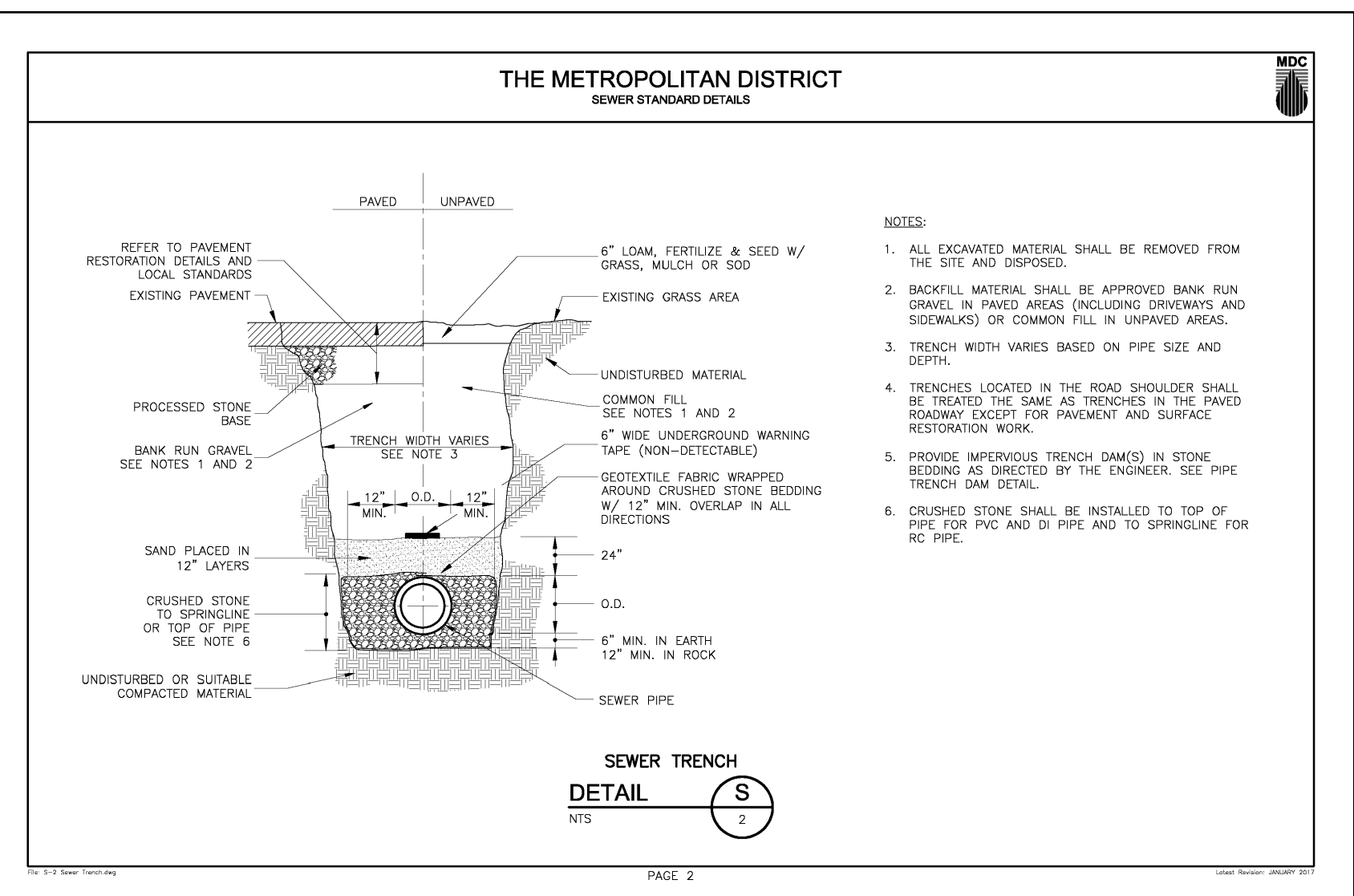
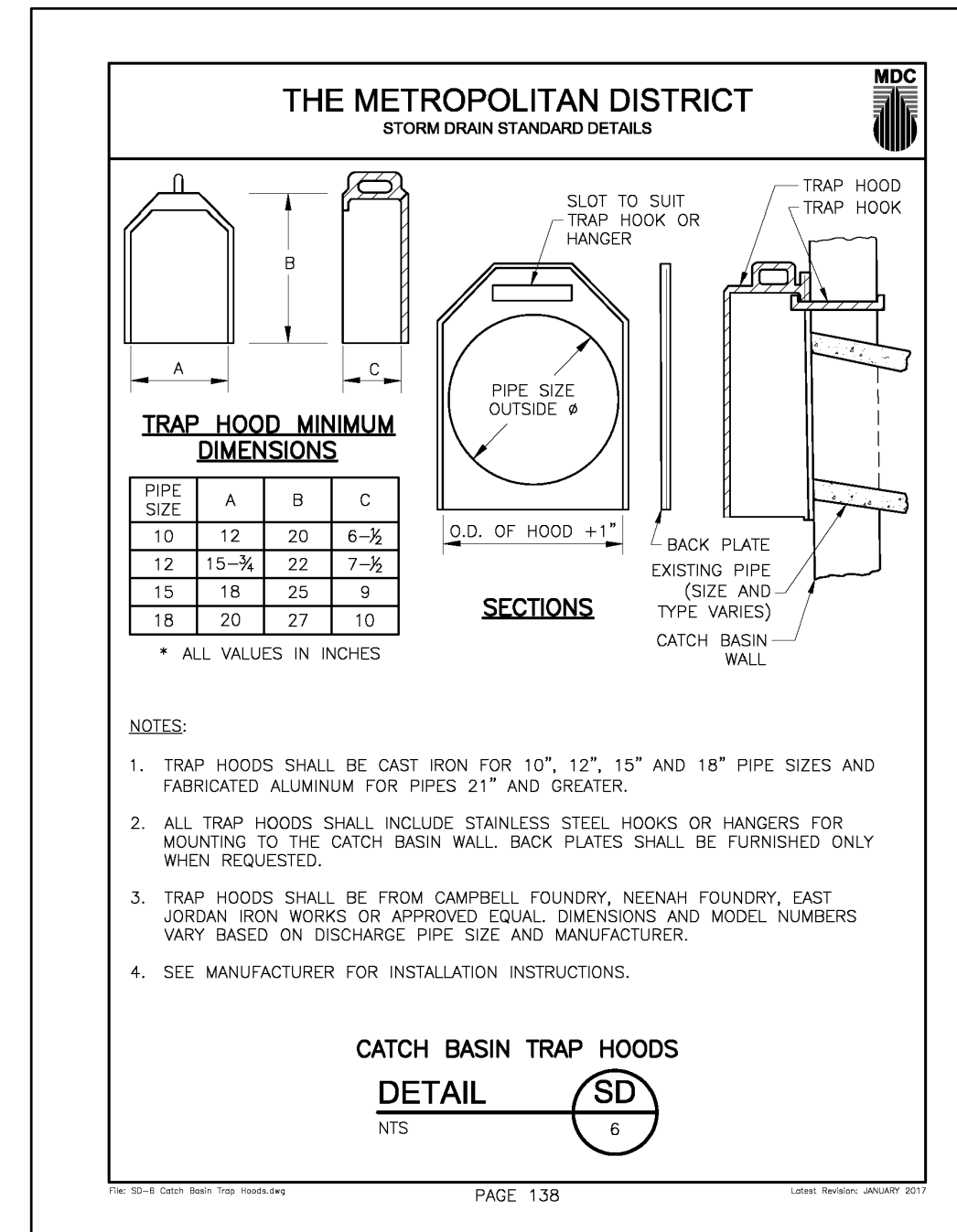
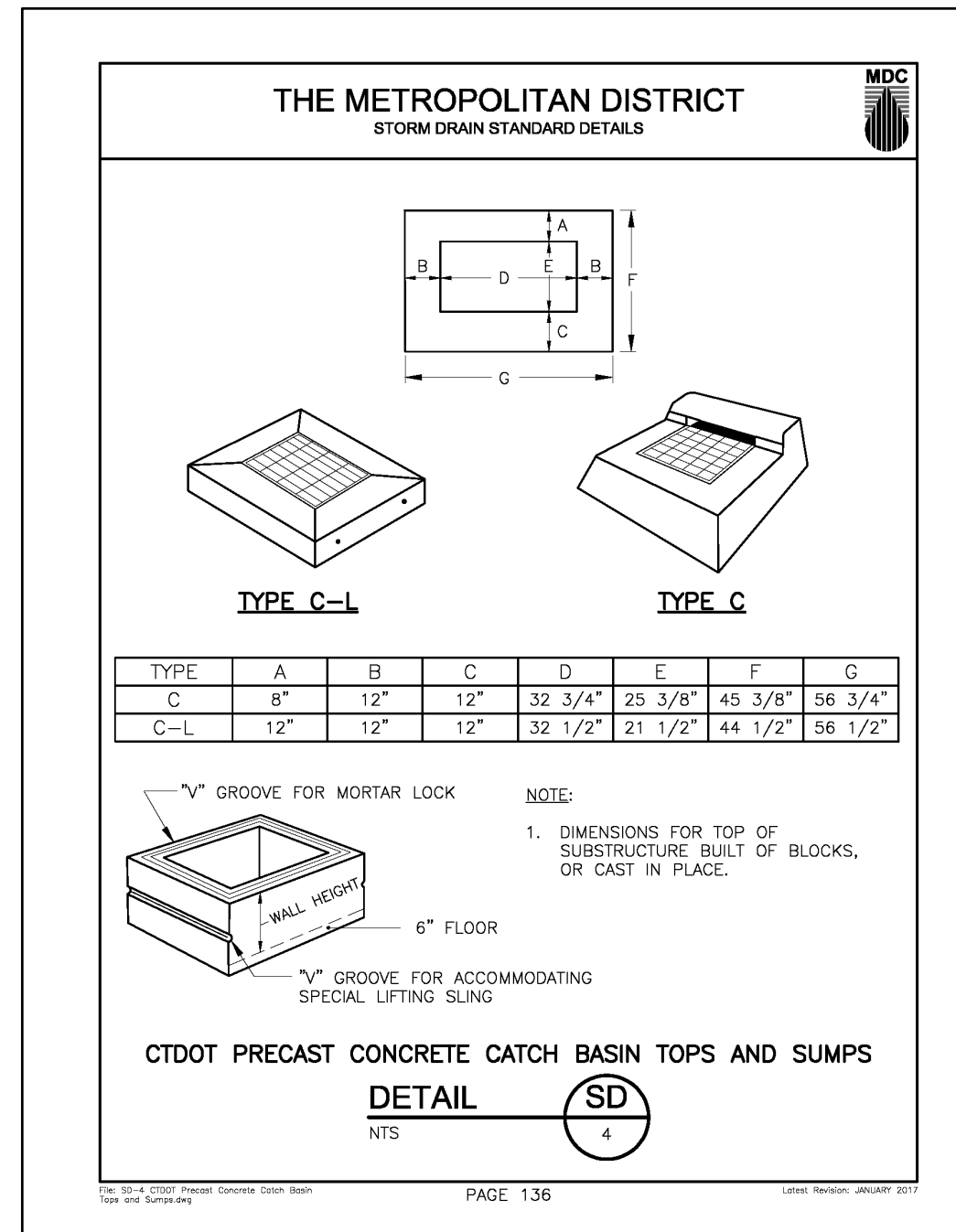
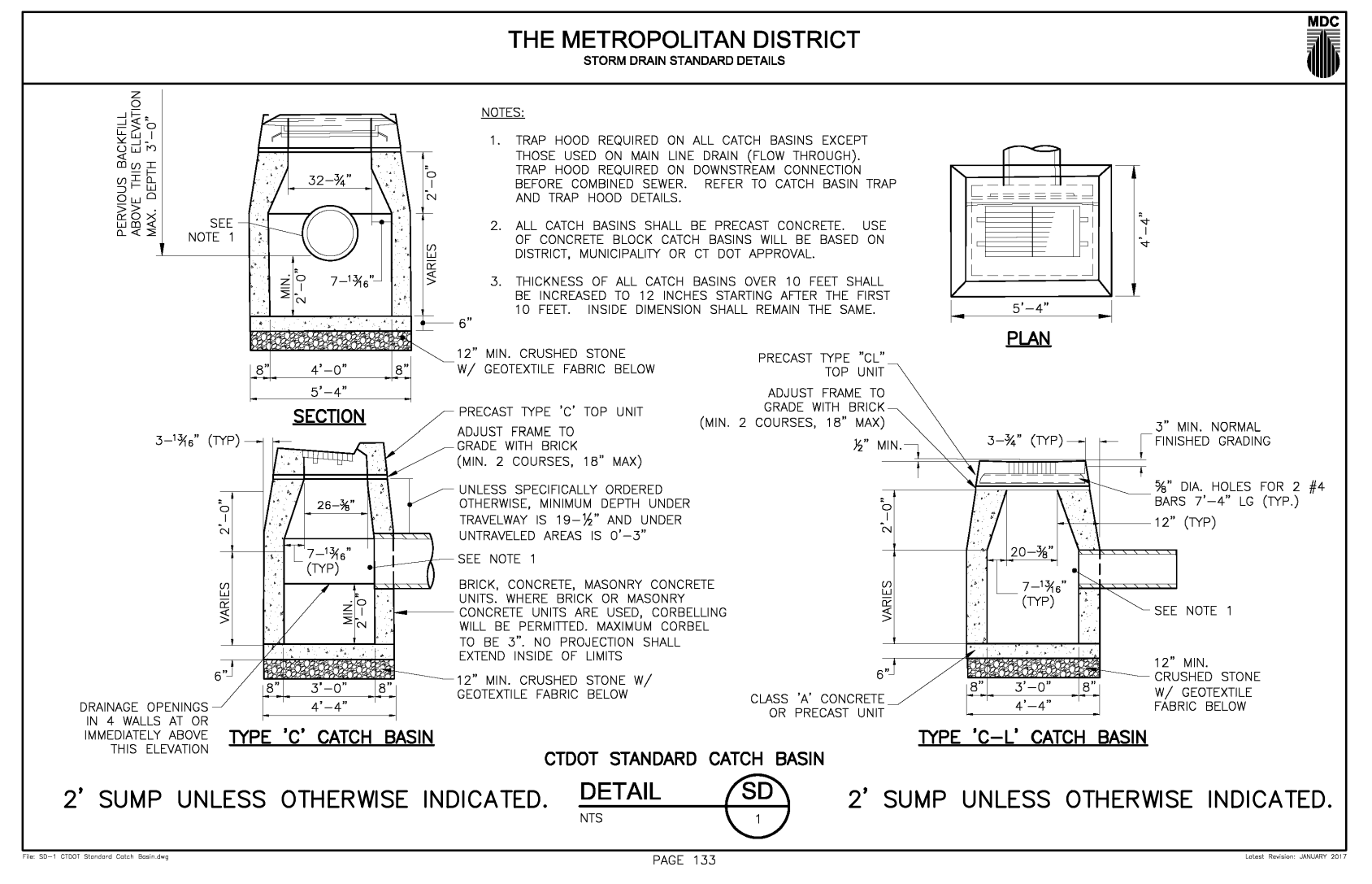
N.T.S.



- NOTE:
- WOOD POSTS SHALL BE HARDWOOD 1 1/2" x 1 1/2" x 48" MIN. STEEL POST SHALL BE A MINIMUM OF 0.5 POUNDS PER LINEAR FOOT X 48".
  - JOINTS, WHEN REQUIRED, SHALL BE SPICED & SECURELY SEALED TOGETHER, AT POST LOCATIONS ONLY, WITH A MINIMUM 6" OVERLAP.

**SEDIMENT FENCE EROSION CONTROL (SFE)**

N.T.S.



NOTE:  
IF WET OR UNSUITABLE SOILS ARE ENCOUNTERED AT THE BOTTOM OF THE TRENCH THOSE SOILS SHALL BE EXCAVATED AND REPLACED WITH A MUD MAT OR CRUSHED STONE. THE DEPTH, EXTENT AND DETAILS FOR THE REPLACEMENT SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

MDC CODE:	BRACKETT SCHOOL HOUSING HARTFORD
WATER:	BILDVWHAR 10
SANITARY:	BILDVWHAR 18
STORM:	BILDVWHAR XX

No.	Date	Description	Revisions:
1	05-25-06	Town & Client Comments	
2	04-06-08	Town Comments	
3	08-02-18	MDC Comments	
4	04-01-19	MDC Comments	

SITE DETAILS	
PREPARED FOR	CITY OF HARTFORD
PROJECT	NAUGATUCK STREET EXTENSION
LOCATION	HARTFORD, CONNECTICUT
DATE	05-19-06
DRAWN BY	CAD
CHECKED BY	DSZ
JOB NO.	04193
SHEET NO.	7 OF 6

**SD-1**



**PROJECT DESCRIPTION:**

The proposed project extends the length of Naugatuck Street by approximately 580 linear feet and connects to Hampton Street. This includes the construction of the bituminous concrete road; granite curb; driveway ramps; sidewalk; storm drainage; sanitary sewer; water; gas; underground electric, telephone and CATV; utility services; light poles; and restoration of disturbed areas with loam & seed.

**CONSTRUCTION SEQUENCE:**

In general, the overall project will follow the sequence below:

- Contact "call before you dig" at 1-800-922-4455 at least 48 hours prior to the start of construction to have existing utilities marked.
- Attend a reconstruction meeting with the City of Hartford staff, including the Wetlands Agent, Director of Public Works and Utility Companies.
- The contractor shall obtain all necessary permits from City, M.D.C., and custodial utility companies prior to start of construction.
- Place sediment fence as shown on the plan prior to the start of any excavation.
- Install and maintain protection of traffic including installation of warning signs, flashers & barricades.
- Dig test pits and relay the information to the engineer and custodial utility company of any potential conflicts.
- Sawcut & remove pavement, curb, sidewalk & amenities, within construction area or where shown on the plans.
- Rough grade road for roadway construction.
- Install Storm drainage, sanitary sewer and utilities.
- Install granite curbing.
- Prepare subgrade and install roadway gravel subbase and processed aggregate base course.
- Install driveway aprons.
- Install pavement binder course and wearing course.
- Install concrete sidewalks and ramps.
- Place topsoil, loam and seed.
- Remove erosion controls after new lawn areas are stabilized.
- Complete final cleaning of storm sewer system.
- The approximate date for start of construction is spring 2019. The estimated completion date is fall 2019.

**GENERAL NOTES:**

- Elevations depicted hereon (if any) refer to Hartford MDC Station #HH-115 Elevation = 78.73 purported to refer to 1989 North American Vertical Datum (NAVD 88).
- Bearings and coordinates depicted hereon refer to the 1927 North American Datum (NAD 27). MDC Mon #77184 N = 348,434.23 and E = 621,305.12 & MDC Mon # 77185 N = 347,910.62 and E = 620,917.27 were used for reference.
- All work and materials to conform to City of Hartford Standard Specifications, D.O.T. Form 817, or the details shown on these plans as applicable.
- All work on this project shall be completed in conformance with the requirements of the various Federal, State, and local permits issued for this project.
- All work on this project shall be completed in conformance with the requirements of the various zoning and inland wetland permits issued for this project.
- A pre-construction meeting and authorization to proceed will be required prior to start of any construction, including removal of trees or stripping of land. Procedures for such pre-construction meeting and authorization to proceed shall be in accordance with City and State requirements. The contractor is responsible for arranging this meeting with City and State officials and the City Director of Public Works, as applicable.
- Prior to any excavation the contractor shall verify all underground utilities by calling 1-800-922-4455 at least 48 hours in advance.
- The location of all utilities shown is approximate and are based on available as-built information from utility company records, the property owner, and limited survey data. All existing utilities may not be shown. The contractor is responsible for determining the exact location of all utilities on the site prior to the start of any construction activity and notifying the design site engineer of any adjustments to the plans which are necessary. Test pits will be required at all proposed utility crossings in order to determine underground utility locations and to identify potential conflicts with vertical and horizontal alignments shown on the plans. Test pits shall be completed by the contractor at his expense.
- All utilities to be installed in accordance with utility company applicable requirements. Final location of utility connections is subject to revision by individual utility companies prior to the installation. The contractor is responsible for coordinating the work with the applicable utility companies.
- Erosion and sedimentation control measures shall be installed and maintained in accordance with the plan, specifications, and the erosion and sedimentation control notes.
- Trees shall be flagged and approved, prior to removal.
- No stumps are to be buried on site.
- All debris shall be removed from the site by the contractor.
- Utility service shall be maintained at all times.
- Drainage shall be maintained throughout the project so as not to cause flooding of roadways or damage to private property.
- Water service installation is to be coordinated with The Metropolitan District staff prior to the start of work by the contractor.
- All new site utilities are to be installed underground.
- Trees and vegetation identified to be saved shall be protected from construction equipment by suitable means approved by City staff.
- Removal of trees or other vegetation, or re-grading substantially different from that shown on the approved site plan, will not be permitted without prior authorization by the City or State, as applicable.
- All work and materials for water main and service shall conform to The Metropolitan District.
- All water main and service piping shall be ANSI/AWWA C151, Class 54, Tyton/MJ D.I.P. unless otherwise specified. All water service shall have a minimum cover of 4 1/2 feet.

**EROSION CONTROL DEVICES:**

Refer to the "Connecticut Guidelines For Soil Erosion And Sediment Control - 2002" (see Erosion and Sediment Control Note 3) when constructing erosion control devices shown on this plan.

HBEC - HAYBALE EROSION CHECKS shall be staked a minimum of five (5) feet from the base of disturbed slopes exceeding eight (8) feet in height, or at locations shown on the plans. Place haybales before starting a fill slope and after digging a cut slope. Heel haybales 4" into the soil. Stake haybales around the perimeter of all catch basins. Remove all sediment when deposits reach 1/2 bale height. Haybales must be replaced periodically.

SFEC - SEDIMENT FENCE EROSION CHECK: a synthetic textile barrier designed to filter sediment from surface water runoff. Placement shall be similar to HBEC and installation requires anchoring the fence bottom to prevent bypass. All sediment shall be removed if deposits reach one (1) foot in depth. Additional support (such as snow fence or wire fence) on the downhill face may be required to strengthen sediment fence in high flow locations.

CE - CONSTRUCTION EXIT: a broken stone pad providing a hard surface points where vehicles will leave the site. The construction exits reduce tracking of sediment into adjacent pavement. Excess sediment should be periodically removed from the stone surface.

**EROSION AND SEDIMENT CONTROL NOTES**

- Disturbance of soil surfaces is regulated by State Law. All work shall comply with an approved "Erosion and Sediment Control Plan" to prevent or minimize soil erosion.
- The installation and maintenance of erosion control devices is the responsibility of the land owner, developer, and the excavation contractor. Town officials shall be notified in writing of the name, address and telephone number of the individual responsible for this work (including any changes) at the required pre-construction conference.
- The contractor shall use the "Connecticut Guidelines for Soil Erosion and Sediment Control" (2002), as amended as a guide in constructing the erosion and sediment controls indicated on these plans. The guidelines may be obtained from the Connecticut Department of Environmental Protection store, 79 Elm Street, Hartford, CT 06106-5127.
- The contractor shall schedule operations to limit disturbance to the smallest practical area for the shortest possible time. Overall site disturbance shall be confined to those limits delineated on the plans.
- The contractor is responsible for the timely installation, inspection, repair or replacement of erosion control devices to insure proper operation.
- The contractor shall notify the design engineer of unsatisfactory erosion conditions not controlled by the erosion and sediment control plan and shall install additional measures as required.
- All disturbed areas not covered by buildings, pavement, mulch or ground cover plantings shall be planted with grass.
- Accumulated sediment removed from erosion control devices is to be spread and stabilized in level, erosion resistant locations as general fill.
- Special attention shall be given to the construction sequence outlined on the erosion and sediment control plan.
- The developer shall be responsible for cleaning any construction debris or sediment from existing roads as ordered by the Town and/or State, if any debris or sediment from construction activities enter onto these roadways.
- Limit work within wetland areas to the least disturbance necessary for construction. Restore disturbed areas as closely as possible to their original natural state.
- Additional dust control measures as specified in D.O.T. 816 Section 9.39, Section 9.42 and Section 9.43 shall be furnished by the contractor as site conditions warrant or as directed by Town or State officials.
- The contractor is responsible for cleaning and removal of sediment and/or debris from the storm drainage system throughout the duration of the project (i.e. sumps, plunge pools, etc.)

**STANDARD SANITARY SEWER NOTES FOR DEVELOPER'S PERMIT-AGREEMENT PROJECTS**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS.
- THE SANITARY SEWER SHALL BE CONSTRUCTED UNDER A DEVELOPER'S PERMIT AGREEMENT BETWEEN (NAME AS APPEARS ON THE CERTIFICATE OF TITLE) AND THE METROPOLITAN DISTRICT, AND SHALL BE BUILT BY A LICENSED DRAIN LAYER UNDER PERMIT BY AND UNDER THE SUPERVISION OF THE DIRECTOR OF ENGINEERING AND PLANNING OR THEIR DESIGNEE.
- "CALL BEFORE YOU DIG" - THE CONTRACTOR IS HEREBY REMINDED THAT TITLE 16, CHAPTER 293 OF THE CONNECTICUT GENERAL STATUTES REQUIRES NOTIFICATION OF THE UTILITY COMPANIES OF PENDING EXCAVATION AT OR NEAR PUBLIC UTILITIES. THE CONTRACTOR SHALL CALL 1-800-922-4455 AT LEAST 48 HOURS PRIOR TO BEGINNING THE EXCAVATION.
- SANITARY SEWERS ARE FOR SANITARY SEWAGE ONLY. ALL STORM WATER, COOLING WATER, AND SUBSOIL DRAINAGE ARE EXCLUDED FROM SANITARY SEWERS BY DISTRICT ORDINANCES.
- SANITARY SEWER DISCHARGES MUST MEET ALL APPLICABLE STATE, FEDERAL, METROPOLITAN DISTRICT AND LOCAL REGULATIONS. THIS MAY INCLUDE, BUT IS NO LIMITED TO PERMITTING, SAMPLING AND REPORTING REQUIREMENTS.
- SUBSOIL AND SURFACE DRAINAGE SHALL BE CONNECTED TO THE NEAREST STORM DRAIN OR WATERCOURSE, AS APPROVED BY THE APPROPRIATE AUTHORITY.
- ALL FEDERAL AND STATE OSHA SAFETY STANDARDS MUST BE FOLLOWED DURING SEWER INSTALLATION AND TESTING, INCLUDING 29 CFR 1926.650 - 1926.652, THAT ADDRESSES EXCAVATION WORK AND REQUIREMENTS FOR PROTECTIVE SYSTEMS.
- THE CONTRACTOR SHALL FURNISH TO THE ENGINEER A MATERIALS LIST AND SUBMITTALS, FOR REVIEW AND APPROVAL, PRIOR TO THE INSTALLATION OF THE PROPOSED SEWER.
- ELEVATIONS ARE BASED ON NAVD 88 DATUM.
- ALL SEWER PIPE AND APPURTENANCES SHALL BE STAKED (SURVEYED) OUT BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF CONNECTICUT. THE SURVEY SHALL INCLUDE AN OFFSET LINE EVERY EVEN FIFTY FEET (50'0"), BENCHES AND CUT SHEETS.
- ANY PROPOSED WATER MAINS SHALL BE INSTALLED AFTER THE SANITARY SEWER.
- WHENEVER POSSIBLE THE SANITARY SEWER SHALL BE LOCATED A MINIMUM OF TEN FEET (10'0") HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. WHEN LOCAL CONDITIONS PREVENT THIS A LESSER DISTANCE IS ALLOWED IF (A) THE WATER MAIN IS IN A SEPARATE TRENCH, OR (B) IT IS LOCATED IN THE SAME TRENCH TO ONE SIDE ON A BENCH OF UNDISTURBED EARTH WITH AT LEAST TWELVE INCHES (12"), AND PREFERABLY EIGHTEEN INCHES (18"), HORIZONTAL SEPARATION BETWEEN THE EDGES OF THE SEWER PIPE AND THE WATER MAIN. IN EITHER CASE, THE BOTTOM OF THE WATER MAIN SHALL BE EIGHTEEN INCHES ABOVE THE CROWN OF THE SEWER PIPE.
- ANY CONFLICT BETWEEN THE PROPOSED SANITARY SEWER, EXISTING OR PROPOSED UTILITIES AND/OR STORM DRAINS WILL BE RESOLVED AT THE EXPENSE OF THE DEVELOPER.
- ROADWAYS REQUIRING FILL SHALL HAVE A MINIMUM OF THREE FEET (3'0") OF ACCEPTABLE FILL PLACED ABOVE THE TOP OF THE PROPOSED PIPE ELEVATION OR TO ESTABLISHED GRADE, AND COMPACTED TO 95% DENSITY PRIOR TO INSTALLATION OF THE SANITARY SEWER.
- TRENCH BACKFILL UNDER ROADWAYS AND WALKWAYS SHALL BE BANK RUN GRAVEL, SAND, OR ACCEPTABLE NATURAL SOIL, SATISFACTORY TO THE TOWN, CITY AND/OR STATE AUTHORITY HAVING JURISDICTION.
- PRIOR TO PLACING BACKFILL, THE CRUSHED STONE FOUNDATION AND THE STONE HAUNCHING ALONG THE MAIN SEWER PIPES AND LATERALS SHALL BE WRAPPED IN A DISTRICT APPROVED FILTER FABRIC AND SHALL BE LAPPED CLOSED AT THE TOP A MINIMUM OF ONE FOOT (1'0"). THE FILTER FABRIC SHALL BE PLACED UNDER THE CRUSHED STONE FOUNDATION FOR MANHOLES AND EXTENDED ABOVE THE PIPE.
- AFTER PLACING APPROXIMATELY TWO FEET (2'0") OF BACKFILL OVER ALL SEWER PIPING, THE CONTRACTOR SHALL PLACE A SIX-INCH WIDE STRIP OF DURABLE, NON-DETECTABLE COLOR CODED (GREEN FOR SANITARY SEWER AND STORM SEWER) UNDERGROUND UTILITY LOCATION TAPE IMPRINTED WITH AN APPROPRIATE WARNING INDICATING THE PRESENCE OF THE BURIED UTILITY CONDUIT.
- THE CONTRACTOR IS RESPONSIBLE, AT HIS OWN EXPENSE, FOR VERIFYING FIELD COMPACTION OF BACKFILL UTILIZING AASHTO T190 METHOD D. TEST RESULTS MAY BE REQUIRED BY THE METROPOLITAN DISTRICT.
- TEMPORARY AND PERMANENT PAVING RESTORATION SHALL BE IN ACCORDANCE WITH DISTRICT AND/OR TOWN AND/OR STATE SPECIFICATIONS.
- THE SEWER LINE SHALL BE TESTED FOR LEAKAGE USING LOW PRESSURE AIR IN ACCORDANCE WITH SPECIFICATIONS FURNISHED BY THE METROPOLITAN DISTRICT. ANY SECTION OF PIPELINE FAILING THE TEST SHALL BE REPAIRED OR REPLACED AND RE-TESTED BEFORE INDIVIDUAL BUILDING CONNECTIONS WILL BE PERMITTED.
- CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION(S) SHALL BE DONE BY THE CONTRACTOR UPON COMPLETION OF THE SEWER, AND AGAIN AT THE END OF THE ONE-YEAR MAINTENANCE PERIOD AT THE DEVELOPER'S EXPENSE. A DISTRICT REPRESENTATIVE SHALL BE PRESENT DURING THE INSPECTIONS.
- ALL SANITARY SEWER LATERALS SHALL BE A MINIMUM OF SIX INCHES (6") IN DIAMETER AND SHALL BE INSTALLED AT NOT LESS THAN TWO PERCENT (2%) GRADE. THE MAXIMUM GRADE ALLOWED SHALL BE TEN PERCENT (10%), LATERALS TO THE EDGE OF THE RIGHT-OF-WAY OR EASEMENT SHALL BE BUILT IN CONJUNCTION WITH THE MAIN SEWER CONSTRUCTION.
- APPROVAL FOR THE SEWER IS FOR THE MAIN LINE AND LATERALS (FROM THE MAIN LINE TO THE EDGE OF THE RIGHT-OF-WAY OR THE EDGE OF THE EASEMENT) ONLY. CONNECTIONS FROM THE LATERALS AT THE EDGE OF THE RIGHT-OF-WAY OR THE EDGE OF THE EASEMENT TO THE BUILDING(S) SHALL BE CONSTRUCTED UNDER INDIVIDUAL HOUSE CONNECTION PERMITS ISSUED BY THE CUSTOMER SERVICE DEPARTMENT OF THE METROPOLITAN DISTRICT, LOCATED AT 125 MAXIM ROAD, HARTFORD, CONNECTICUT.
- ALL WORK SHALL FOLLOW STATE PLUMBING CODE TO INCLUDE INDIVIDUAL FIXTURE BACKFLOW PROTECTION.

**LEGEND:**

- ★ POSSIBLE CONNECTION CHARGE OR OTHER MONETARY CHARGE IS DUE IN AN AMOUNT BASED UPON PREVAILING RATES IN EFFECT AT THE TIME OF ISSUANCE OF THE HOUSE CONNECTION PERMIT.
- ★ DEFERRED DEVELOPER'S OUTLET CHARGE IS DUE IN AN AMOUNT BASED UPON PREVAILING RATES IN EFFECT AT THE TIME OF ISSUANCE OF THE HOUSE CONNECTION PERMIT.

**STANDARD WATER MAIN NOTES FOR DEVELOPER'S PERMIT-AGREEMENT PROJECTS**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS.
- WATER MAIN TO BE INSTALLED IN ACCORDANCE WITH THE METROPOLITAN DISTRICT'S "DEVELOPERS MANUAL FOR WATER MAIN DESIGN AND INSTALLATION STANDARDS."
- THE WATER MAIN SHALL BE CONSTRUCTED UNDER A DEVELOPER'S PERMIT AGREEMENT BETWEEN XXXXXXXXXXXXXXXXXXXXXXXX AND THE METROPOLITAN DISTRICT AND SHALL BE BUILT BY A LICENSED PLUMBER UNDER PERMIT BY AND UNDER THE SUPERVISION OF THE DIRECTOR OF ENGINEERING AND PLANNING OR THEIR DESIGNEE.
- "CALL BEFORE YOU DIG" - THE CONTRACTOR IS HEREBY REMINDED THAT TITLE 16, CHAPTER 293 OF THE CONNECTICUT GENERAL STATUTES REQUIRES NOTIFICATION OF THE UTILITY COMPANIES OF PENDING EXCAVATION AT OR NEAR PUBLIC UTILITIES. THE CONTRACTOR SHALL CALL 1-800-922-4455 AT LEAST 48 HOURS PRIOR TO BEGINNING THE EXCAVATION.
- ALL FEDERAL AND STATE OSHA SAFETY STANDARDS MUST BE FOLLOWED DURING WATER MAIN INSTALLATIONS AND TESTING, INCLUDING 29 CFR 1926.650 - 1926.652, THAT ADDRESS EXCAVATION WORK AND REQUIREMENTS FOR PROTECTIVE SYSTEMS.
- TEST PITS SHALL BE DUG WELL IN ADVANCE OF THE WATER MAIN INSTALLATION TO DETERMINE POSSIBLE OFFSETS ABOVE OR BELOW OTHER UTILITIES, STRUCTURES OR OBSTACLES.
- EXTREME CARE MUST BE EXERCISED BY THE CONTRACTOR TO PROTECT EXISTING SANITARY SEWERS, SANITARY SEWER LATERALS, STORM DRAINS AS WELL AS OTHER UTILITIES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL FURNISH TO THE ENGINEER A MATERIALS LIST AND SUBMITTALS, FOR APPROVAL, PRIOR TO THE INSTALLATION OF THE PROPOSED WATER MAIN.
- ELEVATIONS ARE BASED ON NAVD 88 DATUM.
- ALL WATER MAIN AND APPURTENANCES SHALL BE STAKED (SURVEYED) OUT BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF CONNECTICUT. THE SURVEY SHALL INCLUDE AN OFFSET LINE OR STREET LINE EVERY FIFTY FEET (50'0"), FINAL ROAD OR SURFACE ELEVATION.
- TEST PRESSURE SHALL BE 150 PSI, AS CONFIRMED BY THE METROPOLITAN DISTRICT INSPECTOR ON SITE.
- GATE OPERATIONS FOR THIS PROJECT SHALL BE "OPEN RIGHT".
- HYDRANT LOCATIONS ARE SUBJECT TO THE APPROVAL OF THE TOWN FIRE MARSHAL.
- MINIMUM DEPTH OF COVER OVER PROPOSED WATER MAIN SHALL BE 4.5 FEET AS MEASURED FROM THE UNDESIDE OF THE PAVEMENT TO THE TOP OF THE PIPE.
- ALL WATER MAINS SHALL BE CLASS 54 ANSI/AWWA C151/A21.51-81 DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND LINED MOLDS FOR WATER OR OTHER LIQUIDS.
- WHERE ROCK IS ENCOUNTERED DURING THE INSTALLATION OF THE PROPOSED WATER MAIN, THE PROPOSED MAIN SHALL BE LAID ON A PRE-COMPACTED BED OF APPROVED MATERIAL A MINIMUM SIX INCHES (6") IN DEPTH.
- ALL FITTINGS, UNLESS OTHERWISE SPECIFIED, SHALL BE MECHANICAL JOINT AND SHALL BE INSTALLED WITH RESTRAINT IN EACH DIRECTION.
- WHERE RESRANT IS INDICATED, APPROVED RETAINER GLANDS OR RODDING MAY BE UTILIZED.
- WHERE "PULLING" OR DEFLECTING PIPE IS INDICATED, SUCH DEFLECTION SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF "THE DIPRA HANDBOOK." IN NO CASE SHOULD THE DEFLECTION BE GREATER THAN FIVE DEGREES (3 DEGREES IF RESTRAINED).
- ALL GATE VALVES, AIR VALVES AND BLOWOFFS SHALL BE INSTALLED COMPLETE WITH DISTRICT APPROVED GATE BOXES AND APPURTENANCES UNLESS OTHERWISE NOTED.
- GATE NUT EXTENSION STEMS REQUIRED WHERE GATE VALVE NUTS ARE PLACED AT A DEPTH GREATER THAN 4.5 FEET BELOW FINAL GRADE.
- CONCRETE COLLARS FOR FIRE HYDRANTS SHALL BE INSTALLED PRIOR TO THE METROPOLITAN DISTRICT PLACING THE WATER MAIN INTO SERVICE.
- MAINTAIN A MINIMUM DISTANCE OF 10 FEET (10'0") HORIZONTAL BETWEEN THE WATER MAIN AND ANY EXISTING OR PROPOSED SANITARY SEWER. WHEN LOCAL CONDITIONS PREVENT THIS, A LESSER DISTANCE IS ALLOWED IF (A) THE WATER MAIN IS IN A SEPARATE TRENCH, OR (B) IT IS LOCATED IN THE SAME TRENCH TO ONE SIDE ON A BENCH OF UNDISTURBED EARTH WITH AT LEAST TWELVE INCHES (12"), AND PREFERABLY EIGHTEEN INCHES (18"), HORIZONTAL SEPARATION BETWEEN THE EDGES OF THE SEWER PIPE AND THE WATER MAIN. IN EITHER CASE, THE BOTTOM OF THE WATER MAIN SHALL BE EIGHTEEN INCHES ABOVE THE CROWN OF THE SEWER PIPE.
- WHERE THE WATER MAIN IS TO BE INSTALLED BELOW DRAIN PIPE, MAINTAIN A MINIMUM OF 18 INCHES BETWEEN THE BOTTOM OF STORM DRAIN AND THE CROWN OF THE WATER MAIN.
- ANY CONFLICT BETWEEN THE PROPOSED WATER MAIN, EXISTING OR PROPOSED UTILITIES AND/OR STORM DRAINS SHALL BE RESOLVED AT THE EXPENSE OF THE DEVELOPER.
- AFTER PLACING APPROXIMATELY TWO FEET (2'0") OF BACKFILL MATERIAL OVER THE WATER MAIN, THE CONTRACTOR SHALL PLACE A SIX-INCH WIDE STRIP OF DURABLE, NON-DETECTABLE, COLOR CODED (BLUE FOR WATER) UNDERGROUND UTILITY DETECTION TAPE IMPRINTED WITH THE APPROPRIATE WARNING INDICATING THE PRESENCE OF A BURIED UTILITY CONDUIT.
- TRENCH BACKFILL UNDER ROADWAYS AND WALKWAYS SHALL BE BANK RUN GRAVEL, SAND, OR ACCEPTABLE NATIVE SOIL SATISFACTORY TO THE TOWN, CITY OR AND/OR STATE AUTHORITY HAVING JURISDICTION.
- ROADWAYS REQUIRING FILL SHALL HAVE A MINIMUM OF THREE FEET (3'0") OF ACCEPTABLE FILL PLACED ABOVE THE TOP OF THE PROPOSED PIPE ELEVATION OR TO ESTABLISHED GRADE, AND COMPACTED TO 95% DENSITY PRIOR TO INSTALLATION OF THE WATER MAIN.
- TEMPORARY AND PERMANENT PAVING RESTORATION SHALL BE MADE IN ACCORDANCE WITH DISTRICT AND/OR TOWN AND/OR STATE SPECIFICATIONS.
- CHLORINATION BY INJECTION METHOD AND DECHLORINATION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL ABIDE BY THE DISTRICT'S STANDARDS FOR DISINFECTING WATER MAINS, INCLUDING PROPERLY NEUTRALIZING THE CHLORINATED WATER AND DISCHARGING THE WATER ACCORDINGLY. ALL WORK TO BE COORDINATED WITH THE METROPOLITAN DISTRICT.
- APPROVAL IS FOR THE MAIN LINE ONLY. INDIVIDUAL PERMITS FOR DOMESTIC AND FIRE SERVICES AND HYDRANTS SHALL BE OBTAINED AT THE CUSTOMER SERVICE DEPARTMENT, 125 MAXIM ROAD, HARTFORD, CONNECTICUT.
- ALL WEDGE VALVES SHALL BE REMOVED UPON COMPLETION OF WATER MAINS UNLESS OTHERWISE INSTRUCTED TO REMAIN AND/OR TO BE CONVERTED.
- THE CONTRACTOR SHALL CALL MDC SYSTEMS REPAIR (860-278-7850 EXT. 3627) AFTER JOB CONFERENCE WITH DISTRICT TO SCHEDULE ANY REQUIRED TAPS OF MDC WATER MAINS.

**LEGEND:**

- ★ POSSIBLE MONETARY CHARGE IS DUE IN AN AMOUNT BASED UPON PREVAILING RATES IN EFFECT AT THE TIME OF ISSUANCE OF THE WATER SERVICE PERMIT.

No.	Date	Description
1	05-31-06	City Comments
2	03-14-08	City Comments
3	08-02-18	MDC Comments
4	10-16-18	MDC Comments
5	04-01-19	MDC Comments

NOTES PREPARED FOR  
**CITY OF HARTFORD**  
NAUGATUCK STREET EXTENSION  
HARTFORD, CONNECTICUT

Date: 05-19-06 Drawn by: CAD Job no: 04193  
Scale: NONE Checked by: DSZ Sheet no: 7 OF 7

MDC CODE:	BRACKETT SCHOOL HOUSING HARTFORD
WATER:	BILDVWHAR 10
SANITARY:	BILDVSHAR 18
STORM:	BILDVSHAR XX

**NT-1**

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