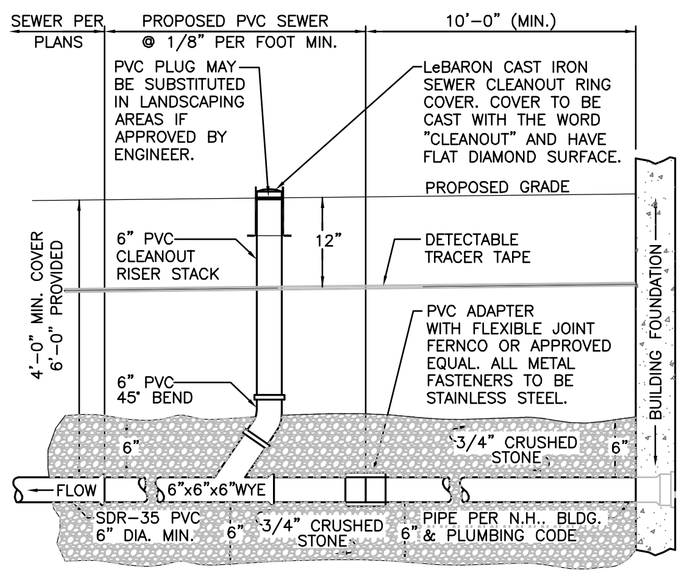
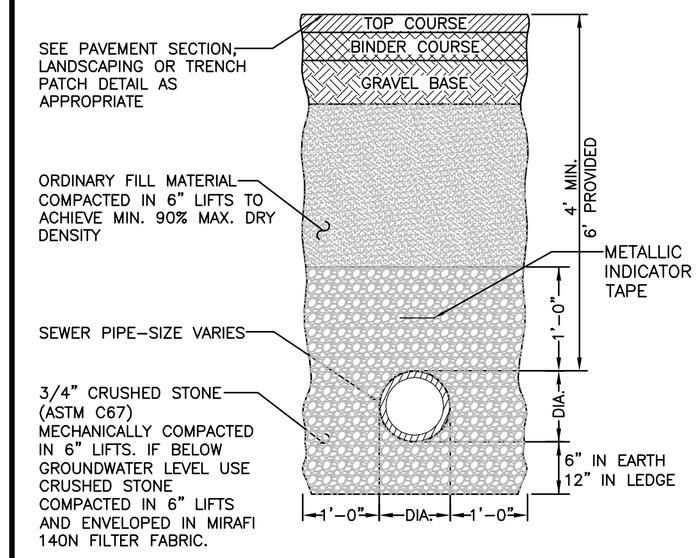
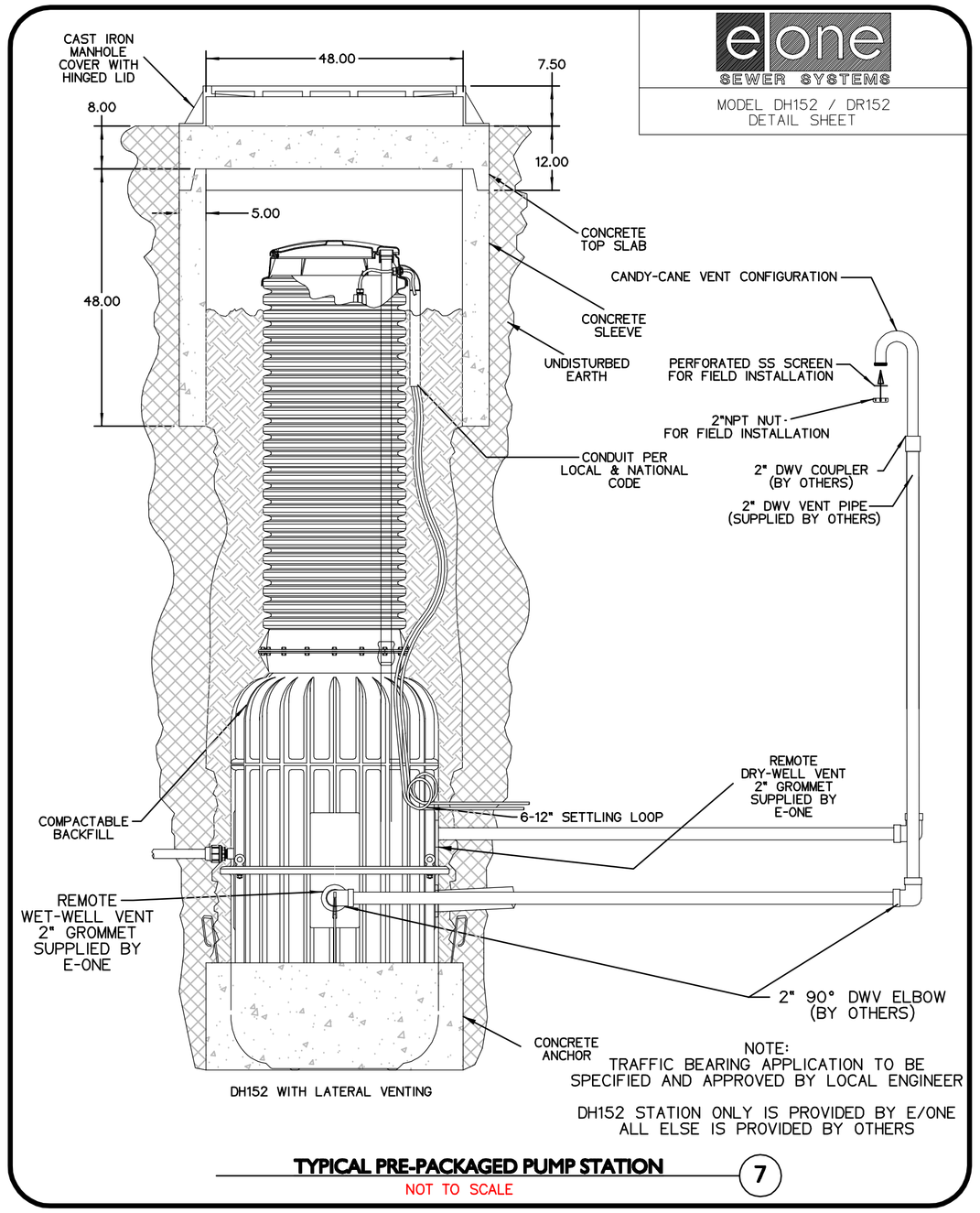


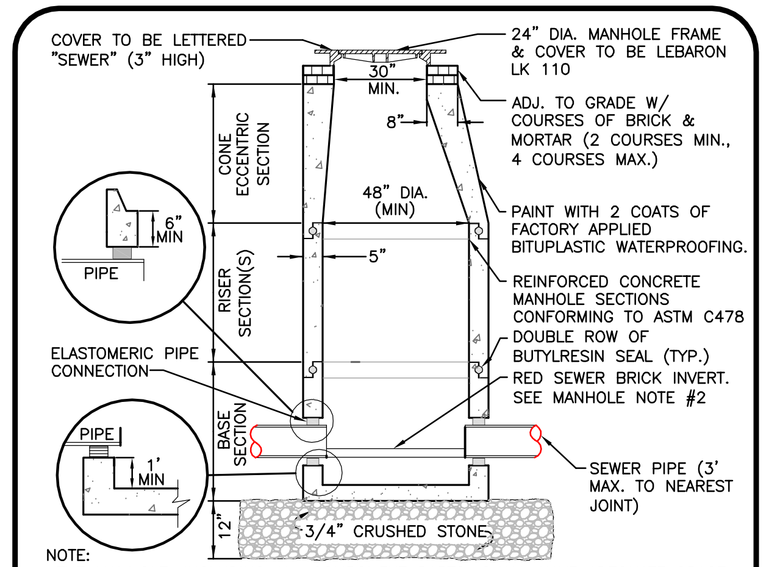
BUILDING SEWER SERVICE (1)
NOT TO SCALE



TYPICAL SEWER TRENCH DETAIL (2)
NOT TO SCALE

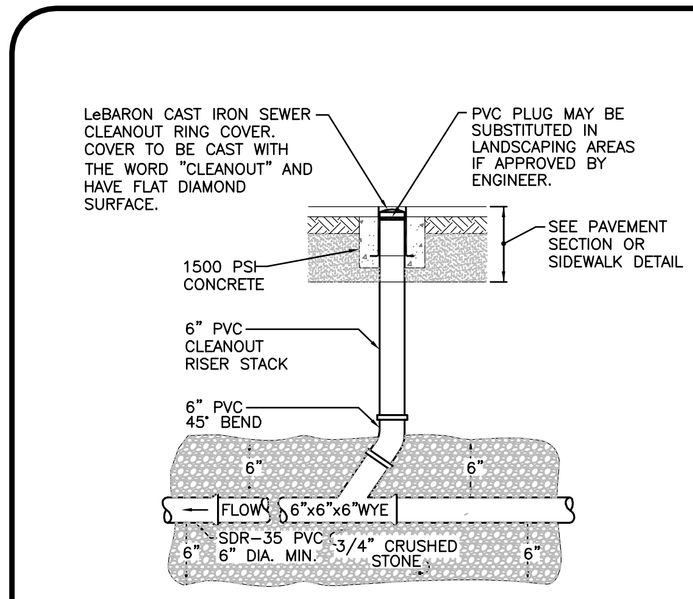


TYPICAL PRE-PACKAGED PUMP STATION (7)
NOT TO SCALE

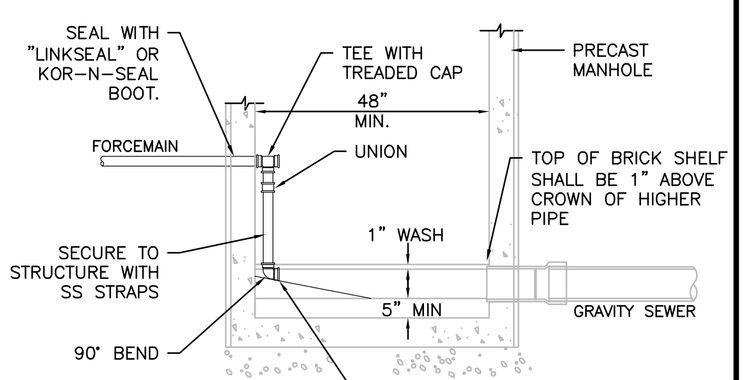


NOTE:
THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENT AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND (H-20 LOADING) OR WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE.

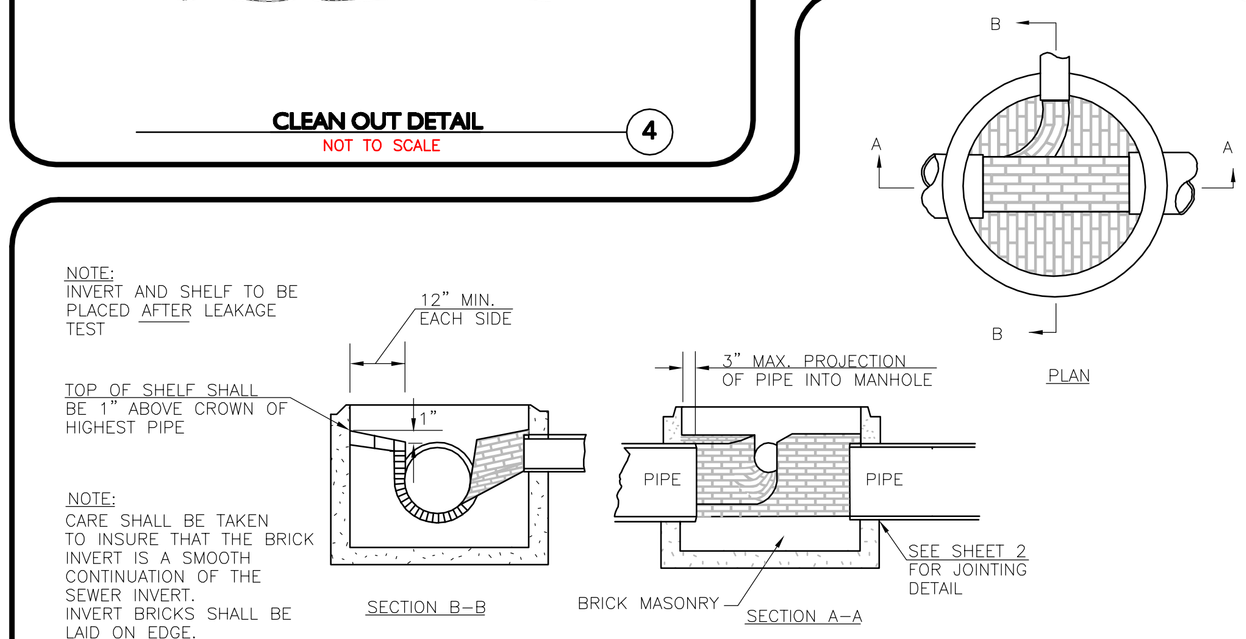
PRECAST CONCRETE SEWER MANHOLE (3)
NOT TO SCALE



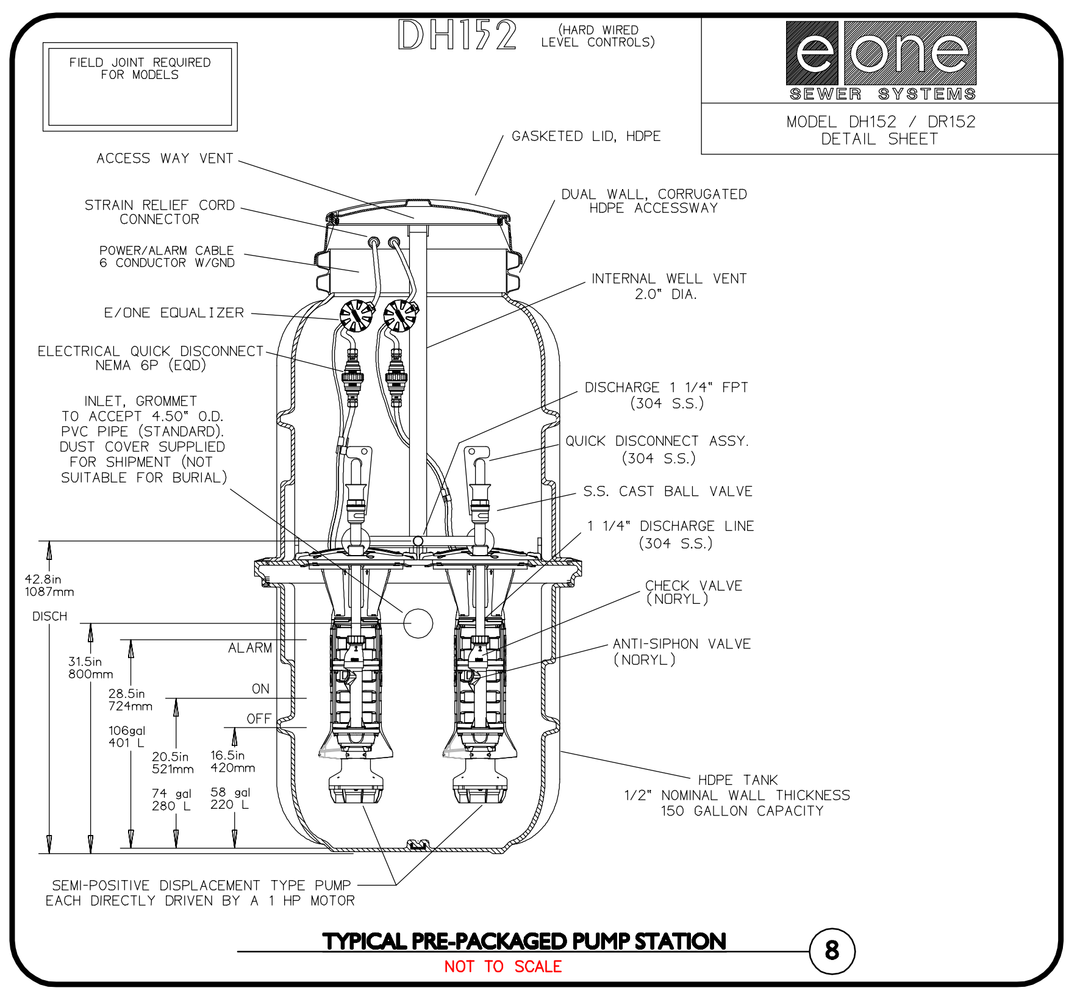
CLEAN OUT DETAIL (4)
NOT TO SCALE



FORCE MAIN TO STRUCTURE (6)
SCALE: 1/2"=1'-0"



MANHOLE NOTES:
1. THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
2. INVERTS AND SHELVES. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.



TYPICAL PRE-PACKAGED PUMP STATION (8)
NOT TO SCALE

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FINAL APPROVAL BY DURHAM PLANNING BOARD.
CERTIFIED BY MICHAEL BEHRENDT, TOWN PLANNER.

MICHAEL BEHRENDT — DATE

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
ORION UNH LLC
225 FRANKLIN STREET, 26TH FLOOR
BOSTON, MA 02110

PROJECT:
ORION
STUDENT HOUSING
25/35 MAIN STREET
DURHAM, NEW HAMPSHIRE

PROJECT NO.	1925-01	DATE:	06-09-14
SCALE:	AS SHOWN	DWG. NAME:	C - DETAIL
DRAFTED BY:	SM	CHECKED BY:	RPC

PREPARED BY:

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environmental consulting ◆ landscape architecture
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DRAWING TITLE: DETAILS
SHEET No. D-1

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