TOWN OF WAREHAM, MASSACHUSETTS

NARROWS PUMP STATION BYPASS INSTALLATION CONTRACT NO. 2020-WW-2

FEBRUARY 2021

TOWN PERSONNEL

TOWN MANAGER
DEREK SULLIVAN

DIRECTOR OF WATER POLLUTION CONTROL
GUY CAMPINHA

SEWER COMMISSIONERS

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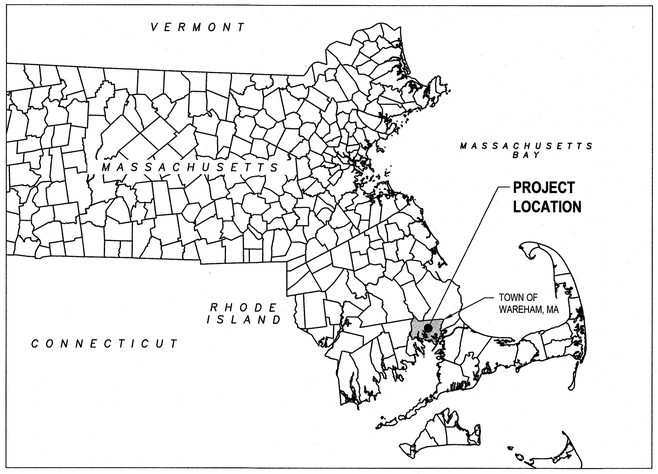
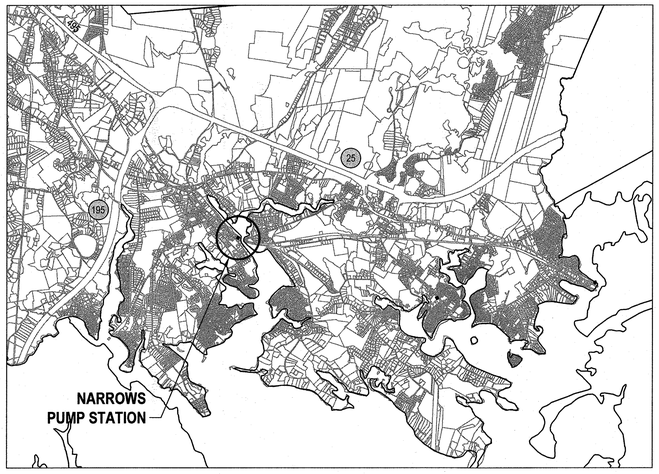


VICINITY MAP

N



LOCATION MAP

N

DRAWING LIST

SHEET NO. DRAWING TITLE

GENERAL

G001	VICINITY MAP, LOCATION MAP, AND DRAWING LIST
G002	ABBREVIATIONS, LEGENDS, SYMBOLS, AND NOTES
G003	NOTES AND SEDIMENTATION AND EROSION CONTROL DETAILS

CIVIL

C001	NARROWS PUMP STATION SITE PLAN, SECTION, LEGEND, AND NOTES
C002	MISCELLANEOUS DETAILS

No.	Issue	Drawn	Approved	Date
0	FOR CONSTRUCTION	JDF/CTC	RHK	2/2021

Bar is one inch on original size sheet
0 1"

COMMONWEALTH OF MASSACHUSETTS
MARC DRAINVILLE
ENVIRONMENTAL
No. 43294
REGISTERED PROFESSIONAL ENGINEER
2/15/21

GHD Inc.
1545 Iyannough Road
Hyannis MA 02601 USA
T 1 774 470 1630 F 1 774 470 1631 W www.ghd.com

Drawn	JDF/CTC	Designer	JDF/CTC
Drafting Check	RHK	Design Check	RHK
Project Manager	RHK	Date	2/2021
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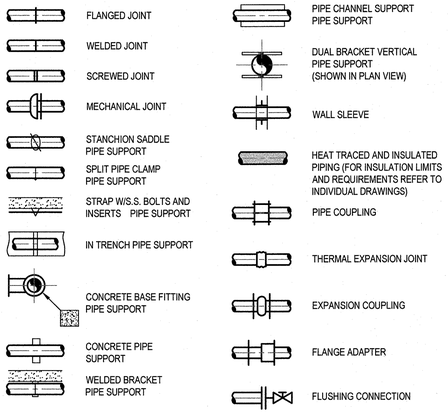
Client TOWN OF WAREHAM, MASSACHUSETTS
Project NARROWS PUMP STATION BYPASS INSTALLATION
Title VICINITY MAP, LOCATION MAP, AND DRAWING LIST
Project No. 11221503
Original Size ANSI D
Sheet No. 11221503-G001
Sheet 1 of 5

Plot Date: 8 February 2021 - 5:12 PM Plotted By: Craig Curtin Filename: G:\55\41221503\Digital_Design\ACAD 2017\Sheets\General\11221503-G001.dwg

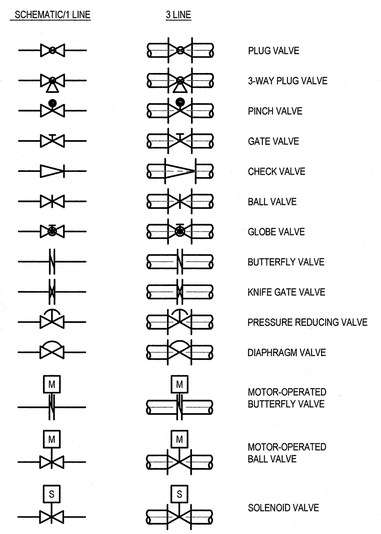
ABBREVIATIONS

AB	ANCHOR BOLT
AC	ASBESTOS CEMENT
ADD'L	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AST	ASPHALT TILE
ACTL	ACOUSTIC TILE
ADJ	ADJUSTABLE
AGGR	AGGREGATE
ALLOW	ALLOWANCE
ALT	ALTERNATE
ALUM	ALUMINUM
ARCH	ARCHITECT OR ARCHITECTURAL
ASB	ASBESTOS
ASPH	ASPHALT
ASSY	ASSEMBLY
ACOUS	ACOUSTICAL (SOUND DEADENING)
APPROX	APPROXIMATE
ATAD	AUTOTHERMAL AEROBIC DIGESTION
BASP	BALLASTED ACTIVATED SLUDGE PROCESS
BET	BETWEEN
BF	BLIND FLANGE
BFV	BUTTERFLY VALVE
BL or ℄	BUILDING LINE
BM	BENCH MARK\ BEAM
BOF	BOTTOM OF FOOTING
BU	BUILT UP
BV	BALL VALVE
BO	BOARD
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BP	BASE PLATE
BRG	BEARING
BRK	BRICK
BRZ	BRONZE
BOT or B	BOTTOM
CB	CATCH BASIN
CC	CENTER TO CENTER
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONN	CONNECTION
CP	CONCRETE PLANK
CRS	COURSE
CT	CERAMIC TILE
CV	CHECK VALVE
CW	COLD WATER/ CIRCULAR WASHER
CY	CUBIC YARD
CABN	CABINET
CEM	CEMENT
CER	CERAMIC
CL2	CHLORINE
CL	CLEAR
℄	CENTER LINE
CLG	CEILING
CLKG	CAULKING
CLF	CHAIN LINK FENCE
COL	COLUMN, COLOR
COMBN	COMBINATION
CONC	CONCRETE
CON	CONCENTRIC
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COND	CONDUIT
COR	CORRIDOR
CPLG	COUPLING
CPVC	CHLORINATED POLYVINYL CHLORIDE
CRF	CHEMICAL RESISTANT FINISH
CL JT	CONTROL JOINT
CTR	CONTRACT
CU	COPPER
CU IN	CUBIC INCH
D	DISCHARGE
DB	DISTRIBUTION BOX
DF	DRINKING FOUNTAIN
DJ	DOUBLE JOINT
DL	DEAD LOAD
DET	DETAIL
DIA, Ø	DIAMETER
DIAG	DIAGONAL
DEFL	DEFLECTION
DIM	DIMENSION
DIST	DISTRIBUTION, DISTANCE
DI / DIP	DUCTILE IRON
DOZ	DOZEN
DN	DOWN
DR	DOOR
DWG	DRAWING
DWL	DOWEL
DH	DECK HYDRANT
E	EAST
EF	EACH FACE
EJ	EXPANSION JOINT
EW	EACH WAY
EA	EACH
ECC	ECCENTRIC
EFF	EFFLUIENT
EL or ELEV	ELEVATION
ELB	ELBOW
ELEC	ELECTRIC
ENAM	ENAMEL
ENG	ENGINE
ENGR	ENGINEER
ENT	ENTRANCE
ENR	ENHANCED NUTRIENT REMOVAL
EQUIP	EQUIPMENT
EX, EXIST	EXISTING
EXC	EXCAVATE
EXH	EXHAUST
EXP	EXPANSION
EXT	EXTERIOR
EXTEND OPER	EXTENDED OPERATOR
EXTR	EXTRUDE
FC	FOOT CANDLE/ FLUSHING CONNECTION
FCV	FLOW CONTROL VALVE
FD	FLOOR DRAIN/ FIRE DOOR
FE	FIRE EXTINGUISHER
FF	FAR FACE/ FINISHED FLOOR
FG	FIBERGLASS
FM	FORCE MAIN
FAB	FABRICATE
FDN	FOUNDATION
FIN	FINISH
FIN RAD	FIN RADIATOR
FITG	FITTING
FIX	FIXTURE
FL	FLASHING/ FLANGE
FLX CON	FLEXIBLE CONTAINMENT TUBE
FLG	FLOORING
FLR	FLOOR
FLOUR	FLUORESCENT
FOC	FACE OR COLUMN
FPRF	FIREPROOF
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FOOTING STEP
FST	FINAL SETTLING TANK
FT	FEET
FTG	FOOTING
FURR	FURRING/ FURRED
F&C	FRAME AND COVER
F&G	FRAME AND GRATING
G	NATURAL GAS
GC	GENERAL CONTRACTOR
GI	GALVANIZED IRON
GPM	GALLONS PER MINUTE
GV	GATE VALVE
GWF	GLAZED WALL FINISH
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GEN	GENERATOR
GL	GLASS
GR	GRADE
GRAN	GRANITE
GYP	GYPSUM
GYP BD	GYPSUM BOARD
GMU	GLAZED MASONRY UNIT
H&V	HEATING and VENTILATING
HD	HEAVY DUTY
HDPE	HIGH DENSITY POLYETHYLENE
HDBD	HARDBOARD
H EXCH	HEAT EXCHANGER
HWL	HIGH WATER LEVEL
HDWR	HARDWARE
HGT or HT	HEIGHT
HM	HOLLOW METAL
HOR or H	HORIZONTAL
HP	HORSEPOWER
HPT	HIGH POINT
HTR	HEATER
HYD	HYDRANT
I	IRON
'I'	INLET
IN FC	INSIDE FACE
ID	INSIDE DIAMETER
INCIN	INCINERATOR
INCL	INCLUDE
INF	INFLUENT
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
IPS	INTERNAL PIPE SIZE
I/O	INPUT/ OUTPUT
JCT	JUNCTION
JST	JOIST
JT	JOINT
JAN CLO	JANITOR'S CLOSET
KC	KEENE'S CEMENT
LE	LEFT END
LL	LIVE LOAD
LLV/ (H)	LONG LEG VERT./ (HOR.)
LWL	LOW WATER LEVEL
LAM	LAMINATE
LAV	LAVATORY
LT WT	LIGHTWEIGHT
LG	LENGTH/ LONG
L PT	LOW POINT
LT	LIGHT
LV	LOUVER
M	MOTOR
MCC	MOTOR CONTROL CENTER
MBAS	MAGNETITE-BALLASTED ACTIVATED SLUDGE
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MJ	MECHANICAL JOINT
MO	MASONRY OPENING
MAS	MASONRY
MATR	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MLSS	MIXED LIQUOR SUSPENDED SOLIDS
MTD	MOUNTING
MULT	MULTIPLE
N	NORTH
NF	NEAR FACE
NIC	NOT IN CONTRACT
NPT	NATIONAL PIPE THREAD
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
No. or #	NUMBER
NOM	NOMINAL
NAT	NATURAL
NS	NO SMOKING
OF	OVERFLOW STRUCTURE
OC	ON CENTER
OD	OUTSIDE DIAMETER
O FC	OUTSIDE FACE
OT	OPEN TRUSS
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OPER	OPERABLE
P&ID	PROCESS AND INSTRUMENTATION DIAGRAM
PARB	POST-ANOXIC & RE-AERATION BASINS
PCF	POUNDS PER CUBIC FOOT
PRV	PRESSURE RELIEF VALVE
PSF	POUNDS PER SQUARE FOOT
PV	PLUG VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
POLY, PE	POLYETHYLENE
PAR	PARALLEL
PARTN	PARTITION
PAT	PATTERN
PAVT	PAVEMENT
PC	PIECE
PERF	PERFORATED
PERP	PERPENDICULAR
℄	PLATE/ PROPERTY LINE
PLAST	PLASTER
PLAS LAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLR	PILASTER
PLWD	PLYWOOD
PNL	PANEL
PW	POTABLE WATER
POR	PORCELAIN
PR	PAIR
PREFAB	PREFABRICATED
PROP	PROPOSED
PT	POINT/ PAINT
PVC	POLYVINYL CHLORIDE
PAC	POLYALUMINUM CHLORIDE
PS	PUMP STATION
QT	QUARRY TILE
QUAN	QUANTITY
R	RISER, REACTION, RADIUS
RD	ROOF DRAIN\ ROAD
RO	ROUGH OPENING
ROB	RUN OF BANK
RAD	RADIUS/ RADIATOR
RE	RIGHT END
REC	RECESS/ RECORD
RECIR	RECIRCULATION
RED	REDUCER
REF	REFERENCE/ REFRIGERATOR
RCP	REINFORCED CONCRETE PIPE
REG	REGISTER
REINF	REINFORCING
REM	REMOVE
REP	REPAIR
REQ'D	REQUIRED
REV	REVISE
RF	ROOF
RFG	ROOFING
RL	ROOF LEADER
RM	ROOM
RUBB	RUBBER
RES FLR	RESILIENT FLOORING
S	SOUTH
'S'	SUCTION
SF	SQUARE FOOR
SLDG	SLIDE GATE
SLCG	SLUICE GATE
SJ	STEEL JOINT
SP	STOP PLATE
SS	STAINLESS STEEL
SWD	SIDE WATER DEPTH
SADL	SADDLE
SAN	SANITARY
SCH	SCHEDULE
SECT	SECTION
SEL	SELECTION
SEW	SEWER
SH	SHEET
SIM	SIMILAR
SOI	SPRAYED ON INSULATION
SPEC	SPECIFICATION
SQ	SQUARE
ST	STREET
STAT	STATION
STL	STEEL
STOR	STORAGE
STD	STANDARD
STIRR	STIRRUPS
STRUC	STRUCTURAL or STRUCTURE
SUR	SURFACE
SUS	SUSPENDED/ SUSPENSION
SYM	SYMMETRICAL
SCP	STRUCTURAL CLAY PIPE
T	TILE, TREAD or TOP
TDH	TOTAL DYNAMIC HEAD
T/D	TOP OF DECK
T/F	TOP OF FOOTING
T/G	TOP OF GROUT
T/M	TOP OF MASONARY
T/S	TOP OF SLAB
T/W	TOP OF WALL
THK	THICK
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEL	TELEPHONE
TEMP	TEMPERATURE
TR	TOILET ROOM
TOL	TOLERANCE
TRANS	TRANSFORMER
TK	TANK
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
UV	ULTRAVIOLET
V	VINYL or VERTICAL
VAT	VINYL ASBESTOS TILE
VIF	VERIFY IN FIELD
VERT	VERTICAL
VT	VITRIFIED TILE
W	WATER
W/	WITH
WI	WROUGHT IRON
WG	WEIR GATE
WL	WATER LEVEL
WO	WINDOW OPENING
W/O	WITHOUT
WS	WATER SURFACE
WWF	WELDED WIRE FABRIC
WC	WATER CLOSET
WD	WOOD
W PT	WORKING POINT
WS	WATERSTOP
WT	WEIGHT
W ST	WELDED STEEL PIPE
WV	WATER VALVE
WH	WALL HYDRANT
WP	WHITE PINE

MISCELLANEOUS SYMBOLS



VALVE SYMBOLS



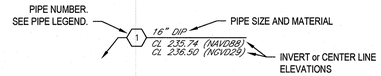
LEGEND

N/F	- NOW OR FORMERLY
ELEV.	- ELEVATION
Ⓓ	- DRAIN MANHOLE
Ⓢ	- SEWER MANHOLE
Ⓜ	- MANHOLE
B	- CATCH BASIN
	- TRAFFIC SIGNAL
WS	- WATER SERVICE
GS	- GAS SERVICE
SS	- SEWER SERVICE
WV	- WATER VALVE
GV	- GAS VALVE
SV	- SEWER VALVE
RCP	- REINFORCED CONCRETE PIPE
CMP	- CORRUGATED METAL PIPE
HDPE	- HIGH DENSITY POLYETHYLENE PIPE
D.I.	- DUCTILE IRON
C.I.	- CAST IRON
FE	- FLARED END
LSA	- LANDSCAPED AREA
TCB	- TOP CURB BITUMINOUS
GC	- TOP CURB GRANITE
TCCB	- TOP CAPE COD BERM
GUY	- GUY WIRE ANCHOR
EP	- EDGE PAVEMENT
BIT CONC	- BITUMINOUS CONCRETE
—S—	- SEWER LINE
—T—	- TELEPHONE LINE
—D—	- DRAIN LINE
—G—	- GAS LINE
—W—	- WATER LINE
—OHW—	- OVERHEAD UTILITIES
—UGE—	- UNDERGROUND UTILITIES
APPROXIMATE	- APPROX. PROPERTY LINE
△	- TRAVERSE POINT
DYLL	- DOUBLE YELLOW LANE LINE
SWEL	- SOLID WHITE EDGE LINE
BWLL	- BROKEN WHITE LANE LINE
SWLL	- SOLID WHITE LANE LINE
DYCL	- DOUBLE YELLOW CENTER LINE
	- RIP RAP
	- TREE OR HEDGE LINE
(R)	- RECORD
NF	- NOT FOUND
UP#	- UTILITY POLE
	- STONE WALL
SIGN OR SIGN	- SIGN
	- WETLAND FLAG
	- WOOD FENCE
	- CHAIN LINK OR WIRE FENCE
T	- REQUIRED TEST PIT

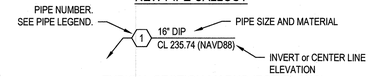
STAGING AREA NOTES:

1. FINAL STAGING AREA LOCATION TO BE DETERMINED WITH OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR SECURITY OF MATERIALS AND EQUIPMENT LEFT ON SITE
2. ANY AREA WITHIN THE STAGING AREA DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EQUAL OR BETTER CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
3. STAGING SHALL BE IN ACCORDANCE WITH THE SPECIFICATION SECTION 01010.

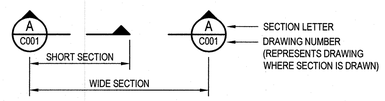
EXISTING PIPE CALLOUT



NEW PIPE CALLOUT



TYPICAL SECTION MARKS (FOR PLANS)



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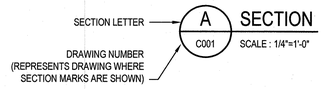
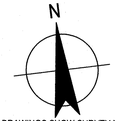
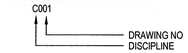


NORTH ARROW



ALL DRAWINGS SHOW SURVEY NORTH

DESIGNATION INDEX (EXAMPLE)



DISCIPLINE DESIGNATION

G	GENERAL
C	CIVIL
D	DEMOLITION
A	ARCHITECTURAL
S	STRUCTURAL
M	PROCESS MECHANICAL
E	ELECTRICAL
I	INSTRUMENTATION
H	HVAC

GENERAL LEGEND

NEW GRAPHICS, EQUIPMENT, CONDITIONS, STRUCTURES, ETC. ARE SHOWN AS BOLD LINEWORK AND IN THIS TEXT FORMAT.

EXISTING GRAPHICS, EQUIPMENT, CONDITIONS, STRUCTURES, ETC. ARE SHOWN AS LIGHT LINEWORK AND IN THIS TEXT FORMAT.

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COMMONWEALTH OF MASSACHUSETTS
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GHD Inc.
1545 Iyannough Road
Hyannis MA 02601 USA
T 1 774 470 1630 F 1 774 470 1631 W www.ghd.com

Drawn	JDF/CTC	Designer	JDF/CTC
Drafting Check	RHK	Design Check	RHK
Project Manager	RHK	Date	2/2021
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Client: TOWN OF WAREHAM, MASSACHUSETTS
Project: NARROWS PUMP STATION BYPASS INSTALLATION
Title: ABBREVIATIONS, LEGENDS, SYMBOLS, AND NOTES

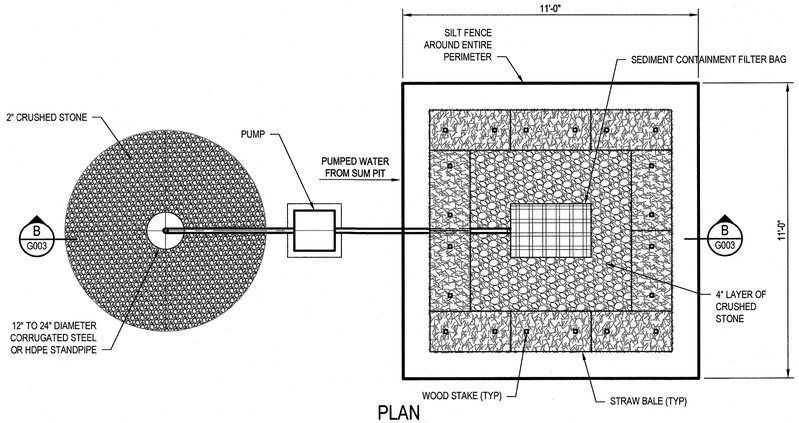
Project No. 11221503

Original Size	Sheet No.	Sheet
ANSI D	11221503-G002	2 of 5

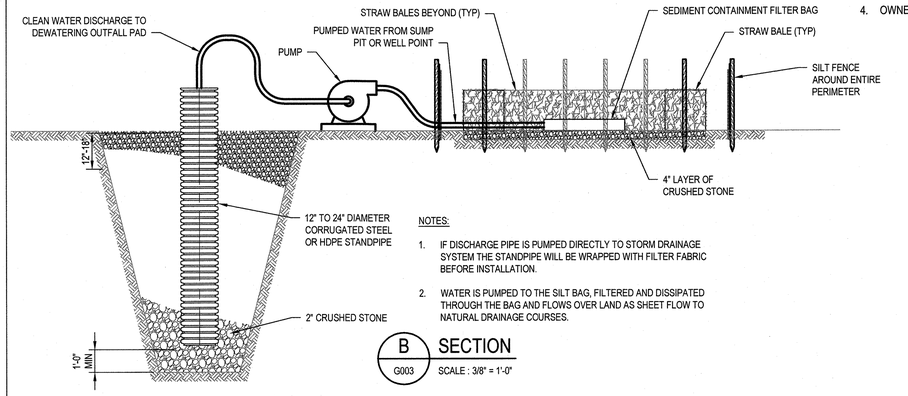
Plot Date: 8 February 2021 - 5:13 PM Plotted By: Craig Curtin Filename: G:\55\11221503\Digital_Design\ACAD 2017\Sheets\General\11221503-G002.dwg

EROSION & SEDIMENTATION CONTROL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY THE CONTRACTOR DAILY AND IMMEDIATELY AFTER PERIODS OF RAINFALL. REPAIR AND/OR MAINTENANCE OF SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE MADE AS SOON AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF ALL CONTROL MEASURES ON THIS SITE.
2. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. RESTABILIZATION WILL BE SCHEDULED IMMEDIATELY AFTER ANY DISTURBANCE.
3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ALL CONSTRUCTION ACTIVITIES.
4. ANCHOR ALL TOPSOIL STOCK PILES WITH STRAW MULCH AND RING WITH SILT FENCE, OR HAYBALE BARRIER.
5. SEDIMENT REMOVAL FROM CONTROL STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SEDIMENT SHALL BE DISPOSED OF IN A MANNER WHICH DOES NOT RESULT IN ADDITIONAL EROSION AND WHICH IS CONSISTENT WITH THE CONTRACT DOCUMENTS AND REGULATORY REQUIREMENTS.
6. THE EROSION AND SEDIMENTATION CONTROL MEASURES DESCRIBED HEREIN ARE INTENDED AS A GENERAL GUIDE FOR THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ANY AND ALL WORK NECESSARY TO PREVENT EROSION OF SOIL FROM THE CONSTRUCTION SITE. TO PREVENT EROSION, THE CONTRACTOR SHALL PROVIDE SILT FENCES OR OTHER CONTROL MEASURES AS THE NEED ARISES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
7. PAVED ROADWAYS SHALL BE KEPT CLEAN AT ALL TIMES.
8. REFER TO SPECIFICATION SECTION 01564 FOR MORE DETAILS.
9. WATER REMOVED DURING EXCAVATIONS AND OTHER EARTH MOVING ACTIVITIES MUST BE RELEASED TO SEDIMENT TRAPS OR DEWATERING STRUCTURES.



PLAN



NOTES:

1. IF DISCHARGE PIPE IS PUMPED DIRECTLY TO STORM DRAINAGE SYSTEM THE STANDPIPE WILL BE WRAPPED WITH FILTER FABRIC BEFORE INSTALLATION.
2. WATER IS PUMPED TO THE SILT BAG, FILTERED AND DISSIPATED THROUGH THE BAG AND FLOWS OVER LAND AS SHEET FLOW TO NATURAL DRAINAGE COURSES.

B G003 SECTION
SCALE : 3/8" = 1'-0"

1 G003 SCHEMATIC DEWATERING DETAIL
NOT TO SCALE

DEWATERING NOTES:

1. CONTRACTOR SHALL DEVELOP A DEWATERING PLAN AS REQUIRED IN SECTION 02141.
2. PROVIDE SHEETING IF REQUIRED TO ACCOMPLISH THE WORK AND PROTECT EXISTING INFRASTRUCTURE
3. CONSTRUCTION NOTES FOR SCHEMATIC DEWATERING DETAIL (TO BE USED IN CONJUNCTION WITH SPECIFICATION SECTION 02141).
   - 3.1. FILTER BAGS SHOULD BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS AND SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
   - 3.2. BAGS SHALL BE ACCESSIBLE BY MACHINERY AND BAGS ARE TO BE REPLACED WITH THEY BECOME 1/2 FULL. SPARE BAGS SHOULD BE KEPT AVAILABLE AT PROJECT SITE.
   - 3.3. BAGS SHALL BE LOCATED IN A WELL VEGETATED (GRASSY) UPLAND AREA AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.
   - 3.4. PUMPS DISCHARGE HOSE TO BE INSTALLED ACCORDING TO MANUFACTURER INSTRUCTIONS.

GENERAL CONSTRUCTION SEQUENCING NOTES:

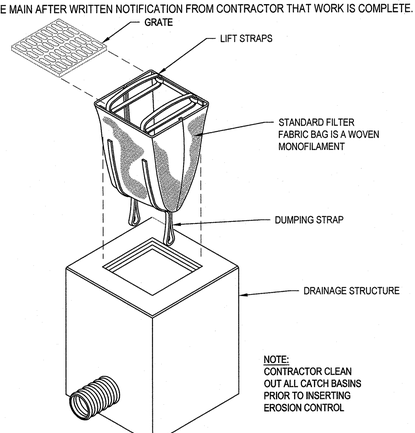
THE CONTRACTOR SHALL NOTE THE FOLLOWING RESPONSIBILITIES FOR THE SEQUENCE OF WORK:

CONTRACTOR RESPONSIBILITIES:

1. CONTRACTOR TO PARTICIPATE IN TRIAL RUN SHUTDOWN PRIOR TO ANY CONSTRUCTION ON SITE AS OUTLINED IN SECTION 01010 OF THE SPECIFICATIONS.
2. CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AT THE EFFLUENT FORCE MAIN AT THE STATION TO VERIFY PIPE MATERIAL, OUTER PIPE DIAMETER, AND ANY OTHER NECESSARY INFORMATION PRIOR TO ORDERING ANY MATERIALS.
3. FLOW INFORMATION AT THE PUMP STATION SHALL BE REVIEWED PRIOR TO ANY EXCAVATION TO CONFIRM THAT FLOWS ARE WITHIN CAPABILITIES OF THE SEPTAGE HAULING SERVICE. TOWN WILL PROVIDE HOURLY FLOW RATES FOR THE PUMP STATION FOR UP TO FOUR MONTHS PRIOR TO THE EXCAVATION IF REQUESTED. FLOWS UP TO 1,000 GPM SHOULD BE ANTICIPATED AT THE PUMP STATION.
4. CONTRACTOR SHALL SUBMIT A DETAILED BYPASS PLAN FOR APPROVAL PRIOR TO CONSTRUCTION. PLAN TO INCLUDE:
   - 4.1. SEWAGE HAULER AND CONTRACTOR CONTACT INFORMATION (CELL PHONE OF 24-HOUR CONTACT)
   - 4.2. ESTIMATE OF THE NUMBER OF TRUCKS NEEDED FOR THE BYPASS EVENT (UTILIZING INFORMATION GATHERED FROM THE TRIAL RUN SHUTDOWN)
   - 4.3. WRITTEN DESCRIPTION OF CONSTRUCTION SEQUENCE INCLUDING:
     - 4.3.1. HOURS OF OPERATION DURING SHUTDOWN (CONFINE WORK HOURS TO BETWEEN 10 PM AND 6 AM)
     - 4.3.2. METHODS OF CONSTRUCTION (DESCRIBE ANY PREASSEMBLY OF PIPES, FITTINGS, AND BYPASS)
     - 4.3.3. CONFIRMATION OF EXISTING PIPE MATERIAL, SIZE, AND FLOWS
5. PROVIDE OWNER WITH 2 WEEKS NOTICE OF STATION BYPASS. TOWN OF WAREHAM SHALL PAY FOR UP TO 12 HOURS OF SEPTAGE HAULING (4 HOURS FOR TRIAL RUN AND 8 HOURS FOR SHUTDOWN. ANY REQUIRED SEWER PUMPING AFTER THAT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. CONTRACTOR SHALL COORDINATE WITH THE TOWN OF WAREHAM'S CONTRACTED SEWER HAULING SERVICE (EITHER SOARES OF TAUNTON MA OR BAY STATE SEWAGE DISPOSAL OF LAKEVILLE, MA) FOR ALL SEWAGE HAULING OR ANY OTHER SEWAGE HAULING SERVICE IDENTIFIED BY THE OWNER.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANYTHING NOT SPECIFICALLY OUTLINED AS AN OWNER RESPONSIBILITY.

OWNER RESPONSIBILITIES:

1. OWNER SHALL PROVIDE AVAILABLE PUMP STATION DATA TO CONTRACTOR.
2. OWNER SHALL DRAIN FORCE MAIN AFTER BEING GIVEN 2 WEEKS NOTICE BY CONTRACTOR.
3. TOWN SHALL CONTRACT WITH SEPTAGE HAULER FOR UP TO 12 HOURS FOR DURATION OF PROJECT (4 HOURS FOR TRIAL RUN AND 8 HOURS FOR SHUTDOWN)
4. OWNER SHALL RECHARGE FORCE MAIN AFTER WRITTEN NOTIFICATION FROM CONTRACTOR THAT WORK IS COMPLETE.



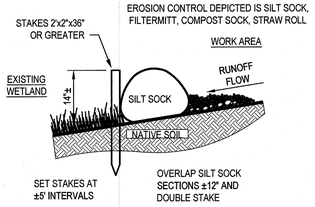
NOTE:
CONTRACTOR CLEAN OUT ALL CATCH BASINS PRIOR TO INSERTING EROSION CONTROL

2 G003 SEDIMENTATION CONTROL AT CATCH BASIN
NOT TO SCALE

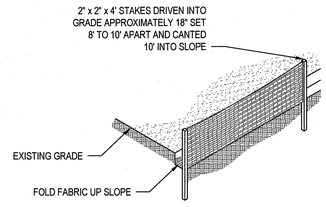
GENERAL NOTES:

(THESE NOTES APPLY TO ALL DRAWINGS UNLESS OTHERWISE SPECIFIED)

1. VERTICAL DATUM BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). HORIZONTAL CONTROL BASED ON THE NAD 1983 STATE PLANE MASSACHUSETTS MAINLAND PROJECTION.
2. ALL UTILITIES SHOWN ON PLAN ARE APPROXIMATE ONLY. UTILITIES ARE BASED ON DIG SAFE MARKINGS AND AVAILABLE PLANS ON RECORD.
3. BACKGROUND INFORMATION (FOR C001) TAKEN FROM EXISTING CONDITIONS SURVEY AT THE NARROWS PUMPING STATION, WAREHAM, MA PREPARED FOR GHD INC. BY GREEN SEAL ENGINEERING, INC. 114 STATE ROAD, BUILDING B, SAGAMORE BEACH MA 02562 AND DATED JANUARY 30, 2019.
4. CONTRACTOR TO PERFORM TEST PITS TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION AT LOCATIONS, AT MINIMUM, MARKED WITH " T" TWO WEEKS PRIOR TO COMMENCING EXCAVATION.
5. ALL FITTINGS AND JOINTS ARE TO BE RESTRAINED.
6. THESE PLANS ARE BASED ON RECORD DRAWINGS. CONDITIONS IN THE FIELD MAY VARY FROM THOSE SHOWN HEREIN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT HIS WORK. TO CONVERT FROM NGVD 1929 TO NAVD 1988 SUBTRACT 0.83'.
7. THE FOLLOWING REFERENCES TO EXISTING PLANS WERE USED FOR DEPICTING EXISTING CONDITIONS ON THIS PROJECT (CONTRACTOR SHOULD NOTE THAT DATUMS MAY VARY):
   - 7.1. NEW SEWAGE WORKS NARROWS AND HYNES FIELD PUMPING STATIONS CONTRACT NO.2 AS PREPARED BY FAY, SPOFFORD AND THORNDIKE AND DATED MARCH 19, 1970.
8. EXISTING FACILITIES AND PIPING SHOWN LIGHT. NEW FACILITIES AND PIPING SHOWN HEAVY.
9. THE CONTRACTOR SHALL CALL-BEFORE-YOU-DIG AT 1-888-DIG-SAFE FOR LOCATING AND STAKEOUT OF ANY UTILITY PRIOR TO EXCAVATION. THE CONTRACTOR SHALL ALSO PERFORM EXPLORATORY EXCAVATIONS TO LOCATE EXISTING UTILITIES. APPROXIMATE LOCATIONS OF UTILITIES ARE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY EXISTING UTILITIES DAMAGED DUE TO HIS / HER OPERATIONS.
10. ALL EXISTING ELEVATIONS SHOWN ARE APPROXIMATE. FIELD VERIFY PRIOR TO CONSTRUCTI0N.
11. REFER TO SPECIFICATION SECTION 01010 FOR REQUIREMENTS FOR MAINTAINING PUMP STATION OPERATIONS AND FOR OBTAINING NECESSARY LOCAL AND STATE PERMITS.
12. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE ALL EXISTING PIPING ELEVATIONS, LOCATIONS, SIZE AND TYPE OF MATERIAL WITH NEW PIPING PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE ALL NEW AND EXISTING EQUIPMENT, BUILDING, ROOM, AND CHANNEL OR TANK DIMENSIONS AND ELEVATIONS PRIOR TO ORDERING NEW EQUIPMENT. REPORT DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
13. CONTRACTOR SHALL SUPPLY ALL BENDS REQUIRED TO MAINTAIN SMOOTH FLOW LINES, CHANGES IN ELEVATION AND TO MEET ALL TRANSITIONS.
14. CONTRACTOR SHALL REPLACE ALL EXISTING PAVEMENT WITHIN THE LIMIT OF WORK AND ELSEWHERE AS SHOWN ON THE DRAWINGS.
15. WHERE NEW UNDERGROUND PIPING IS CONNECTED TO EXISTING UNDERGROUND PIPING, CONTRACTOR IS REQUIRED TO PERFORM EXPLORATORY EXCAVATIONS IN THESE AREAS, AS REQUIRED, TO CONFIRM EXISTING PIPING LOCATIONS AND ELEVATIONS. REFER TO SPECIFICATION SECTION 01010.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT OF ALL EXCAVATIONS, AS REQUIRED, INCLUDING SHEETING AND BRACING. CONTRACTOR SHALL ALSO STRUCTURALLY SUPPORT AND / OR PROTECT WATER MAIN, GAS MAIN, STORM SEWER, SANITARY SEWER OR ANY OTHER UTILITY AND APPURTENANCES WHERE NECESSARY WHEN EXCAVATING ADJACENT TO OR CROSSING SAID UTILITY.
17. CONTRACTOR SHALL SUBMIT BYPASS PLAN TO THE ENGINEER AND OWNER FOR APPROVAL PRIOR TO CONSTRUCTION COMMENCING.
18. CONTRACTOR IS RESPONSIBLE FOR DETERMINING DEPTH OF GROUNDWATER AND FOR ALL COSTS ASSOCIATED WITH THE DEWATERING NECESSARY TO INSTALL PIPING AND APPURTENANCES.



3 G003 SILT SOCK
NOT TO SCALE



4 G003 SILT FENCE DETAIL
NOT TO SCALE

No.	Issue	Drawn	Approved	Date
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COMMONWEALTH OF MASSACHUSETTS
MARC DRAINVILLE
ENVIRONMENTAL
No. 43294
REGISTERED PROFESSIONAL ENGINEER
2/5/21

GHD Inc.
1545 Iyannough Road
Hyannis MA 02601 USA
T 1 774 470 1630 F 1 774 470 1631 W www.ghd.com

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Project Manager	RHK	Date	2/2021
		Scale	AS SHOWN

Client TOWN OF WAREHAM, MASSACHUSETTS
Project NARROWS PUMP STATION BYPASS INSTALLATION
Title NOTES AND SEDIMENTATION AND EROSION CONTROL DETAILS
Project No. 11221503

Original Size ANSI D
Sheet No. 11221503-G003
Sheet 3 of 5

Plot Date: 8 February 2021 - 5:14 PM
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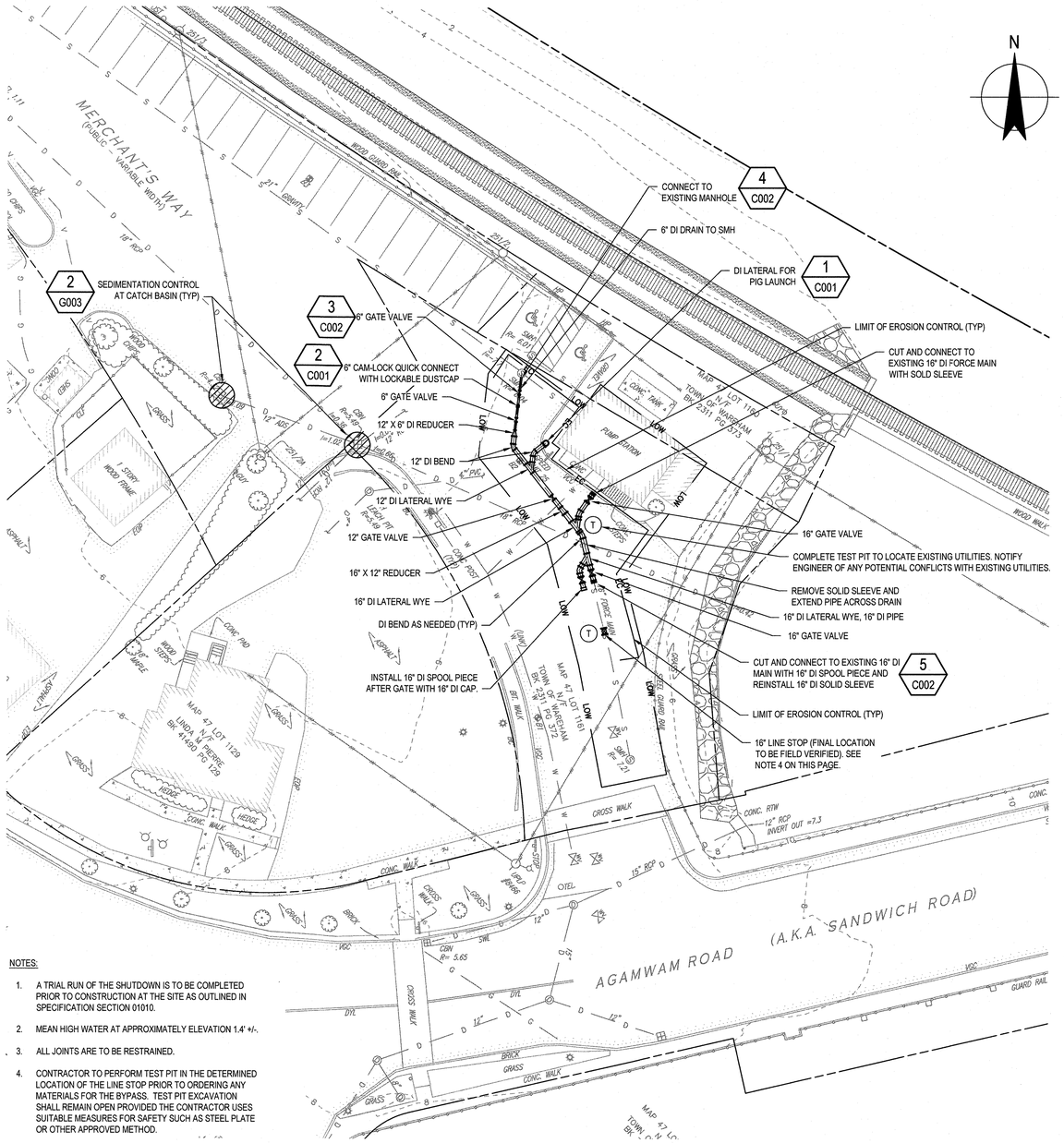


NOTES:

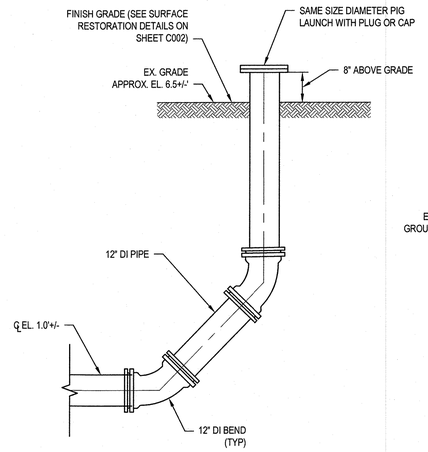
1. A TRIAL RUN OF THE SHUTDOWN IS TO BE COMPLETED PRIOR TO CONSTRUCTION AT THE SITE AS OUTLINED IN SPECIFICATION SECTION 01010.
2. MEAN HIGH WATER AT APPROXIMATELY ELEVATION 1.4' +/-.
3. ALL JOINTS ARE TO BE RESTRAINED.
4. CONTRACTOR TO PERFORM TEST PIT IN THE DETERMINED LOCATION OF THE LINE STOP PRIOR TO ORDERING ANY MATERIALS FOR THE BYPASS. TEST PIT EXCAVATION SHALL REMAIN OPEN PROVIDED THE CONTRACTOR USES SUITABLE MEASURES FOR SAFETY SUCH AS STEEL PLATE OR OTHER APPROVED METHOD.

0 10 20 30 40'

SCALE 1"=20' AT ORIGINAL SIZE

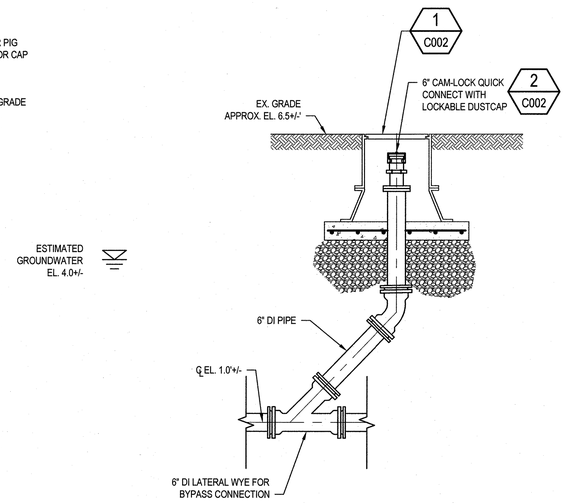
NARROWS PUMP STATION PLAN

SCALE 1" = 20'



1 C001 PIG LAUNCH DETAIL

NOT TO SCALE



2 C001 EMERGENCY BYPASS CONNECTION DETAIL

NOT TO SCALE

LEGEND PROPOSED

- SEWER PIPE
- LOW — LIMIT OF WORK
- EC — LIMIT OF EROSION CONTROL
- PROPERTY LINE
- SEDIMENTATION CONTROL AT CATCH BASIN
- LINE STOP
- T — TEST PIT

No.	Issue	Drawn	Approved	Date
0	FOR CONSTRUCTION	JDF/CTC	RHK	2/2021

Bar is one inch on original size sheet

0 1"

COMMONWEALTH OF MASSACHUSETTS
MARC DRAINVILLE
ENVIRONMENTAL
No. 43294
REGISTERED
PROFESSIONAL ENGINEER
2/15/21

GHD Inc.
1545 Iyannough Road
Hyannis MA 02601 USA
T 1 774 470 1630 F 1 774 470 1631 W www.ghd.com

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Drafting Check	RHK	Design Check	RHK
Project Manager	RHK	Date	2/2021
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Client TOWN OF WAREHAM, MASSACHUSETTS
Project NARROWS PUMP STATION BYPASS INSTALLATION
Title NARROWS PUMP STATION
SITE PLAN, SECTION, LEGEND, AND NOTES
Project No. 11221503

Original Size ANSI D | Sheet No. 11221503-C001 | Sheet 4 of 5

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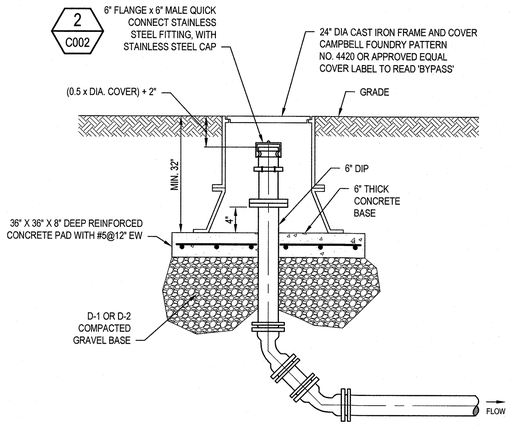
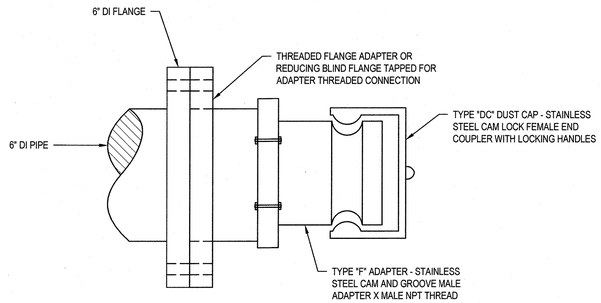


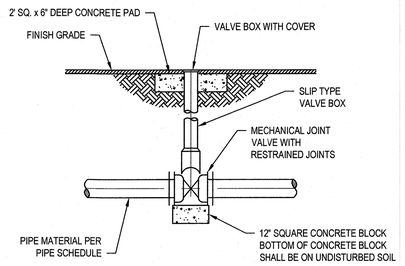
1 C002 CLEANOUT DETAIL (CO)

NOT TO SCALE



2 C002 FLANGE TAPPED FOR QUICK DISCONNECT DETAIL

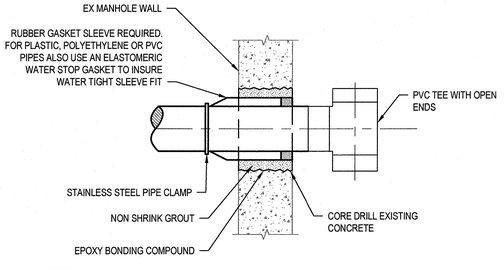
NOT TO SCALE



NOTE: PROVIDE EXTENDED OPERATOR STEM WITH 2" NUT TO 6" BELOW COVER.

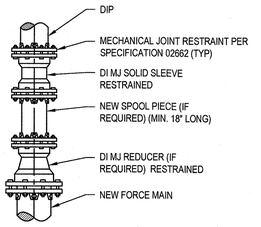
3 C002 TYPICAL DETAIL FOR ALL BURIED VALVES

NOT TO SCALE



4 C002 TYPICAL WALL SLEEVE AT EXISTING MANHOLE

NOT TO SCALE

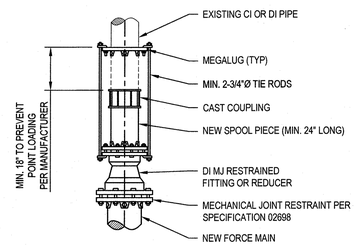


5 C002 DI PIPE CONNECTION TO DI PIPE

NOT TO SCALE

NOTES:

1. ALL VALVES AND TEES SHALL BE RESTRAINED JOINT.
2. CONTRACTOR SHALL CONFIRM EXISTING PIPE O.D. PRIOR TO THE CUTTING OF ANY EXISTING PIPE.

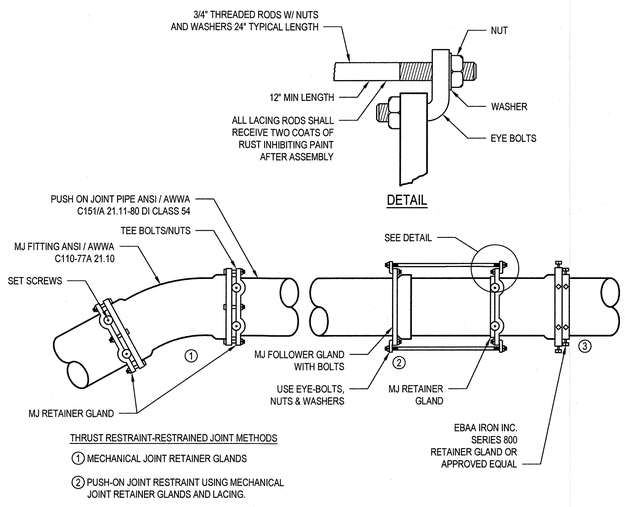


6 C002 DI PIPE CONNECTION TO CIP

NOT TO SCALE

NOTES:

1. ALL VALVES AND TEES SHALL BE RESTRAINED JOINT.
2. CONTRACTOR SHALL CONFIRM EXISTING PIPE O.D. PRIOR TO THE CUTTING OF ANY EXISTING PIPE.



THRUST RESTRAINT-RESTRAINED JOINT METHODS

(1) MECHANICAL JOINT RETAINER GLANDS

(2) PUSH-ON JOINT RESTRAINT USING MECHANICAL JOINT RETAINER GLANDS AND LACING.

(3) PUSH-ON JOINT RETAINER GLANDS.

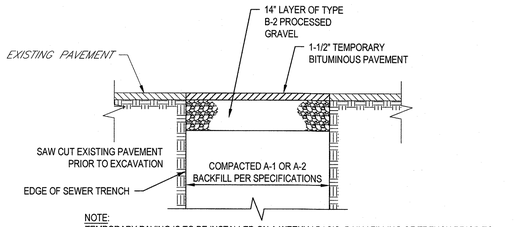
9 C002 TYPICAL RESTRAINED JOINTS

NOT TO SCALE

10 C002 DIP TRENCH SECTION

NOT TO SCALE

NOTE: FOR LOCATIONS WHERE GROUNDWATER LEVEL IS ABOVE TRENCH BOTTOM, PIPE BEDDING SHALL BE TYPE D-1 WITH 3/4" MAXIMUM SIZE.

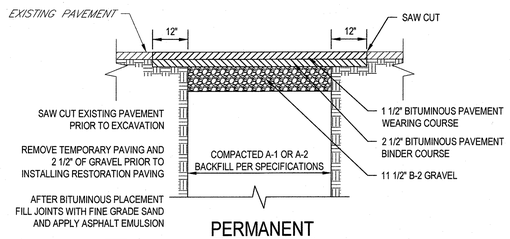


NOTE:
TEMPORARY PAVING IS TO BE INSTALLED ON A WEEKLY BASIS. DAILY FILLING OF TRENCH PRIOR TO PAVING SHALL INCLUDE TYPE B-2 GRAVEL TO FINISHED GRADE. GRAVEL SHALL BE REMOVED TO A DEPTH OF 1-1/2" PRIOR TO PLACEMENT OF TEMPORARY ASPHALT.

TEMPORARY

7 C002 RESTORATION PAVING DETAIL

NOT TO SCALE



PERMANENT

8 C002 RESTORATION PAVING DETAIL

NOT TO SCALE

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0 1"

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GHD Inc.
1545 Iyannough Road
Hyannis MA 02601 USA
T 1 774 470 1630 F 1 774 470 1631 W www.ghd.com

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Project NARROWS PUMP STATION BYPASS INSTALLATION
Title MISCELLANEOUS DETAILS
Project No. 11221503
Original Size ANSI D
Sheet No. 11221503-C002
Sheet 5 of 5

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