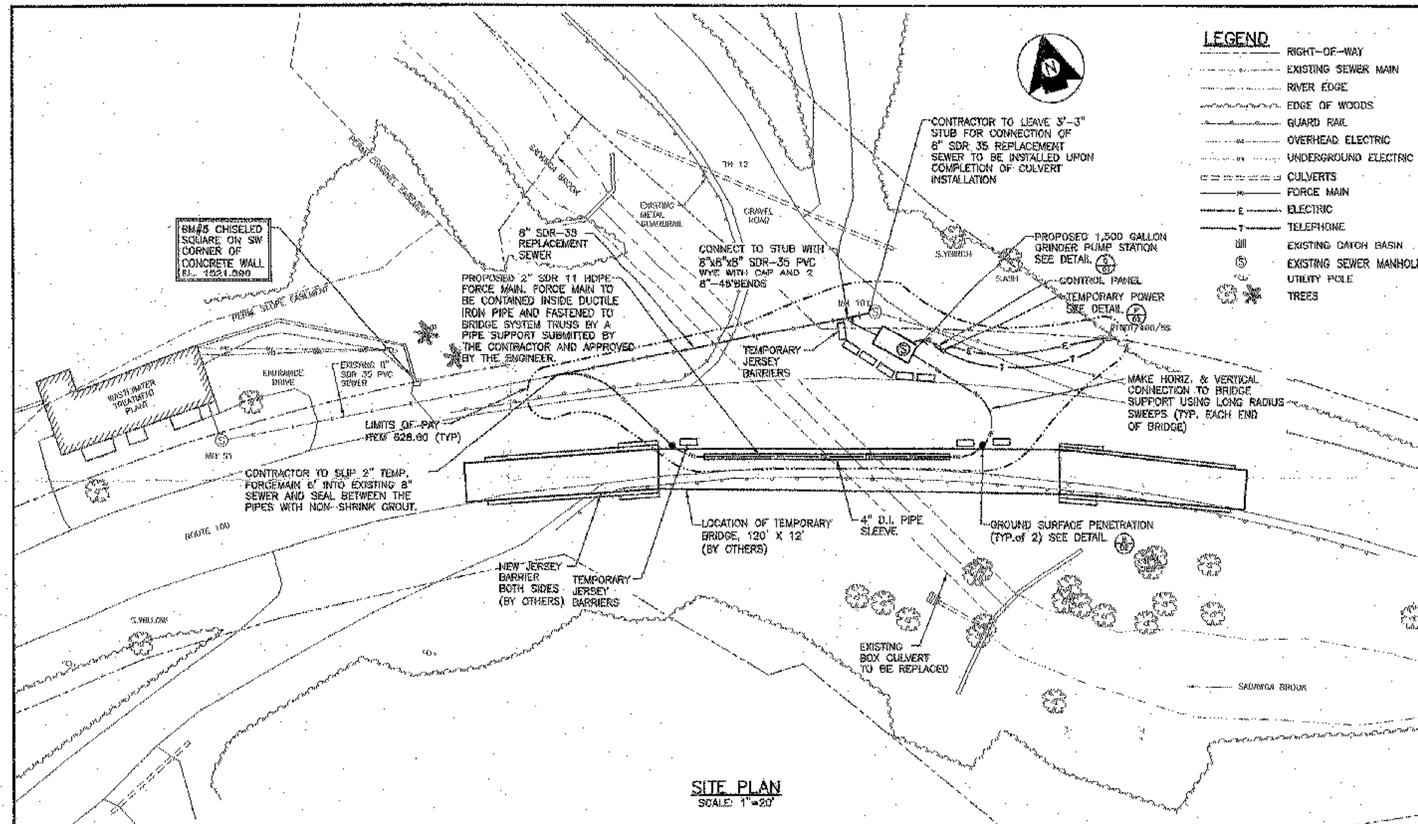
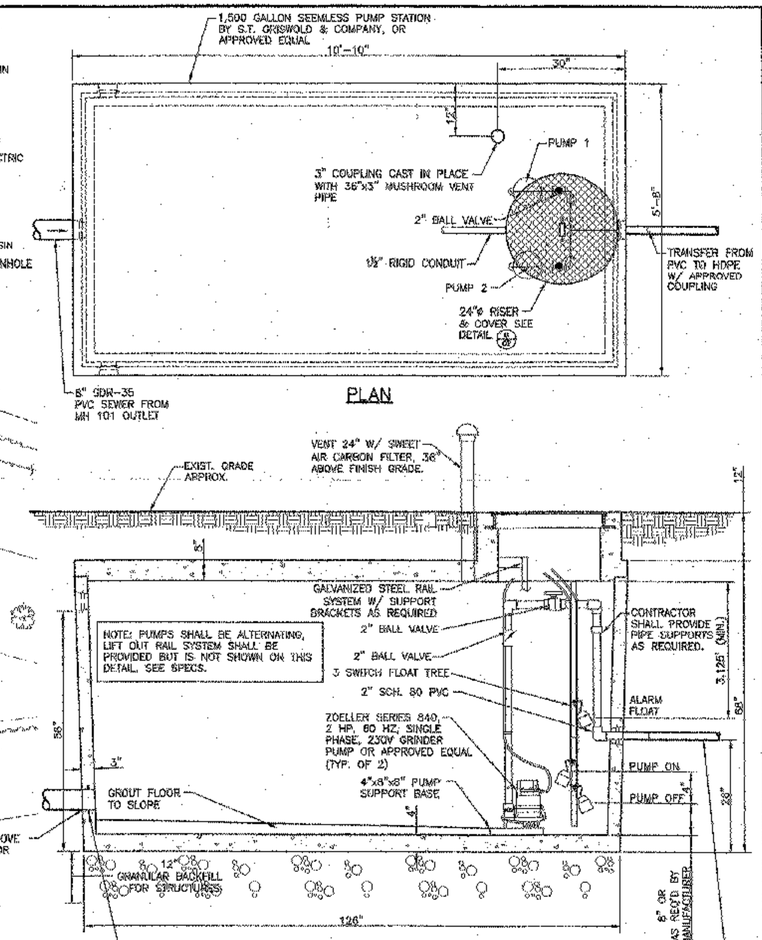


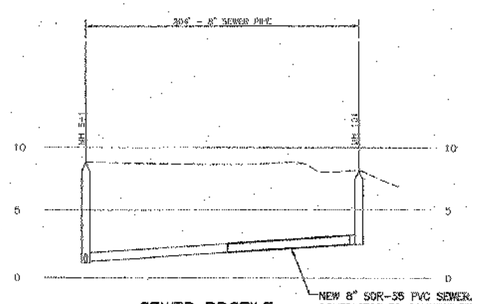
SITE PLAN
SCALE: 1"=20'



PUMP STATION DETAIL
NOT TO SCALE

CONSTRUCTION SEQUENCE:

1. CLOSE OFF ROAD AND ACTIVATE TEMPORARY BRIDGE.
2. INSTALL GRINDER PUMP STATION.
3. INSTALL 2" TEMPORARY FORCE MAIN FROM PUMP STA. UNDER THE BRIDGE, TO THE TIE IN LOCATION.
4. PRESSURE TEST THE 2" TEMPORARY FORCE MAIN.
5. ACTIVATE GRINDER UNIT AND PUMPS.
6. TIE IN THE TEMPORARY 2" FORCE MAIN, TEMPORARILY ABANDONING THE EXISTING 8" LINE.
7. IF CONSTRUCTION CONTINUES INTO WINTER MONTHS, ALL BURIED TEMPORARY PIPE SHALL BE COVERED WITH 4" OF RIGID POLYSTYRENE INSULATION BOARD, HDPE FORCE MAIN SHALL BE HEAT TRACED.
8. AT AN ADDITIONAL COST TO BRIDGE CONSTRUCTION, INSTALL NEW PERMANENT 8" SDR-35 REPLACEMENT SEWER FROM STUB OF MH 101 TO THE LIMIT OF DISTURBED SEWER.
9. REMOVE TEMPORARY FORCE MAIN.
10. CONTRACTOR TO EXCAVATE TEMPORARY PUMP STATION AND BACKFILL HOLE.
11. CONTRACTOR RESPONSIBLE FOR PUMPING OUT PUMP STATION AND DISPOSAL OF SOLIDS IN ACCORDANCE WITH ALL LOCAL AND STATE REGULATIONS, THROUGH USE OF A LOCAL SEPTAGE HAULER OR ALTERNATE APPROVED MEANS.
12. PERFORM LEAKAGE TEST ON NEW SEWER, PUT IN SERVICE.
13. SEE NOTE 9 OF GENERAL NOTES.



SEWER PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

NEW 8" SDR-35 PVC SEWER. CONTRACTOR TO CONNECT TO STUB OFF MH 101 AND COORDINATE LIMITS OF SEWER REPLACEMENT WITH THAT DISTURBED DURING CONSTRUCTION.

GENERAL NOTES:

1. SEE SECTION 828 AND SUPPLEMENTAL SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIRENTS.
2. CONTRACTOR SHALL COORDINATE PUMP VOLTAGE WITH THAT AVAILABLE AT THE UTILITY POLE.
3. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR THE MEANS AND METHODS OF EVACUATION AND FOR THE DESIGN AND CONSTRUCTION OF THE EXCAVATION SUPPORT SYSTEMS.
4. ELECTRICAL COMPONENTS INSTALLED INSIDE THE PUMP STATION SHALL BE EXPLOSION PROOF. APPROPRIATE SEALS SHALL BE INSTALLED IN THE CONDUIT BETWEEN THE TANKS AND CONTROL PANEL.
5. ALL EXISTING UNDERGROUND UTILITIES WERE LOCATED USING AVAILABLE INFORMATION. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. ALL REPAIRS TO DAMAGED UTILITIES SHALL BE MADE BY THE CONTRACTOR USING MATERIALS APPROVED BY THE ENGINEER AT NO ADDITIONAL EXPENSE OF THE OWNER.
6. CONTRACTOR TO CONTACT DIG SAFE IN VERMONT AT 1-888-DIG-SAFE, PRIOR TO COMMENCING WORK. CONTRACTOR SHALL VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND ELECTRIC AND TELEPHONE LINES AND TAKE NECESSARY PRECAUTIONS IN STRICT ACCORDANCE WITH OSHA STANDARDS DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT LOCAL ELECTRICAL AND TELEPHONE UTILITIES REGARDING ANY NECESSARY SUPPORT OF ANY UTILITY POLES DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR THE SUPPORT OR TEMPORARY RELOCATION OF ALL UTILITY POLES AFFECTED BY THE CONSTRUCTION.
7. EXPLORATORY EXCAVATION IS REQUIRED TO LOCATE UNDERGROUND UTILITIES. CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES.
8. LEAKAGE TESTING SHALL BE PERFORMED ON ALL BUILDING SEWERS AND STRUCTURES. TESTING SHALL BE PERFORMED IN PRESENCE OF THE ENGINEER AND CONFORM TO; CHAPTER 1 OF THE ENVIRONMENTAL PROTECTION RULES (EFFECTIVE JAN. 1, 2005), APPENDIX 1-A: DESIGN GUIDELINES, FOR THE FOLLOWING SECTIONS:
   * SEWER COLLECTION SYSTEMS: SECTION 1-A-03(K)
   * MANHOLE STRUCTURES: SECTION 1-A-03(L)
   * SEE SPECIFICATIONS FOR LEAKAGE TEST REQUIREMENTS
9. CONTRACTOR SHALL MAINTAIN SEWER FLOW AT ALL TIMES THROUGH OPERATION OF THE EXISTING SYSTEM, THROUGH BYPASS PUMPING, OR OTHER MEANS APPROVED BY THE ENGINEER.
10. CONTRACTOR TO LOCATE PUMP STATION TO FACILITATE EXCAVATION OF CULVERT AND TO MAINTAIN ACCESS TO TH 12 AT ALL TIMES.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL. A TRAFFIC CONTROL PLAN IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. REQUEST FOR TRAFFIC DETOURS ON LOCAL COLLECTOR ROADS MUST BE REVIEWED AND APPROVED BY LOCAL AUTHORITIES. ACCESS TO RESIDENCES ALONG ROADS SHALL BE AVAILABLE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING LOCAL FIRE, POLICE, AND EMERGENCY SERVICES AT BOTH INITIAL AND ANY CHANGES TO DETOURS OR RESTRICTED TRAFFIC FLOW. TRAFFIC ALONG ROUTE 100 SHALL BE MAINTAINED AT ALL TIMES.
12. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL AT ALL TIMES DURING THE EXECUTION OF THE WORK.
13. ALL WORK SHALL BE DONE IN THE PUBLIC RIGHT-OF-WAY OR EASEMENTS.
14. THE CONTRACTOR SHALL RESTORE ALL LAWNS AND OTHER GRASSED AREAS DISTURBED BY CONSTRUCTION, RESTORATION OF GROWTH SHALL AT LEAST BE FULLY EQUAL TO THAT PREVAILING PRIOR TO CONSTRUCTION.
15. CONTRACTOR SHALL MAINTAIN PUBLIC WALKWAYS, PRIVATE ENTRANCES, BUSINESS ENTRANCES, COMMERCIAL ACCESSES, AND RESIDENTIAL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
16. CONTRACTOR SHALL REFER TO BRIDGE REPLACEMENT PROJECT PLANS FOR ACTUAL ELEVATIONS.

PUMP STATION DESIGN CRITERIA:

1. AVERAGE DAILY FLOW = 6,000 GPD OR 4.2 GPM.
2. PEAK FLOW = 6,000 GPD x PEAKING FLOW FACTOR OF 4 = 24,000 GPD OR 16.8 GPM
3. EMERGENCY STORAGE =
   - LONGEST POWER OUTAGE OVER 5 YEARS = 3 HOURS
   - ASSUME FLOW OCCURS OVER 16 HOURS DURING OUTAGE =

     6,000 GPD x 14HRS/16HRS x 1 DAY/24HRS x 3HRS = 1,125 GALLONS
   - VOLUME ABOVE ALARM FLOAT =

     3.125' x (10.33") x (5.16') = 166.5 FT = 1,245 GALLONS
4. ALARMS WILL BE SENT TO PROPOSED AUTO DIALER TO NOTIFY TOWN STAFF.
5. SEE SPECIFICATIONS FOR PUMP CONTROLS DETAILS.

THIS SYSTEM WAS NOT USED.
SEE CHANGE OF DESIGN /
SUPPLEMENTARY AGREEMENT #1,
DATED AUGUST 31, 2006.

RECEIVED
MAR 05 2007
UTILITIES

WHITTINGHAM ST CULV (6)
SEWER LAYOUT
SHEET 17 OF 34

Dufresne-Henry
North Springfield, Vermont
Tel. (802) 886-2201 Fax (802) 886-2280
www.dufresne-henry.com

Rev.	Description	By	Date

VERMONT

VILLAGE OF WHITTINGHAM
TEMPORARY WASTEWATER BYPASS PUMPING FOR THE REPLACEMENT OF HIGHWAY BRIDGE 29, VT. ROUTE 100

SITE PLAN AND DETAILS

WHITTINGHAM

12-5-06
STATE OF VERMONT
DAVID L. HAYWARD
No. 10174
REGISTERED PROFESSIONAL ENGINEER

Project No.	4028017
Proj. Manager	M.E. HAYWARD
Proj. Designer	N.G. TIMLEN
Drawn By	G.D. MERCLE
Checked By	N.G. TRUE
Scale	AS SHOWN
Approved	
Date	OCTOBER 2006

C1

Sheet 1 of 2
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