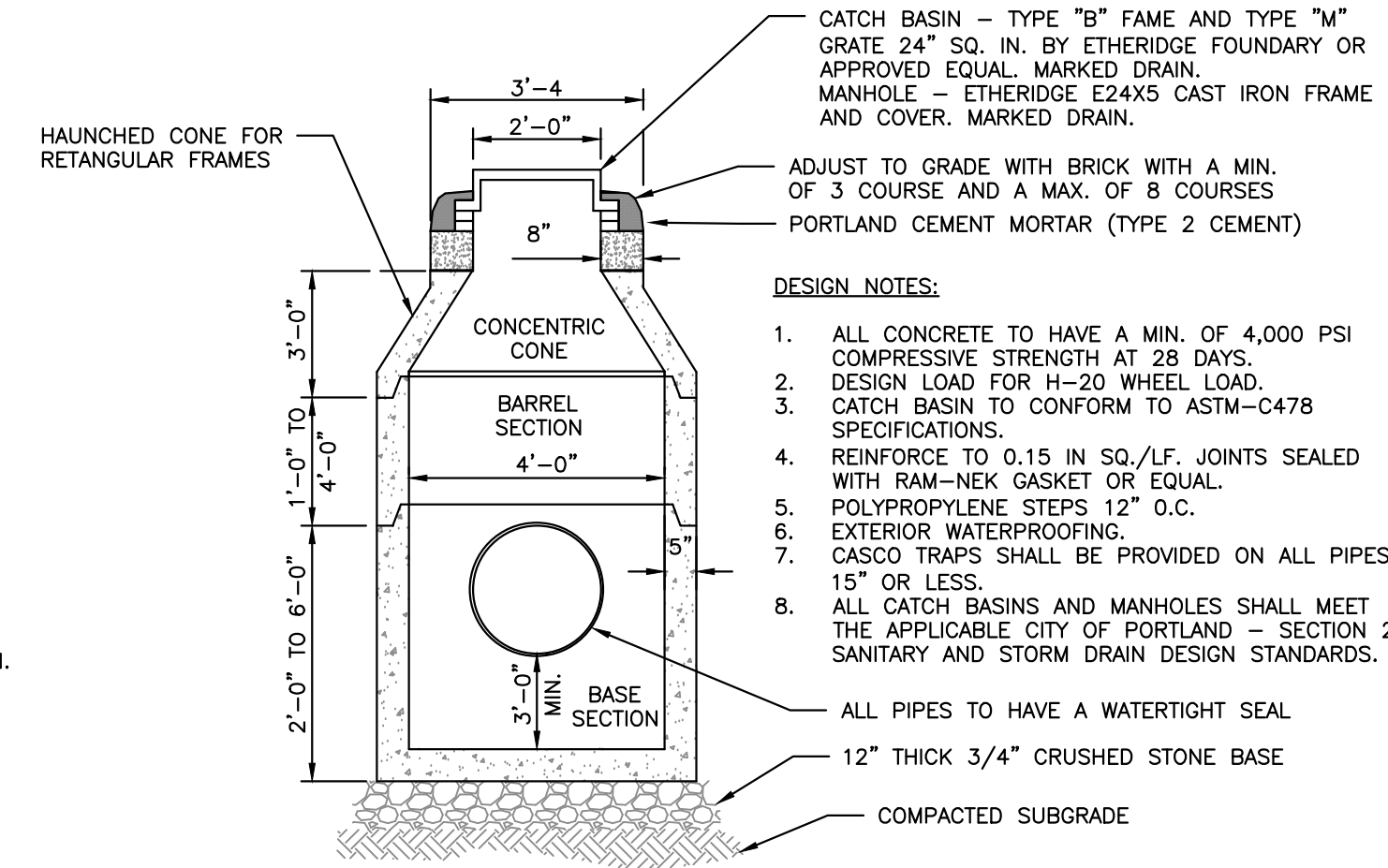


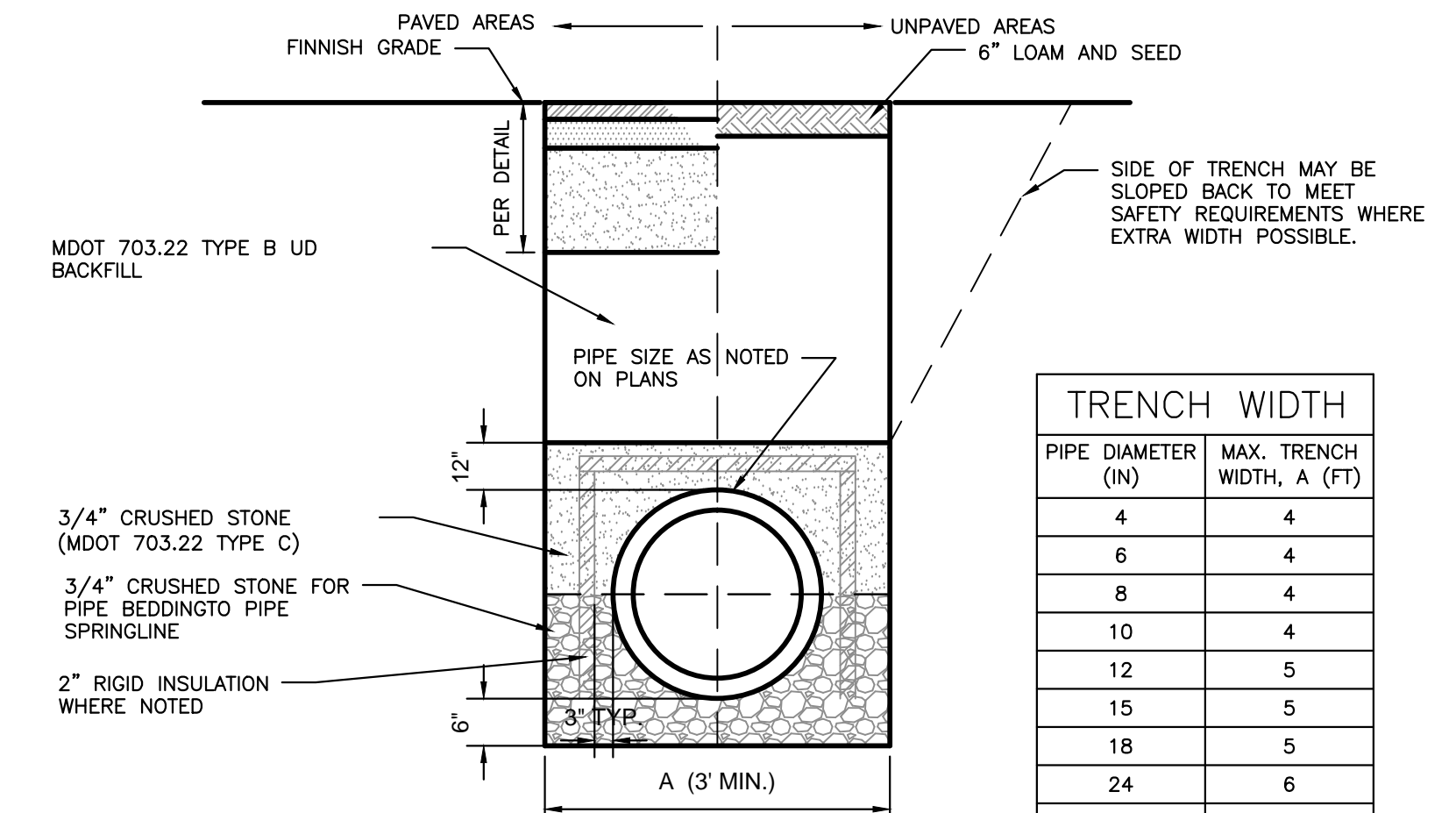
STANDARD PRECAST SEWER MANHOLE
NOT TO SCALE



4'-0" PRECAST CATCH BASIN/MANHOLE
NOT TO SCALE

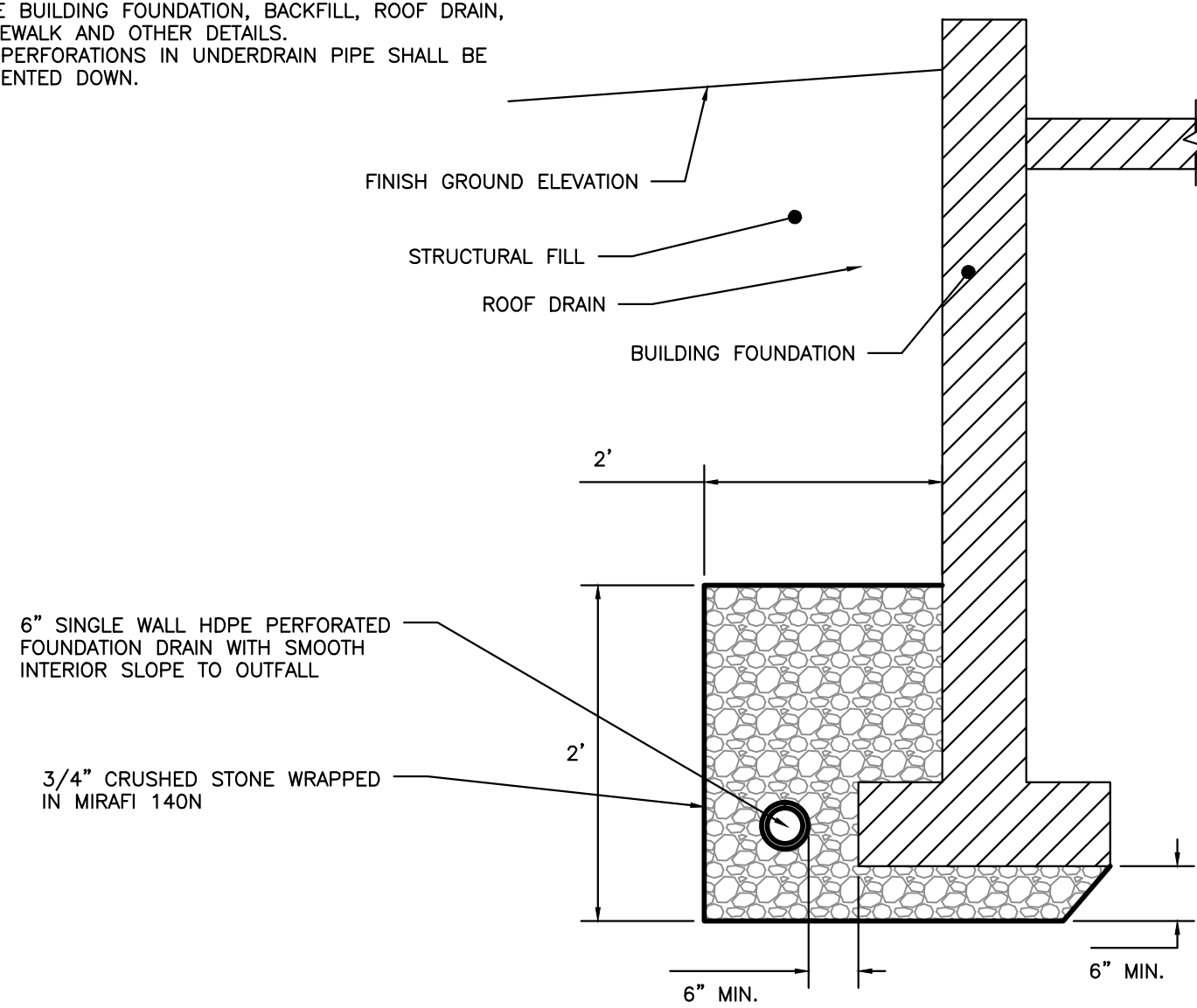
DESIGN NOTES:

- ANY ALTERNATE TRENCHING METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
- ALL CONSTRUCTION METHODS SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL STANDARDS FIGURE 11-12.
- BRACING & SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- PERFORATIONS IN STORM DRAIN (PERF.SD) SHALL BE ORIENTED UP.
- ALL PERFORATED STORM DRAIN SHALL BE PVC SDR 35 MIN PS-46 RATING OR APPROVED EQUAL.

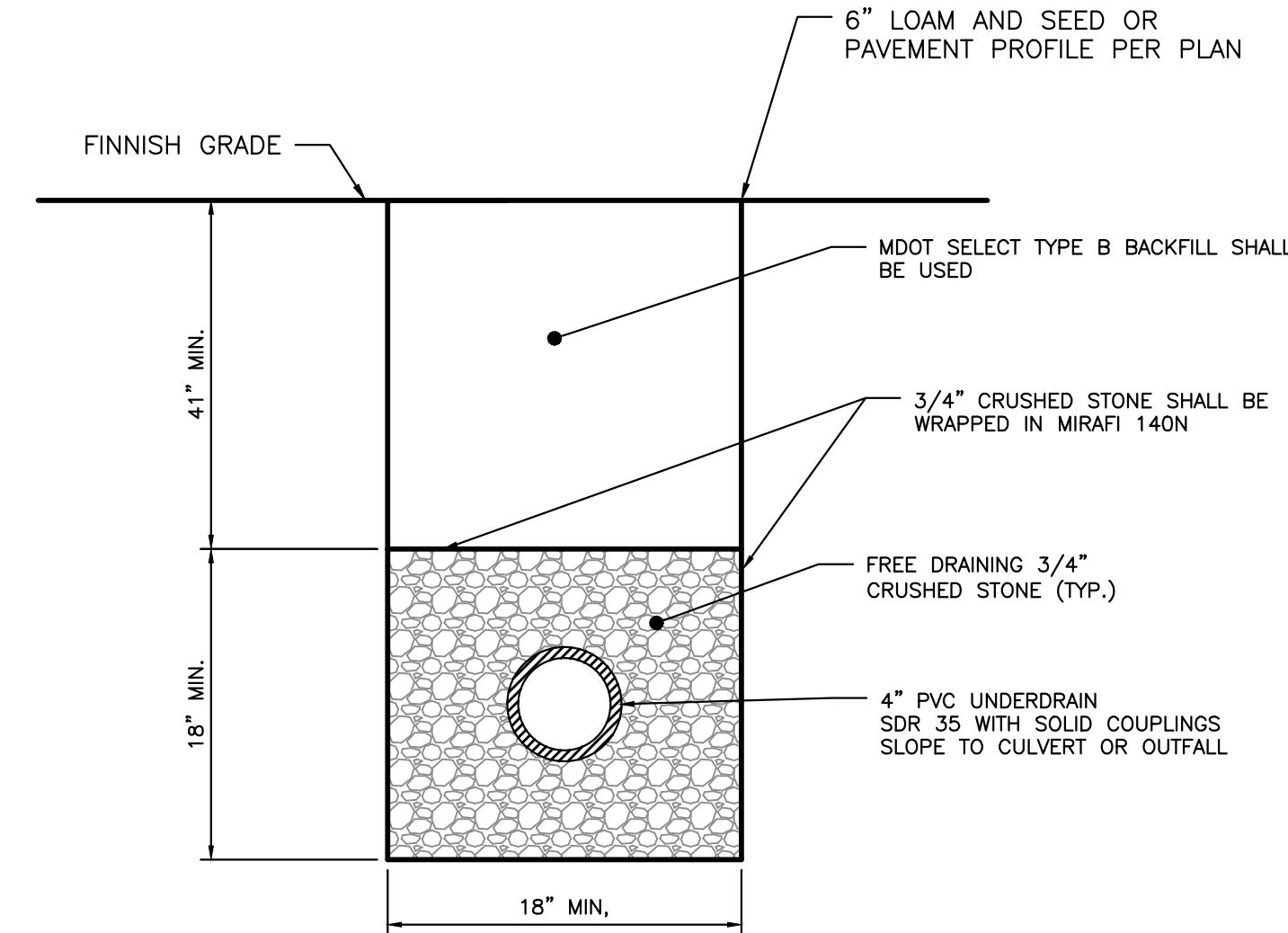


SINGLE PIPE TRENCH
NOT TO SCALE

- NOTES:
- REFER TO THE BUILDING ARCHITECTS PLANS FOR THE BUILDING FOUNDATION, BACKFILL, ROOF DRAIN, SIDEWALK AND OTHER DETAILS.
 - PERFORATIONS IN UNDERDRAIN PIPE SHALL BE ORIENTED DOWN.



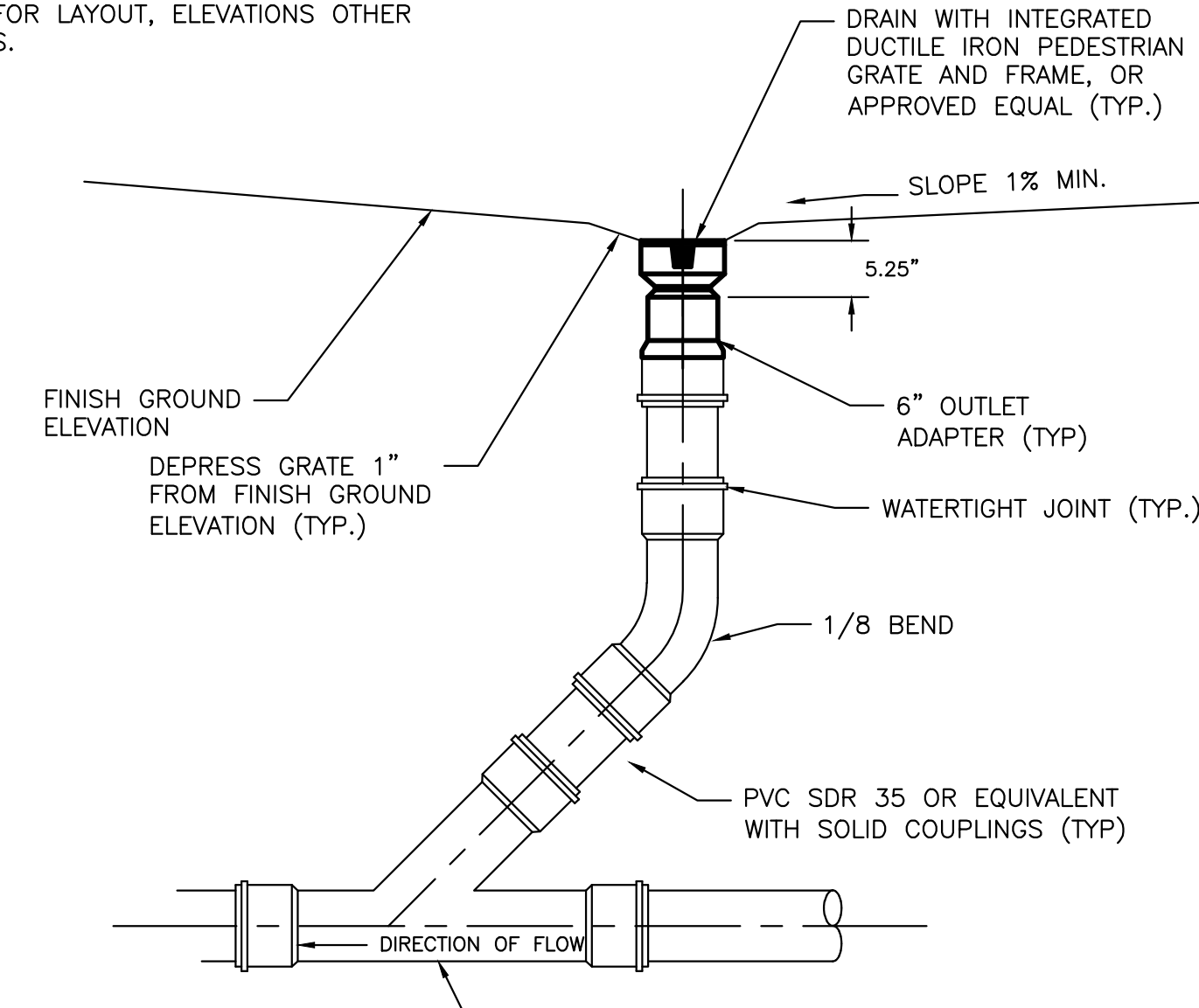
FOUNDATION DRAIN DETAIL
NOT TO SCALE



- NOTES:
- MINIMUM UNDERDRAIN SLOPE 0.0025 (0.25%)
 - PERFORATIONS IN UNDERDRAIN PIPE SHALL BE ORIENTED DOWN.

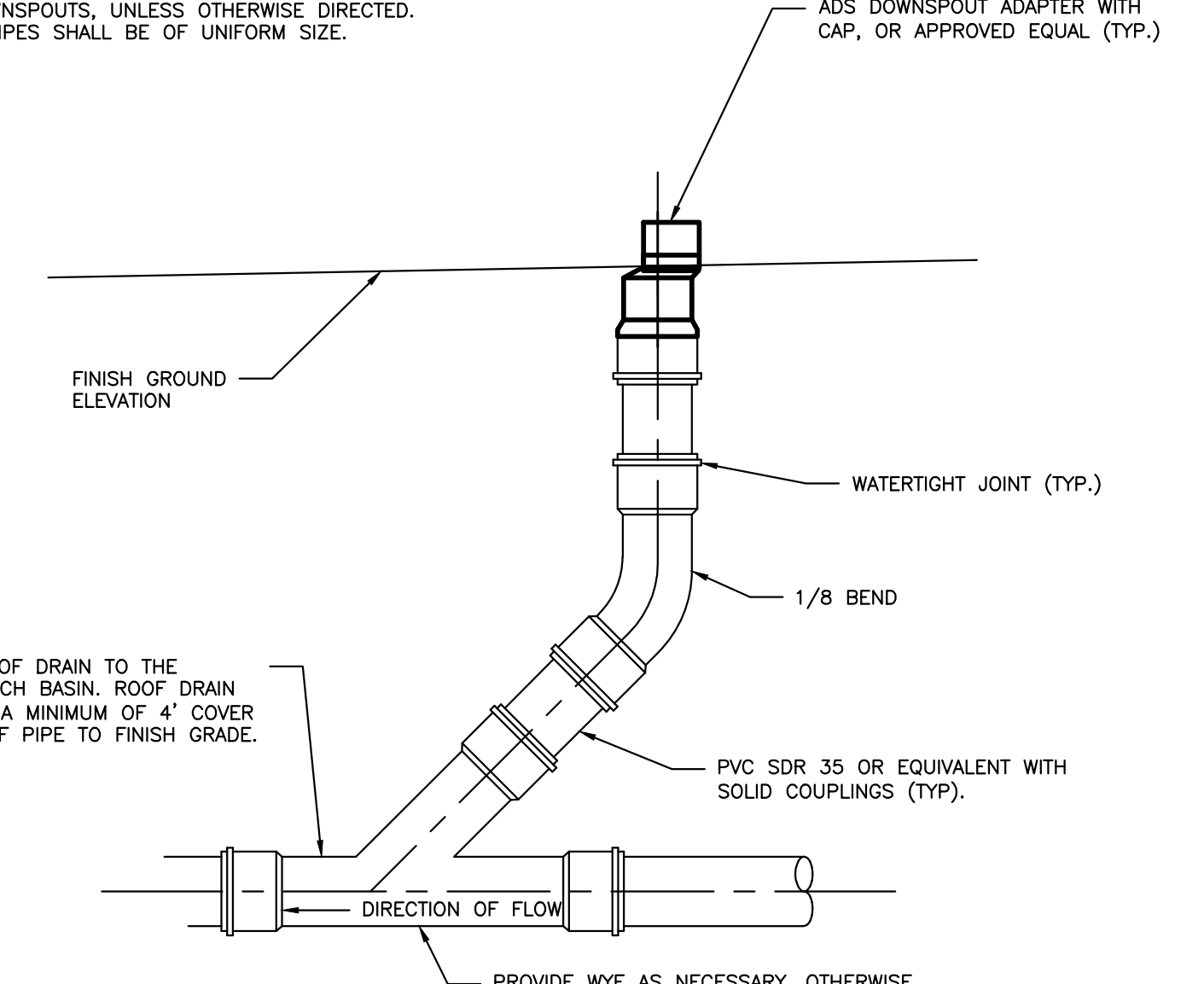
UNDERDRAIN DETAIL
NOT TO SCALE

- NOTES:
- REFER TO THE GRADING & DRAINAGE PLAN FOR LAYOUT, ELEVATIONS OTHER DETAILS.



INLINE DRAIN DETAIL
NOT TO SCALE

- NOTES:
- CONTRACTOR RESPONSIBLE FOR THE INSTALLATION OF THE ROOF DRAIN, ADAPTER AND COVER. OWNER TO INSTALL GUTTERS AND DOWNSPOUTS, UNLESS OTHERWISE DIRECTED.
 - ALL PIPES SHALL BE OF UNIFORM SIZE.



ROOF DRAIN DETAIL
NOT TO SCALE

WORKSHOP SUBMISSION
75% LEVEL DRAWINGS
NOT FOR CONSTRUCTION

ISSUED FOR	BY
WORKSHOP #2	WHS
	11/12/13

REVISION	REV. DATE

DRAWING NAME: DRAINAGE DETAILS - 1

PROJECT NAME: MUNUJOY HEIGHTS

CLIENT: REDFERN PROPERTIES PORTLAND, MAINE

ACORN ENGINEERING, INC. 04104
P.O. BOX 3372 PORTLAND, MAINE
(207) 775-2655

FILE#7_details 11-12-13.dwg

DATE: 7/11/13

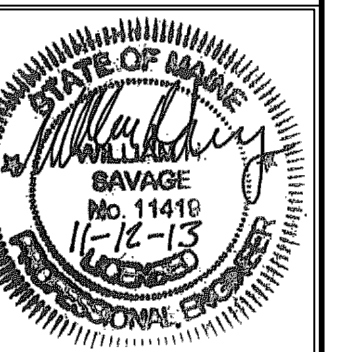
JN: 302-001

SCALE: NTS

DESIGN BY: WHS

DRAWN BY: ZRJ

CHECKED BY: WHS



DRAWING NO.
C-41