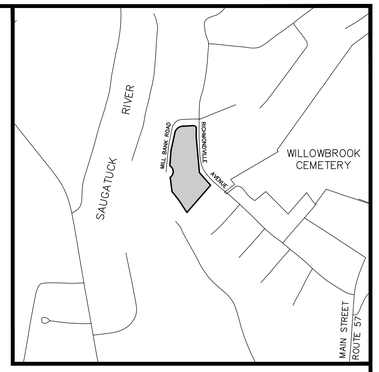
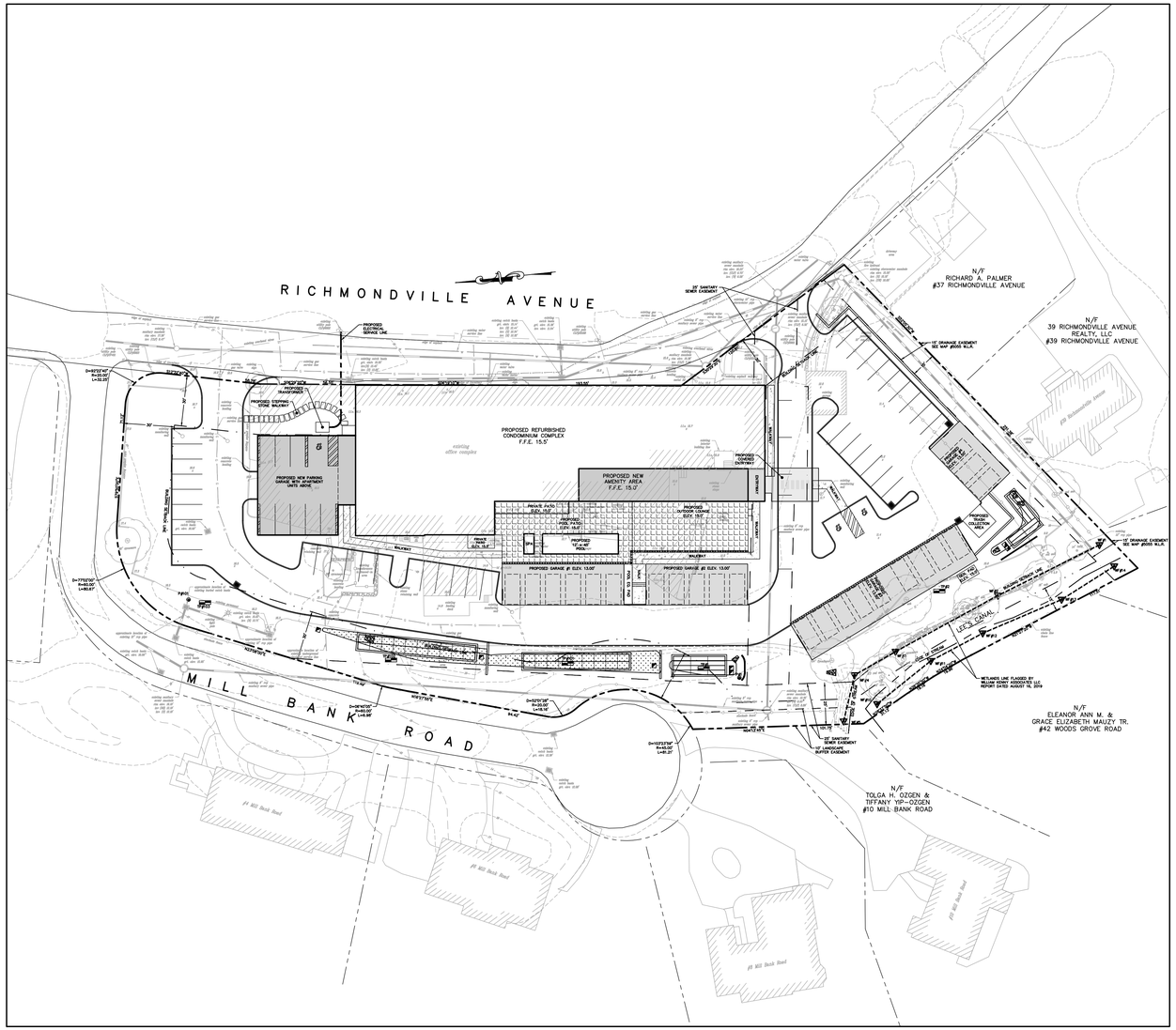
PROPOSED NEW RESIDENTIAL DEVELOPMENT FOR:

41 RICHMONDVILLE AVENUE, WESTPORT, CT



SCALE: 1"=500'



SCALE: 1" = 40'

REFERENCE DRAWINGS:

- IMPROVEMENT LOCATION SURVEY
- CE 1 - COVERAGE REDUCTION SCHEMATIC
- CE 2 - DRAINAGE PLAN
- CE 3 - ZONING LAYOUT PLAN
- CE 4 - EMERGENCY MANAGEMENT PLAN
- CE 5 - SIGHT LINE PLAN
- CE 6 - SEDIMENT & EROSION CONTROLS PLAN
- CE 7 - NOTES AND DETAILS SHEET
- FULL SET OF ARCHITECTURAL PLANS

LEGEND

LIMIT OF PAVEMENT		ELECTRIC SERVICE	
CURBING		STORM GRAVITY SEWER	
RETAINING WALL		GAS SERVICE	
BLDG FOOTPRINT		CATCH BASIN (CB)	
WATER SERVICE		STORM DETENTION SYSTEM	
SANITARY GRAVITY SEWER			

RICHMONDVILLE AVENUE

N/F
RICHARD A. PALMER
#37 RICHMONDVILLE AVENUE

N/F
39 RICHMONDVILLE AVENUE
REALTY, LLC
#39 RICHMONDVILLE AVENUE

PROPOSED STEPPING STONE WALKWAY

PROPOSED NEW PARKING GARAGE WITH APARTMENT UNITS ABOVE

PROPOSED REFURBISHED CONDOMINIUM COMPLEX
F.F.E. 15.5'

existing office complex

100-YEAR FLOOD LINE

PROPOSED NEW AMENITY AREA
F.F.E. 15.0'

PROPOSED COVERED ENTRYWAY

ENTRYWAY

WALKWAY

PRIVATE PATIO
ELEV. 15.0'

PROPOSED POOL PATIO
ELEV. 15.0'

PROPOSED OUTDOOR LOUNGE
ELEV. 15.0'

SPA

PROPOSED 12'-0"x45' POOL

PRIVATE PATIO
ELEV. 15.5'

PROPOSED GARAGE #1 ELEV. 13.00'

POOL EQ. PAD

WALK

PROPOSED GARAGE #2 ELEV. 13.00'

PROPOSED GARAGE #4
ELEV. 13.50'

PROPOSED TRASH COLLECTION AREA

PROPOSED GARAGE #3
ELEV. 13.50'

75' CONSERVATION DWELLING SETBACK

30' CONSERVATION ACCESSORY STRUCTURE SETBACK

20' CONSERVATION NONDISTURBANCE SETBACK

W.P.L.O.

LEE'S CANAL

EDGE OF STREAM

WETLANDS LINE FLAGGED BY WILLIAM KENNY ASSOCIATES LLC REPORT DATED AUGUST 16, 2019

MILL BANK ROAD

N/F
ELEANOR ANN M. &
GRACE ELIZABETH MAUZY TR.
#42 WOODS GROVE ROAD

N/F
TOLGA H. OZGEN &
TIFFANY YIP-OZGEN
#10 MILL BANK ROAD

#4 Mill Bank Road

#6 Mill Bank Road

D=92°22'40"
R=20.00'
L=32.25'

S12°32'40"W

58.78'

S06°29'20"W

56.55'

S06°19'10"W

193.55'

S30°39'55"E

120.90'

S50°30'30"W

251.98'

71.12'

S73°50'00"E

D=77°02'00"
R=60.00'
L=80.67'

N23°08'00"E

119.49'

N16°27'55"E

94.42'

D=52°01'28"
R=20.00'
L=18.16'

D=06°40'05"
R=60.00'
L=6.98'

D=103°23'59"
R=45.00'
L=81.21'

N04°13'45"E

101.75'

N21°27'20"W

177.51'

N24°32'20"W

19.46'

N28°23'50"W

19.16'

N28°27'50"W

51.13'

TP#101

TP#102

TP#103

TP#1

P#1

P#2

WF#1

WF#2

WF#3

WF#4

WF#5

WF#10

WF#11

WF#12

WF#13

WF#14

REVISED: 02/13/2020 - Per comments made by the Planning & Zoning Department.
REVISED: 02/04/2020 - Amended drainage systems and associated site adjustments for Planning & Zoning Commission Submittal.
REVISED: 01/31/2020 - Per comments made by the Conservation Commission and the FECB Application Review.
REVISED: 01/13/2020 - Amended grading & drainage systems due to the sanitary sewer easements.

LEGEND

	IMPERVIOUS AREA TO BE CONVERTED TO LAWN
	EXISTING BUILDING
	PROPOSED BUILDING

COVERAGE REDUCTION SCHEMATIC

41 RICHMONDVILLE AVENUE

WESTPORT, CT

Prepared for

41 RICHMONDVILLE LLC

STATE OF CONNECTICUT
JIMMY KOUSIDIS
LICENSED
PROFESSIONAL ENGINEER

SCALE: 1" = 20'
0 20 40

DATED: 12/12/2019
JOB NO.: CH19-2
SHEET NO: CE - 1

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
10-B First Street, Norwalk, CT 06855
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E: jim@kousidisengineering.com
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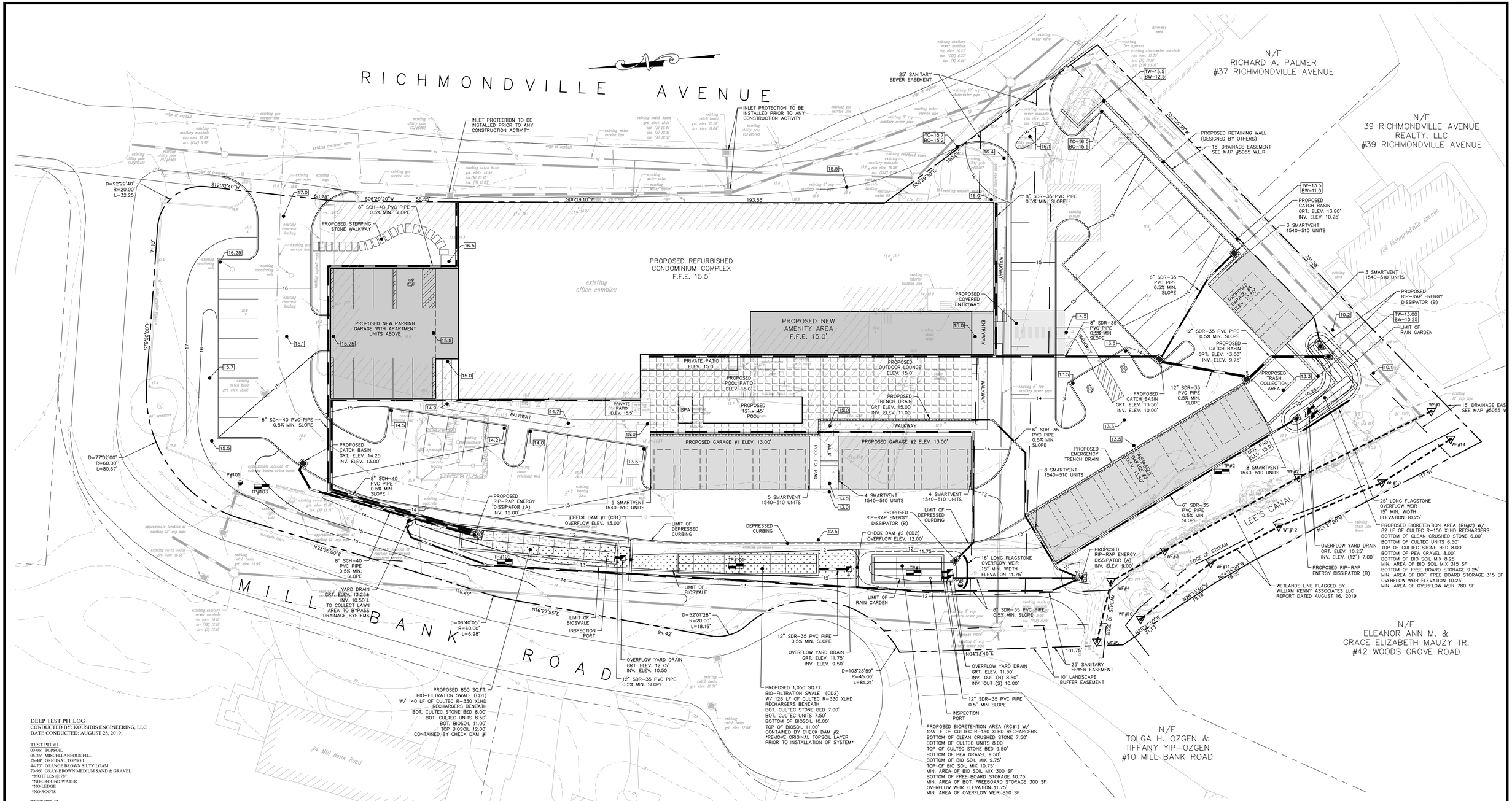

DEEP TEST PIT LOG
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: AUGUST 28, 2019

TEST PIT #1
00-06" TOPSOIL
06-26" MISCELLANEOUS FILL
26-44" ORIGINAL TOPSOIL
44-70" ORANGE BROWN SILTY LOAM
70-96" GRAY-BROWN MEDIUM SAND & GRAVEL
*MOTTLES @ 78"
*NO GROUND WATER
*NO LEDGE
*NO ROOTS

TEST PIT #2
00-26" MISCELLANEOUS FILL
26-36" ORIGINAL TOPSOIL
36-60" ORANGE BROWN SILTY LOAM
60-84" BROWN MEDIUM SAND & GRAVEL
*MOTTLES @ 60"
*GROUND WATER @ 70"
*NO LEDGE
*NO ROOTS

DEEP TEST PIT LOG
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: JANUARY 06, 2020

TEST PIT #101
00-16" TOPSOIL & FILL
16-48" MISCELLANEOUS FILL
48-62" ORIGINAL TOPSOIL - SLIGHTLY COMPACTED
62-96" TAN FINE-MEDIUM SAND WITH GRAVEL & COBBLES
*NO MOTTLES
*GROUND WATER @ 90"
*NO LEDGE
*ROOTS TO 24"

TEST PIT #102
00-24" TOPSOIL & FILL
24-64" CLEAN GRAVELLY FILL
64-84" ORANGE BROWN SILTY LOAM
84-126" TAN MEDIUM SAND & GRAVEL WITH COBBLES
*NO MOTTLES
*GROUND WATER @ 120"
*NO LEDGE
*ROOTS TO 120"

TEST PIT #103
00-02" ASPHALT
02-14" DRIVEWAY BASE
14-48" MISCELLANEOUS FILL
48-120" TAN MEDIUM SAND & GRAVEL WITH COBBLES
*NO MOTTLES
*NO GROUND WATER
*NO LEDGE
*NO ROOTS

PERCOLATION TEST DATA:
P#1
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: AUGUST 29, 2019
DIAMETER: 8" SANITARIAN: N/A
DEPTH: 32" PRE SOAK TIME: SATURATED
**TEST CONDUCTED IN ORIGINAL GROUND

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
10:00	-	7.00"	-	-
10:10	10.0 MIN.	14.50"	7.50"	1.33
10:20	10.0 MIN.	19.25"	4.75"	2.11
10:30	10.0 MIN.	22.50"	3.25"	3.08
10:40	10.0 MIN.	24.50"	2.00"	5.00
10:50	10.0 MIN.	26.25"	1.75"	5.71
11:00	10.0 MIN.	28.00"	1.75"	5.71

PERCOLATION TEST DATA:
P#101
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: JANUARY 06, 2020
DIAMETER: 10" SANITARIAN: N/A
DEPTH: 20" PRE SOAK TIME: 11:30
**TEST CONDUCTED IN ORIGINAL GROUND

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
12:30	-	4.25"	-	-
12:40	10.0 MIN.	8.50"	4.25"	2.35
12:50	10.0 MIN.	11.50"	3.00"	3.33
13:00	10.0 MIN.	13.25"	1.75"	5.71
13:10	10.0 MIN.	14.75"	1.50"	6.67
13:20	10.0 MIN.	16.25"	1.50"	6.67
13:30	10.0 MIN.	17.75"	1.50"	6.67

RIP-RAP BED SIZING (A)

RIPRAP SIZING (TYPE B)	
FLOW VELOCITY:	5.67 ft/s
PIPE DIAMETER:	8 in
PIPE AREA:	0.349 sf
FLOW RATE:	4.46 cfs
La=((3.0(Q-5))/D^1.5)+10	5.39 ft
W1=3*D	1.5 ft
W2=3*D+0.4*La	3.66 ft

NOTE: CALCULATIONS FROM ConnDOT DRAINAGE MANUAL, MAY, 2002.

RIP-RAP BED SIZING (B)

RIPRAP SIZING (TYPE B)	
FLOW VELOCITY:	5.67 ft/s
PIPE DIAMETER:	6 in
PIPE AREA:	0.196 sf
FLOW RATE:	3.15 cfs
La=((3.0(Q-5))/D^1.5)+10	3.36 ft
W1=3*D	1.5 ft
W2=3*D+0.4*La	2.06 ft

NOTE: CALCULATIONS FROM ConnDOT DRAINAGE MANUAL, MAY, 2002.

REVISED: 02/13/2020 - Per comments made by the Planning & Zoning Department.
REVISED: 02/04/2020 - Amended drainage systems and associated site adjustments for Planning & Zoning Commission Submittal.
REVISED: 01/31/2020 - Per comments made by the Conservation Commission and the FECB Application Review.
REVISED: 01/13/2020 - Amended grading & drainage systems due to the sanitary sewer easements.

DRAINAGE PLAN

41 RICHMONDVILLE AVENUE

WESTPORT, CT

Prepared for

41 RICHMONDVILLE LLC

STATE OF CONNECTICUT
JAMY KOUSIDIS
No. 18650
LICENSED
PROFESSIONAL ENGINEER

SCALE: 1" = 20'
0 20 40

DATED: 12/12/2019
JOB NO.: CH19-2
SHEET NO: CE - 2

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
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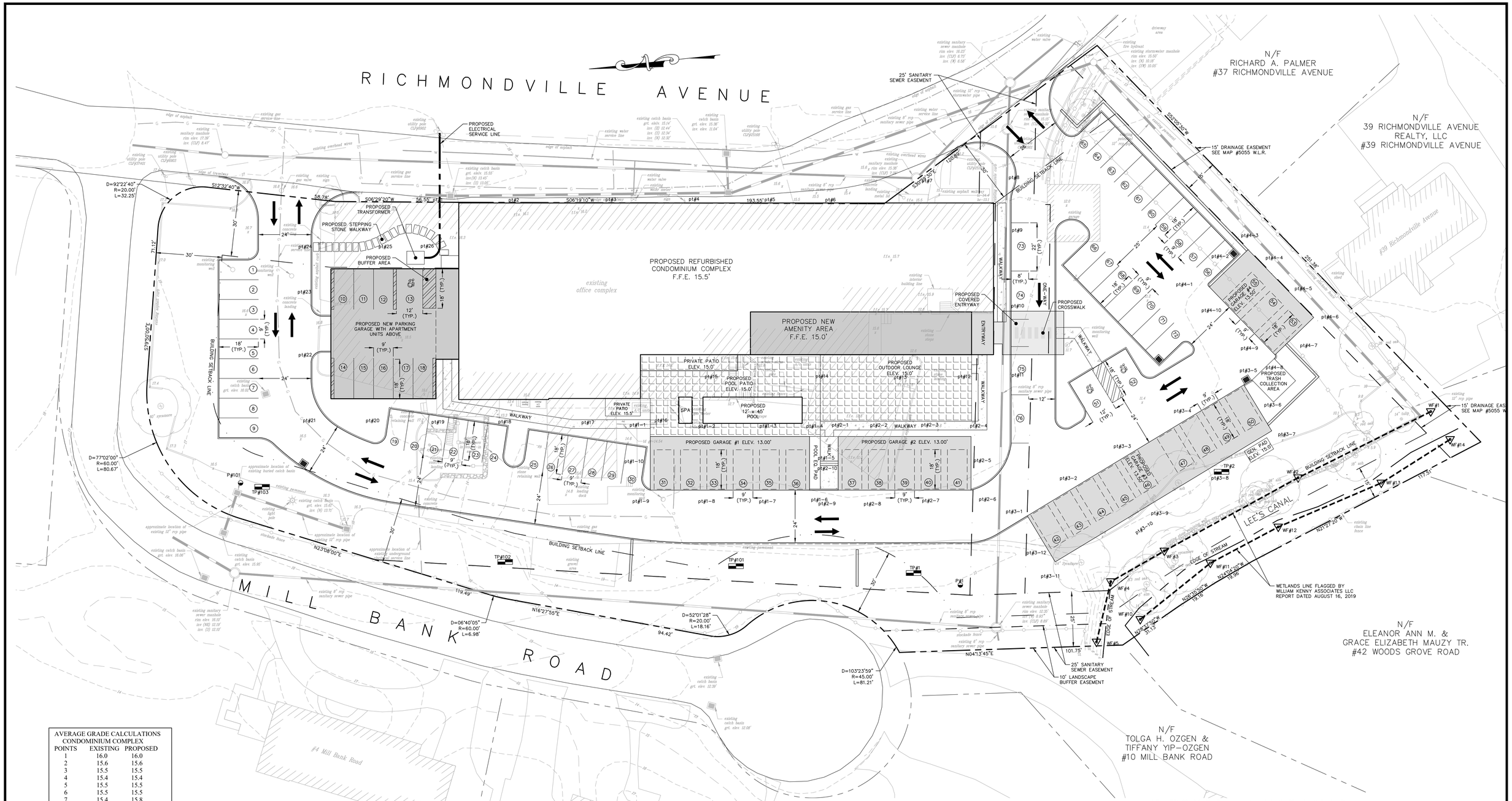
Web: www.kousidisengineering.com



AVERAGE GRADE CALCULATIONS CONDOMINIUM COMPLEX		
POINTS	EXISTING	PROPOSED
1	16.0	16.0
2	15.6	15.6
3	15.5	15.5
4	15.4	15.4
5	15.5	15.5
6	15.5	15.5
7	15.4	15.8
8	13.7	16.2
9	12.8	15.3
10	12.2	14.6
11	12.0	14.2
12	12.9	15.0
13	13.5	15.0
14	13.5	15.0
15	15.4	15.0
16	12.6	15.0
17	15.0	14.7
18	13.3	14.7
19	17.2	14.4
20	17.0	14.9
21	16.6	14.5
22	16.8	15.0
23	16.8	16.0
24	16.9	16.5
25	16.6	16.6
26	16.3	16.8
TOTAL	390.0	398.7
AVERAGE	15.00	15.33

AVERAGE GRADE CALCULATIONS GARAGE #1		
POINTS	EXISTING	PROPOSED
1-1	12.6	15.0
1-2	12.6	15.0
1-3	12.7	15.0
1-4	12.8	15.0
1-5	12.3	14.0
1-6	12.0	13.0
1-7	11.8	12.9
1-8	11.9	12.9
1-9	12.0	13.0
1-10	12.3	13.4
TOTAL	123.0	139.2
AVERAGE	12.30	13.92

AVERAGE GRADE CALCULATIONS GARAGE #2		
POINTS	EXISTING	PROPOSED
2-1	12.8	15.0
2-2	12.8	14.9
2-3	12.7	14.8
2-4	12.8	14.7
2-5	12.3	13.9
2-6	12.0	12.9
2-7	11.8	12.9
2-8	11.9	12.9
2-9	12.0	12.9
2-10	12.3	13.4
TOTAL	122.0	138.3
AVERAGE	12.20	13.83

AVERAGE GRADE CALCULATIONS GARAGE #3		
POINTS	EXISTING	PROPOSED
3-1	11.4	13.3
3-2	11.5	13.5
3-3	11.4	13.5
3-4	11.1	13.5
3-5	10.8	13.0
3-6	10.7	13.3
3-7	10.6	10.0
3-8	11.0	11.0
3-9	11.0	11.0
3-10	10.8	10.8
3-11	12.3	11.0
3-12	12.0	12.0
TOTAL	134.6	145.9
AVERAGE	11.22	12.16

AVERAGE GRADE CALCULATIONS GARAGE #4		
POINTS	EXISTING	PROPOSED
2-1	11.0	14.0
2-2	11.0	14.0
2-3	11.0	11.0
2-4	10.8	10.8
2-5	10.6	10.6
2-6	10.4	10.4
2-7	10.4	10.0
2-8	10.5	13.2
2-9	10.6	13.4
2-10	10.8	13.4
TOTAL	107.1	120.8
AVERAGE	10.71	12.08

REVISED: 02/13/2020 - Per comments made by the Planning & Zoning Department.
REVISED: 02/04/2020 - Amended drainage systems and associated site adjustments for Planning & Zoning Commission Submittal.
REVISED: 01/31/2020 - Per comments made by the Conservation Commission and the FECB Application Review.
REVISED: 01/13/2020 - Amended grading & drainage systems due to the sanitary sewer easements.

ZONING LAYOUT PLAN

41 RICHMONDVILLE AVENUE

WESTPORT, CT

Prepared for

41 RICHMONDVILLE LLC

STATE OF CONNECTICUT
JIMMY KOUSIDIS
No. 20000
LICENSED
PROFESSIONAL ENGINEER

SCALE: 1" = 20'
0 20 40

DATED: 12/12/2019
JOB NO.: CH19-2
SHEET NO: CE - 3

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
10-B First Street, Norwalk, CT 06855
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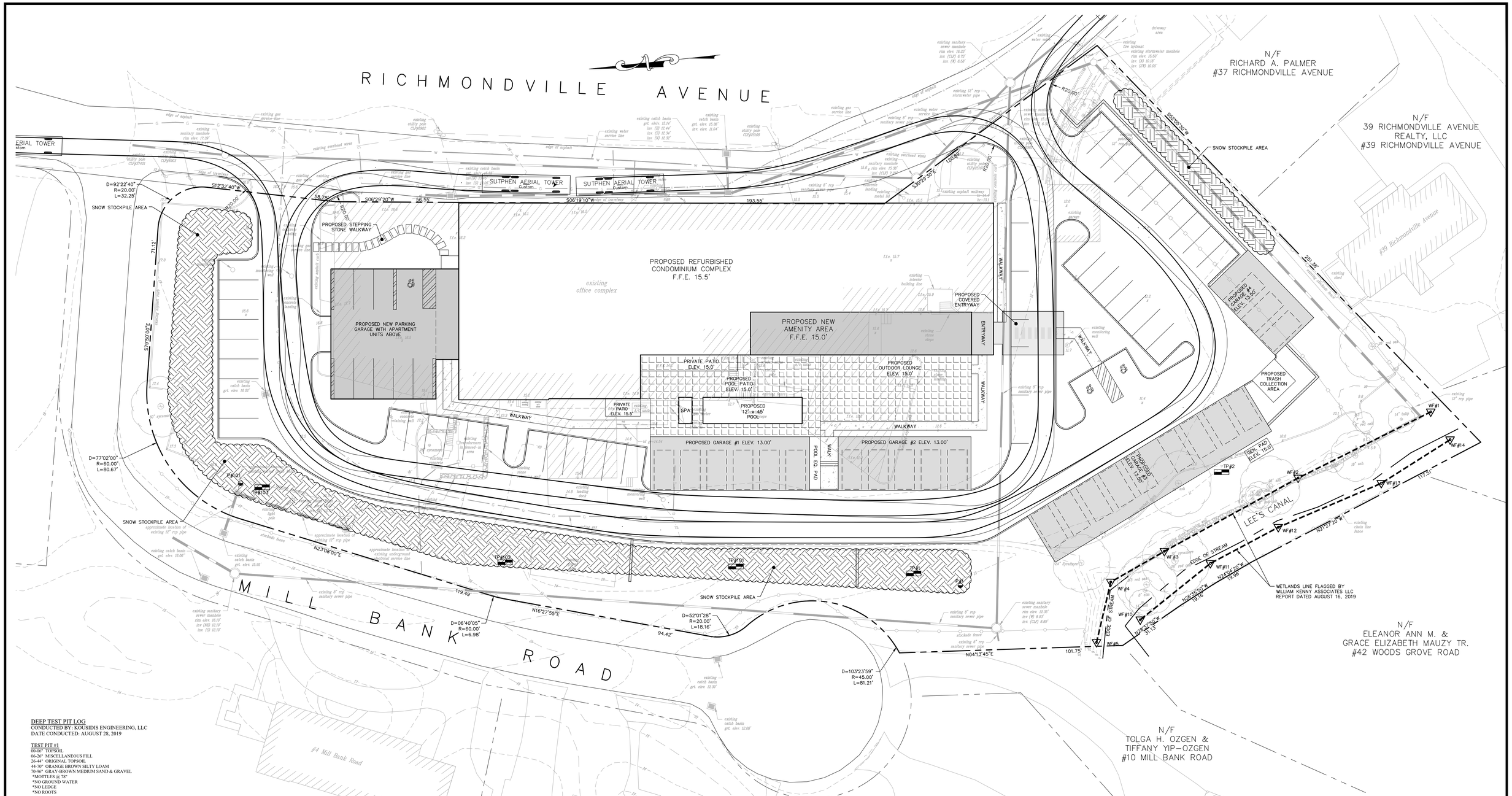

DEEP TEST PIT LOG
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: AUGUST 28, 2019

TEST PIT #1
00-06" TOPSOIL
06-26" MISCELLANEOUS FILL
26-44" ORIGINAL TOPSOIL
44-70" ORANGE BROWN SILTY LOAM
70-96" GRAY-BROWN MEDIUM SAND & GRAVEL
*MOTTLES @ 78"
*NO GROUND WATER
*NO LEDGE
*NO ROOTS

TEST PIT #2
00-26" MISCELLANEOUS FILL
26-36" ORIGINAL TOPSOIL
36-60" ORANGE BROWN SILTY LOAM
60-84" BROWN MEDIUM SAND & GRAVEL
*MOTTLES @ 60"
*GROUND WATER @ 70"
*NO LEDGE
*NO ROOTS

PERCOLATION TEST DATA:
P#1
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: AUGUST 29, 2019
DIAMETER: 8" SANITARIAN: N/A
DEPTH: 32" PRE SOAK TIME: SATURATED
**TEST CONDUCTED IN ORIGINAL GROUND

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
10:00	-	7.00"	-	-
10:10	10.0 MIN.	14.50"	7.50"	1.33
10:20	10.0 MIN.	19.25"	4.75"	2.11
10:30	10.0 MIN.	22.50"	3.25"	3.08
10:40	10.0 MIN.	24.50"	2.00"	5.00
10:50	10.0 MIN.	26.25"	1.75"	5.71
11:00	10.0 MIN.	28.00"	1.75"	5.71

DEEP TEST PIT LOG
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: JANUARY 06, 2020

TEST PIT #101
00-16" TOPSOIL & FILL
16-48" MISCELLANEOUS FILL
48-62" ORIGINAL TOPSOIL - SLIGHTLY COMPACTED
62-96" TAN FINE-MEDIUM SAND WITH GRAVEL & COBBLES
*NO MOTTLES
*GROUND WATER @ 90"
*NO LEDGE
*ROOTS TO 24"

TEST PIT #102
00-24" TOPSOIL & FILL
24-64" CLEAN GRAVELLY FILL
64-84" ORANGE BROWN SILTY LOAM
84-126" TAN MEDIUM SAND & GRAVEL WITH COBBLES
*NO MOTTLES
*GROUND WATER @ 120"
*NO LEDGE
*ROOTS TO 120"

TEST PIT #103
00-02" ASPHALT
02-14" DRIVEWAY BASE
14-48" MISCELLANEOUS FILL
48-120" TAN MEDIUM SAND & GRAVEL WITH COBBLES
*NO MOTTLES"
*NO GROUND WATER
*NO LEDGE
*NO ROOTS

PERCOLATION TEST DATA:
P#101
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: JANUARY 06, 2020
DIAMETER: 10" SANITARIAN: N/A
DEPTH: 20" PRE SOAK TIME: 11:30
**TEST CONDUCTED IN ORIGINAL GROUND

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
12:30	-	4.25"	-	-
12:40	10.0 MIN.	8.50"	4.25"	2.35
12:50	10.0 MIN.	11.50"	3.00"	3.33
13:00	10.0 MIN.	13.25"	1.75"	5.71
13:10	10.0 MIN.	14.75"	1.50"	6.67
13:20	10.0 MIN.	16.25"	1.50"	6.67
13:30	10.0 MIN.	17.75"	1.50"	6.67

REVISED: 02/13/2020 - Per comments made by the Planning & Zoning Department.
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REVISED: 01/31/2020 - Per comments made by the Conservation Commission and the FECB Application Review.
REVISED: 01/13/2020 - Amended grading & drainage systems due to the sanitary sewer easements.

EMERGENCY MANAGEMENT PLAN

41 RICHMONDVILLE AVENUE

WESTPORT, CT

Prepared for

41 RICHMONDVILLE LLC

STATE OF CONNECTICUT
JIM KOUSIDIS
No. 18515
LICENSED
PROFESSIONAL ENGINEER

SCALE: 1" = 20'
0 20 40

DATED: 12/12/2019
JOB NO.: CH19-2
SHEET NO: CE - 4

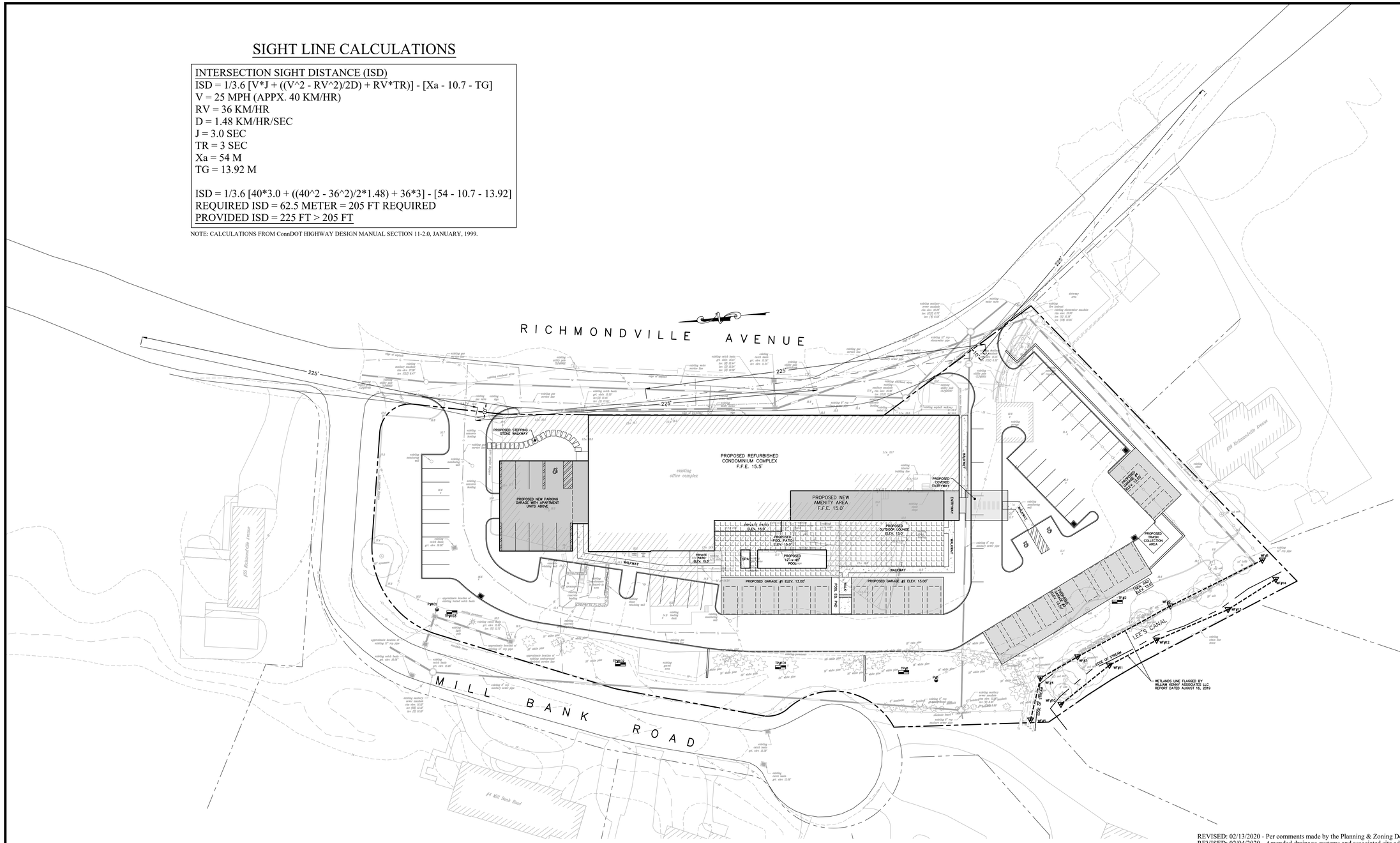
KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
10-B First Street, Norwalk, CT 06855 E: jim@kousidisengineering.com
P: 203-557-8943 F: 203-557-8944 Web: www.kousidisengineering.com

SIGHT LINE CALCULATIONS

INTERSECTION SIGHT DISTANCE (ISD)
ISD = 1/3.6 [V*J + ((V^2 - RV^2)/2D) + RV*TR)] - [Xa - 10.7 - TG]
V = 25 MPH (APPX. 40 KM/HR)
RV = 36 KM/HR
D = 1.48 KM/HR/SEC
J = 3.0 SEC
TR = 3 SEC
Xa = 54 M
TG = 13.92 M

ISD = 1/3.6 [40*3.0 + ((40^2 - 36^2)/2*1.48) + 36*3] - [54 - 10.7 - 13.92]
REQUIRED ISD = 62.5 METER = 205 FT REQUIRED
PROVIDED ISD = 225 FT > 205 FT

NOTE: CALCULATIONS FROM ConnDOT HIGHWAY DESIGN MANUAL SECTION 11-2.0, JANUARY, 1999.



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REVISED: 01/13/2020 - Amended grading & drainage systems due to the sanitary sewer easements.

SIGHT LINE PLAN

41 RICHMONDVILLE AVENUE

WESTPORT, CT

Prepared for

41 RICHMONDVILLE LLC

STATE OF CONNECTICUT
JAMES KOUSIDIS
No. 18629
LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 30'
0 30 60

DATED: 12/12/2019
JOB NO.: CH19-2
SHEET NO: CE - 5

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
10-B First Street, Norwalk, CT 06855
P: 203-557-8943 F: 203-557-8944
E: jim@kousidisengineering.com
Web: www.kousidisengineering.com

RICHMONDVILLE AVENUE

MILL BANK ROAD

N/F
RICHARD A. PALMER
#37 RICHMONDVILLE AVENUE

N/F
39 RICHMONDVILLE AVENUE
REALTY, LLC
#39 RICHMONDVILLE AVENUE

N/F
ELEANOR ANN M. &
GRACE ELIZABETH MAUZY TR.
#42 WOODS GROVE ROAD

N/F
TOLGA H. OZGEN &
TIFFANY YIP-OZGEN
#10 MILL BANK ROAD

LEE'S CANAL

PROPOSED REFURBISHED CONDOMINIUM COMPLEX
F.F.E. 15.5'

PROPOSED NEW AMENITY AREA
F.F.E. 15.0'

PROPOSED NEW PARKING GARAGE WITH APARTMENT UNITS ABOVE

PROPOSED GARAGE #1 ELEV. 13.00'

PROPOSED GARAGE #2 ELEV. 13.00'

PROPOSED GARAGE #3 ELEV. 13.50'

PROPOSED GARAGE #4 ELEV. 13.50'

PROPOSED 12'x45' POOL

PROPOSED OUTDOOR LOUNGE ELEV. 15.0'

PROPOSED COVERED ENTRYWAY

PROPOSED TRASH COLLECTION AREA

TEMPORARY STAGING AREA

CONTRACTOR PARKING AREA

TEMPORARY MUD-TRACKING PAD

TEMPORARY SILT FENCE

TEMPORARY STOCKPILE AREA

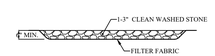
TEMPORARY TREE PROTECTIVE FENCING

INLET PROTECTION TO BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY

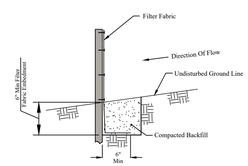
WETLANDS LINE FLAGGED BY WILLIAM KENNY ASSOCIATES LLC REPORT DATED AUGUST 16, 2019

SEQUENCE OF ACTIVITIES:

1. Install erosion control measures prior to any construction activity.
2. Install inlet protection to all street catch basins.
3. De-Stump trees that have and will be cut down.
4. Demolish portions of the building to be removed.
5. Excavate the foundation for the building additions/garages.
6. Backfill the foundation walls and frame structure.
7. Install all new underground utilities.
8. Install new subsurface drainage systems after appropriate inspections.
9. Install new bioretention areas.
10. Stabilize all disturbed areas other than around the structure.
11. Remove the existing asphalt areas and rough grade the property.
12. Construct all patios, decks and the pool and stabilize grounds around buildings and driveway.
13. Fully stabilize property by finishing the driveway & parking surface, vegetate all areas per the approved landscape plan and remove all erosion control measures when all disturbed areas have been fully stabilized.



MUD-TRACKING PAD
N.T.S.



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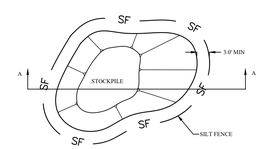
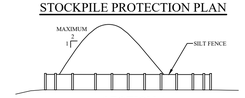


STOCKPILE PROTECTION PLAN



SECTION A
N.T.S.

REVISED: 02/13/2020 - Per comments made by the Planning & Zoning Department.
REVISED: 02/04/2020 - Amended drainage systems and associated site adjustments for Planning & Zoning Commission Submittal.
REVISED: 01/31/2020 - Per comments made by the Conservation Commission and the FECB Application Review.
REVISED: 01/13/2020 - Amended grading & drainage systems due to the sanitary sewer easements.

SEDIMENT & EROSION CONTROLS PLAN

41 RICHMONDVILLE AVENUE

WESTPORT, CT

Prepared for

41 RICHMONDVILLE LLC

STATE OF CONNECTICUT
JIMMY KOUSIDIS
No. 34808
LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 20'
0 20 40

DATED: 12/12/2019
JOB NO.: CH19-2
SHEET NO: CE - 6

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
10-B First Street, Norwalk, CT 06855
P: 203-557-8943 F: 203-557-8944
E: jim@kousidisengineering.com
Web: www.kousidisengineering.com

DEEP TEST PIT LOG
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: AUGUST 28, 2019

TEST PIT #1
00-06" TOPSOIL
06-26" MISCELLANEOUS FILL
26-44" ORIGINAL TOPSOIL
44-70" ORANGE BROWN SILTY LOAM
70-96" GRAY-BROWN MEDIUM SAND & GRAVEL
*MOTTLES @ 78"
*NO GROUND WATER
*NO LEDGE
*NO ROOTS

TEST PIT #2
00-26" MISCELLANEOUS FILL
26-36" ORIGINAL TOPSOIL
36-60" ORANGE BROWN SILTY LOAM
60-84" BROWN MEDIUM SAND & GRAVEL
*MOTTLES @ 60"
*GROUND WATER @ 70"
*NO LEDGE
*NO ROOTS

DEEP TEST PIT LOG
CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: JANUARY 06, 2020

TEST PIT #101
00-16" TOPSOIL & FILL
16-48" MISCELLANEOUS FILL
48-62" ORIGINAL TOPSOIL - SLIGHTLY COMPACTED
62-96" TAN FINE-MEDIUM SAND WITH GRAVEL & COBBLES
*NO MOTTLES
*GROUND WATER @ 90"
*NO LEDGE
*ROOTS TO 24"

TEST PIT #102
00-24" TOPSOIL & FILL
24-64" CLEAN GRAVELLY FILL
64-84" ORANGE BROWN SILTY LOAM
84-126" TAN MEDIUM SAND & GRAVEL WITH COBBLES
*NO MOTTLES
*GROUND WATER @ 120"
*NO LEDGE
*ROOTS TO 120"

TEST PIT #103
00-02" ASPHALT
02-14" DRIVEWAY BASE
14-48" MISCELLANEOUS FILL
48-120" TAN MEDIUM SAND & GRAVEL WITH COBBLES
*NO MOTTLES"
*NO GROUND WATER
*NO LEDGE
*NO ROOTS

PERCOLATION TEST DATA:
P#1
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: AUGUST 29, 2019
DIAMETER: 8" SANITARIAN: N/A
DEPTH: 32" PRE SOAK TIME: SATURATED
**TEST CONDUCTED IN ORIGINAL GROUND

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
10:00	-	7.00"	-	-
10:10	10.0 MIN.	14.50"	7.50"	1.33
10:20	10.0 MIN.	19.25"	4.75"	2.11
10:30	10.0 MIN.	22.50"	3.25"	3.08
10:40	10.0 MIN.	24.50"	2.00"	5.00
10:50	10.0 MIN.	26.25"	1.75"	5.71
11:00	10.0 MIN.	28.00"	1.75"	5.71

PERCOLATION TEST DATA:
P#101
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: JANUARY 06, 2020
DIAMETER: 10" SANITARIAN: N/A
DEPTH: 20" PRE SOAK TIME: 11:30
**TEST CONDUCTED IN ORIGINAL GROUND

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
12:30	-	4.25"	-	-
12:40	10.0 MIN.	8.50"	4.25"	2.35
12:50	10.0 MIN.	11.50"	3.00"	3.33
13:00	10.0 MIN.	13.25"	1.75"	5.71
13:10	10.0 MIN.	14.75"	1.50"	6.67
13:20	10.0 MIN.	16.25"	1.50"	6.67
13:30	10.0 MIN.	17.75"	1.50"	6.67

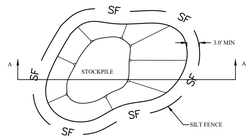
MAXIMUM LOT AREA COVERAGE CALCULATION
FOR - #41 RICHMONDVILLE AVENUE (A/B ZONE)

Gross Lot Area: 104,798 sq.ft.
Net Lot Area: 101,709 sq.ft.

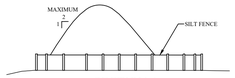
PROPOSED LOT COVERAGE:
Building: 29,507 sq.ft. (28.39%)
TOTAL: 58,500 sq.ft (55.95%)
Total Coverage ALLOWED - (101,709x70%=71,196 sq.ft.)

EXCAVATION & FILL CALCULATIONS [32-8.2.1(a)]

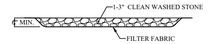
EXCAV.&FILL AMOUNT ALLOWED:
Lot Area*50%*Coverage*10'/27cf/cy
(104,798*50%*25%*10)/27 = 4,851cy
Actual Estimated Exc.&Fill = 2,518cy<4,851cy Allowed
Total Excavation Volume = 1,202 cy
Total Fill Volume = 1,316 cy
Net Material Volume = 114 cy of Fill



STOCKPILE PROTECTION PLAN



SECTION A
N.T.S



MUD-TRACKING PAD
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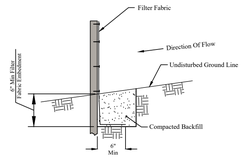

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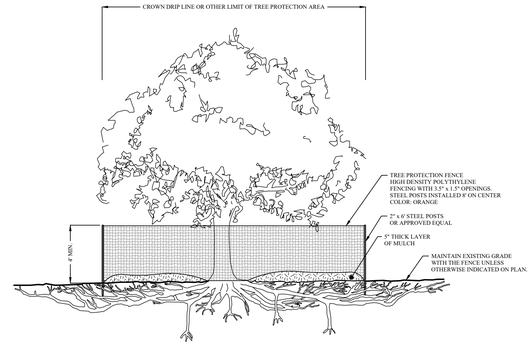
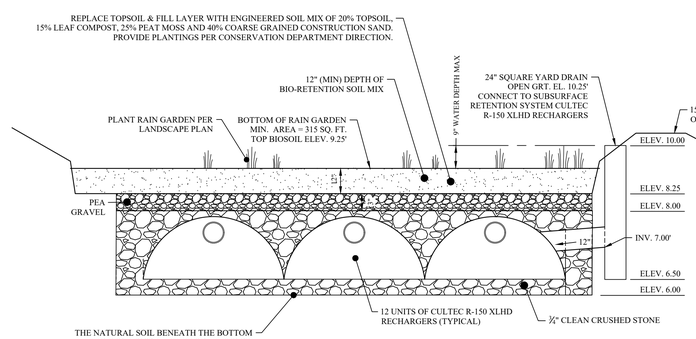
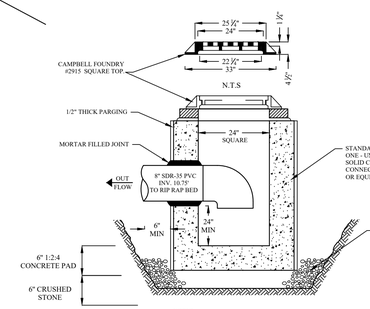


TREE PROTECTION
N.T.S.

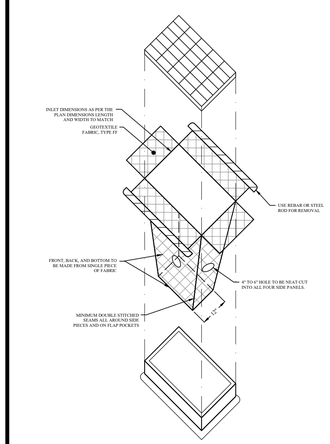


RAIN GARDEN #2 SECTION
N.T.S.

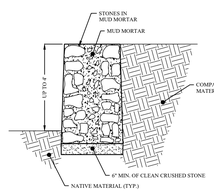


NOTES:
1. ALL AREA DRAIN COMPONENTS TO BE PRE-CAST REIN-FORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
ALL JOINTS TO BE MORTARED.
AREA DRAINS SHALL CONFORM TO ASTM C478.

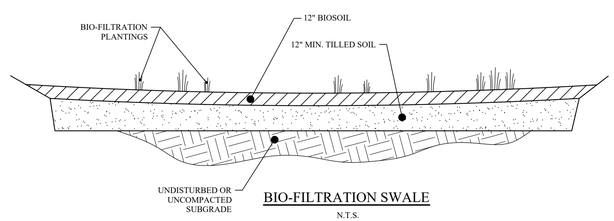
YARD DRAIN
N.T.S.



INLET PROTECTION TYPE D
N.T.S.



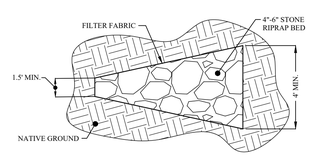
MASONRY RETAINING WALL
N.T.S.



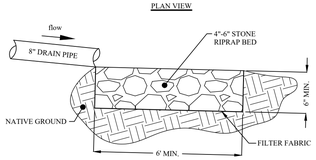
BIO-FILTRATION SWALE
N.T.S.

NOTES:
1. ALL AREA DRAIN COMPONENTS TO BE PRE-CAST REIN-FORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
ALL JOINTS TO BE MORTARED.
AREA DRAINS SHALL CONFORM TO ASTM C478.

CATCH BASIN
N.T.S.



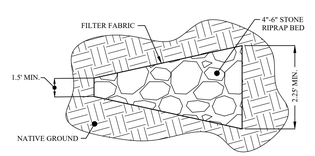
PLAN VIEW



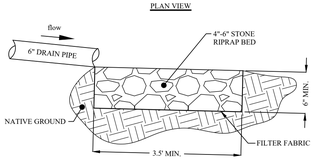
RIP-RAP BED (A)
TO WETLANDS
N.T.S.

RIPRAP SIZING (TYPE B)	
FLOW VELOCITY:	5.67 ft/s
PIPE DIAMETER:	8 in
PIPE AREA:	0.349 sf
FLOW RATE:	4.46 cfs
La=((3.0(Q-5))/D^1.5)+10	5.39 ft
W1=3*D	1.5 ft
W2=3*D+0.4*La	3.66 ft

NOTE: CALCULATIONS FROM ConnDOT DRAINAGE MANUAL, MAY, 2002.



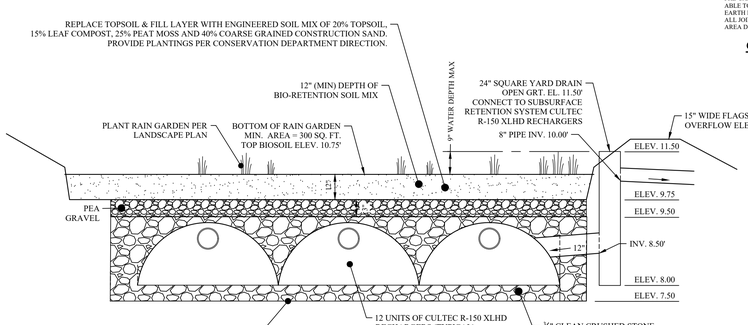
PLAN VIEW



RIP-RAP BED (B)
N.T.S.

RIPRAP SIZING (TYPE B)	
FLOW VELOCITY:	5.67 ft/s
PIPE DIAMETER:	6 in
PIPE AREA:	0.196 sf
FLOW RATE:	3.15 cfs
La=((3.0(Q-5))/D^1.5)+10	3.36 ft
W1=3*D	1.5 ft
W2=3*D+0.4*La	2.06 ft

NOTE: CALCULATIONS FROM ConnDOT DRAINAGE MANUAL, MAY, 2002.



RAIN GARDEN #1 SECTION
N.T.S.

GENERAL NOTES:

1. ALL SURVEY DATA, BOUNDARY LINES AND TOPOGRAPHY, ARE FROM A "PROPERTY & TOPOGRAPHIC SURVEY" PREPARED FOR COASTAL LUXURY HOMES AT 41 RICHMONDVILLE AVENUE, WESTPORT, CT, PREPARED BY REDNISS & MEAD, DATED DECEMBER 11, 2019.
2. ALL CONSTRUCTION SHALL COMPLY WITH THE TOWN OF WESTPORT REQUIREMENTS, THE STATE OF CONNECTICUT BASIC BUILDING CODE AND THE CONNECTICUT GUIDELINES FOR SOIL AND EROSION AND SEDIMENT CONTROL.
3. INFORMATION OF EXISTING UTILITIES HAS BEEN COMPILED FROM VARIOUS SOURCES INCLUDING UTILITY COMPANY RECORDS, MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES.
4. THE PROPERTY IS BEING SERVICED BY PUBLIC WATER AND MUNICIPAL SEWER SYSTEM.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, FLAGMEN, ETC., FOR TRAFFIC CONTROL AND SITE SAFETY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH OSHA REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH OSHA REQUIREMENTS.
6. REMOVE STUMPS AND BRUSH FROM SITE, OR CHIP AND USE DURING LANDSCAPING. DO NOT BURY STUMPS ON SITE.
7. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE PLANS UNLESS CHANGES HAVE BEEN APPROVED IN WRITING BY THE DESIGN ENGINEER PRIOR TO THE WORK BEING DONE.
8. ALL DISTURBED AREAS SHALL BE MULCHED AND SEEDED AS SOON AS POSSIBLE.
9. AREAS OF ASPHALT PAVEMENT THAT ARE DISTURBED BY THE CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED IN ACCORDANCE WITH THE ASPHALT TRENCH REPAIR DETAIL. THE FINISHED GRADE OF ASPHALT PAVING SHALL BLEND TO EXISTING GRADE AND THE EDGE OF THE CONCRETE PAVEMENT SMOOTHLY WITH NO SLOPES EXCEEDING 4%.
10. A MINIMUM OF 6" OF CRUSHED STONE MUST BE INSTALLED UNDER ALL EXTERIOR PORCHES AND STAIRS.

EARTHWORK & GRADING:

11. GRADE AWAY FROM BUILDING WALLS AT 2% MINIMUM (TYPICAL).
12. PROPOSED EARTH SLOPES SHALL BE NO STEEPER THAN 5:1 (HORZ.-VERT.), UNLESS OTHERWISE DEPICTED ON SITE PLAN.
13. GENERAL FILL BEYOND PAVED AREAS SHALL BE FREE OF BRUSH RUBBISH, STUMPS. FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" IN THICKNESS. THE DRY DENSITY AFTER COMPACTION SHALL NOT BE LESS THAN 95 % OF THE STANDARD PROCTOR TEST AND DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D698. AFTER COMPACTING, THE FILL SHALL BE 4" BELOW THE REQUIRED GRADE AS SHOWN ON THE PLAN.
14. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
15. FILL OR TOPSOIL SHALL NOT BE PLACED NOR COMPACTED WHILE IN A FROZEN OR MUDDY CONDITION OR WHILE SUBGRADE IS FROZEN.
16. ALL EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

STORM SEWER SYSTEMS:

17. ALL PIPE SHALL BE INSTALLED STRAIGHT AND AT THE VERTICAL AND HORIZONTAL ALIGNMENT SHOWN. NO 90° BENDS IN ALL PIPES.
18. MINIMUM COVER ON ALL PIPES SHALL BE TWO FEET (2') UNLESS OTHERWISE NOTED.
19. ALL POLY VINYL CHLORIDE PIPE (PVCP) SHALL BE SDR 35 WITH RUBBER JOINTS AND MEET THE REQUIREMENTS ASTM D3 AND D3212.
20. ALL AREA DRAINS SHALL HAVE A 2' SUMP.
21. CONTACT THE DESIGN ENGINEER THREE DAYS PRIOR TO EXCAVATING FOR THE INFILTRATION SYSTEM. DURING THE EXCAVATION, THE DESIGN ENGINEER MAY REVISE THE ELEVATIONS OF THE SYSTEM IF FIELD CONDITIONS DICTATE.
22. THE ENGINEER OF RECORD IS REQUIRED TO WITNESS THE INSTALLATION OF THE DRAINAGE SYSTEM PRIOR TO BACKFILLING.
23. DIRECT THE ROOF AREA AND THE DRIVEWAY INLET STRUCTURES TO THE PROPOSED DRAINAGE SYSTEMS AND BIO-FILTRATION SWALES AS DEPICTED.

SEDIMENT & EROSION CONTROLS:

24. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND SHALL HAVE THEM INSPECTED AND APPROVED BY THE SITE ENGINEER PRIOR TO ANY LAND DISTURBANCE. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENT MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE SITE ENGINEER.
25. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURES WITHOUT PRIOR PERMISSION FROM THE SITE ENGINEER.
26. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC OR PRIVATE ROADS. ALL MATERIALS DEPOSITED ONTO SUCH ROADS SHALL BE REMOVED AS SOON AS POSSIBLE.
27. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY REMOVED WITH PRIOR PERMISSION FROM THE SITE ENGINEER.
28. ALL DISTURBED AREAS WITH A SLOPE STEEPER THAN 3:1 SHALL BE STABILIZED WITH SOD OR SEED AND ANCHORED STRAW MULCH OR OTHER APPROVED STABILIZATION MEASURE, AS SOON AS POSSIBLE BUT NO LATER THAN 5 CALENDAR DAYS.
29. SEDIMENT TRAPS AND BASINS SHALL NOT BE CONSTRUCTED WITHIN 25' OF AN EXISTING FOUNDATION OR ONE THAT IS UNDER CONSTRUCTION.
30. SEDIMENT REMOVED FROM TRAPS, SILTATION FENCES OR BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS BUT NOT WITHIN A FLOODPLAIN, WETLANDS OR TREE-SAVE AREAS.
31. ALL WATER REMOVED FROM EXCAVATED AREAS SHALL BE PASSED THROUGH APPROVED DEWATERING PRACTICES OR PUMPED TO A SEDIMENT BASIN PRIOR TO DISCHARGE TO A FUNCTIONAL STORM DRAIN SYSTEM OR TO STABLE GROUND SURFACE.
32. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL DISTURBED AREAS USING SOD OR AN APPROVED SIX MIXTURE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON MUST BE STABILIZED WITH PERMANENT GROWTH AS SOON AS POSSIBLE. WHEN PROPERTY IS BROUGHT TO FINISHED GRADES DURING THE WINTER MONTHS WHEN PERMANENT STABILIZATION IS IMPRACTICAL THEN AN APPROVED TEMPORARY STABILIZATION SHALL BE DONE UNTIL THE SPRING MONTHS WHERE PERMANENT STABILIZATION IS POSSIBLE.

FLOOD VENT AREA CALCULATION
GARAGE #1
FOOTPRINT = (72.5 ft x 24.5 ft) = 1,776.25 sq. ft.
MIN. REQ. FLOOD VENT AREA = 1,776.25 sq. in.
SMART VENT 1540-510 COVERAGE = 200 sq.in.
FLOOD VENTS REQUIRED = (1,776.25/200) = 8.88
FLOOD VENTS PROVIDED = 10 VENTS
OPENINGS PROVIDED = (200 x 10) = 2,000
2,000 sq. in. > 1,776.25 sq. in.
BOT. VENT ELEVATION 13.25'

FLOOD VENT AREA CALCULATION
GARAGE #3
FOOTPRINT = (115 ft x 24.5 ft) = 2,817.5 sq. ft.
MIN. REQ. FLOOD VENT AREA = 2,817.5 sq. in.
SMART VENT 1540-510 COVERAGE = 200 sq.in.
FLOOD VENTS REQUIRED = (2,817.5/200) = 14.09
FLOOD VENTS PROVIDED = 16 VENTS
OPENINGS PROVIDED = (200 x 16) = 3,200
3,200 sq. in. > 2,817.5 sq. in.
BOT. VENT ELEVATION 13.50'

FLOOD VENT AREA CALCULATION
GARAGE #2
FOOTPRINT = (60.5 ft x 24.5 ft) = 1,482.25 sq. ft.
MIN. REQ. FLOOD VENT AREA = 1,482.25 sq. in.
SMART VENT 1540-510 COVERAGE = 200 sq.in.
FLOOD VENTS REQUIRED = (1,482.25/200) = 7.41
FLOOD VENTS PROVIDED = 8 VENTS
OPENINGS PROVIDED = (200 x 8) = 1,600
1,600 sq. in. > 1,482.25 sq. in.
BOT. VENT ELEVATION 13.25'

FLOOD VENT AREA CALCULATION
GARAGE #4
FOOTPRINT = (43 ft x 24.5 ft) = 1,053.5 sq. ft.
MIN. REQ. FLOOD VENT AREA = 1,053.5 sq. in.
SMART VENT 1540-510 COVERAGE = 200 sq.in.
FLOOD VENTS REQUIRED = (1,053.5/200) = 5.27
FLOOD VENTS PROVIDED = 6 VENTS
OPENINGS PROVIDED = (200 x 6) = 1,200
1,200 sq. in. > 1,053.5sq. in.
BOT. VENT ELEVATION 13.50'

REVISED: 02/13/2020 - Per comments made by the Planning & Zoning Department.
REVISED: 02/04/2020 - Amended drainage systems and associated site adjustments for Planning & Zoning Commission Submittal.
REVISED: 01/31/2020 - Per comments made by the Conservation Commission and the FECB Application Review.
REVISED: 01/13/2020 - Amended grading & drainage systems due to the sanitary sewer easements.

NOTES & DETAILS

41 RICHMONDVILLE AVENUE

WESTPORT, CT

Prepared for

41 RICHMONDVILLE LLC

STATE OF CONNECTICUT
JIMMY KOUSIDIS
NO. 18629
LICENSED
PROFESSIONAL ENGINEER

SCALE: AS-DEPICTED

DATED: 12/12/2019
JOB NO.: CH19-2
SHEET NO: CE - 7

KOUSIDIS ENGINEERING, LLC
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