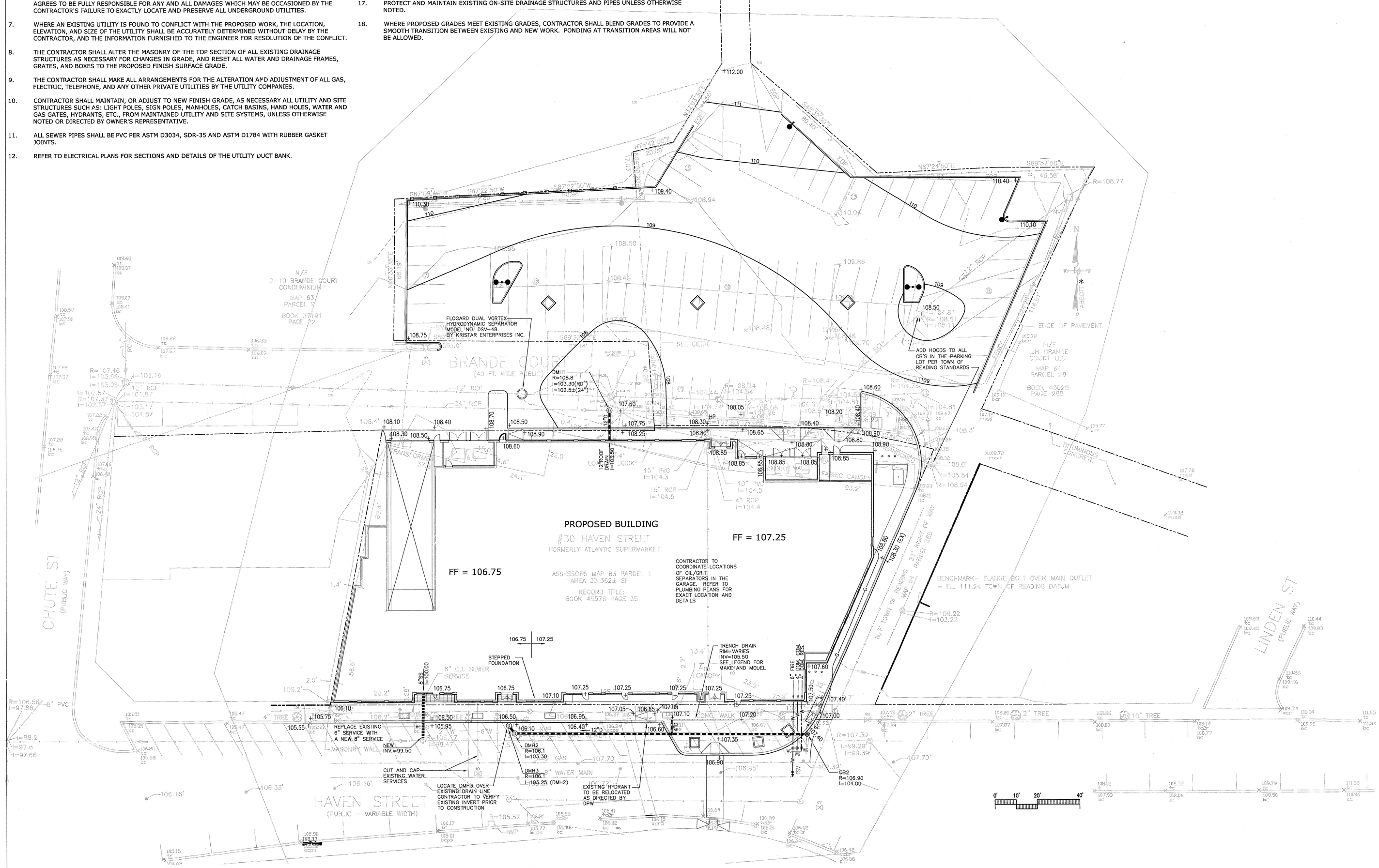
GRADING AND UTILITY NOTES

1. EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PREPARED BY JM ASSOCIATES OF NORTH READING, MA AND IS DATED 7 APRIL 2010.
2. PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT, BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED WITH A DIGSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
3. CONTRACTOR TO ADJUST UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN-OUTS, UTILITY MANHOLES, CATCH BASINS, INLETS, ETC.) THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH TOWN OF READING DEPARTMENT OF PUBLIC WORKS STANDARDS.
5. ALL WORK TO BE DONE WITHIN PUBLIC RIGHT-OF-WAYS SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF READING.
6. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
7. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
8. THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE STRUCTURES AS NECESSARY FOR CHANGES IN GRADE, AND RESET ALL WATER AND DRAINAGE FRAMES, GRATES, AND BOXES TO THE PROPOSED FINISH SURFACE GRADE.
9. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL GAS, FLECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
10. CONTRACTOR SHALL MAINTAIN, OR ADJUST TO NEW FINISH GRADE, AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS: LIGHT POLES, SIGN POLES, MANHOLES, CATCH BASINS, HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC., FROM MAINTAINED UTILITY AND SITE SYSTEMS, UNLESS OTHERWISE NOTED OR DIRECTED BY OWNER'S REPRESENTATIVE.
11. ALL SEWER PIPES SHALL BE PVC PER ASTM D3034, SDR-35 AND ASTM D1784 WITH RUBBER GASKET JOINTS.
12. REFER TO ELECTRICAL PLANS FOR SECTIONS AND DETAILS OF THE UTILITY DUCT BANK.
13. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION, AT THE CONTRACTOR'S EXPENSE.
14. REFER TO ARCHITECTURAL PLANS FOR PROPOSED LOCATION OF UTILITY SERVICE STUBS AT BUILDING.
15. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRICAL.) FINAL DESIGN AND LOCATIONS AT THE BUILDING WILL BE PROVIDED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION.
16. ALL CEMENT LINED DUCTILE IRON JOINTS AT FITTINGS (CLASS 52,) VALVES, AND HYDRANT LATERALS SHALL BE MECHANICAL JOINT WITH NEOPRENE GASKETS. JOINTS AT OTHER LOCATIONS SHALL BE PUSH-ON TYPE WITH NEOPRENE OR SYNTHETIC RUBBER GASKETS. ALL WATER GATES SHALL OPEN AS PER CITY REQUIREMENTS. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.0 FEET OF GROUND COVER AND A MINIMUM OF 10 FOOT SEPARATION FROM THE SEWER SYSTEM. AT WATER AND SEWER CROSSINGS, THE WATER LINE SHALL BE ENCASED IN SIX INCHES OF CONCRETE FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING.
17. PROTECT AND MAINTAIN EXISTING ON-SITE DRAINAGE STRUCTURES AND PIPES UNLESS OTHERWISE NOTED.
18. WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
19. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STRUCTURES AND PLANTING BEDS.
20. MAXIMUM SLOPE IN DISTURBED AREAS SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
21. ENSURE ALL EXISTING (TO REMAIN), AND PROPOSED MANHOLE COVERS PROPERLY IDENTIFY UTILITY SERVICED.
22. CONTRACTOR SHALL VERIFY EXISTING GRADES AND NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
23. BITUMINOUS CONCRETE ELEVATIONS AT CATCH BASINS TO BE 1/4 INCH ABOVE RIM ELEVATION SHOWN FOR CATCH.
24. SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED.

GRADING AND UTILITY LEGEND

	PROPERTY LINE
	SEWER LINE
	DRAIN LINE
—W—	WATER LINE
D	DRAIN MANHOLE
S	SEWER MANHOLE
+100.50	SPOTGRADE
RD	ROOF DRAIN
T	TRANSFORMER
WG	WATER GATE
HYD	HYDRANT
TSV	TAPPING SLEEVE AND VALVE
CB	CATCH BASIN
	ACO TRENCH DRAIN KLASSIK DRAIN-KS100S SERIES W/ PERFORATED STEEL GRATE TYPE 410Q
110	PROPOSED CONTOUR



1	Level 1
1"=20'	

30 HAVEN

30 Haven Street
Reading, MA 01864

oaktree

DZI
Site Planning, Civil Engineering, Landscape Architecture
Po Box 307
Foxborough, MA
508.393.8383 phone
devellisz rein.com
DeVellis Zrein Inc.
Consultant

FOR CONSTRUCTION

N

COMMONWEALTH OF MASSACHUSETTS IMAD A ZREIN CIVIL No. 37261 REGISTERED PROFESSIONAL ENGINEER
9/14/11
Stamp

Revisions	Description
9.14.11	FOR CONSTRUCTION

GRADING AND UTILITIES PLAN

Scale:	1"=20'
Job Number	2G1S-65
Drawing By:	CRM
Checked By:	IAZ
Date	5.31.11

C-3

© 2010 Oaktree Development

C:\Users\Pepito\Desktop\MA_Reading_Atlantic_&_Cameron_110317.rvt