

Russ Hall Drainage Improvements

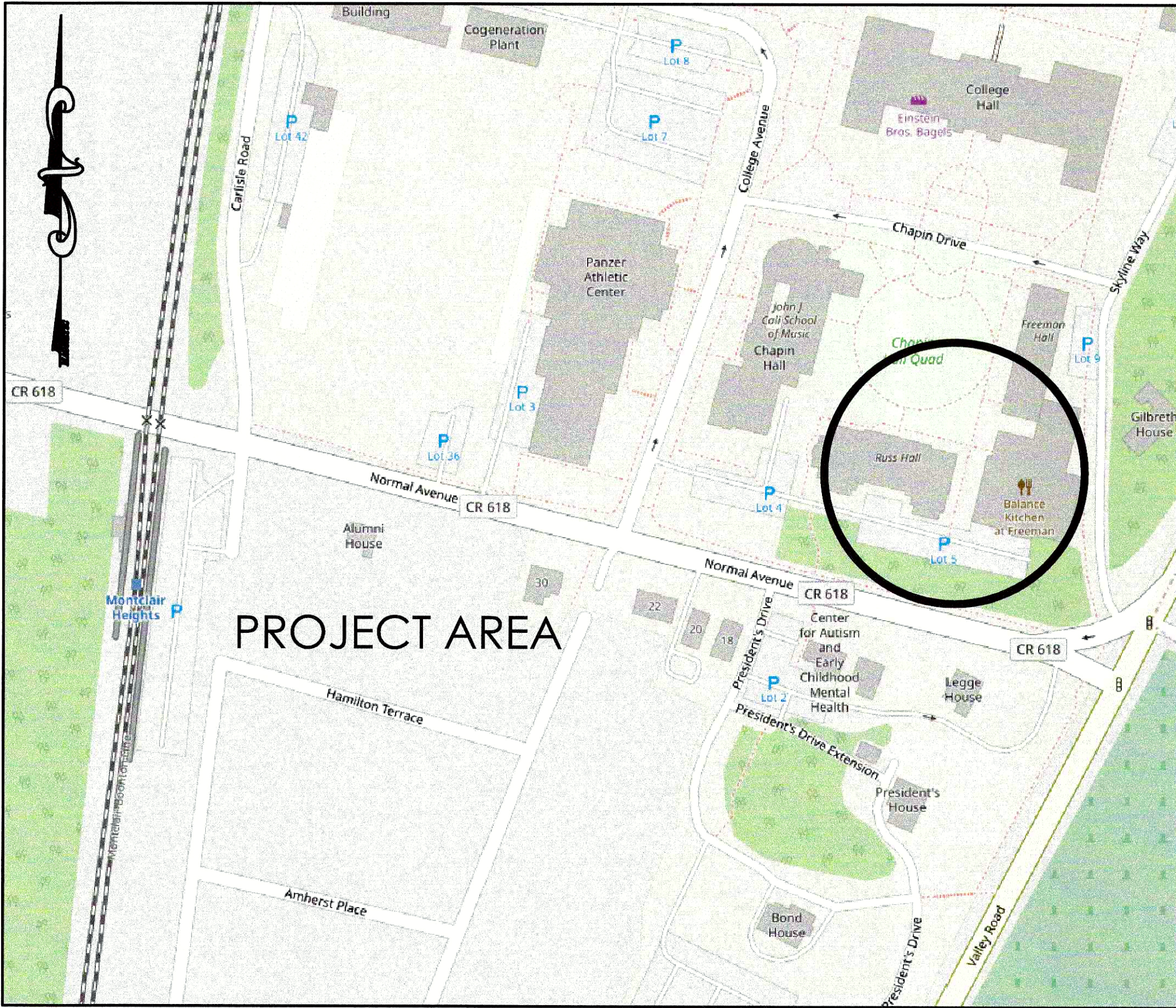
Montclair State University

Township of Montclair

Essex County, New Jersey

PUBLIC UTILITIES

GAS: PUBLIC SERVICE ELECTRIC AND GAS (GAS)
ELECTRIC: PUBLIC SERVICE ELECTRIC AND GAS (ELECTRIC)
CABLE: CABLEVISION
TELEPHONE: VERIZON
WATER: SUEZ WATER
TRAFFIC SIGNAL: COUNTY OF ESSEX



PROJECT LOCATION MAP
N.T.S.
[MAP COURTESY OF OPEN STREET MAPS, 2018]



Plans prepared by:

BOSWELL ENGINEERING

330 PHILLIPS AVENUE

SOUTH HACKENSACK, NEW JERSEY 07606

Tel (201) 641-0770 . Fax (201) 641-1831

NJ Certificate of Authorization No. 24GA27958000

STEPHEN T. BOSWELL
PROFESSIONAL ENGINEER N.J. LIC. 34680








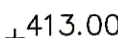

CHRISTOPHER J. NASH
PROFESSIONAL ENGINEER N.J. LIC. 31605

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	CONSTRUCTION PLAN
3	LANDSCAPE PLAN
4-5	CONSTRUCTION DETAILS

MSU PROJECT NO. 18C038.1
BOSWELL ENGINEERING JOB NO. 18-209

December 20, 2018

Note: This project is governed by 2007 New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction and Standard Roadway Construction/Traffic Control/Bridge Construction Details, as amended herein.

<u>LEGEND</u>	
	EXISTING CURB
	EXISTING FIRE HYDRANT
	EXISTING UTILITY POLE
	SHREDDED HARDWOOD BARK MULCHING
	HIGH DENSITY POLYETHYLENE PIPE (REFER TO PLAN FOR SIZE & TYPE)
	INLET (REFER TO PLAN FOR TYPE)
	PROPOSED CONTOUR
	PROPOSED SPOT GRADE
	TREE REMOVAL

1. NOT ALL UTILITY POLES, UTILITY LINES, VALVES, DRIVEWAYS, INLETS, TREES AND OTHER EXISTING TOPOGRAPHIC FEATURES HAVE BEEN SHOWN ON PLAN. ASCERTAIN ALL LOCATIONS PRIOR TO CONSTRUCTION.
2. CONSTRUCTION LAYOUT/STAKEOUT, COORDINATION OF ALL WORK WITH UTILITY COMPANIES, AND TEMPORARY SUPPORT OF UTILITY POLES, IF REQUIRED, IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. MONITOR ALL GRADES INCLUDING PAVEMENT, DRIVEWAY, DRAINAGE, CURB AND SIDEWALK THROUGHOUT THE PROJECT SO THAT POSITIVE DRAINAGE IS MAINTAINED AND PONDING DOES NOT OCCUR. SEPARATE PAYMENT WILL NOT BE MADE FOR THE MONITORING OF GRADES BUT THE COST WILL BE INCLUDED IN VARIOUS PAY ITEMS IN THE PROJECT.
4. PERFORM ALL CONSTRUCTION WORK IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODE MEANS THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS AND ADDITIONS THERETO OF THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S "OCCUPATIONAL SAFETY AND HEALTH STANDARDS" (OSHA); "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" OF THE STATE OF NEW JERSEY, DEPARTMENT OF LABOR AND INDUSTRY, BUREAU OF ENGINEERING AND SAFETY; "CONSTRUCTION SAFETY CODE," AND "MAINTENANCE, CONSTRUCTION AND DEMOLITION," AND "BUILDING CODE."
5. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES TO THE PRECONSTRUCTION CONDITION ONCE ALL WORK IS COMPLETE.
6. CONTRACTOR SHALL PROVIDE AN APPROPRIATE EXCAVATION SCHEME SO AS NOT TO DISTURB ANY ADJACENT WALKWAYS/PATHS. ALL BRACING/SHORING REQUIRED SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR THE PROJECT.
7. QUANTITIES PROVIDED ON THE PLANS ARE APPROXIMATE ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING HIS/HER BID. ALL COSTS ASSOCIATED WITH PRODUCING A FINAL AND ACCEPTABLE PRODUCT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR THE PROJECT.

[illegible]

BOSWELL ENGINEERING

ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS

330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
 TEL: (201) 641-0770 • FAX: (201) 641-1831
 N.J. CERTIFICATE OF AUTHORIZATION NO. 24CA27958000

PROFESSIONAL ENGINEER N.J. LIC. 34680

PROFESSIONAL ENGINEER N.J. LIC. 31605

ESSEX COUNTY			NEW JERSEY	
SURVEYED BY: AB	DESIGNED BY: N/A	SCALE:	JOB NO.	DATE:
DRAWN BY: EE	CHECKED BY: N/A	1"=10'	18-209	12/20/18
CADD FILE: 18-209-CP			SHEET 2	OF 5

1. HOLE SHALL BE LARGE ENOUGH TO TAKE THE BALL OF THE TREE WITHOUT TWISTING OR BENDING.
2. HOLE SHALL BE AT A DEPTH THAT THE FINAL SOIL LEVEL WILL BE WHERE IT WAS WHEN THE PLANT WAS GROWING IN THE PREVIOUS LOCATION.
3. ALL TREES SHALL BE OF NURSERY STOCK; SHALL BE OF SYMMETRICAL GROWTH; SHALL BE FREE OF DISEASE, INSECTS AND MECHANICAL INJURY; SHALL BE STRAIGHT OF STEM, WITH A WELL BALANCED TOP; SHALL BE OF VIGOROUS GROWTH; AND SHALL HAVE A WELL-DEVELOPED ROOT SYSTEM.
4. LOOSE TOPSOIL MIXTURE SHALL BE CAREFULLY WORKED BETWEEN ROOTS AND FIRMED TO AVOID AIR POCKETS.
5. THE HOLE SHALL BE SOAKED AFTER PLANTING AND ANY SETTling SHALL BE FILLED.
6. A SOIL SAUCER SHALL BE PROVIDED TO RETAIN WATER AROUND THE HOLE.
7. IF WEATHER IS DRY, SOAK ONCE A WEEK DURING THE DRY PERIOD.
8. PLANTS SHALL BE PLANTED UPRIGHT; FACED IN A DIRECTION SO AS TO GIVE THE BEST APPEARANCE.
9. TREES SHALL BE SUPPORTED IMMEDIATELY AFTER PLANTING.
10. COMMERCIAL FERTILIZER TO BE USED SHALL BE COMPLETE FERTILIZER AND SHALL BE A STANDARD PRODUCT COMPLYING WITH STATE AND FEDERAL FERTILIZER LAWS.
11. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARDS FOR NURSERY STOCK RELATIVE TO QUALITY CONTROL.
12. ALL NEWLY PLANTED MATERIAL SHALL BE MULCHED WITH A MINIMUM OF 3" SHREDDED HARDWOOD MULCH. A MAXIMUM OF ONE (1) INCH OF MULCH WITHIN TWELVE (12) INCHES OF ROOT FLARE SHALL BE PROVIDED. NO MULCH SHALL COME INTO CONTACT WITH THE FLARE.
13. ANY DISTURBED AREAS SHALL BE TOPSOILED WITH A 4" MIN. THICKNESS AND SEEDED AS PER SEEDING NOTES.
14. ALL NEW PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AT COMPLETION OF JOB.
15. DO NOT FILL WITHIN TEN (10) FEET OF EXISTING TREES TO REMAIN.
16. TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, PRODUCTIVE SOIL OF A GOOD LOAM TYPE. IT SHALL BE FREE OF STONES OVER ONE (1) INCH SIZE, STICK, WITHOUT A MIXTURE OF SUBSOIL OR OTHER FOREIGN MATTER. IT SHALL NOT BE WORKED IN A MUDDY OR WET CONDITION.
17. ALL PLANT RELOCATIONS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
18. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER IN WRITING PRIOR TO PLANT INSTALLATION.
19. ALL WIRE BASKETS SHALL BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT.
20. IF ANY DISCREPANCIES BETWEEN PLANTING SCHEDULE AND THE PLAN EXIST, THE PLAN SHALL SUPERSEDE.

[illegible]

PROFESSIONAL ENGINEER N.J. LIC. 34680

PROFESSIONAL ENGINEER N.J. LIC. 31605

ESSEX COUNTY			NEW JERSEY	
SURVEYED BY: AB DRAWN BY: EE	DESIGNED BY: N/A CHECKED BY: N/A	SCALE: N.T.S.	JOB NO. 18-209	DATE: 12/20/18
CADD FILE: 18-209-DS			SHEET 5 OF 5	