

PROPOSED ABOVE GROUND INFILTRATION BASIN 3
 6 INCH SAND BOTTOM
 BASIN SURFACE BOTTOM: 101.00
 NO STORM WSE: 101.27
 2-YR STORM WSE: 101.82
 10-YR STORM WSE: 102.40
 100-YR STORM WSE: 103.92
 SPILLWAY FULL-FLOW WSE: 104.67

PROPOSED ABOVE GROUND INFILTRATION BASIN 2
 6 INCH SAND BOTTOM
 BASIN SURFACE BOTTOM: 110.50
 NO STORM WSE: 111.28
 2-YR STORM WSE: 112.85
 10-YR STORM WSE: 114.31
 100-YR STORM WSE: 117.25
 SPILLWAY FULL-FLOW WSE: 118.07

PROPOSED ABOVE GROUND INFILTRATION BASIN 4
 6 INCH SAND BOTTOM
 BASIN SURFACE BOTTOM: 117.00
 NO STORM WSE: 117.68
 2-YR STORM WSE: 118.34
 10-YR STORM WSE: 119.09
 100-YR STORM WSE: 120.54
 SPILLWAY FULL-FLOW WSE: 120.75

STRUCTURAL CALCULATIONS FOR ANY OVERSIZED DRAINAGE STRUCTURE(S) AND OUTLET CONTROL STRUCTURE(S) SHALL BE PROVIDED TO THE BOROUGH ENGINEER'S OFFICE PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL SUBMIT STRUCTURE SHOP DRAWINGS TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION.

DRAINAGE STRUCTURE SCHEDULE National Lead Redevelopment		DRAINAGE STRUCTURE SCHEDULE National Lead Redevelopment	
Structure ID	Structure Type	Structure ID	Structure Type
CB-101	TYPE B INLET	CB-224	TYPE B INLET
CB-102	TYPE B INLET	CB-225	TYPE B INLET
CB-103	TYPE B INLET	CB-226	AREA DRAIN
CB-104	TYPE B INLET	CB-227	TYPE B INLET
CB-105	AREA DRAIN	CB-228	TYPE B INLET
CB-106	TYPE B INLET	CB-229	TYPE B INLET
CB-107	TYPE B INLET	CB-230	TYPE B INLET
CB-108	AREA DRAIN	CB-231	TYPE B INLET
CB-109	AREA DRAIN	CB-232	TYPE B INLET
CB-110	AREA DRAIN	MH-201	6" I.D. CONCRETE MANHOLE
CB-111	TYPE B INLET	MH-202	6" I.D. CONCRETE MANHOLE
CB-112	TYPE B INLET	MH-203	6" I.D. CONCRETE MANHOLE
MH-101	4" I.D. CONCRETE MANHOLE	MH-204	4" I.D. CONCRETE MANHOLE
MH-102	4" I.D. CONCRETE MANHOLE	MH-205	6" I.D. CONCRETE MANHOLE
MH-103	4" I.D. CONCRETE MANHOLE	MH-206	6" I.D. CONCRETE MANHOLE
OCS-101	SEE DETAIL	MH-207	6" I.D. CONCRETE MANHOLE
FES-101	HDPE FLARED END SECTION	MH-208	4" I.D. CONCRETE MANHOLE
FES-102	HDPE FLARED END SECTION	MH-209	4" I.D. CONCRETE MANHOLE
CB-201	TYPE B INLET	MH-210	4" I.D. CONCRETE MANHOLE
CB-202	TYPE B INLET	MH-211	4" I.D. CONCRETE MANHOLE
CB-203	TYPE B INLET	MH-212	4" I.D. CONCRETE MANHOLE
CB-204	TYPE B INLET	MH-213	4" I.D. CONCRETE MANHOLE
CB-205	TYPE B INLET	MH-214	4" I.D. CONCRETE MANHOLE
CB-206	TYPE B INLET	MH-215	6" I.D. CONCRETE MANHOLE
CB-207	TYPE B INLET	MH-216	6" I.D. CONCRETE MANHOLE
CB-208	TYPE B INLET	MH-217	6" I.D. CONCRETE MANHOLE
CB-209	TYPE B INLET	FES-201	PIPE PENETRATION THROUGH WALL
CB-210	TYPE B INLET	FES-202	PIPE PENETRATION THROUGH WALL
CB-211	TYPE B INLET	FES-203	PIPE PENETRATION THROUGH WALL
CB-212	TYPE B INLET	OCS-201	SEE DETAIL
CB-213	TYPE B INLET	CB-301	AREA DRAIN
CB-214	TYPE B INLET	CB-302	AREA DRAIN
CB-215	AREA DRAIN	CB-303	AREA DRAIN
CB-216	AREA DRAIN	CB-304	AREA DRAIN
CB-217	TYPE B INLET	CB-305	AREA DRAIN
CB-218	TYPE B INLET	MH-301	4" I.D. CONCRETE MANHOLE
CB-219	TYPE B INLET	MH-302	4" I.D. CONCRETE MANHOLE
CB-220	TYPE B INLET	FES-301	HDPE FLARED END SECTION
CB-221	AREA DRAIN	FES-302	HDPE FLARED END SECTION
CB-222	TYPE B INLET	FES-303	HDPE FLARED END SECTION
CB-223	AREA DRAIN	FES-401	HDPE FLARED END SECTION
		OCS-401	SEE DETAIL

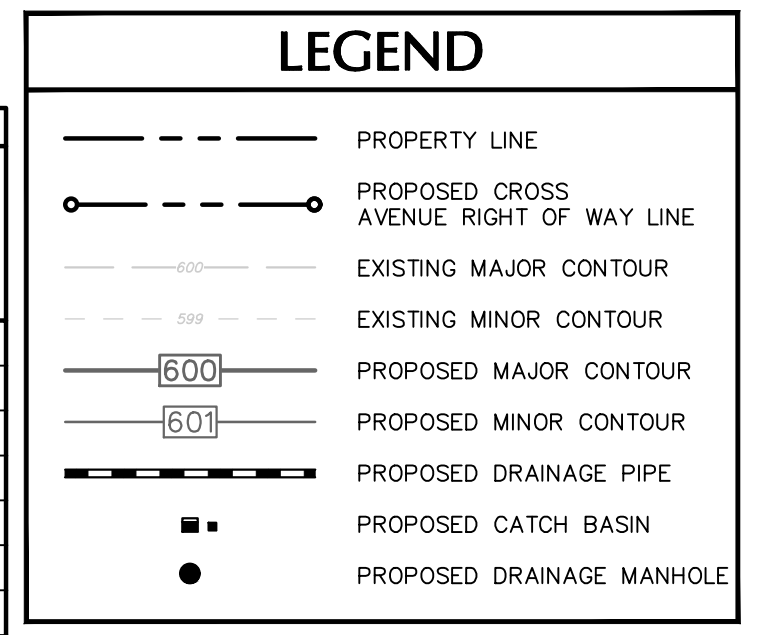
REFER TO DRAWING CS002 FOR GENERAL AND REFERENCE NOTES
 REFER TO DRAWINGS CG111 THROUGH CG114 FOR ENLARGEMENTS

A BASEMENT DRAIN COLLECTION SYSTEM AND SUMP PUMP SHALL BE INSTALLED AND CONNECT TO THE PROPOSED ROOF LEADER SYSTEM FOR ALL PROPOSED BASEMENT UNITS.

IN ACCORDANCE WITH BMP MANUAL REQUIREMENTS, POST-CONSTRUCTION TESTING MUST BE PERFORMED ON THE AS-BUILT INFILTRATION BASINS TO ENSURE THAT THE INSTALLED BMP FUNCTIONS AS DESIGNED. WHERE AS-BUILT TESTING SHOWS A LONGER DRAIN TIME THAN DESIGNED, CORRECTIVE ACTION MUST BE TAKEN AND THE BASIN SHALL BE RE-TESTED.

NATIONAL LEAD REDEVELOPMENT - SOIL TESTING SUMMARY					
TEST PIT NAME	EXISTING GROUND SURFACE ELEVATION	DEPTH OF TEST PIT (FEET)	SEASONAL HIGH WATER TABLE ELEVATION	TESTED PERMEABILITY RATE (IN/HR)	PERMEABILITY TEST ELEVATION
TP-1A	112.0	12.5	98*	3.35	107.5
TP-1B	108.5	9.0	98*	3.63	107.0
TP-2A	111.0	20.0	91**	6.4	104.0
TP-2B	112.0	22.0	90**	14.5	102.5
TP-2C	112.0	21.0	91**	14.5	103.0
TP-2D	111.0	20.5	90.5**	9.6	103.0
TP-3A	103.0	12.5	92**	5.49	96.0
TP-3B	105.0	16.0	94**	15.68	97.5
TP-4A	116.5	19.0	97.5**	4.9	115.0
TP-4B	117.0	19.0	98**	3.4	111.0

Notes:
 * No evidence of water table or groundwater mottling observed during the excavation. Elevation represents 1.5 feet below the bottom of lowest test pit excavation in Basin 1.
 ** No evidence of water table or groundwater mottling observed during the excavation. Elevation represents the bottom of test pit excavation.
 *** Mottling observed during test pit excavation.



Date	Description	No.
16 DEC 22	REVISED PER BOROUGH REVIEW COMMENTS	3
4 FEB 22	REVISED PER BOROUGH REVIEW COMMENTS	2
15 MAY 20	COMPLETENESS RESUBMISSION	1

REVISIONS		
Date	Description	No.

SIGNATURE: LEONARD D. SAVINO DATE SIGNED: _____
 PROFESSIONAL ENGINEER NJ Lic. No. GE-39238
LANGAN
 Langan Engineering and Environmental Services, Inc.
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ CERTIFICATE OF AUTHORIZATION No. 26GA798640

Project: **NATIONAL LEAD REDEVELOPMENT**
 BLOCK No. 297, LOT No. 1
 BLOCK No. 332, LOTS Nos. 1 - 4
 BLOCK No. 333, LOT No. 1
 BOROUGH OF SAYREVILLE
 MIDDLESEX COUNTY NEW JERSEY
 Drawing Title

OVERALL DRAINAGE PLAN

Project No. 100580901 Drawing No. AE-4
 Date: 20 DECEMBER 2019
 Drawn By: BMW
 Checked By: JED