

PRELIMINARY AND FINAL MAJOR SITE PLAN & PRELIMINARY AND FINAL MAJOR SUBDIVISION LOT 15.01 ~ BLOCK 44

SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, N.J.

PREPARED FOR
2065 HIGHWAY 37 OWNERS, LLC AND 2065 HIGHWAY 37 MANCHESTER, LLC
143 ROUTE 70
TOMS RIVER, NEW JERSEY, 08755

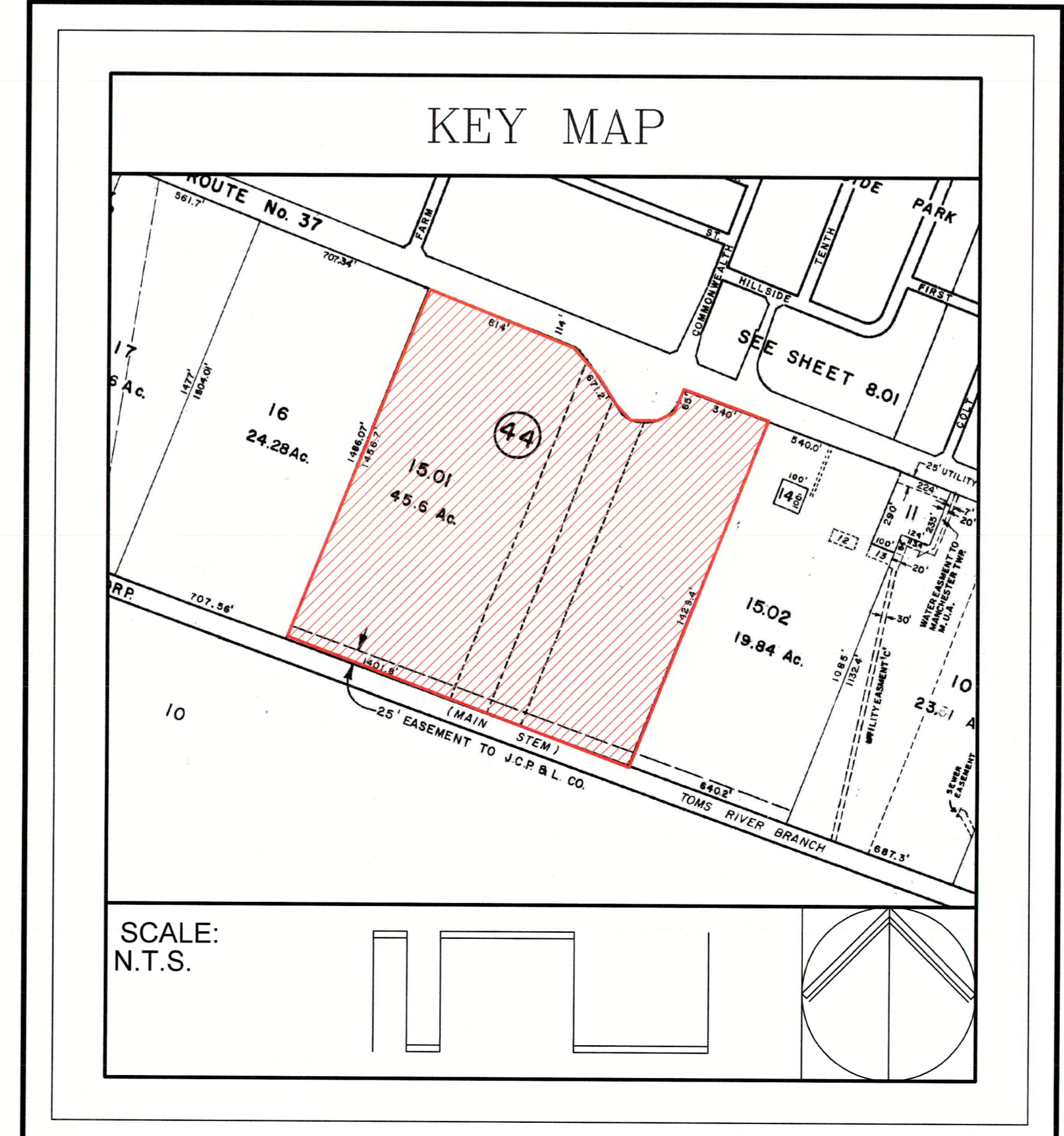
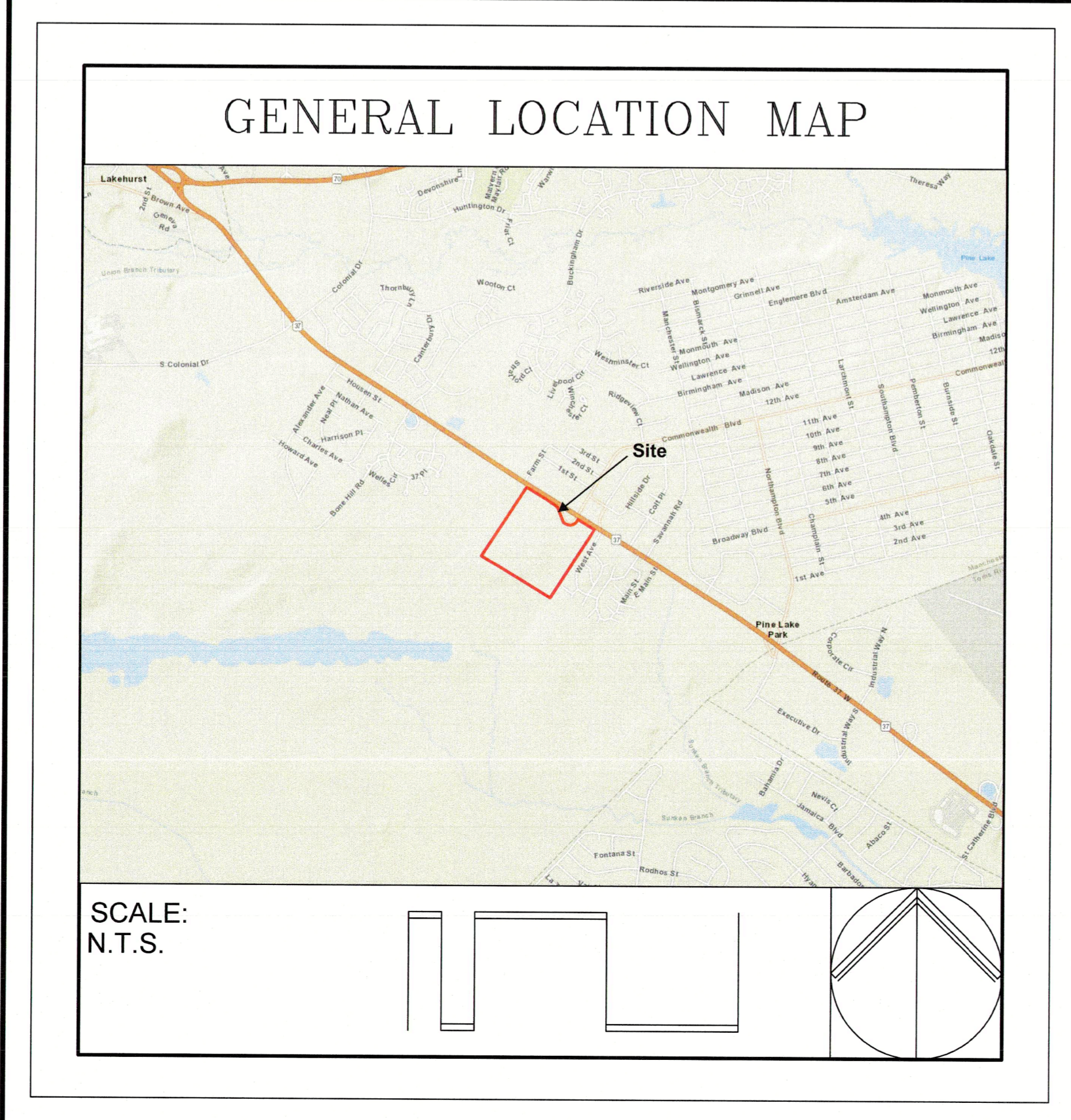
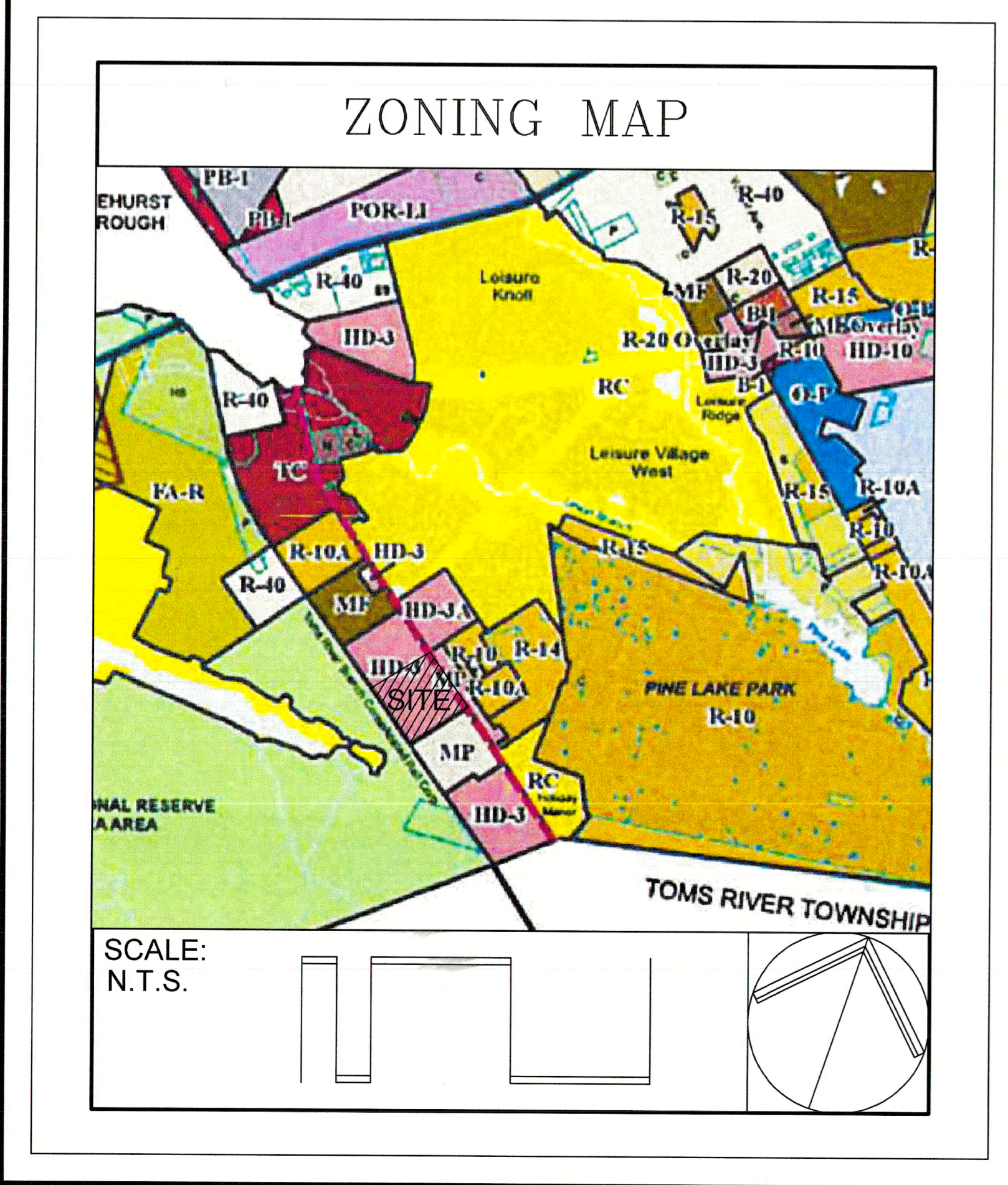
PREPARED BY
FWH ASSOCIATES, P.A.

CIVIL ENGINEERS LAND SURVEYORS
LANDSCAPE ARCHITECTS SITE PLANNERS
1856 ROUTE 9 TOMS RIVER NEW JERSEY 08755 (732)797-3100

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CLASSIFIED AND APPROVED AS A MAJOR SITE AND SUBDIVISION PLAN BY THE
MANCHESTER TOWNSHIP
PLANNING BOARD ON _____

CHAIRPERSON
ATTEST: _____
SECRETARY _____ DATE _____
PLANNING BOARD ENGINEER _____ DATE _____



01/14/21	REV. PER PHASING LIMITS	SA	JS		
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS		
5/20/20	REVISED PER NUDOT LETTER 4-13-2020	CSM	JS		
3/20/20	ADD SCS PLANS TO SET	CSM	JS		
10/22/19	REV PER WAWA REQUESTED REVISIONS	CSM	JS		
9/24/19	REVISE PER BUFFER FENCING PER NADDP	CSM	JS		
3/18/19	REV PER CAFRA MEETING 2/14/19	CSM	JS		
11/07/18	REV PER CAFRA STORMWATER COMMENTS 10/31/18	SA	JS		

DATE _____ REVISION _____ DRAWN _____ CHECKED _____ RELEASED _____

TITLE SHEET

**PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44
TAX MAP SHEET NO. 8**

SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, N.J.

FWH ASSOCIATES, P.A.

1856 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223

CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS
RESERVE SPECIALISTS
ARCHITECTS

FWHASSOCIATES.COM

Brian P. Murphy

PROFESSIONAL ENGINEER
NJ LIC. NO. 42000

DRAWN BY	CSM	DATE	8/10/18
DESIGNED BY	JS	SCALE	N.T.S.
CHECKED BY	JS	DRAWER NO.	PD-170
RELEASED BY	BPM	PROJECT NO.	1423.0016
SHEET NO.	1	OF	49

August 3, 2018 Client #1423.0016
List of adjoining within 200 feet
Block 44 Lot 15.02 Owner(s)

Block 41.01 Lot 1 Angster Edward F
29 Central Ave
Toms River, NJ 08757

Block 42.01 Lot 12 Krupnick, Feldman & Izbicki, et als
PO Box 109
Lakewood, NJ 08701

Block 42.05 Lot 8 1980 Route 37, LLC
90 W Sylvania Ave
Neptune City, NJ 07753

Block 44 Lot 10 Pine Acres LLC
1881 Hwy 37
Toms River, NJ 08757

Block 44 Lot 11 Bay Rum LLC c/o Hilltop Nursery Scl
1917 Hwy 37
Toms River, NJ 08757

Block 44 Lot 14 Pine Acres LLC
1881 Hwy 37
Toms River, NJ 08757

Block 44 Lot 15.01 Davies Consultants Inc
28510 Sombrero Dr
Bonita Springs, FL 34135

Block 44 Lot 15.02 Pine Acres Mobile Home Park
157 70th St
Avalon, NJ 08202

Block 75.01 Lot 1 Heritage Minerals Inc/Hovcons Inc
4000 Rt 66 Hochchild Plaza
Tinton Falls, NJ 07753

Block 200 Lot 1 Consolidated Rail Corp
6 Penn Center Plaza
Philadelphia, PA 19103

Comcast
830 Route 37 West
Toms River, NJ 08755

Manchester Township
Clerk's Office
1 Colonial Drive
Manchester, NJ 08759

NJ Natural Gas
PO Box 1464
Wall, NJ 07719

Verizon, Eng Dept
PO Box 152206
Irving, TX 75015

NJ DEP
CN 401
Trenton, NJ 08625

Ocean County MUA
PO Box P
Bayville, NJ 08721

GPU
400 Lincoln Street
Phillipsburg, NJ 08865

NI DOT
Route 79 & Daniels Way
Freehold, NJ 07728

Ocean County Road Dept
119 Hooper Avenue
Toms River, NJ 08753

GRADING AND DRAINAGE NOTES

- 1) THE CONTRACTOR SHALL PROTECT VEGETATION IN AREAS THAT ARE TO BE LEFT IN THE NATURAL STATE.
- 2) ALL STRUCTURES TO BE SET ON A COMPACTED BASE, 6" THICK OF CLEAR CRUSHED STONE CONFORMING TO NJDOT #57 COARSE AGGREGATE.
- 3) ALL STORM STRUCTURES TO BE PRECAST REINFORCED CONCRETE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 4) ALL STORM SEWER TO BE CLASS III, WALL B, AS PER ASTM C-76 WITH RUBBER "O" RING JOINTS CONFORMING TO ASTM C-443, UNLESS OTHERWISE SPECIFIED.
- 5) ALL PRECAST DRAINAGE STRUCTURES SHALL CONTAIN REINFORCING STEEL AND BE DESIGNED FOR HS-20 LOADING.
- 6) ANY DRAINAGE STRUCTURE THAT IS TO BE LEFT UNCOVERED FOR MORE THAN 8 HOURS SHALL BE PROTECTED WITH BARRICADES IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OR OSHA STANDARDS.
- 7) HDPE STORM PIPE SHALL COMPLY WITH THE MOST CURRENT AASHTO DESIGNATION M254, TYPE S OR SP, AND SHALL CONFORM TO ASTM D3350 WITH SMOOTH INTERIOR WALLS.
- 8) CONDUIT OUTLET PROTECTION SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF ANY PIPE RUN.
- 9) ALL JOINTS SHALL BE MORTARED WITH 2:1 SAND MORTAR UNLESS OTHERWISE NOTED ON THE PLANS.
- 10) THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS SHOWN HEREON INAPPROPRIATE OR INEFFECTIVE.
- 11) ANY WASTE, DEBRIS OR ANY OTHER SIMILAR MATERIAL FOUND ON SITE OR GENERATED BY OPERATIONS DURING CONSTRUCTION SHALL BE PROPERLY REMOVED AND DISPOSED OF BY THE DEVELOPER IN ACCORDANCE WITH ALL APPLICABLE LAWS & REGULATIONS.
- 12) ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA LAW AND STATE GOVERNING SAFETY CODES.

SANITARY SEWER NOTES:

- 1) THE AUTHORITY SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF SEWER INSTALLATION. NO SEWERS SHALL BE INSTALLED WITHOUT INSPECTION BY THE AUTHORITY'S ENGINEER.
- 2) ALL TELEPHONE, ELECTRIC AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENT WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
- 3) THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS SHOWN HEREON INAPPROPRIATE OR INEFFECTIVE.
- 4) THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY INCLUDING PROVISIONS OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.
- 5) ALL SANITARY SEWER TO BE 8" SDR-35 PVC PIPE UNLESS OTHERWISE SPECIFIED. FITTINGS SHALL BE SDR 35 AND SHALL CONFORM TO ASTM-D3034. THE POLYVINYL CHLORIDE COMPOUNDS FOR THE PIPE SHALL HAVE A CELL CLASSIFICATION OF 12454-B (WITH MINIMUM TENSILE MODULUS OF 500,000 PSI) AS DEFINED IN ASTM-D1784.
- 6) ALL PIPES AND FITTINGS THAT WILL BE INSTALLED AT A DEPTH OF 16 FEET OR MORE SHALL BE C-900.
- 7) ANY DUCTILE IRON PIPE USED FOR SANITARY SEWER SHALL HAVE MECHANICAL JOINT FITTINGS AND MUST BE LINED WITH PROTECTO 401 COATING OR AN APPROVED EQUAL.
- 8) PROPER PIPE COVERAGE IS TO BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. ALL STORM AND SANITARY SEWER LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 9) THE SANITARY SEWER SHALL BE SEPARATED FROM ALL WATER MAINS BY A MINIMUM OF TEN (10) FEET HORIZONTALLY AND EIGHTEEN (18) INCHES VERTICALLY. WHENEVER A CROSSING MAY OCCUR, THE WATER MAIN SHOULD BE LOCATED ABOVE THE SANITARY SEWER BY EIGHTEEN (18) INCHES, MINIMUM. IF THIS SEPERATION CANNOT BE MET, THE WATER MAIN MUST BE PROTECTED WITH A CONCRETE CRADLE AND THE SANITARY SEWER MAIN SHALL BE DUCTILE IRON PIPE WITH WATER TIGHT JOINTS AT A MINIMUM DISTANCE OF TEN (10) FEET FROM EACH SIDE OF THE WATER MAIN.
- 10) PIPE JOINTS SHALL BE INTEGRAL BELL GASKETED JOINTS THAT WHEN ASSEMBLED, FORM A POSITIVE SEAL. THE JOINTS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM-D2211 AND THE LUBRICANT USED FOR ASSEMBLY SHALL BE AS PROVIDED OR RECOMMENDED BY THE PIPE MANUFACTURER AND SHALL HAVE NO DETRIMENTAL EFFECT ON THE GASKET OR THE PIPE.
- 11) THE PIPE SHALL BE INSTALLED AS SPECIFIED IN ASTM D2321. IN NO CASE SHALL LESS THAN A CLASS III MATERIAL BE USED FOR BEDDING AND HAUNCHING MATERIALS.
- 12) SIZE OF THE SEWER LATERAL LINES ARE TO BE 4", UNLESS OTHERWISE SPECIFIED.
- 13) ALL SANITARY LATERALS ARE TO BE SCHEDULE 40 PVC.

WATER DISTRIBUTION NOTES:

- 1) ALL WATER MAIN TO BE CLASS S2 DUCTILE IRON PIPE. PROPER PIPE COVERAGE IS TO BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
- 2) ALL WATER MAINS SHALL BE INSTALLED AT A DEPTH TO OBTAIN A MINIMUM OF THREE AND A HALF (3.5) FEET OF COVER TO THE TOP OF THE PIPE.
- 3) ALL TELEPHONE, ELECTRIC AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENT WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
- 4) THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS SHOWN HEREON INAPPROPRIATE OR INEFFECTIVE.
- 5) THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.
- 6) ALL JOINTS SHALL BE PUSH ON SINGLE GASKET OR MECHANICAL JOINT SINGLE GASKET CONFORMING TO AWWA C111.
- 7) GATE VALVES SHALL BE COMPOSED OF A DUCTILE IRON BODY WITH RESILIENT WEDGE TYPE GATES.
- 8) ALL VALVE BOXES MUST BE CENTERED ON VALVE AND MUST BE SET TO FINISHED GRADE.
- 9) ALL VALVE BOXES FOR HYDRANT ASSEMBLIES MUST BE SET IN PAVEMENT OR PARKING AREA WHERE POSSIBLE. ALL VALVE BOXES MUST BE SET TO FINISHED PAVEMENT SURFACE ELEVATION.
- 10) ALL THRUST BLOCKS WILL BE CALCULATED IN THE FIELD AND WILL BE FOUNDED ON VIRGIN SOIL.
- 11) ALL FITTINGS SHALL BE CEMENT LINED DIP WITH MECHANICAL JOINTS ENDS AND RETAINER GLANDS UNLESS OTHERWISE NOTED.
- 12) THE AUTHORITY SHALL BE NOTIFIED AT LEAST 48 HOURS BEFORE ANY CONSTRUCTION IS TO COMMENCE ON THE WATER SYSTEMS.

Block 44, Lot 15.01

Zone: HD-3 Highway Development District (2065 Route 37 Redevelopment Plan)

Table with columns: STANDARD, REQUIREMENT, PROVIDED, and Lot 15.04. It details requirements for Commercial Use (Minimum Lot Area, Minimum Lot Frontage, etc.) and Residential Use (Minimum Lot Area, Maximum Lot Coverage, etc.), along with parking requirements (Retail, Gasoline Station, ADA).

GENERAL NOTES:

- 1) THE SUBJECT PROPERTY IS KNOWN AS LOT 15.02 IN BLOCK 44 AS SHOWN ON THE OFFICIAL TAX MAP OF THE MUNICIPALITY OF MANCHESTER, OCEAN COUNTY, NJ.
- 2) THE PROPERTY IS LOCATED IN THE HD 3 ZONE AND CONTAINS A TOTAL TRACT AREA OF 45.43 ACRES.
- 3) Existing Use: VACANT (PREVIOUS ASPHALT PLANT)
- 4) Proposed Use: RESIDENTIAL, FUELING STATION, RETAIL
- 5) APPLICANT: KAREN REALTY GROUP
150 TENNIS CT
WALL, NJ 07719
OWNER: DAVIES CONSULTANTS
28510 SOMBRERO DRIVE
BONITA SPRINGS, FL 34135
- 6) OUTBOUND INFORMATION AND TOPOGRAPHIC INFORMATION TAKEN FROM A PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY 2065 N.J.S.H ROUTE 37 LOT 15.01 BLOCK 44 SITUATED IN TOWNSHIP OF MANCHESTER, OCEAN COUNTY, NEW JERSEY" PREPARED BY FWH ASSOCIATES P.A DATED 8-3-18 SIGNED BY WILLIAM P. SCHEMEL PROFESSIONAL LAND SURVEYOR
- 7) PHYSICAL LOCATION OF FEATURES PROVIDED BY VERTEX AERIAL MAPPING DATED 2-4-17
8) VERTICAL DATUM: NAVD 1988, DERIVED FROM GPS OBSERVATIONS
- 9) BENCHMARK: TOP OF MONUMENT EAST BOUND N.J.S.H ROUTE 37
ELEVATION: 75.72
- 10) FRESH WATER WETLANDS HAVE BEEN IDENTIFIED ONSITE
- 11) NO 100 YEAR FLOOD PLAINS ARE KNOWN TO EXIST ON THE SITE PER THE FLOOD INSURANCE RATE MAP FOR THE MUNICIPALITY OF MANCHESTER, OCEAN COUNTY, NJ
- 12) SOIL TEST PIT LOGS ARE PROVIDED IN A REPORT ENTITLED "STORMWATER MANAGEMENT REPORT", PREPARED BY FWH ASSOCIATES P.A.
- 13) MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:
A. RESIDENTIAL SITE IMPROVEMENT STANDARDS (N.J.A.C. 5-21)
B. NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", 2007, AS SUPPLEMENTED.
C. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, AND REQUIREMENTS.
D. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
E. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
- 14) GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE LINES, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
- 15) TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
- 16) THE SIZE AND LOCATION OF STRUCTURES WITHIN 200' ARE APPROXIMATE.
- 17) BUILDING FOOTPRINT DIMENSIONS SHOW HEREON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR EACH DWELLING/BUILDING SHALL BE FURNISHED ON THE INDIVIDUAL PLOT PLANS/ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS.
- 18) ALL TRAFFIC CONTROL, SIGNAGE AND STRIPING SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, CHAPTER 10B.
- 19) CURBS SHALL BE DEPRESSED FLUSH WITH PAVEMENT, AND HANDICAPPED ACCESSIBLE RAMPS INSTALLED WHERE SIDEWALKS AND CROSSWALKS INTERSECT SAME. DETECTABLE WARNING SHALL BE INCLUDED ON HANDICAP ACCESSIBLE RAMPS LOCATED ON PUBLIC ROADWAYS AND WHERE OTHERWISE DIRECTED BY A REGULATORY AGENCY HAVING JURISDICTION.
- 20) THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF THE WORK ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES PRIOR TO CONSTRUCTION.
- 21) STREET SURFACES AND OTHER SURFACES DISTURBED BY THE CONSTRUCTION OF FACILITIES FOR THIS PROJECT SHALL BE RESTORED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP OF TOMS RIVER, THE COUNTY OF OCEAN AND THE STATE OF NJ.
- 22) THE OWNER WILL SECURE ALL NECESSARY PERMITS FROM MUNICIPAL, COUNTY, OR STATE AGENCIES PRIOR TO THE START OF CONSTRUCTION.
- 23) THE OWNER OR HIS REPRESENTATIVE SHALL DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR THE CONSTRUCTION SITE SAFETY DURING THE COURSE OF THE SITE IMPROVEMENT PURSUANT TO N.J.A.C. 5: 23-2.21(e) OF THE NEW JERSEY UNIFORM CONSTRUCTION CODE AND CFR 1926.3 (OSHA COMPETENT PERSON).
- 24) THE CONTRACTOR SHALL PROTECT VEGETATION IN AREAS THAT ARE TO BE LEFT IN THE NATURAL STATE.
- 25) ANY DRAINAGE STRUCTURE THAT IS TO BE LEFT UNCOVERED FOR MORE THAN 8 HOURS SHALL BE PROTECTED WITH BARRICADES IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OR OSHA STANDARDS.

PROPOSED IMPERVIOUS SURFACE ON-SITE

Table with columns: Planning Area, Net Land Area, Allowable Impervious, and Proposed Impervious. Rows show Suburban (SSA) and Suburban (NSA).

PROPOSED TREE PRESERVATION ON-SITE

Table with columns: Planning Area, Net Land Area, Existing Net Forested Area, Required Tree Preservation (Forested), Existing Net Unforested Area, Required Tree Preservation (Unforested), Total Required Tree Preservation, and Total Proposed Tree Preservation. Rows show Suburban (SSA) and Suburban (NSA).

PROPOSED HERBACEOUS & SHRUB PLANTING ON-SITE

Table with columns: Planning Area, Net Land Area, Allowable Impervious, Required Tree Preservation, Allowable Herb / Shrub, and Proposed Herb / Shrub. Rows show Suburban (SSA) and Suburban (NSA).

Revision table with columns: Date, Revision, CSM, JS, and checkboxes for DRAWN, CHECKED, RELEASED.

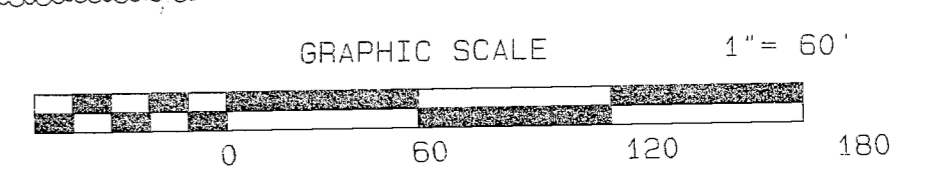
PROJECT NOTES PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION LOT 15.01 ~ BLOCK 44 TAX MAP SHEET NO. 8 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY. Includes FWH ASSOCIATES P.A. logo and contact information.

Professional Engineer information for Brian P. Murphy, N.J. Lic. No. 42000. Includes signature and title.



Soil Pit #	Ground Elevation	ESHW	GW Elevation	Perm Elevation	Perm. Rate in/hr	Comment
1	69.1	56.1	> 54.1	66.1	71.13	
2	57.50	52.92	50.50	53.50	57.73	Clay layer 52.5-49.5
3	59.00	55.00	52.00	55.67	18.11	
4	59.10	55.10	53.10	55.10	17.62	Basin 4
5	68.40	57.40	55.07	63.40	37.30	
6	66.20	55.20	53.20	57.20	37.68	Basin 3
7	68.50	57.50	55.50	64.50	38.32	
8	63.30	54.30	52.30	59.97	51.11	Basin 4
9	61.80	56.80	52.80	58.47	16.80	Basin 1
A	68.30	57.05	55.30	60.80	22.15	Basin 1
B	70.00	57.00	> 55.0	59.58	< 0.2	Clay layer 61.67 - 57.0
C	67.60	57.10	55.27	59.60	37.11	Basin 2
D	57.70	55.20	53.45	55.62	8.51	Ex Sump 2
E	65.20	54.53	52.70	60.20	30.71	Basin 2
F	66.50	55.00	52.83	61.50	< 0.2	Basin 3
G	67.50	56.25	53.17	58.17	< 0.2	Clay layer 56.67 - 56.25
H	58.20	55.78	54.53	55.70	4.29	Ex Sump 5
I	60.50	55.08	53.25	53.83	< 0.2	Ex Sump 6
B1	66.10	53.60	52.60	53.43	29.31	Basin 4
B2	68.90	55.57	53.90	56.40	32.29	Basin 4
B3	71.4	> 55.4	> 55.4	56.82	18.79	Basin 1
B4	66.1	58.1	56.93	59.10	32.63	Basin 3

- LEGEND**
- 103.2' X EXISTING SPOT ELEV
 - ⊗ FIRE HYDRANT
 - ⊕ WATER VALVE
 - ⊙ CLEANOUT
 - UTILITY POLE
 - ⊠ CATCH BASIN
 - ⊙ SAN MANHOLE
 - ⊙ STORM MANHOLE
 - SIGN
 - WETLANDS LINE
 - CONC. BARRIER
 - ⊕ BUSH



5/20/2020 REVISED PER NJDOT LETTER 4-13-2020 CSM JS BPM

DATE REVISION DRAWN CHECKED RELEASED

EXISTING CONDITIONS PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44
 TAX MAP SHEET NO. 8
 SITUATED IN
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

CIVIL ENGINEERS
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 RESERVE SPECIALISTS
 ARCHITECTS

FWH
 FWHASSOCIATES.COM
 1868 Rt. 8, Toms River, NJ 08753 | 732.797.3100 | F: 732.797.3233

William P. Schemel
 PROFESSIONAL LAND SURVEYOR
 N.J. LIC. NO. 36275

CSM JS BPM 8/10/18
 JS 1"=60'
 WPS PD-170
 WPS 1423.0016
 3 49

Block 44, Lot 15.01
Zone: RD-3 Highway Development District (2005 Route 37 Redevelopment Plan)

STANDARD	REQUIREMENT	PROVIDED
Minimum Project Area	Entire Redevelopment Area	45.43 Ac.
Maximum Project Lot Coverage	65%	24.40%
COMMERCIAL USE:		
Minimum Lot Area	2 Acres	6,514 Acres
Minimum Lot Frontage	200 Ft.	239.96 Ft.
Minimum Lot Depth	200 Ft.	432.94 Ft.
Maximum Lot Coverage (per lot)	75%	46%
Minimum Front Yard Setback	50 Ft.	62.7 Ft.
Minimum Side Yard Setback	50 Ft.	76.5 Ft.
Minimum Rear Yard Setback	50 Ft.	N.A.
Maximum Building Height	40 Ft. (3 Stories)	< 40 Ft.
Minimum Setback from Parking Area to Lot Line	10 Ft.	10 Ft.
Minimum Setback from all existing or proposed roads	50 Ft.	50.5 Ft.
Minimum Setback to Redevelopment Area Boundary	50 Ft.	99.7 Ft.
Commercial Parking:		
Retail - 1 space per 200 square feet	90 Required, 142 Provided	25 Required, 50 Provided
Gasoline Station w/ Convenience Store - 1 space per 250 square feet	6 Required, 6 Provided	3 Required, 3 Provided
ADA Required Parking Spaces	6 Required, 6 Provided	4 Required, 4 Provided

RESIDENTIAL USE:	REQUIREMENT	PROVIDED
Minimum Lot Area	10 Acres	15.43 Ac.
Maximum Lot Coverage (per lot)	65%	18.20%
Minimum Front Yard Setback	25 Ft.	38.2 Ft.
Minimum Side Yard Setback	25 Ft.	132.5 Ft.
Minimum Rear Yard Setback	25 Ft.	46.7 Ft.
Maximum Building Height	40 Ft. (3.5 Stories)	40 Ft. or c
Minimum Setback to Redevelopment Area Boundary	50 Ft.	137.5 Ft.
Maximum Density	6 units / acre	5.94 units / ac
Minimum Unit Width	20 Ft.	22 Ft.
Minimum Floor Area per Unit	600 Sq. Ft.	702 Sq. Ft.
Minimum Units per Building	4 Units	10 Units
Maximum Units per Building	10 Units	10 Units
Minimum Building Setback from Internal Street	25 Ft.	23 Ft.
Minimum Distance between Buildings	40 Ft.	40.3 Ft.
Minimum Active Recreation	50 Sq. Ft. / Unit	62.5 Sq. Ft. / Unit
Minimum Passive Open Space	100 Sq. Ft. / Unit	> 100 Sq. Ft. / Unit

Residential Parking:	Required	Provided
Phase 1A: (70 Units)	140 Spaces	140 Spaces
1 Bedroom = 4 Units x 1.8 Spaces = 7.2 Spaces		
2 Bedroom = 62 Units x 2 Spaces = 124 Spaces		
3 Bedroom = 4 Units x 2.3 Spaces = 9.2 Spaces		
ADA Required Parking Spaces	6 Parking Spaces	8 Parking Spaces
Phase 1B: (140 Units)	280 Spaces	286 Spaces
1 Bedroom = 4 Units x 1.8 Spaces = 7.2 Spaces		
2 Bedroom = 132 Units x 2 Spaces = 264 Spaces		
3 Bedroom = 4 Units x 2.3 Spaces = 9.2 Spaces		
ADA Required Parking Spaces	8 Parking Spaces	11 Parking Spaces
Phase 1C: (220 Units)	440 Spaces	496 Spaces
1 Bedroom = 7 Units x 1.8 Spaces = 12.6 Spaces		
2 Bedroom = 196 Units x 2 Spaces = 392 Spaces		
3 Bedroom = 7 Units x 2.3 Spaces = 16.1 Spaces		
ADA Required Parking Spaces	10 Parking Spaces	14 Parking Spaces

PROPOSED IMPERVIOUS SURFACE ON SITE	Planning Area	Net Land Area	Allowable Impervious	Proposed Impervious
Suburban (SSA)	39.0 Ac.	39.0 Ac.	11.7 Ac (30%)	11.05 Ac (28.5%)
Suburban (NSA)	6.43 Ac.	6.43 Ac.	0.32 Ac (5%)	0.0 Ac (0%)

PROPOSED TREE PRESERVATION ON SITE	Planning Area	Net Land Area	Existing Net Forested Area	Required Net Forested Area	Existing Net Unforested Area	Required Net Unforested Area	Total Required Tree Preservation	Total Proposed Tree Preservation
Suburban (SSA)	39.0 Ac.	17.34 Ac.	6.07 (35%)	21.66 Ac.	1.08 Ac (6%)	7.15 Ac.	10.80 Ac.	10.80 Ac.
Suburban (NSA)	6.43 Ac.	6.43 Ac.	4.50 (70%)	0.0 Ac.	0.0 Ac.	4.50 Ac.	4.66 Ac.	4.66 Ac.

PROPOSED HERBACEOUS & SHRUB PLANTING ON SITE	Planning Area	Net Land Area	Allowable Impervious	Required Tree Preservation	Allowable Herb / Shrub	Proposed Herb / Shrub
Suburban (SSA)	39.0 Ac.	39.0 Ac.	11.70 Ac.	7.15 Ac.	20.15 Ac.	17.14 Ac.
Suburban (NSA)	6.43 Ac.	6.43 Ac.	0.32 Ac.	4.50 Ac.	1.61 Ac.	1.77 Ac.

PHASE 1A:
NIDOT IMPROVEMENTS, COMMONWEALTH BLVD. EXTENSION, JESSICA WAY STA. 4+50 TO TERMINUS, LYNN LANE, EMILY DRIVE, CHRISSEY WAY STA. 14+50 TO TERMINUS, RESIDENTIAL BUILDINGS 1-6 AND 15, CLUBHOUSE WITH POOL AND RECREATION AREAS AND PUMP STATION.

PHASE 1B:
CHRISSEY WAY BEGINNING TO STA. 14+50, POROUS PAVING PARKING LOTS 3 AND 4, RESIDENTIAL BUILDINGS 7-9, 16-18 AND 21.

PHASE 1C:
JESSICA WAY BEGINNING TO STA. 4+50, ROAD E, POROUS PAVING PARKING LOT 1 AND 2, RESIDENTIAL BUILDINGS 10-14, 19 AND 20.

PHASE 2:
FUELING STATION AND MARKET.

PHASE 3:
COMMERCIAL PAD.

DATE	REVISION	DRAWN	CHECKED	RELEASED
01/14/21	REV. PER PHASING LIMITS	SA	JIS	
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JIS	
5/20/20	REV. PER NIDOT LETTER 4-13-2020	CSM	JIS	
9/24/19	REV. BUTTER FENCING PER NADP	CSM	JIS	
3/18/19	REV. PER CAFRA MEETING 2/14/19	CSM	JIS	
11/7/18	REV. PER CAFRA STORMWATER COMMENTS 10/31/18	SA	JIS	

OVERALL SITE PLAN & PHASING PLAN
PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44
TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

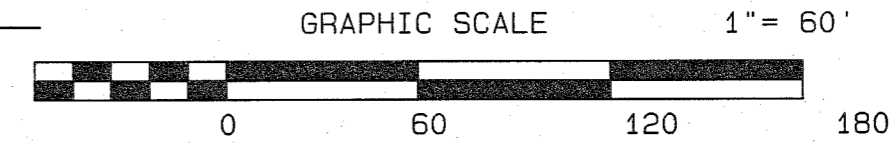
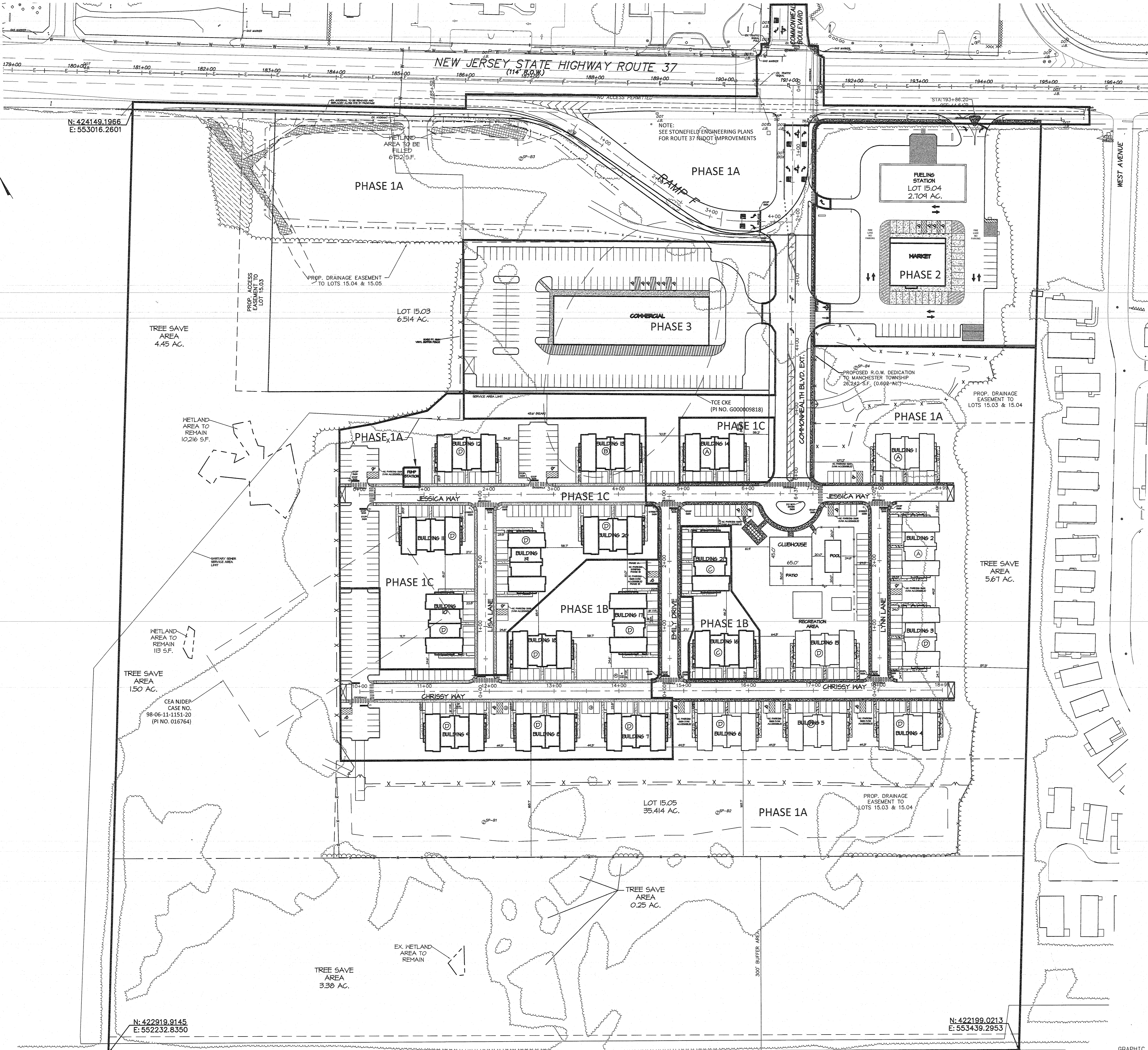
CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS
RESERVE SPECIALISTS
ARCHITECTS

FWH ASSOCIATES, P.A.
FWHASSOCIATES.COM
1850 Rt. 9, Toms River, NJ 08756 T: 732.797.3100 F: 732.797.3223

DESIGNED BY: CSM
CHECKED BY: JIS
SCALE: 1"=60'
DRAWN BY: JIS
PROJECT NO.: PD-170
ISSUED BY: BPM
PROJECT DATE: 1/23/2021
SHEET NO. OF: 4 OF 49

Brian P. Murphy
Professional Engineer
N.J. Lic. No. 36099

William P. Schemel
Professional Land Surveyor
N.J. Lic. No. 98275



SEE SHEET 2 FOR ALL PROJECT NOTES

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Block 44, Lot 15.01
Zone: HD-3 Highway Development District (2005 Route 37 Redevelopment Plan)

STANDARD	REQUIREMENT	PROVIDED
Minimum Project Area	Entire Redevelopment Area	45.43 AC
Maximum Project Lot Coverage	60%	34.40%

REQUIREMENT	PROVIDED (Lot 15.01)	PROVIDED (Lot 15.04)
COMMERCIAL USE:		
Minimum Lot Area	2 Acres	6.534 Acres
Minimum Lot Frontage	200 Ft.	239.96 Ft.
Minimum Lot Depth	200 Ft.	430.81 Ft.
Maximum Lot Coverage (per lot)	75%	46%
Minimum Front Yard Setback	50 Ft.	92.5 Ft.
Minimum Side Yard Setback	50 Ft.	76 Ft.
Minimum Rear Yard Setback	50 Ft.	NA
Maximum Building Height	40 Ft. (3 Stories)	< 40 Ft.
Minimum Setback from Parking Area to Lot Line	10 Ft.	13.8 Ft.
Minimum Setback from all existing or proposed roads	50 Ft.	92.5 Ft.
Minimum Setback to Redevelopment Area Boundary	50 Ft.	99.7 Ft.

REQUIREMENT	PROVIDED (Lot 15.04)
RESIDENTIAL USE:	
Minimum Lot Area	35,434 AC
Maximum Lot Coverage (per lot)	18.20%
Minimum Front Yard Setback	25 Ft.
Minimum Side Yard Setback	25 Ft.
Minimum Rear Yard Setback	25 Ft.
Maximum Building Height	40 Ft. (3.5 Stories)
Minimum Setback to Redevelopment Area Boundary	50 Ft.
Maximum Density	6 units / acre
Minimum Unit Width	20 Ft.
Minimum Floor Area per Unit	600 Sq. Ft.
Minimum Units per Building	4 Units
Maximum Units per Building	10 Units
Minimum Building Setback from Internal Street	20 Ft.
Minimum Distance between Buildings	40 Ft.
Minimum Active Recreation	50 Sq. Ft. / Unit
Minimum Passive Open Space	100 Sq. Ft. / Unit

REQUIREMENT	PROVIDED
Retail - 1 space per 200 square feet	90 Required, 142 Provided
Gasoline Station w/ Convenience Store - 1 space per 250 square feet	25 Required, 50 Provided
ADA Required Parking Spaces	6 Required, 3 Provided

REQUIREMENT	PROVIDED
Residential Parking:	
Phase 1A (170 Units)	140 Spaces
Phase 1B (140 Units)	140 Spaces
Phase 1C (210 Units)	436 Spaces

PHASE 1A:
NIDOT IMPROVEMENTS, COMMONWEALTH BLVD. EXTENSION, JESSICA WAY STA. 4+50 TO TERMINUS, LYNN LANE, EMILY DRIVE, CHRISSEY WAY STA. 14+50 TO TERMINUS, RESIDENTIAL BUILDINGS 1-6 AND 15, CLUBHOUSE WITH POOL AND RECREATION AREAS AND PUMP STATION.

PHASE 1B:
CHRISSEY WAY BEGINNING TO STA. 14+50, POROUS PAVING PARKING LOTS 3 AND 4, RESIDENTIAL BUILDINGS 7-9, 16-18 AND 21.

PHASE 1C:
JESSICA WAY BEGINNING TO STA. 4+50, ROAD E, POROUS PAVING PARKING LOT 1 AND 2, RESIDENTIAL BUILDINGS 10-14, 19 AND 20.

PHASE 2:
FUELING STATION AND MARKET.

PHASE 3:
COMMERCIAL PAD.

DATE	REVISION	DRAWN	CHECKED	RELEASED

SITE DEVELOPMENT PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44

TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

FWH ASSOCIATES, P.A.
1856 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223

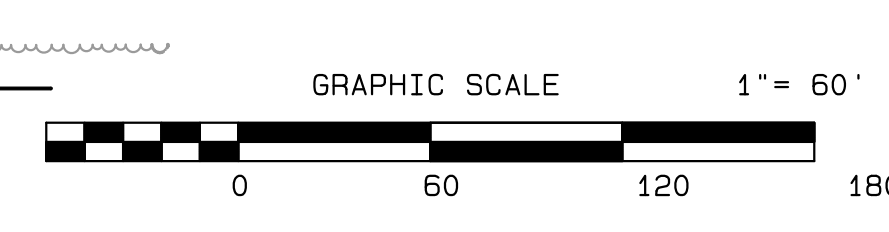
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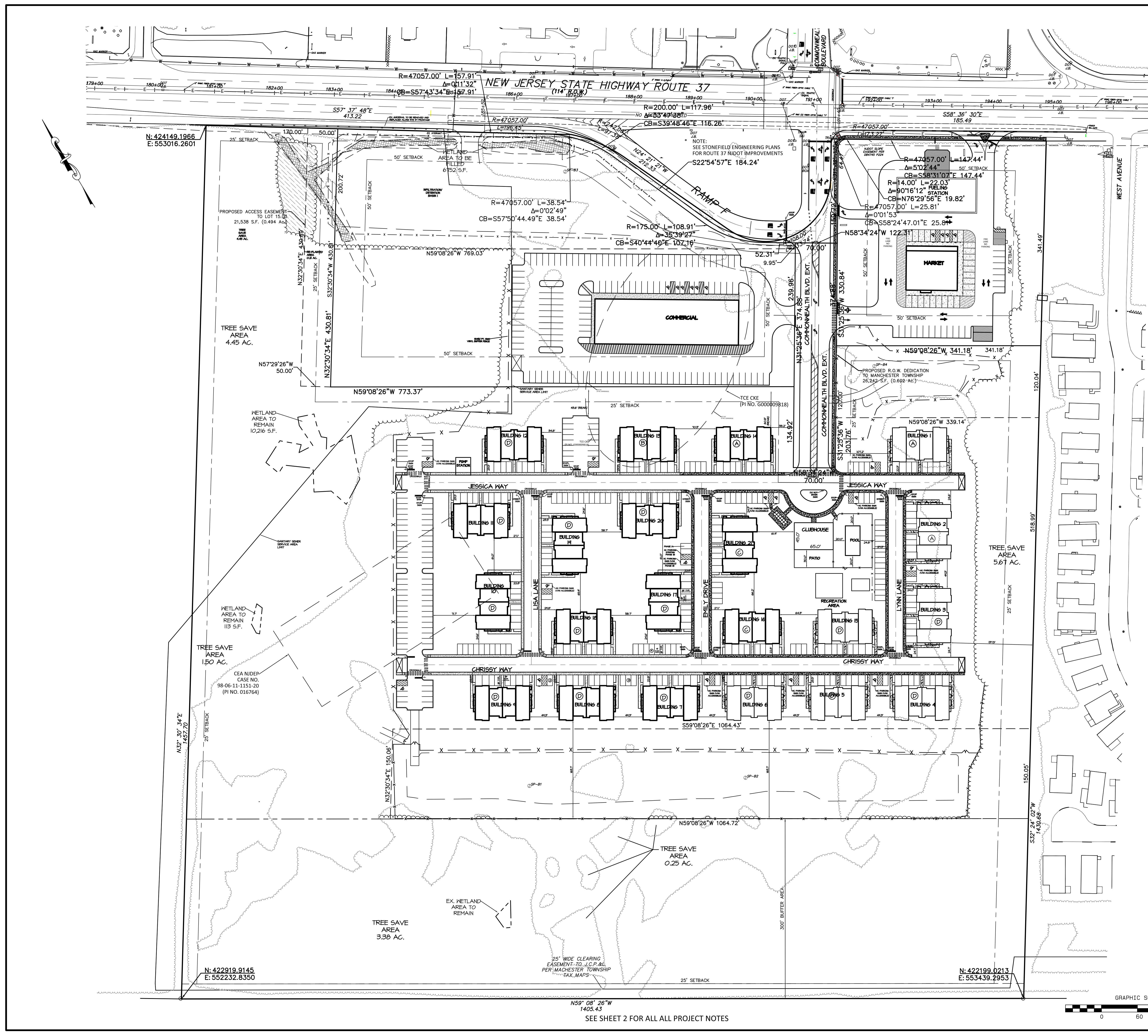
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CSM/SA	01/14/21
DRAWN BY	SCALE
JS	1"=60'
CHECKED BY	DRAWN NO.
JS	PD-170
PREPARED BY	PROJECT NO.
BPM	1423.0016
SHEET NO.	
4A	49

Brian P. Murphy
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 36276

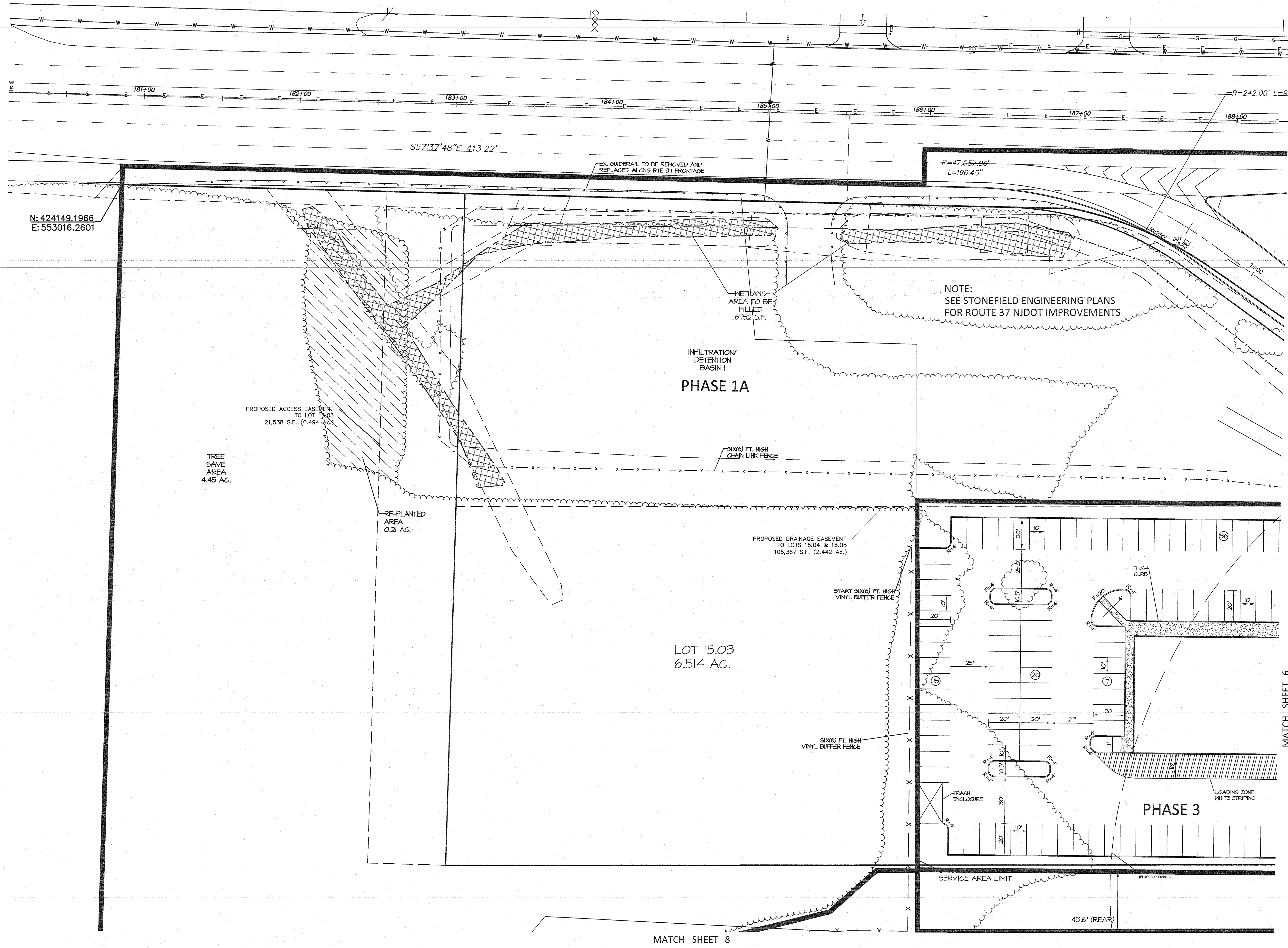
William P. Schemel
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 36276



SEE SHEET 2 FOR ALL PROJECT NOTES



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Block 44, Lot 15.01
Zone: HD-3 Highway Development District (2065 Route 37 Redevelopment Plan)

STANDARD	REQUIREMENT	PROVIDED
Minimum Project Area	Entire Redevelopment Area	45.43 Ac
Maximum Project Lot Coverage	65%	24.40%
		PROVIDED (Lot 15.03)
		PROVIDED (Lot 15.04)
COMMERCIAL USE:		
Minimum Lot Area	2 Acres	6,514 Acres
Minimum Lot Frontage	200 FT.	239.56 FT.
Minimum Lot Depth	200 FT.	430.81 FT.
Maximum Lot Coverage (per lot)	75%	46%
Minimum Front Yard Setback	50 FT.	92.5 FT.
Minimum Side Yard Setback	50 FT.	76 FT.
Minimum Rear Yard Setback	50 FT.	NA.
Maximum Building Height	40 FT. (3 Stories)	and 3 Stories
Minimum Setback from Parking Area to Lot Line	10 FT.	13.8 FT.
Minimum Setback from all existing or proposed roads	50 FT.	92.5 FT.
Minimum Setback to Redevelopment Area Boundary	50 FT.	99.7 FT.
Commercial Parking:		
Retail - 1 space per 200 square feet		90 Required, 142 Provided
Gasoline Station w/ Convenience Store - 1 space per 250 square feet		25 Required, 50 Provided
ADA Required Parking Spaces		6 Required, 9 Provided

RESIDENTIAL USE:	REQUIREMENT	PROVIDED
Minimum Lot Area	10 Acres	35.434 Ac
Maximum Lot Coverage (per lot)	65%	18.20%
Minimum Front Yard Setback	25 FT.	38.3 FT.
Minimum Side Yard Setback	25 FT.	137.5 FT.
Minimum Rear Yard Setback	25 FT.	463.7 FT.
Maximum Building Height	40 FT. (3.5 Stories)	40 FT. or <
Minimum Setback to Redevelopment Area Boundary	50 FT.	137.5 FT.
Maximum Density	6 units / acre	5.94 units / ac
Minimum Unit Width	20 FT.	22 FT.
Minimum Floor Area per Unit	600 Sq. Ft.	750 Sq. Ft.
Minimum Units per Building	4 Units	10 Units
Maximum Units per Building	10 Units	10 Units
Minimum Building Setback from Internal Street	20 FT.	22 FT.
Minimum Distance between Buildings	40 FT.	40.3 FT.
Minimum Active Recreation	50 Sq. Ft. / Unit	62.5 Sq. Ft. / Unit
Minimum Passive Open Space	100 Sq. Ft. / Unit	> 100 Sq. Ft. / Unit
Residential Parking:		
Phase 1 A: (70 Units)	140 Spaces	140 Spaces
1 Bedroom = 4 Units x 1.8 spaces = 7.2 Spaces		
2 Bedroom = 62 Units x 2 Spaces = 124 Spaces		
3 Bedroom = 4 Units x 2.1 Spaces = 8.4 Spaces		
ADA Required Parking Spaces	6 Parking Spaces	8 Parking Spaces
Phase 1 B: (140 Units)	280 Spaces	286 Spaces
1 Bedroom = 4 Units x 1.8 spaces = 7.2 Spaces		
2 Bedroom = 132 Units x 2 Spaces = 264 Spaces		
3 Bedroom = 4 Units x 2.1 Spaces = 8.4 Spaces		
ADA Required Parking Spaces	8 Parking Spaces	11 Parking Spaces
Phase 1 C: (230 Units)	419 Spaces	436 Spaces
1 Bedroom = 7 Units x 1.8 spaces = 12.6 Spaces		
2 Bedroom = 196 Units x 2 Spaces = 392 Spaces		
3 Bedroom = 7 Units x 2.1 Spaces = 14.7 Spaces		
ADA Required Parking Spaces	10 Parking Spaces	14 Parking Spaces

DATE	REVISION	DRAWN	CHECKED	RELEASED
01/14/21	REV. PER PHASING LIMITS	SA	JS	
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS	
5/20/20	REV. PER NJDOT LETTER 4-13-2020	CSM	JS	
9/24/19	REV. BUFFER FENCING PER NJDEP	CSM	JS	
3/18/19	REV. PER CAIRA MEETING 2/14/19	CSM	JS	

SITE PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44

TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

FWH ASSOCIATES, P.A.

1856 Rt. 9, Toms River, NJ 08756 T: 732.797.3100 F: 732.797.3223

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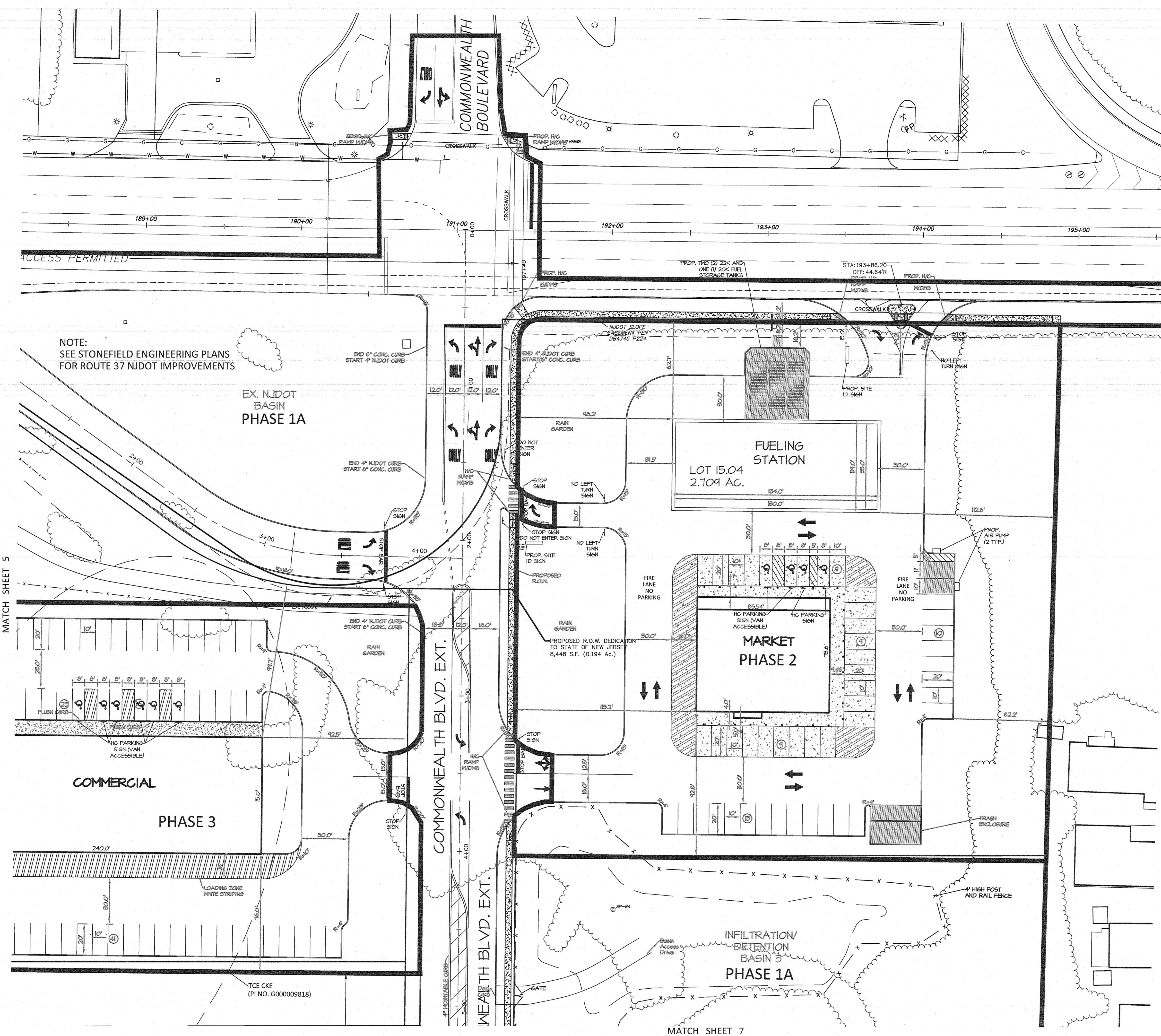
FWH ASSOCIATES, P.A.

Brian P. Murphy

PROFESSIONAL ENGINEER
LIC. NO. 42000

DRAWN BY	CSM	DATE	8/10/18
DESIGNED BY	JS	SCALE	1"=30'
CHECKED BY	JS	DRAWING NO.	PD-170
RELEASED BY	BPM	PROJECT NO.	1423.0016
SHEET NO.	5	TOTAL SHEETS	49

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NOTE: SEE STONEFIELD ENGINEERING PLANS FOR ROUTE 37 NJDOT IMPROVEMENTS

EX. NJDOT BASIN PHASE 1A

FUELING STATION
LOT 15.04
2.709 AC.

MARKET PHASE 2

INFILTRATION/RETENTION BASIN PHASE 1A

MATCH SHEET 5

MATCH SHEET 7

Block 44, Lot 15.01
Zone: HD-3 Highway Development District (2005 Route 37 Redevelopment Plan)

STANDARD	REQUIREMENT	PROVIDED
Minimum Project Area	Entire Redevelopment Area	46.43 AC
Maximum Project Lot Coverage	63%	24.42%

COMMERCIAL USE:	REQUIREMENT	PROVIDED (Lot 15.04)	PROVIDED (Lot 15.04)
Minimum Lot Area	2 Acres	6.534 Acres	2.709 Acres
Minimum Lot Frontage	200 FT.	239.96 FT.	344 FT.
Minimum Lot Depth	200 FT.	430.81 FT.	341.49 FT.
Maximum Lot Coverage (per lot)	70%	40%	54%
Minimum Front Yard Setback	50 FT.	92.5 FT.	62.7 FT.
Minimum Side Yard Setback	50 FT.	70 FT.	92.8 FT.
Minimum Rear Yard Setback	50 FT.	NA.	NA.
Maximum Building Height	< 40 FT.	< 40 FT.	< 40 FT.
Minimum Building Height	40 FT. (3 Stories)	and 3 Stories	and 3 Stories
Minimum Setback from Parking Area to Lot Line	10 FT.	10 FT.	13.8 FT.
Minimum Setback from all existing or proposed roads	50 FT.	50 FT.	62.7 FT.
Minimum Setback to Redevelopment Area Boundary	50 FT.	99.7 FT.	62.7 FT.

Commercial Parking:	REQUIREMENT	PROVIDED
Retail - 1 space per 200 square feet	90 Required,	142 Provided
Gasoline Station w/ Convenience Store - 1 space per 250 square feet	25 Required,	30 Provided
ADA Required Parking Spaces	6 Required,	6 Provided

RESIDENTIAL USE:	REQUIREMENT	PROVIDED (Lot 15.04)
Minimum Lot Area	10 Acres	35.414 AC
Minimum Lot Coverage (per lot)	65%	18.20%
Minimum Front Yard Setback	25 FT.	38.2 FT.
Minimum Side Yard Setback	25 FT.	137.5 FT.
Minimum Rear Yard Setback	25 FT.	463.7 FT.
Maximum Building Height	40 FT. (3 Stories)	40 FT. or <
Minimum Setback to Redevelopment Area Boundary	50 FT.	137.5 FT.
Maximum Density	6 units / acre	5.94 units / ac
Minimum Unit Width	30 FT.	22 FT.
Minimum Floor Area per Unit	600 Sq. Ft.	750 Sq. Ft.
Minimum Units per Building	4 Units	10 Units
Maximum Units per Building	10 Units	10 Units
Minimum Building Setback from Internal Street	20 FT.	22 FT.
Minimum Distance between Buildings	40 FT.	49.3 FT.
Minimum Active Recreation	50 Sq. Ft / Unit	62.5 Sq. Ft / Unit
Minimum Passive Open Space	100 Sq. Ft. / Unit	> 100 Sq. Ft. / Unit

Residential Parking:	REQUIREMENT	PROVIDED
Phase 1 A: (70 Units)	140 Spaces	140 Spaces
1 Bedroom = 4 Units x 1.8 Spaces = 7.2 Spaces		
2 Bedroom = 62 Units x 2 Spaces = 124 Spaces		
3 Bedroom = 4 Units x 2.1 Spaces = 8.4 Spaces		
ADA Required Parking Spaces	6 Parking Spaces	8 Parking Spaces
Phase 1 B: (140 Units)	280 Spaces	280 Spaces
1 Bedroom = 4 Units x 1.8 Spaces = 7.2 Spaces		
2 Bedroom = 123 Units x 2 Spaces = 246 Spaces		
3 Bedroom = 4 Units x 2.1 Spaces = 8.4 Spaces		
ADA Required Parking Spaces	8 Parking Spaces	11 Parking Spaces
Phase 1 C: (230 Units)	460 Spaces	456 Spaces
1 Bedroom = 7 Units x 1.8 Spaces = 12.6 Spaces		
2 Bedroom = 198 Units x 2 Spaces = 396 Spaces		
3 Bedroom = 7 Units x 2.1 Spaces = 14.7 Spaces		
ADA Required Parking Spaces	10 Parking Spaces	14 Parking Spaces

DATE	REVISION	DRAWN	CHECKED	RELEASED
01/14/21	REV. PER PHASING LIMITS	SA	JS	
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS	
5/20/20	REV. PER NJDOT LETTER 4-13-2020	CSM	JS	
10/22/19	REV. PER CLIENT REQUESTED REVISIONS	CSM	JS	
3/18/19	REV. PER CAIRA MEETING 2/14/19	CSM	JS	

SITE PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44

TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

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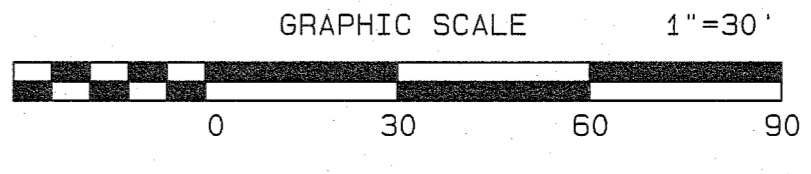
FWHASSOCIATES.COM

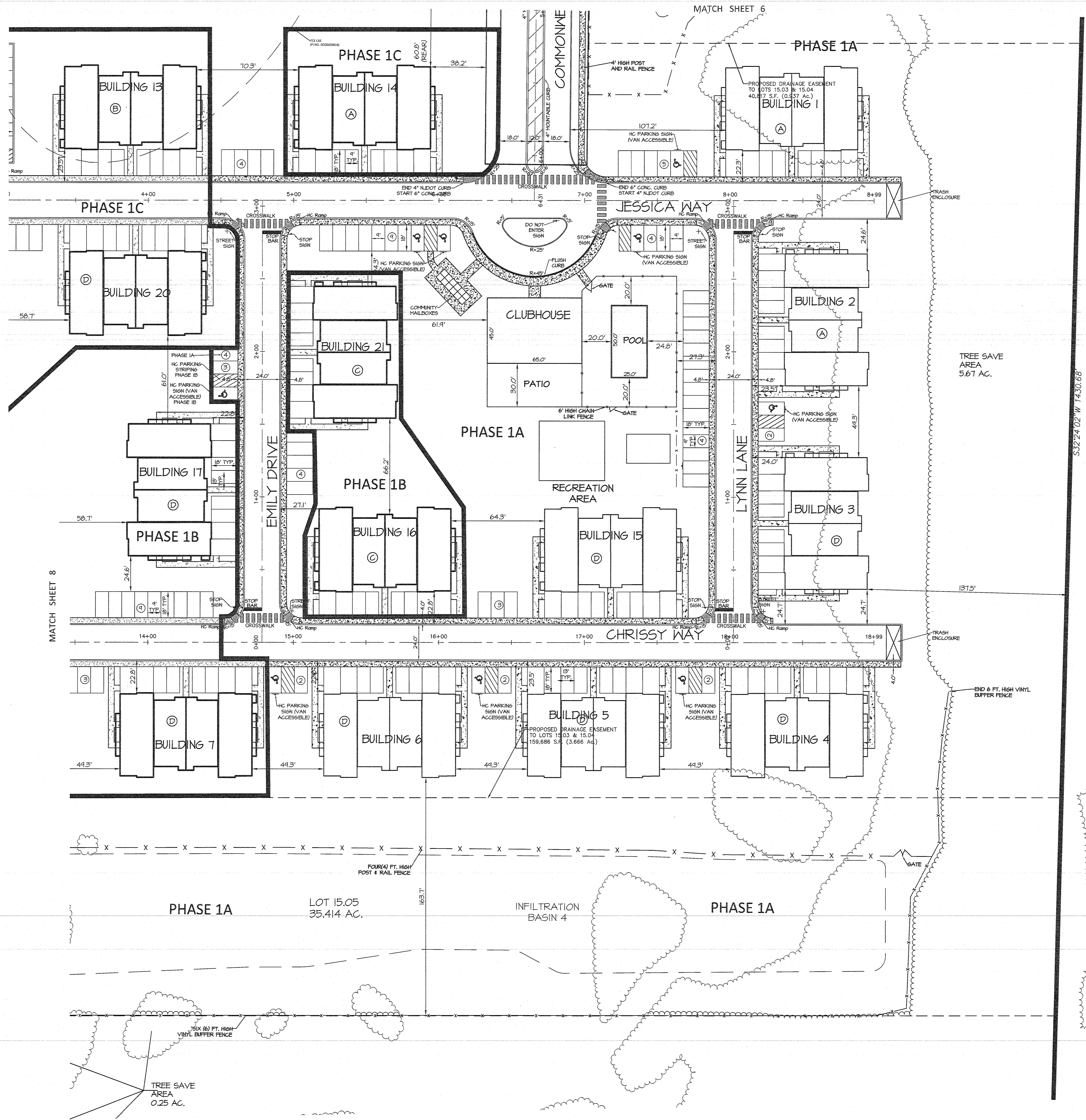
1858 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223

Brian P. Murphy

PROFESSIONAL ENGINEER
N.J. LIC. NO. 42000

DRAWN BY	CSM	DATE	8/10/18
DESIGNED BY	JS	SCALE	1"=30'
CHECKED BY	JS	DRAWING NO.	PD-170
RELEASED BY	BPM	PROJECT NO.	1423.0016
SHEET NO.	6	TOTAL SHEETS	49





Block 44, Lot 15.01
Zone: HD-3 Highway Development District (2005 Route 37 Redevelopment Plan)

STANDARD	REQUIREMENT	PROVIDED
Minimum Project Area	Entire Redevelopment Area	45.41 AC
Maximum Project Lot Coverage	60%	24.62%
COMMERCIAL USE		
Minimum Lot Area	2 Acres	6,534 Acres
Minimum Lot Frontage	200 Ft.	230 Ft.
Minimum Lot Depth	200 Ft.	430 Ft.
Maximum Lot Coverage (per lot)	75%	46%
Minimum Front Yard Setback	50 Ft.	92.3 Ft.
Minimum Side Yard Setback	50 Ft.	76 Ft.
Minimum Rear Yard Setback	50 Ft.	N/A
Maximum Building Height	40 Ft. (8 Stories)	and 35 Stories
Minimum Setback from Parking Area to Lot Line	10 Ft.	30 Ft.
Minimum Setback from all existing or proposed roads	50 Ft.	93.5 Ft.
Minimum Setback to Redevelopment Area Boundary	50 Ft.	99.7 Ft.
Commercial Parking:		
Retail - 1 space per 200 square feet	90 Required, 142 Provided	25 Required, 50 Provided
Gasoline Station w/ Convenience Store - 1 space per 250 square feet	6 Required, 8 Provided	3 Required, 4 Provided
ADA Required Parking Spaces		

RESIDENTIAL USE	REQUIREMENT	PROVIDED
Minimum Lot Area	10 Acres	35,414 AC
Minimum Lot Coverage (per lot)	65%	38.20%
Minimum Front Yard Setback	25 Ft.	38.3 Ft.
Minimum Side Yard Setback	25 Ft.	137.5 Ft.
Minimum Rear Yard Setback	75 Ft.	463.7 Ft.
Maximum Building Height	40 Ft. (8.5 Stories)	40 Ft. or 4
Minimum Setback to Redevelopment Area Boundary	50 Ft.	137.5 Ft.
Maximum Density	6 units / acre	5.94 units / ac
Minimum Unit Width	30 Ft.	22 Ft.
Minimum Floor Area per Unit	600 Sq. Ft.	700 Sq. Ft.
Minimum Units per Building	4 Units	10 Units
Maximum Units per Building	30 Units	30 Units
Minimum Building Setback from Internal Street	20 Ft.	22 Ft.
Minimum Distance between Buildings	40 Ft.	49.3 Ft.
Minimum Active Recreation	50 Sq. Ft. / Unit	62.5 Sq. Ft. / Unit
Minimum Passive Open Space	100 Sq. Ft. / Unit	> 100 Sq. Ft. / Unit
Residential Parking:		
Phase 1A (70 Units)	140 Spaces	140 Spaces
1 Bedroom = 4 Units x 1.5 Spaces = 7.2 Spaces		
2 Bedroom = 62 Units x 2 Spaces = 124 Spaces		
3 Bedroom = 4 Units x 2.1 Spaces = 8.4 Spaces		
ADA Required Parking Spaces	6 Parking Spaces	8 Parking Spaces
Phase 1B (140 Units)	280 Spaces	286 Spaces
1 Bedroom = 4 Units x 1.8 Spaces = 7.2 Spaces		
2 Bedroom = 132 Units x 2 Spaces = 264 Spaces		
3 Bedroom = 4 Units x 2.1 Spaces = 8.4 Spaces		
ADA Required Parking Spaces	8 Parking Spaces	11 Parking Spaces
Phase 1C (130 Units)	419 Spaces	436 Spaces
1 Bedroom = 7 Units x 1.8 Spaces = 12.6 Spaces		
2 Bedroom = 286 Units x 2 Spaces = 572 Spaces		
3 Bedroom = 7 Units x 2.1 Spaces = 14.7 Spaces		
ADA Required Parking Spaces	10 Parking Spaces	14 Parking Spaces

DATE	REV.	DESCRIPTION	SA	JS
01/14/21	REV. PER PHASING	LIMITS	SA	JS
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS		CSM	JS
5/20/20	REV. PER N.J.DOT LETTER 4-13-2020		CSM	JS
8/24/19	REV. BUFFER FENCING PER NJDEP		CSM	JS
3/18/19	REV. PER CAFRA MEETING 2/14/19		CSM	JS
11/7/18	REV. PER CAFRA STORMWATER COMMENTS 10/31/18		SA	JS

SITE PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44

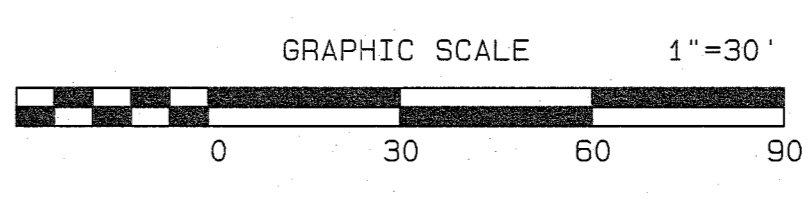
TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

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RESERVE SPECIALISTS
ARCHITECTS**

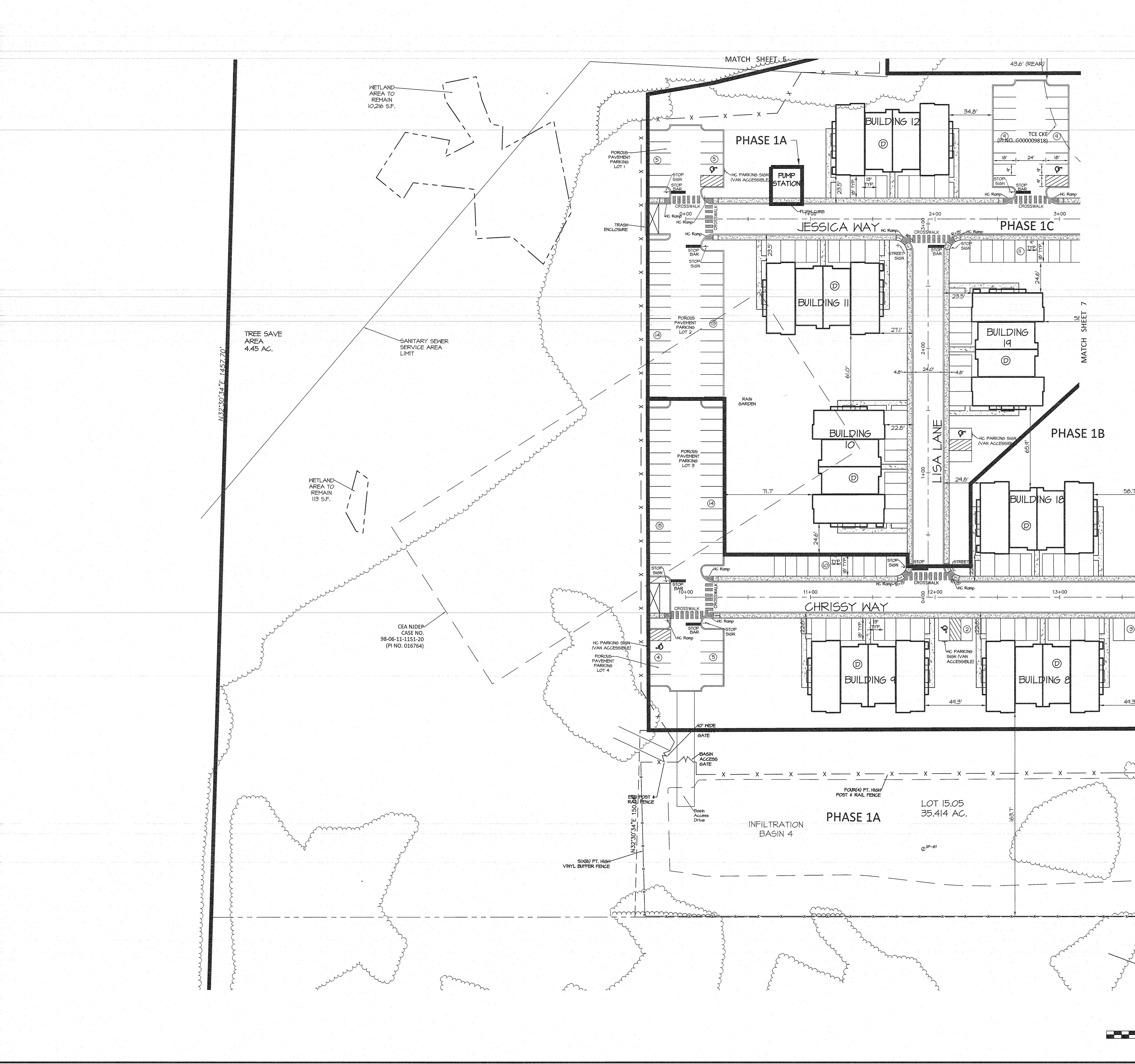
FWH ASSOCIATES.COM
1856 Rt. 9, Toms River, NJ 08756 T: 732.797.3100 F: 732.797.3223

DATE: 8/10/18
DRAWN: CSM
CHECKED: JS
RELEASED: JS
SCALE: 1"=30'
DESIGNED BY: JS
PROJECT NO.: PD-170
RELEASED BY: BPM
PROJECT NO.: 1423.0016
DREYER NO.: 7 49

Brian P. Murphy
 PROFESSIONAL ENGINEER
 N.J. LIC. NO. 42000



C:\pwworking\fw\14230016\14230016.dwg (DWG) DATE: 8/10/18 10:22:09 AM 14230016.dwg (DWG) DATE: 8/10/18 10:22:09 AM 14230016.dwg (DWG) DATE: 8/10/18 10:22:09 AM



Block 44, Lot 15.01
Zone: HD-3 Highway Development District (2005 Route 37 Redevelopment Plan)

STANDARD	REQUIREMENT	PROVIDED
Minimum Project Area	Entire Redevelopment Area	45.43 Ac
Maximum Project Lot Coverage	65%	24.40%
		PROVIDED (Lot 15.05)
		PROVIDED (Lot 15.04)
COMMERCIAL USE:		
Minimum Lot Area	2 Acres	6,514 Acres
Minimum Lot Frontage	200 Ft.	239.98 Ft.
Minimum Lot Depth	200 Ft.	438.85
Maximum Lot Coverage (per lot)	75%	48%
Minimum Front Yard Setback	50 Ft.	93.3 Ft.
Minimum Side Yard Setback	50 Ft.	56 Ft.
Minimum Rear Yard Setback	50 Ft.	NA
Maximum Building Height	40 Ft. (3 Stories)	42 Ft. and 3 Stories
Minimum Setback from Parking Area to Lot Line	10 Ft.	13.8 Ft.
Minimum Setback from all existing or proposed roads	50 Ft.	62.3 Ft.
Minimum Setback to Redevelopment Area Boundary	50 Ft.	98.7 Ft.
Commercial Parking:		
Retail - 1 space per 200 square feet		90 Required, 142 Provided
Gasoline Station w/ Convenience Store - 1 space per 200 square feet		25 Required, 50 Provided
ADA Required Parking Spaces		6 Required, 3 Provided, 4 Provided
RESIDENTIAL USE:		
Minimum Lot Area	10 Acres	35,414 Ac
Minimum Lot Coverage (per lot)	65%	18,20%
Minimum Front Yard Setback	25 Ft.	38.2 Ft.
Minimum Side Yard Setback	25 Ft.	137.5 Ft.
Minimum Rear Yard Setback	25 Ft.	483.7 Ft.
Maximum Building Height	40 Ft. (3.5 Stories)	40 Ft. or <
Minimum Setback to Redevelopment Area Boundary	50 Ft.	137.5 Ft.
Maximum Density	6 units / Acre	5.94 units / Acre
Minimum Unit Width	30 Ft.	22 Ft.
Minimum Floor Area per Unit	400 Sq. Ft.	750 Sq. Ft.
Minimum Units per Building	4 Units	10 Units
Maximum Units per Building	10 Units	10 Units
Minimum Building Setback from Internal Street	20 Ft.	22 Ft.
Minimum Distance between Buildings	40 Ft.	48.3 Ft.
Minimum Active Recreation	50 Sq. Ft / Unit	62.5 Sq. Ft / Unit
Minimum Passive Open Space	100 Sq. Ft. / Unit	> 100 Sq. Ft / Unit
Residential Parking:		
Phase 1A (70 Units)		140 Spaces
1 Bedroom = 4 Units x 1.8 spaces = 7.2 Spaces		
2 Bedroom = 42 Units x 2.3 spaces = 124 Spaces		
3 Bedroom = 4 Units x 2.3 spaces = 8.4 Spaces		
ADA Required Parking Spaces		6 Parking Spaces
Phase 1B (140 Units)		280 Spaces
1 Bedroom = 4 Units x 1.8 spaces = 7.2 Spaces		
2 Bedroom = 132 Units x 2.3 spaces = 304 Spaces		
3 Bedroom = 4 Units x 2.3 spaces = 8.4 Spaces		
ADA Required Parking Spaces		8 Parking Spaces
Phase 1C (120 Units)		435 Spaces
1 Bedroom = 11 Units x 1.8 spaces = 11.6 Spaces		
2 Bedroom = 106 Units x 2.3 spaces = 392 Spaces		
3 Bedroom = 7 Units x 2.3 spaces = 14.7 Spaces		
ADA Required Parking Spaces		10 Parking Spaces

DATE	REVISION	DRAWN	CHECKED	RELEASED
01/14/21	REV. PER PHASING LIMITS	SA	JS	
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS	
5/20/20	REV. PER NJDOT LETTER 4-13-2020	CSM	JS	
9/24/19	REV. BUFFER FENCING PER NADEP	CSM	JS	
3/18/19	REV PER CAFRA MEETING 2/14/19	CSM	JS	
11/7/18	REV PER CAFRA STORMWATER COMMENTS 10/31/18	SA	JS	

SITE PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44

TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

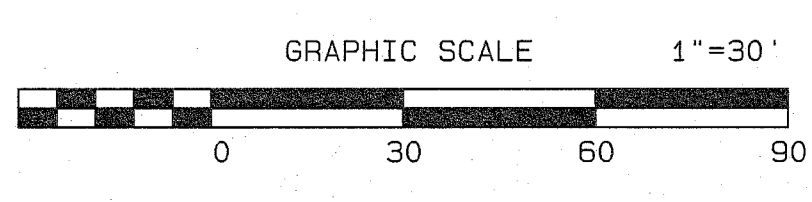
FWH ASSOCIATES, P.A.
1856 Rt. 9, Torne River, NJ 08755 T: 732.797.3100 F: 732.797.3223

CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS
RESERVE SPECIALISTS
ARCHITECTS

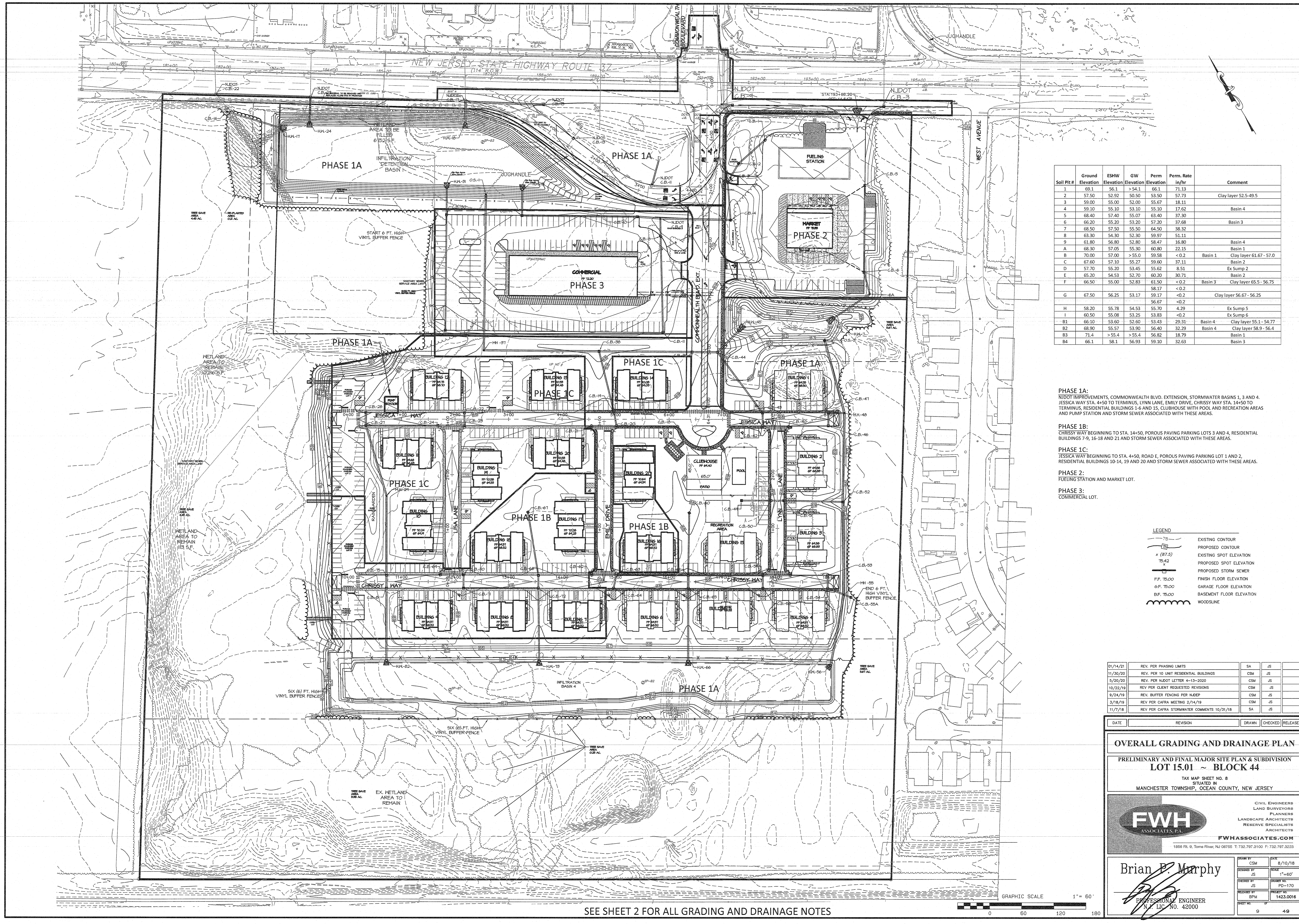
FWH ASSOCIATES.COM

Brian P. Murphy
PROFESSIONAL ENGINEER
N.J. LIC. NO. 42000

DESIGNED BY	CSM	DATE	8/10/18
DRAWN BY	JS	SCALE	1"=30'
CHECKED BY	JS	PROJECT NO.	PD-170
RELEASED BY	BPM	PROJECT NO.	1423.0016
DATE	8	SHEET NO.	49



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Soil Pit #	Ground Elevation	ESHW Elevation	GW Elevation	Perm Elevation	Perm. Rate	Comment
1	69.1	56.1	>54.1	66.1	71.13	
2	57.50	52.92	50.50	53.50	57.73	Clay layer 52.5-49.5
3	59.00	55.00	52.00	55.67	18.11	
4	59.10	55.10	53.10	55.10	17.62	Basin 4
5	68.40	57.40	55.07	63.40	37.30	
6	66.20	55.20	53.20	57.20	37.68	Basin 3
7	65.50	57.50	55.50	64.50	38.32	
8	63.30	54.30	52.30	59.97	51.11	
9	61.80	56.80	52.80	58.47	16.80	Basin 4
A	68.30	57.05	55.30	60.80	22.15	Basin 1
B	70.00	57.00	>55.0	59.58	<0.2	Basin 1 Clay layer 61.67 - 57.0
C	67.60	57.10	55.27	59.60	37.11	Basin 2
D	57.70	55.20	53.45	55.62	8.51	Ex Sump 2
E	65.20	54.53	52.70	60.20	30.71	Basin 2
F	66.50	55.00	52.83	61.50	<0.2	Basin 3 Clay layer 65.5 - 56.75
				58.17	<0.2	
G	67.50	56.25	53.17	59.17	<0.2	Clay layer 56.67 - 56.25
				56.67	<0.2	
H	58.20	55.78	54.53	55.70	4.29	Ex Sump 5
I	60.50	55.08	53.25	53.83	<0.2	Ex Sump 6
B1	66.10	53.60	52.60	53.43	29.31	Basin 4 Clay layer 55.1 - 54.77
B2	68.90	55.57	53.90	56.40	32.29	Basin 4 Clay layer 58.9 - 56.4
B3	71.4	>55.4	>55.4	56.82	18.79	Basin 1
B4	66.1	58.1	56.93	59.10	32.63	Basin 3

PHASE 1A:
 NJDOT IMPROVEMENTS, COMMONWEALTH BLVD. EXTENSION, STORMWATER BASINS 1, 3 AND 4, JESSICA WAY STA. 4+50 TO TERMINUS, LYNN LANE, EMILY DRIVE, CHRISSEY WAY STA. 14+50 TO TERMINUS, RESIDENTIAL BUILDINGS 1-6 AND 15, CLUBHOUSE WITH POOL AND RECREATION AREAS AND PUMP STATION AND STORM SEWER ASSOCIATED WITH THESE AREAS.

PHASE 1B:
 CHRISSEY WAY BEGINNING TO STA. 14+50, POROUS PAVING PARKING LOTS 3 AND 4, RESIDENTIAL BUILDINGS 7-9, 16-18 AND 21 AND STORM SEWER ASSOCIATED WITH THESE AREAS.

PHASE 1C:
 JESSICA WAY BEGINNING TO STA. 4+50, ROAD E, POROUS PAVING PARKING LOT 1 AND 2, RESIDENTIAL BUILDINGS 10-14, 19 AND 20 AND STORM SEWER ASSOCIATED WITH THESE AREAS.

PHASE 2:
 FUELING STATION AND MARKET LOT.

PHASE 3:
 COMMERCIAL LOT.

LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	PROPOSED STORM SEWER
	FINISH FLOOR ELEVATION
	GARAGE FLOOR ELEVATION
	BASEMENT FLOOR ELEVATION
	WOODSLINE

DATE	REVISION	SA	JS
01/14/21	REV. PER PHASING LIMITS	SA	JS
11/20/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
5/20/20	REV. PER NJDOT LETTER 4-13-2020	CSM	JS
10/22/19	REV. PER CLIENT REQUESTED REVISIONS	CSM	JS
9/24/19	REV. BUFFER FENCING PER NJDEP	CSM	JS
3/18/19	REV. PER CAFTA MEETING 2/14/19	CSM	JS
11/7/18	REV. PER CAFTA STORMWATER COMMENTS 10/31/18	SA	JS

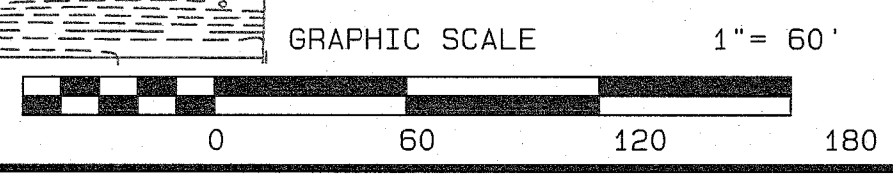
OVERALL GRADING AND DRAINAGE PLAN
 PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44
 TAX MAP SHEET NO. 8
 SITUATED IN
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

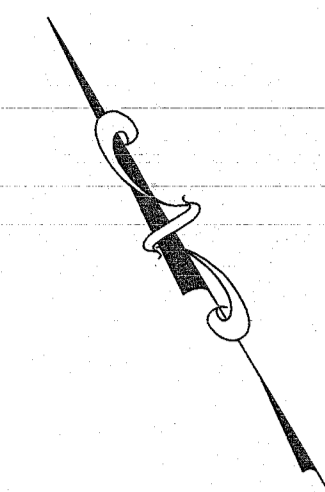
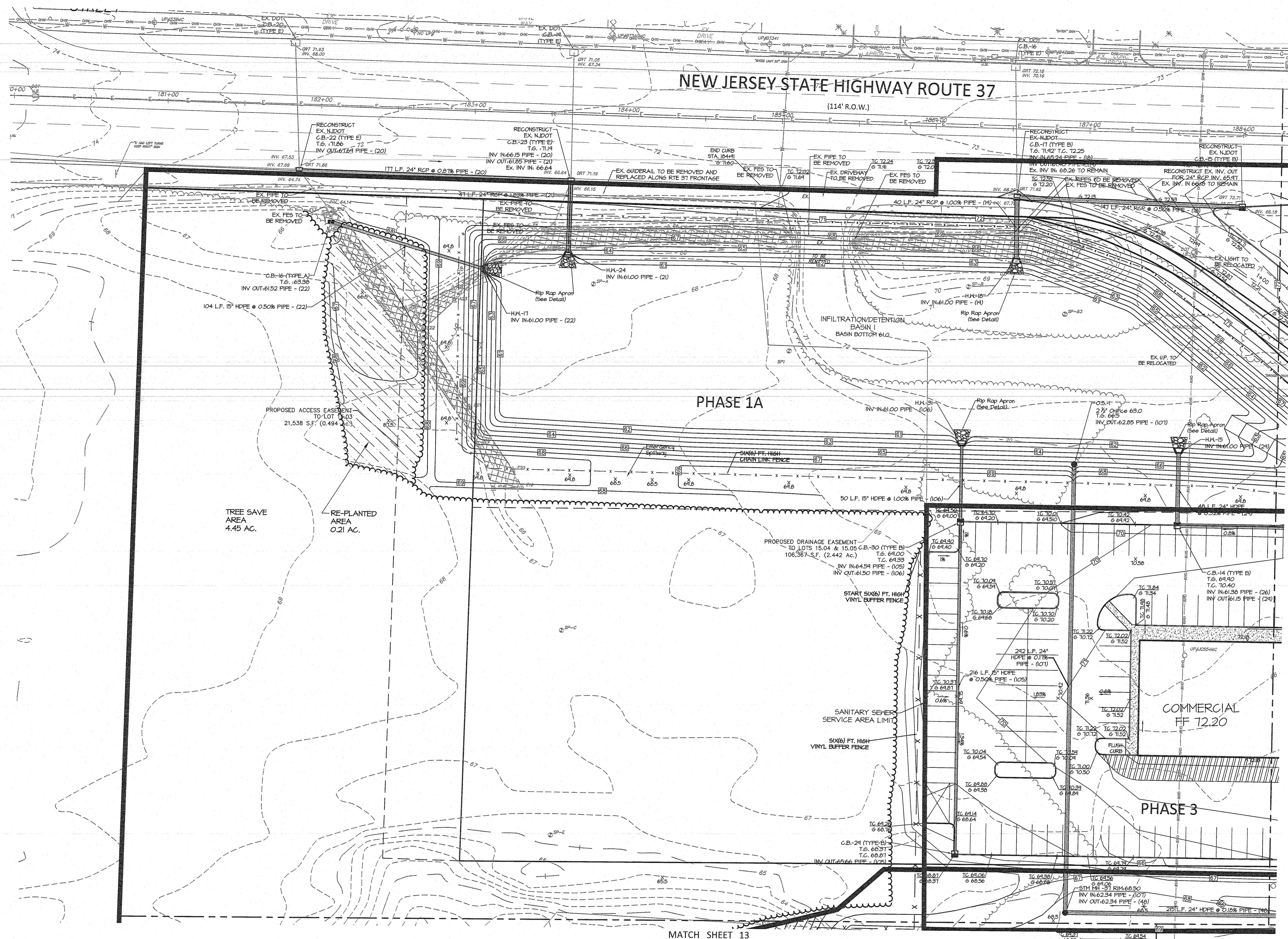
FWH ASSOCIATES, P.A.
 CIVIL ENGINEERS
 LAND SURVEYORS
 PLANNERS
 LANDSCAPE ARCHITECTS
 RESERVE SPECIALISTS
 ARCHITECTS
FWHASSOCIATES.COM
 1856 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3233

Brian P. Murphy
 PROFESSIONAL ENGINEER
 N.J. LIC. NO. 42000

DATE	8/10/18
DESIGNED BY	CSM
CHECKED BY	JS
SCALE	1"=60'
DRAWN BY	JS
PROJECT NO.	PD-170
DATE	1423.0016
SHEET NO.	9
TOTAL SHEETS	49

SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES





TREE SAVE AREA
4.45 AC.

RE-PLANTED AREA
0.21 AC.

PHASE 1A

COMMERCIAL
FF 72.20

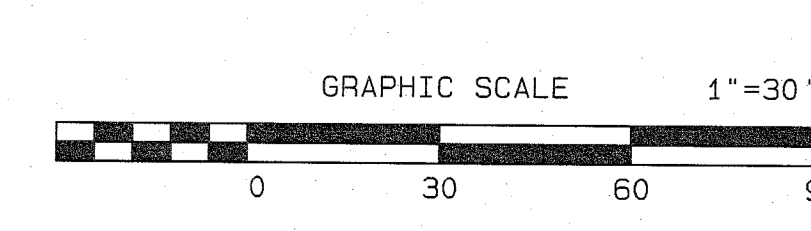
PHASE 3

MATCH SHEET 13

MATCH SHEET 11

LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	PROPOSED STORM SEWER
	FINISH FLOOR ELEVATION
	GARAGE FLOOR ELEVATION
	BASEMENT FLOOR ELEVATION
	WOODSLINE



SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

01/14/21	REV. PER PHASING LIMITS	SA	JS
11/20/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
5/20/20	REV. PER NDOT LETTER 4-13-2020	CSM	JS
10/22/19	REV. PER CLIENT REQUESTED REVISIONS	CSM	JS
3/18/19	REV. PER CAFRA MEETING 2/14/19	CSM	JS
11/7/18	REV. PER CAFRA STORMWATER COMMENTS 10/31/18	SA	JS

DATE	REVISION	DRAWN	CHECKED	RELEASED
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GRADING AND DRAINAGE PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44

TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

FWH
ASSOCIATES, P.A.

1856 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223

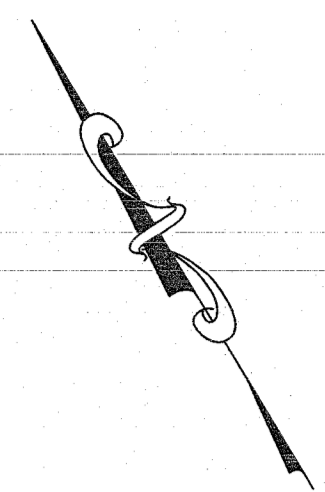
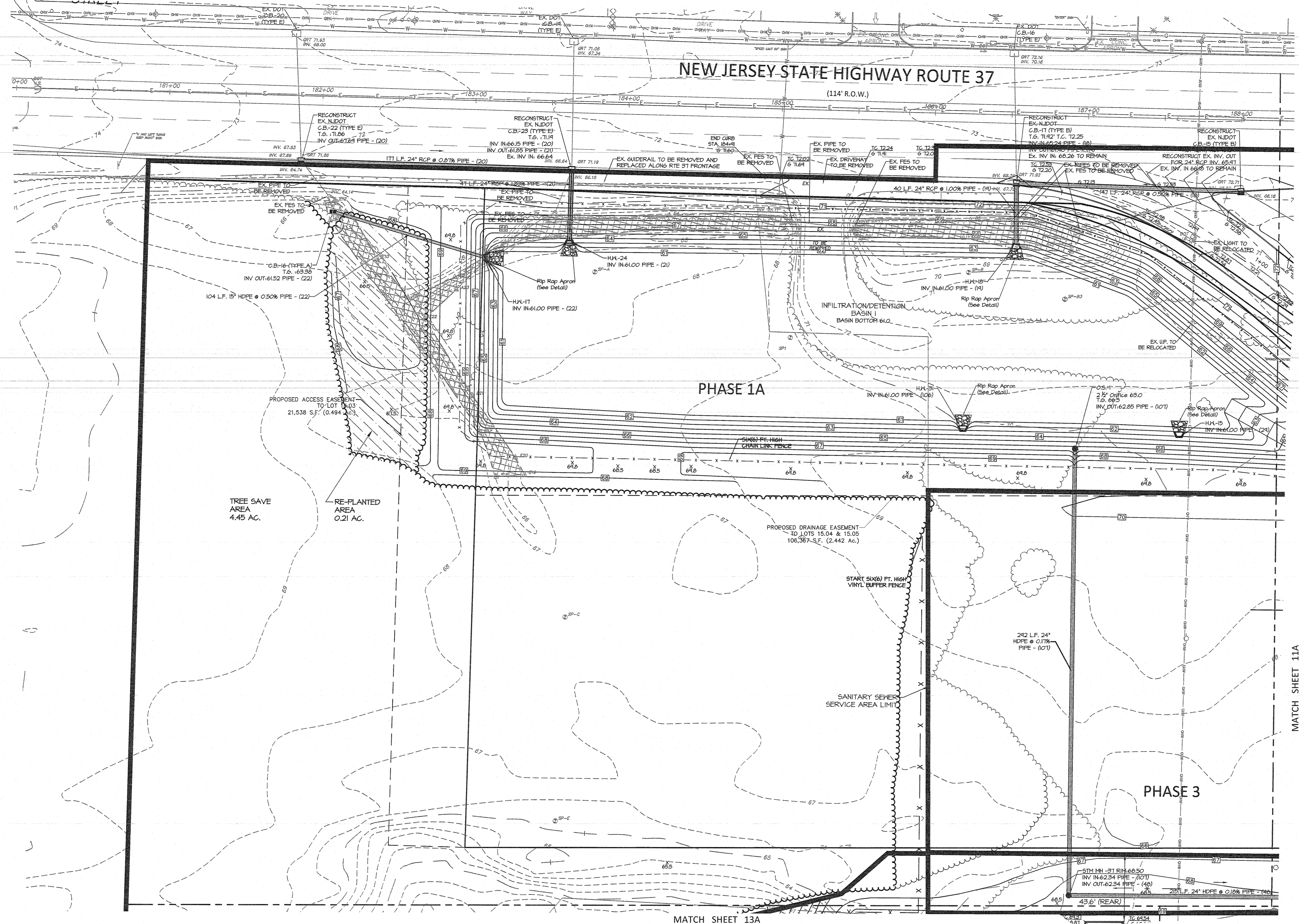
CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
ARCHITECTS
RESERVE SPECIALISTS
ARCHITECTS

FWHASSOCIATES.COM

Brian P. Murphy

PROFESSIONAL ENGINEER
N.J. Lic. No. 42000

DESIGNED BY	CSM	DATE	8/10/18
CHECKED BY	JS	SCALE	1"=30'
DRAWN BY	JS	DRAWING NO.	PD-170
PLANNED BY	BPM	PROJECT NO.	1423.0016
DATE	10	OF	49



SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

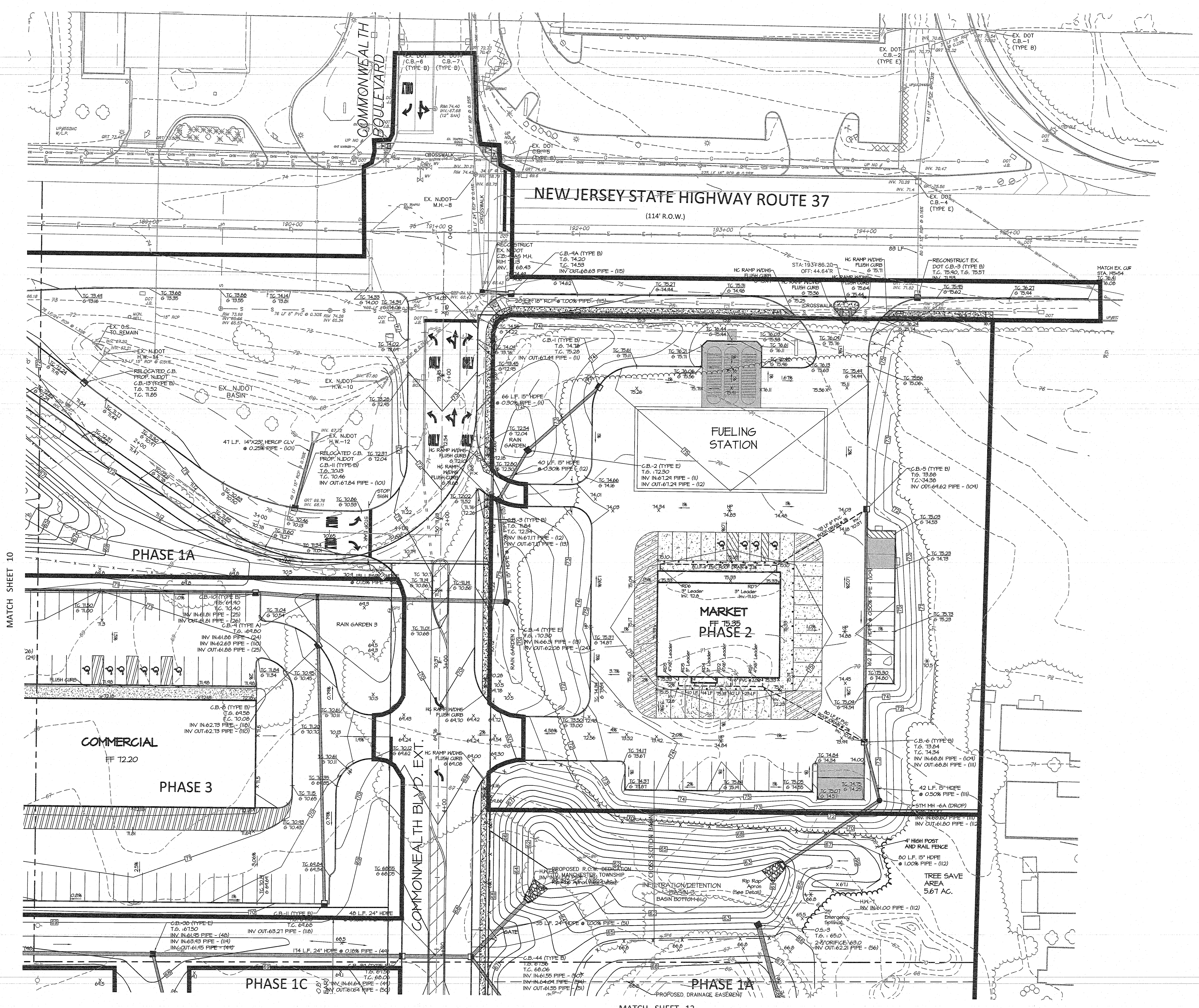
LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	PROPOSED STORM SEWER
	FINISH FLOOR ELEVATION
	GARAGE FLOOR ELEVATION
	BASEMENT FLOOR ELEVATION
	WOODSLINE

GRAPHIC SCALE 1" = 30'

0 30 60 90

DATE	REVISION	DRAWN	CHECKED	RELEASED																				
GRADING AND DRAINAGE PLAN-PHASE 1A																								
PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION LOT 15.01 ~ BLOCK 44 TAX MAP SHEET NO. 8 SITUATED IN MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY																								
		CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS RESERVE SPECIALISTS ARCHITECTS FWHASSOCIATES.COM 1856 Rt. 0, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223																						
Brian P. Murphy PROFESSIONAL ENGINEER N.J. LIC. NO. 42000		<table border="1"> <tr> <td>DRAWN BY</td> <td>SA</td> <td>DATE</td> <td>01/14/21</td> </tr> <tr> <td>CHECKED BY</td> <td>JS</td> <td>SCALE</td> <td>1"=30'</td> </tr> <tr> <td>CREATED BY</td> <td>JS</td> <td>DRAWING NO.</td> <td>PD-170</td> </tr> <tr> <td>RELEASED BY</td> <td>BPM</td> <td>PROJECT NO.</td> <td>1423.0016</td> </tr> <tr> <td>SHEET NO.</td> <td>10A</td> <td>OF</td> <td>49</td> </tr> </table>			DRAWN BY	SA	DATE	01/14/21	CHECKED BY	JS	SCALE	1"=30'	CREATED BY	JS	DRAWING NO.	PD-170	RELEASED BY	BPM	PROJECT NO.	1423.0016	SHEET NO.	10A	OF	49
DRAWN BY	SA	DATE	01/14/21																					
CHECKED BY	JS	SCALE	1"=30'																					
CREATED BY	JS	DRAWING NO.	PD-170																					
RELEASED BY	BPM	PROJECT NO.	1423.0016																					
SHEET NO.	10A	OF	49																					



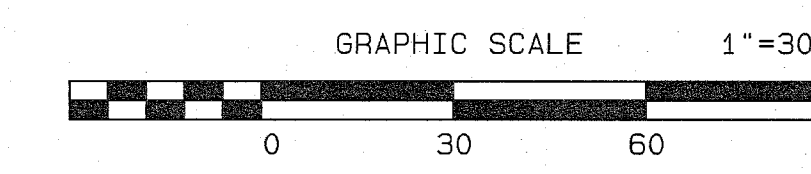
MATCH SHEET 10

MATCH SHEET 12

SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

LEGEND

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	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	PROPOSED STORM SEWER
	FINISH FLOOR ELEVATION
	GARAGE FLOOR ELEVATION
	BASEMENT FLOOR ELEVATION
	WOODSLINE



11/20/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
5/20/20	REV. PER NUDOT LETTER 4-13-2020	CSM	JS
10/22/19	REV. PER CLIENT REQUESTED REVISIONS	CSM	JS
3/16/19	REV. PER CAFTA MEETING 2/14/19	CSM	JS
11/7/18	REV. PER CAFTA STORMWATER COMMENTS 10/31/18	SA	JS

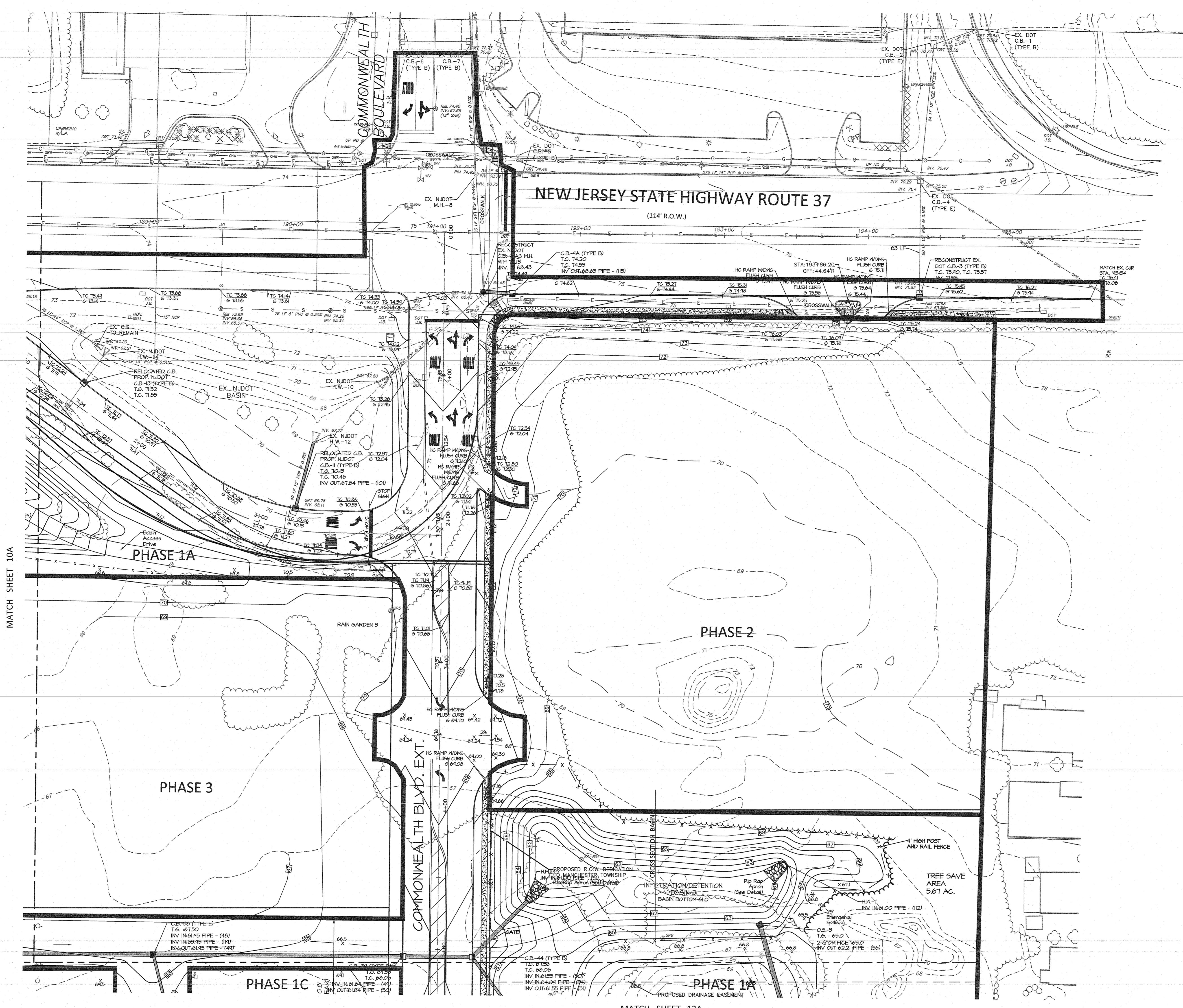
DATE	REVISION	DRAWN	CHECKED	RELEASED
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GRADING AND DRAINAGE PLAN
 PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44
 TAX MAP SHEET NO. 8
 SITUATED IN
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

CIVIL ENGINEERS
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PLANNERS
LANDSCAPE ARCHITECTS
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FWHASSOCIATES.COM
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Brian P. Murphy
 PROFESSIONAL ENGINEER
 N.J. LIC. NO. 42000

DESIGNED BY	CSM	DATE	8/10/18
DRAWN BY	JS	SCALE	1"=30'
CHECKED BY	JS	DRAWER NO.	
RELEASED BY	BPM	PROJECT NO.	1423.0016
SHEET NO.	11	TOTAL SHEETS	49



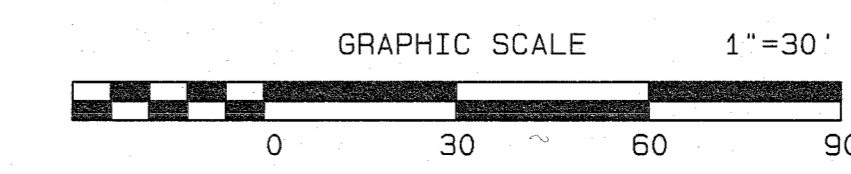
MATCH SHEET 10A

MATCH SHEET 12A

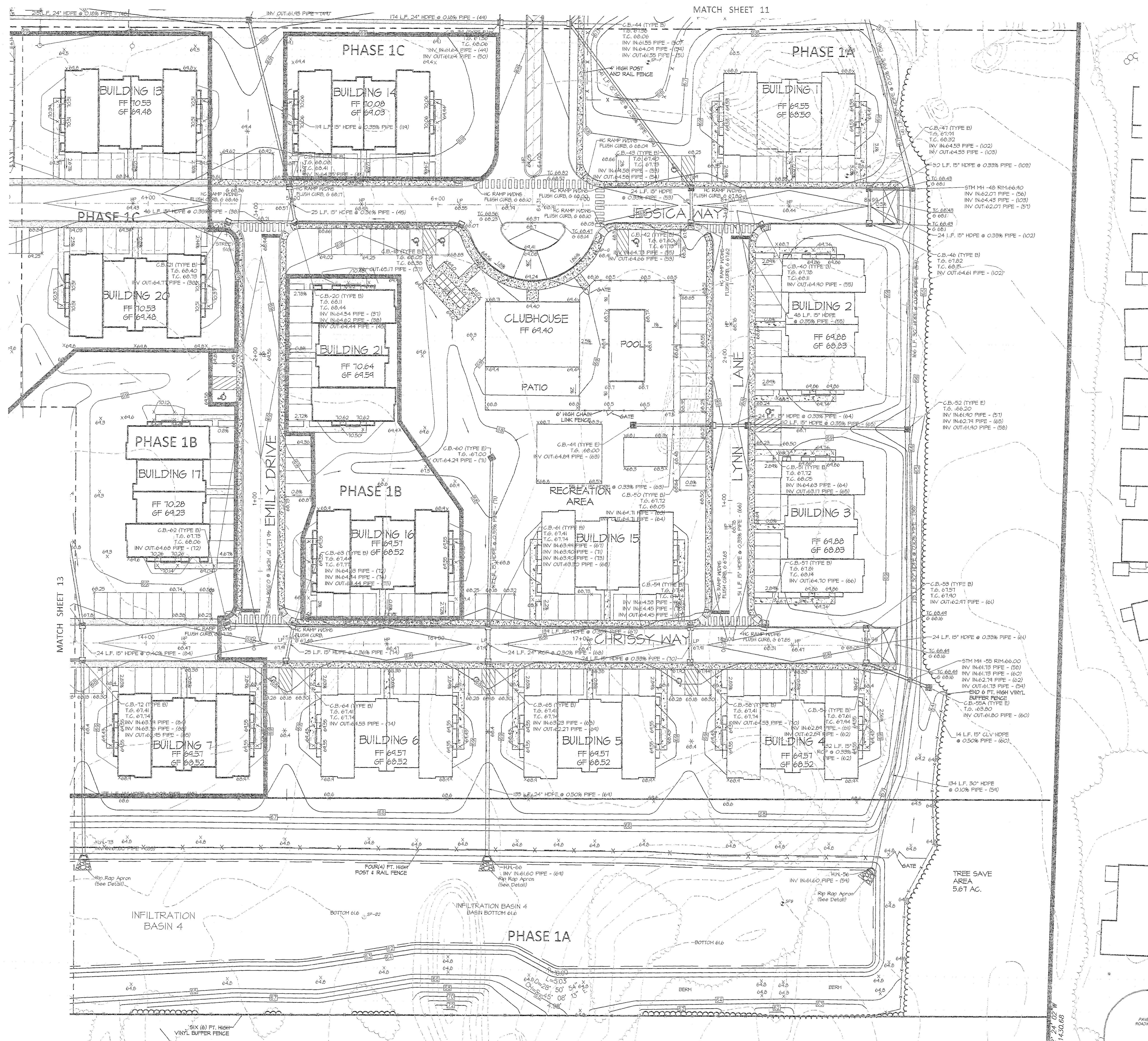
SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	PROPOSED STORM SEWER
	FINISH FLOOR ELEVATION
	GARAGE FLOOR ELEVATION
	BASEMENT FLOOR ELEVATION
	WOODSLINE



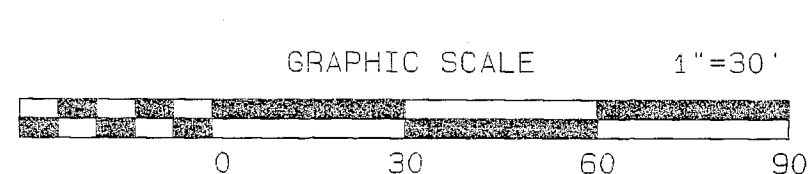
DATE	REVISION	DRAWN	CHECKED	RELEASED
GRADING AND DRAINAGE PLAN-PHASE 1A				
PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION LOT 15.01 ~ BLOCK 44				
TAX MAP SHEET NO. 8 SITUATED IN MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY				
			CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS RESERVE SPECIALISTS ARCHITECTS FWHASSOCIATES.COM	
1858 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223				
Brian P. Murphy PROFESSIONAL ENGINEER N.J. LIC. NO. 42000		DRAWN BY: SA CHECKED BY: JS DESIGNED BY: JS PROJECT NO.: 1423.0016 SHEET NO.: 11A	DATE: 01/14/21 SCALE: 1"=30' DRAWN BY: SA PROJECT NO.: 1423.0016 SHEET NO.: 49	



MATCH SHEET 13

MATCH SHEET 11

- LEGEND**
- - - - - EXISTING CONTOUR
 - - - - - PROPOSED CONTOUR
 - x (87.5) EXISTING SPOT ELEVATION
 - 79.42 PROPOSED SPOT ELEVATION
 - FF, 75.00 FINISH FLOOR ELEVATION
 - GF, 75.00 GARAGE FLOOR ELEVATION
 - BF, 75.00 BASEMENT FLOOR ELEVATION
 - ~~~~~ WOODSLINE



SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

01/14/21	REV. PER PHASING LIMITS	SA	JS
11/20/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
5/20/20	REV. PER NDOT LETTER 4-13-2020	CSM	JS
10/22/19	REV. PER CLIENT REQUESTED REVISIONS	CSM	JS
9/24/19	REV. BUFFER FENCING PER NDEP	CSM	JS
3/18/19	REV. PER CAPRA MEETING 2/14/19	CSM	JS
11/7/18	REV. PER CAPRA STORMWATER COMMENTS 10/31/18	SA	JS

DATE	REVISION	DRAWN	CHECKED	RELEASED
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GRADING AND DRAINAGE PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION
LOT 15.01 ~ BLOCK 44
TAX MAP SHEET NO. 8
SITUATED IN
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

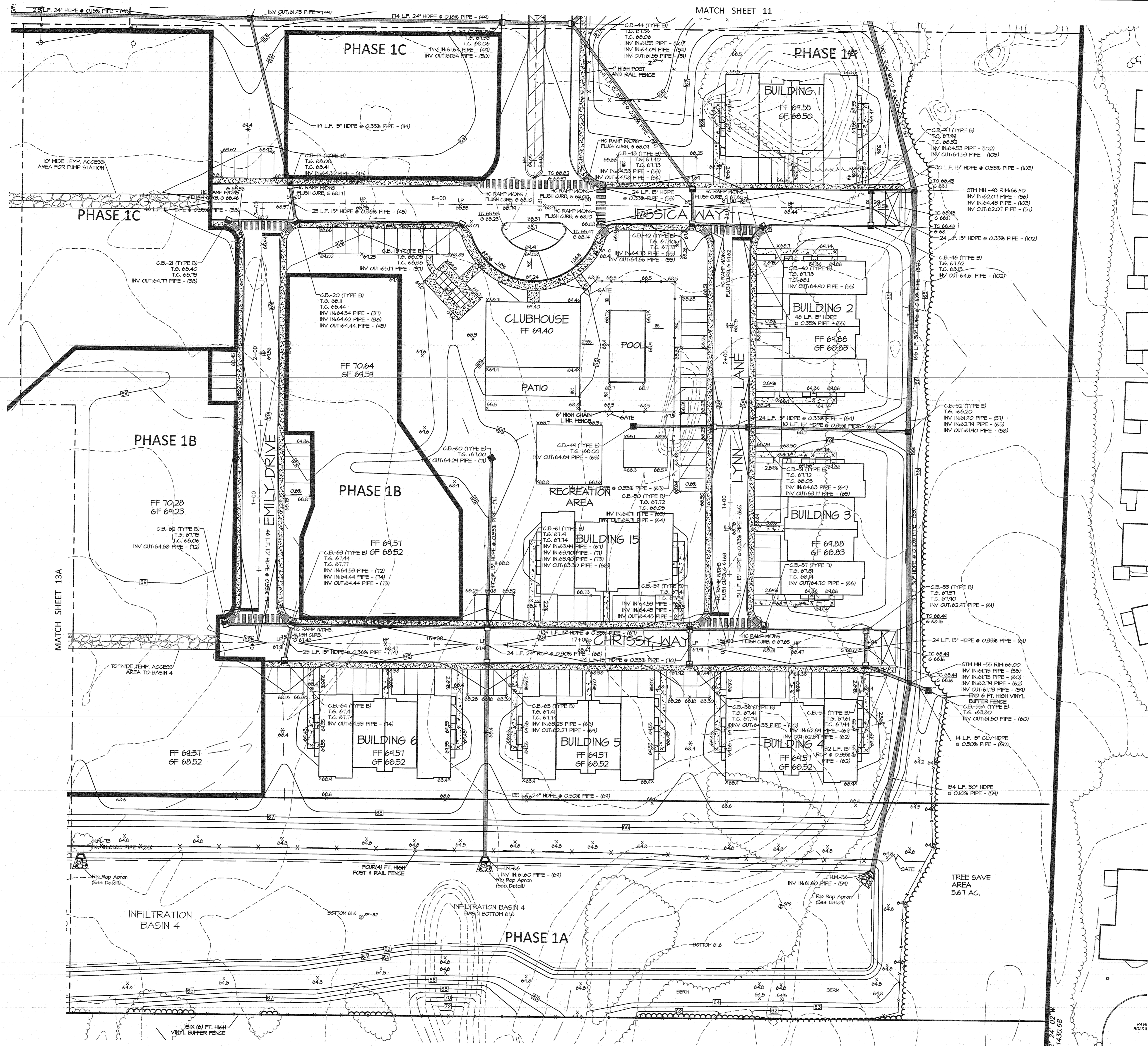
FWP
FRESH WATER PARTNERS

CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS
RESERVE SPECIALISTS
ARCHITECTS
FWHASSOCIATES.COM
1855 Rt. 9, Toms River, NJ 08755 T: 732.797.2100 F: 732.797.3233

DESIGNED BY	CSM	DATE	8/10/18
CHECKED BY	JS	SCALE	1" = 30'
DRAWN BY	JS	DRAWING NO.	
PROJECT MGR	BPM	PROJECT NO.	1423.0016
SHEET NO.	12	TOTAL SHEETS	49

Brian P. Murphy

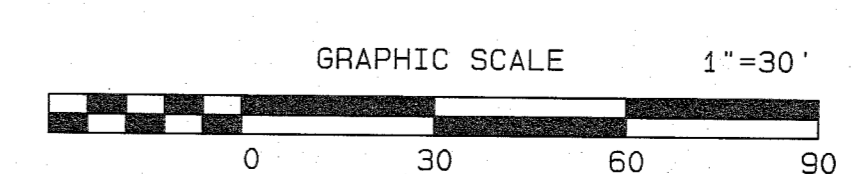
PROFESSIONAL ENGINEER
N.J. LIC. NO. 42000



MATCH SHEET 11

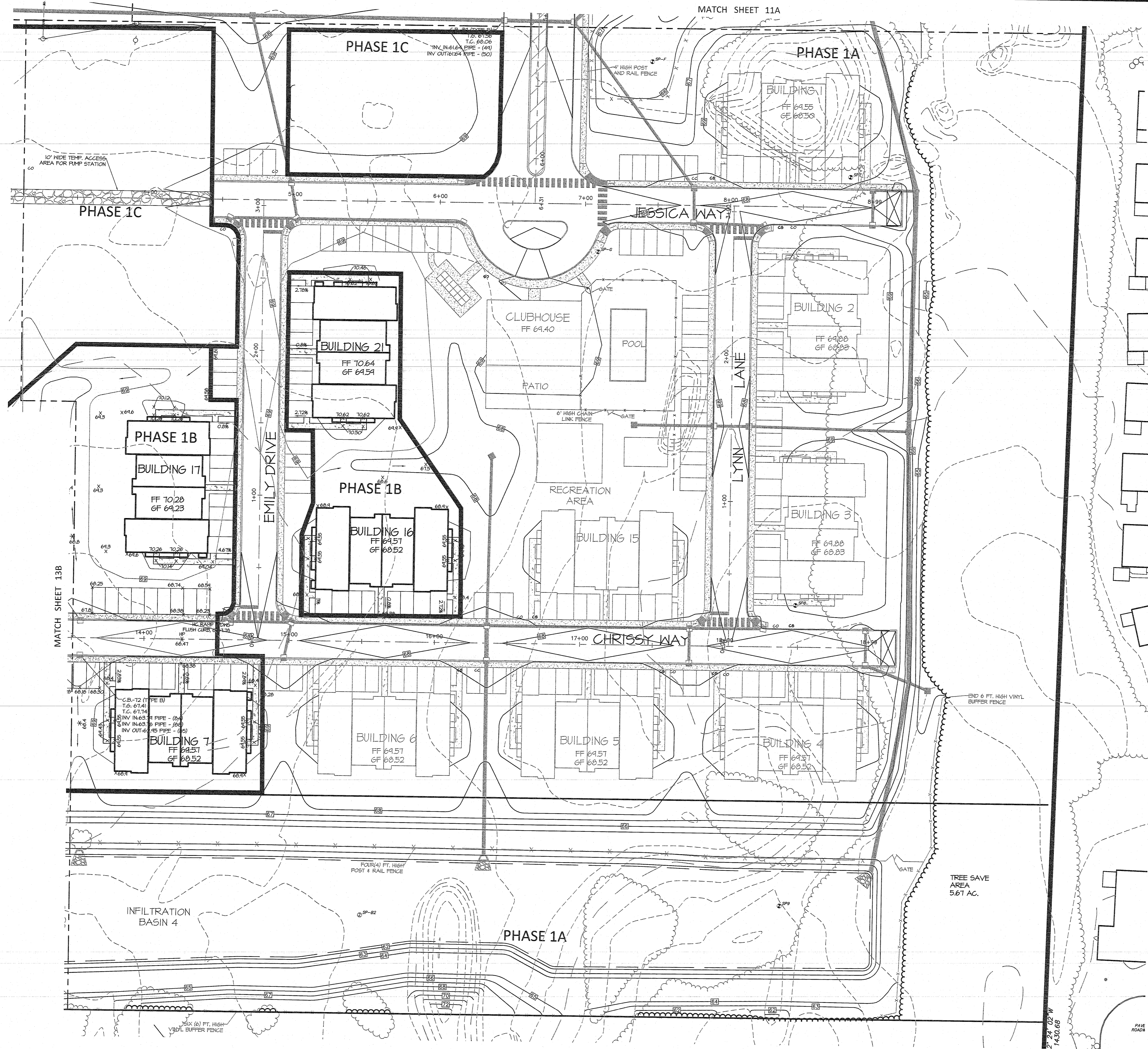
MATCH SHEET 13A

- LEGEND**
- - - - - 75' EXISTING CONTOUR
 - - - - - 75' PROPOSED CONTOUR
 - x (87.5) EXISTING SPOT ELEVATION
 - 75.42 PROPOSED SPOT ELEVATION
 - FF: 75.00 FINISH FLOOR ELEVATION
 - GF: 75.00 GARAGE FLOOR ELEVATION
 - BF: 75.00 BASEMENT FLOOR ELEVATION
 - ===== WOODS LINE



SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

DATE	REVISION	DRAWN	CHECKED	RELEASED																		
GRADING AND DRAINAGE PLAN-PHASE 1A																						
PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION LOT 15.01 ~ BLOCK 44																						
TAX MAP SHEET NO. 8 SITUATED IN MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY																						
FWH ASSOCIATES, P.A.		CIVIL ENGINEERS LAND SURVEYORS PLANNERS ARCHITECTS RESERVE SPECIALISTS ARCHITECTS FWHASSOCIATES.COM 1856 Rt. 9, Toms River, NJ 08756 T: 732.797.3100 F: 732.797.3223																				
Brian P. Murphy PROFESSIONAL ENGINEER N.J. LIC. NO. 42000		<table border="1"> <tr> <td>DRAWN BY</td> <td>DATE</td> </tr> <tr> <td>SA</td> <td>01/14/21</td> </tr> <tr> <td>CHECKED BY</td> <td>SCALE</td> </tr> <tr> <td>JS</td> <td>1"=30'</td> </tr> <tr> <td>DRAWN NO.</td> <td></td> </tr> <tr> <td>ISSUED BY</td> <td>PROJECT NO.</td> </tr> <tr> <td>BPM</td> <td>1423.0016</td> </tr> <tr> <td>SHEET NO.</td> <td></td> </tr> <tr> <td>12A</td> <td>49</td> </tr> </table>			DRAWN BY	DATE	SA	01/14/21	CHECKED BY	SCALE	JS	1"=30'	DRAWN NO.		ISSUED BY	PROJECT NO.	BPM	1423.0016	SHEET NO.		12A	49
DRAWN BY	DATE																					
SA	01/14/21																					
CHECKED BY	SCALE																					
JS	1"=30'																					
DRAWN NO.																						
ISSUED BY	PROJECT NO.																					
BPM	1423.0016																					
SHEET NO.																						
12A	49																					

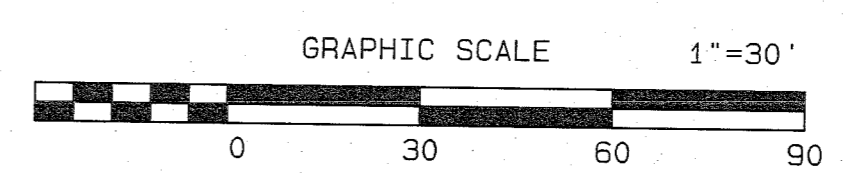


MATCH SHEET 11A

MATCH SHEET 13B

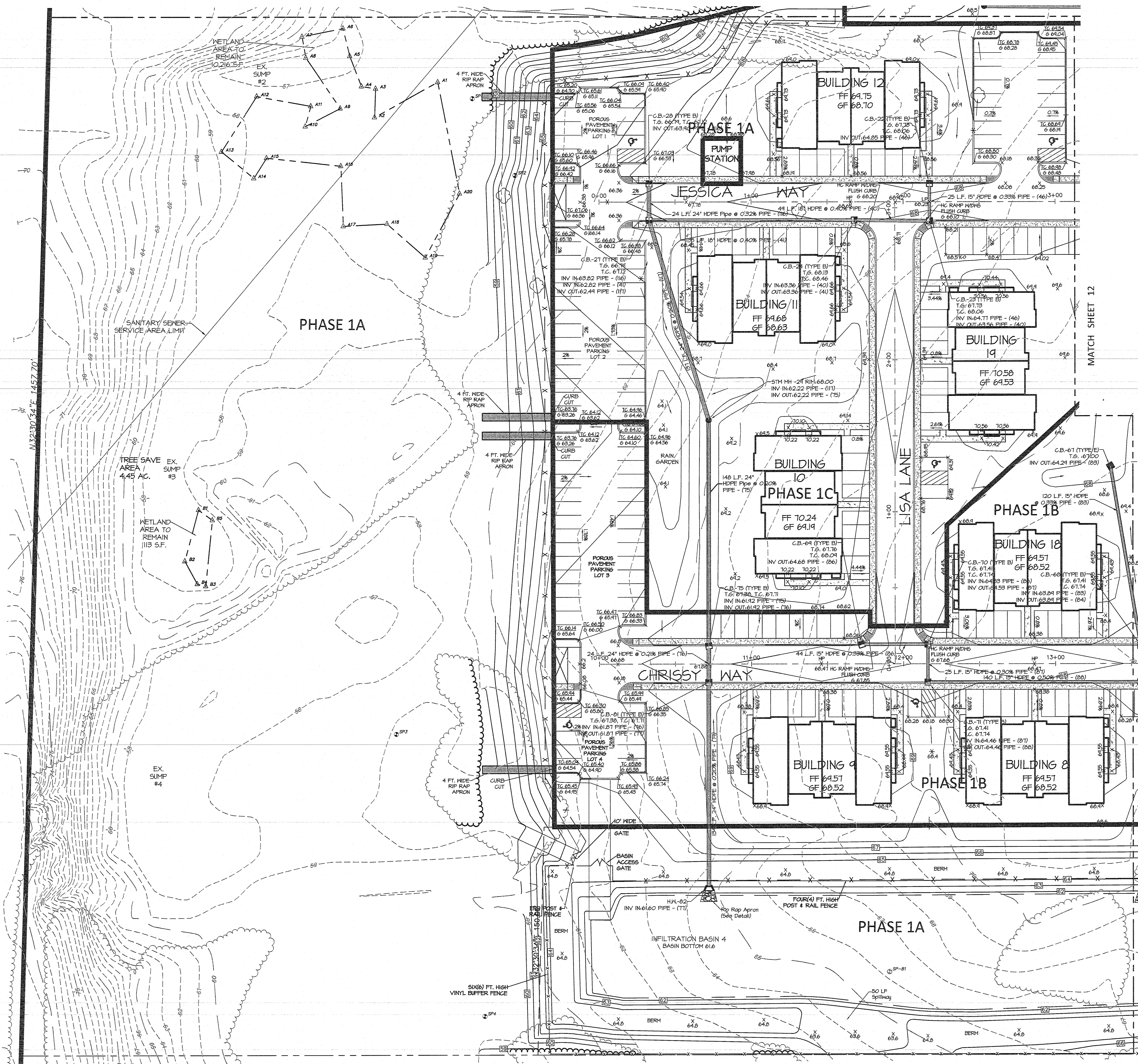
LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	PROPOSED STORM SEWER
	FINISH FLOOR ELEVATION
	GARAGE FLOOR ELEVATION
	BASEMENT FLOOR ELEVATION
	WOODSLINE



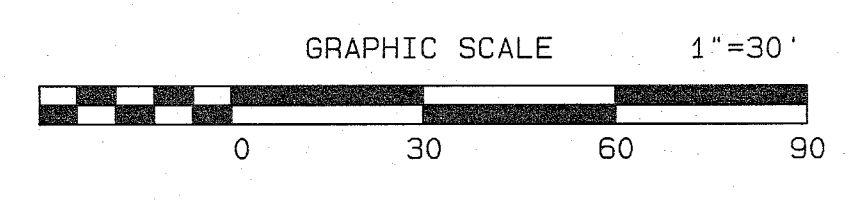
SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

DATE	REVISION	DRAWN	CHECKED	RELEASED
GRADING AND DRAINAGE PLAN-PHASE 1B				
PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION				
LOT 15.01 ~ BLOCK 44				
TAX MAP SHEET NO. 8				
SITUATED IN				
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY				
		CIVIL ENGINEERS LAND SURVEYORS PLANNERS ARCHITECTS LANDSCAPE ARCHITECTS RESERVE SPECIALISTS ARCHITECTS FWHASSOCIATES.COM 1880 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223		
Brian P. Murphy PROFESSIONAL ENGINEER N.J. LIC. NO. 42000		DRAWN BY JS CHECKED BY JS PROJECT NO. 1423.0016 SHEET NO. 12B	DATE 01/14/21 SCALE 1"=30' PROJECT NO. 1423.0016 SHEET NO. 49	



LEGEND

-75-	EXISTING CONTOUR
-75.42-	PROPOSED CONTOUR
x (87.5)	EXISTING SPOT ELEVATION
75.42	PROPOSED SPOT ELEVATION
—	PROPOSED STORM SEWER
F.F. 75.00	FINISH FLOOR ELEVATION
G.F. 75.00	GARAGE FLOOR ELEVATION
B.F. 75.00	BASEMENT FLOOR ELEVATION
~~~~~	WOODSLINE



SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

01/14/21	REV. PER PHASING LIMITS	SA	JS
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
5/20/20	REV. PER NDOT LETTER 4-13-2020	CSM	JS
10/22/19	REV. PER CLIENT REQUESTED REVISIONS	CSM	JS
9/24/19	REV. BUTTER FENCING PER NUSEP	CSM	JS
3/18/19	REV. PER CAPRA MEETING 2/14/19	CSM	JS
11/7/18	REV. PER CAPRA STORMWATER COMMENTS 10/31/18	SA	JS

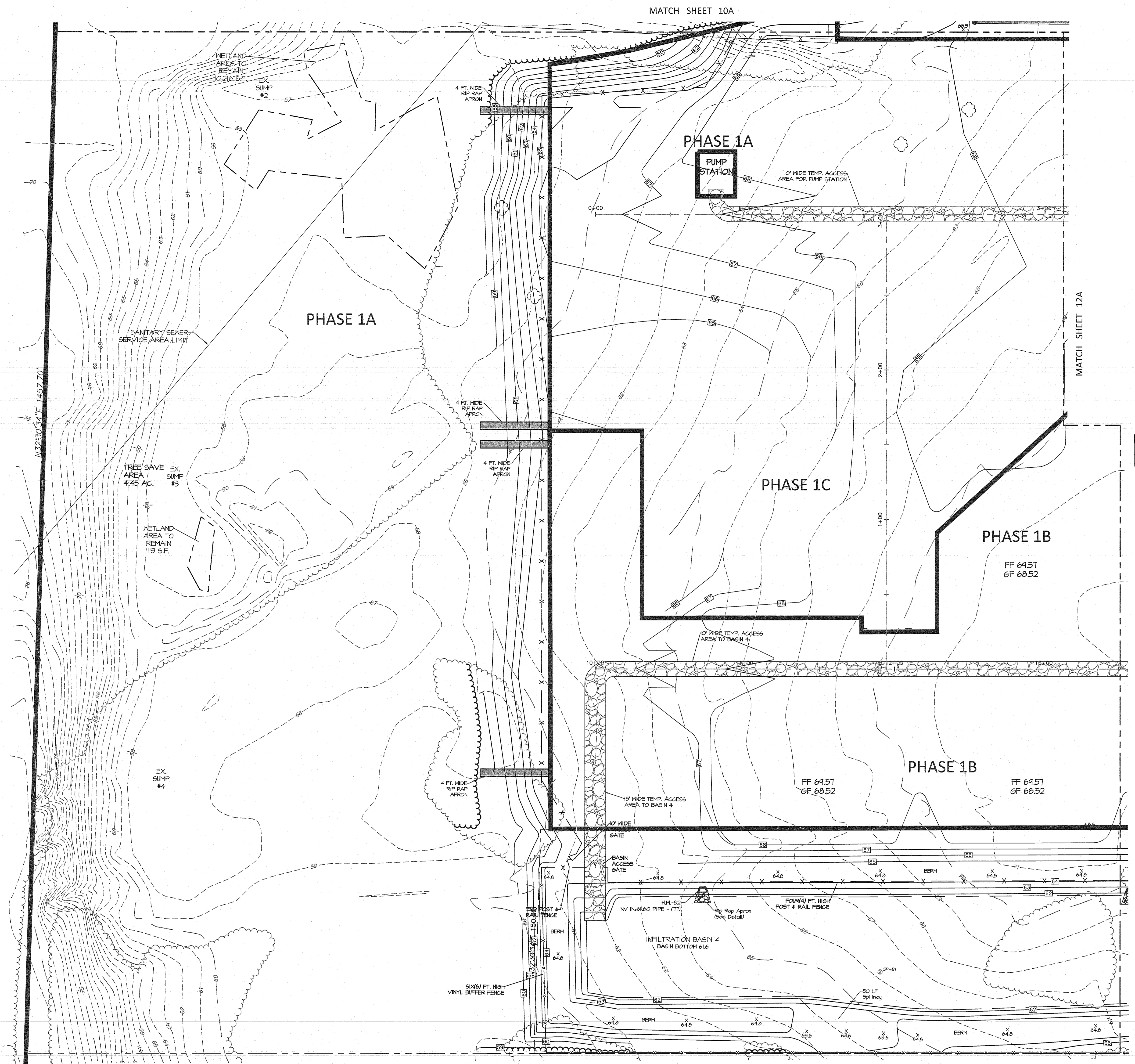
DATE	REVISION	DRAWN	CHECKED	RELEASED
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**GRADING AND DRAINAGE PLAN**  
 PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION  
**LOT 15.01 ~ BLOCK 44**  
 TAX MAP SHEET NO. 8  
 SITUATED IN  
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

**FWH ASSOCIATES, P.A.**  
 CIVIL ENGINEERS  
 LAND SURVEYORS  
 PLANNERS  
 LANDSCAPE ARCHITECTS  
 RESERVE SPECIALISTS  
 ARCHITECTS  
**FWHASSOCIATES.COM**  
 1850 Rt. 9, Torus River, NJ 08756 T: 732.797.3100 F: 732.797.3223

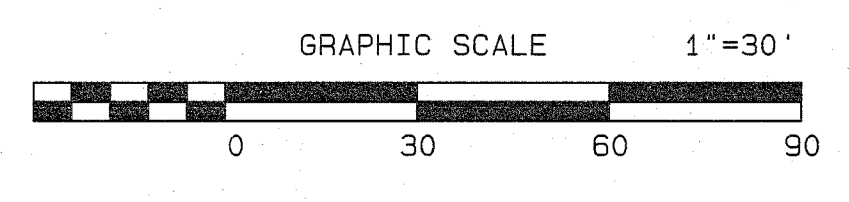
**Brian P. Murphy**  
 PROFESSIONAL ENGINEER  
 N.J. LIC. NO. 42000

DESIGNED BY	CSM	DATE	8/10/18
DRAWN BY	JS	SCALE	1"=30'
CHECKED BY	JS	DRAWN NO.	
REVISIONS BY	BPM	PROJECT NO.	1423.0016
DATE		SHEET NO.	13
		TOTAL SHEETS	49



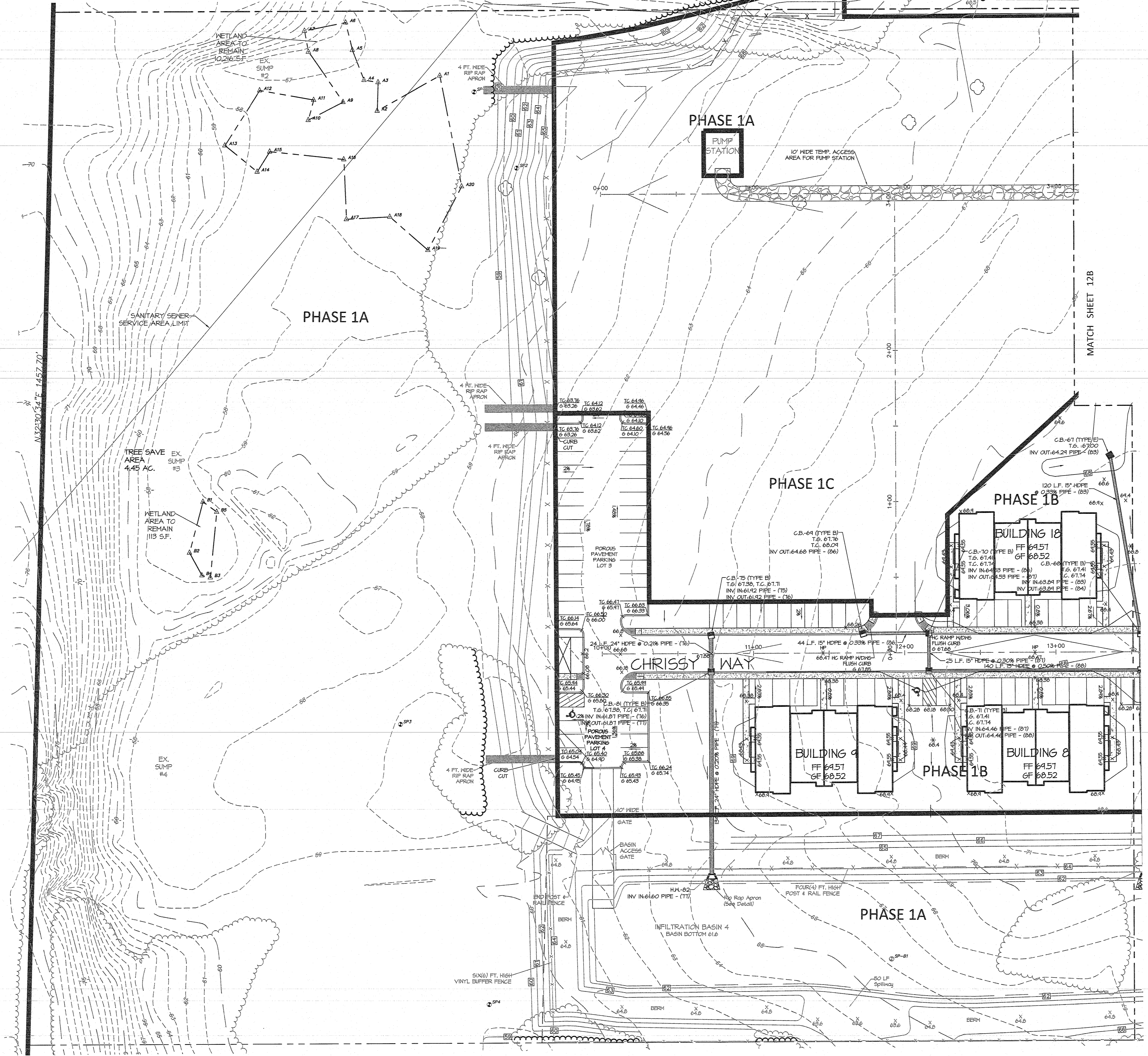
M3230.24 F 1457.70'

- LEGEND**
- 75- EXISTING CONTOUR
  - 85- PROPOSED CONTOUR
  - x (87.5) EXISTING SPOT ELEVATION
  - 75.42 PROPOSED SPOT ELEVATION
  - PROPOSED STORM SEWER
  - PROPOSED SANITARY SEWER
  - FF: 75.00 FINISH FLOOR ELEVATION
  - GF: 75.00 GARAGE FLOOR ELEVATION
  - BF: 75.00 BASEMENT FLOOR ELEVATION
  - WOODS LINE



SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

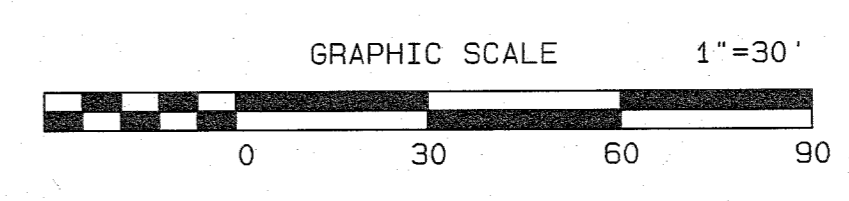
DATE	REVISION	DRAWN	CHECKED	RELEASED
<b>GRADING AND DRAINAGE PLAN-PHASE 1A</b>				
PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION <b>LOT 15.01 ~ BLOCK 44</b>				
TAX MAP SHEET NO. 8 SITUATED IN MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY				
		CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS RESERVE SPECIALISTS ARCHITECTS		
1856 Rt. 9, Toms River, NJ 08756 T: 732.797.3100 F: 732.797.3223		<b>FWH ASSOCIATES.COM</b>		
Brian P. Murphy		DRAWN BY CSM	DATE 01/14/21	SCALE 1"=30'
PROFESSIONAL ENGINEER N.J. LIC. NO. 42000		CHECKED BY JS	DRAWER NO.	PROJECT NO. 1423.0016
		DESIGNED BY JS	PROJECT NO.	SHEET NO. 1.3A
		REVISED BY BPM	PROJECT NO.	SHEET NO. 4-9



113230.34' ± 1457.70'

MATCH SHEET 12B

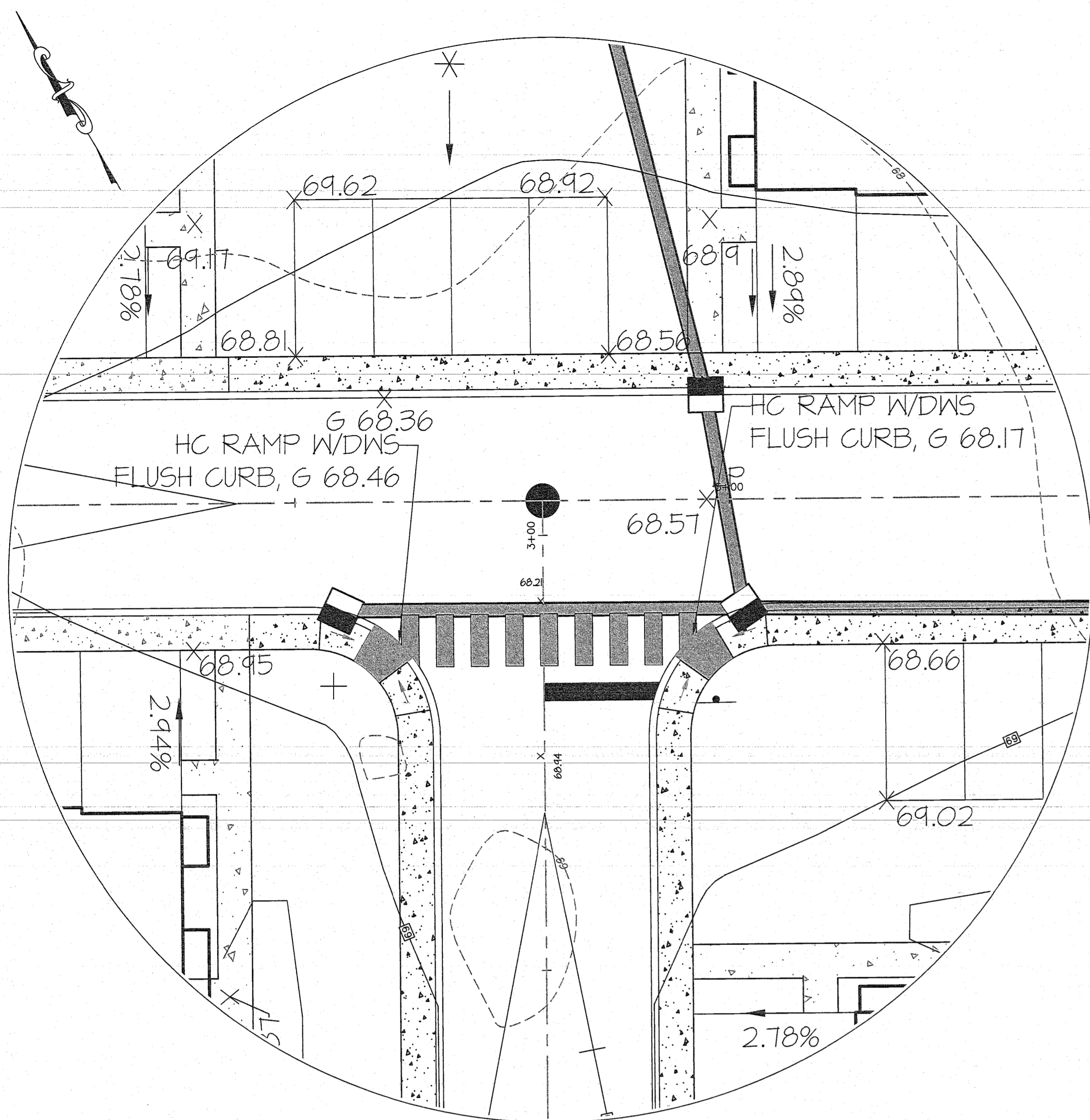
- LEGEND**
- 75 — EXISTING CONTOUR
  - - - 75 - - - PROPOSED CONTOUR
  - x (87.5) EXISTING SPOT ELEVATION
  - 75.42 PROPOSED SPOT ELEVATION
  - 12" — PROPOSED STORM SEWER
  - FF: 75.00 FINISH FLOOR ELEVATION
  - GF: 75.00 GARAGE FLOOR ELEVATION
  - BF: 75.00 BASEMENT FLOOR ELEVATION
  - ~~~~~ WOODSLINE



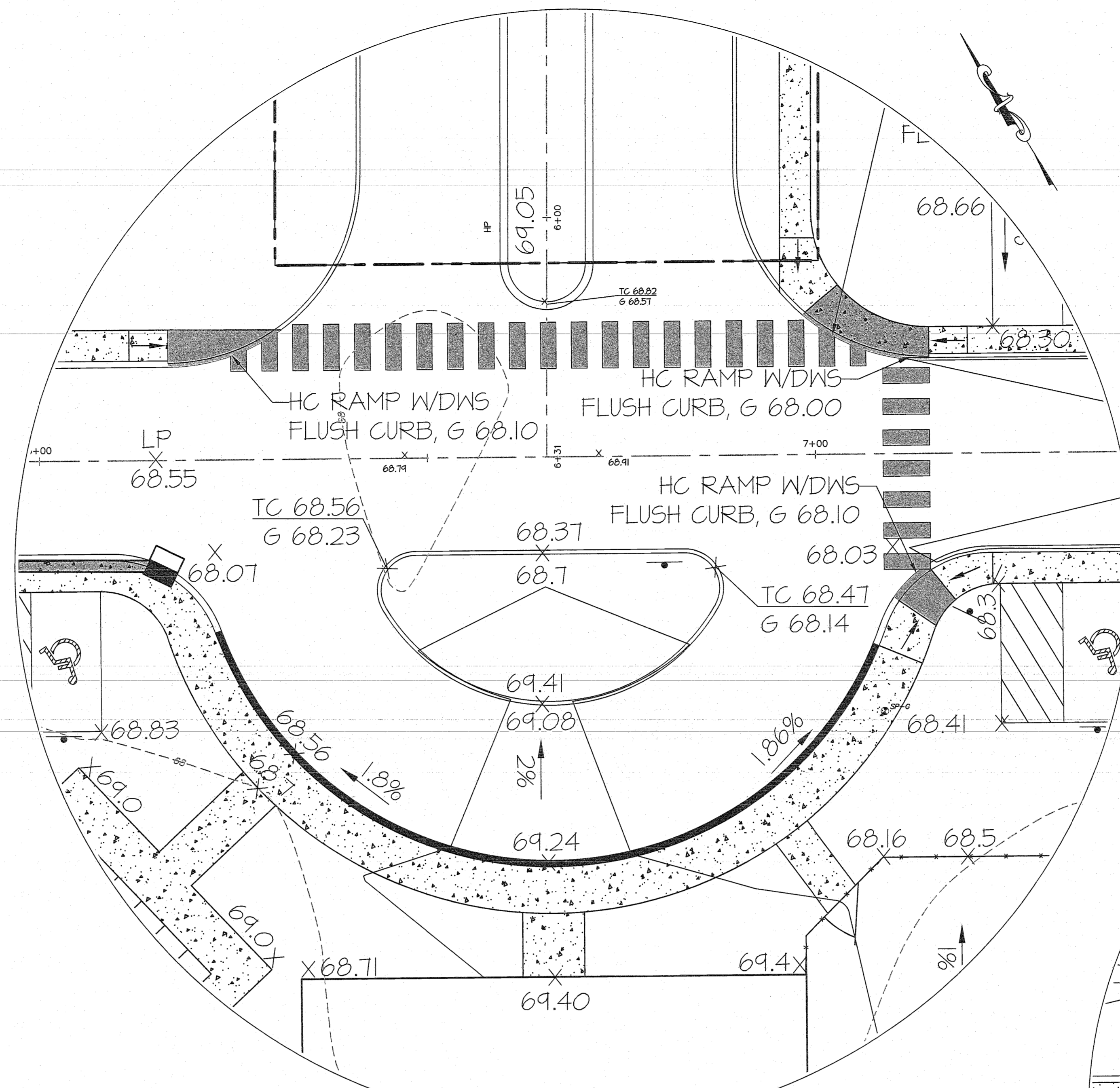
SEE SHEET 2 FOR ALL GRADING AND DRAINAGE NOTES

DATE	REVISION	DRAWN	CHECKED	RELEASED																		
<b>GRADING AND DRAINAGE PLAN-PHASE 1B</b>																						
PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION <b>LOT 15.01 ~ BLOCK 44</b>																						
TAX MAP SHEET NO. 8 SITUATED IN MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY																						
			CIVIL ENGINEERS LAND SURVEYORS PLANNERS ARCHITECTS RESERVE SPECIALISTS ARCHITECTS																			
FWH ASSOCIATES, P.A.			FWHASSOCIATES.COM																			
1858 FT. B. Toms River, NJ 08756 T: 732.797.3100 F: 732.797.3225																						
<p style="font-size: large; margin: 0;">Brian P. Murphy</p> <p style="font-size: small; margin: 0;">PROFESSIONAL ENGINEER N.J. LIC. NO. 42000</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DESIGN BY</td> <td style="width: 50%;">DATE</td> </tr> <tr> <td>CSM</td> <td>01/14/21</td> </tr> <tr> <td>CHECKED BY</td> <td>SCALE</td> </tr> <tr> <td>JS</td> <td>1"=30'</td> </tr> <tr> <td>DESIGNED BY</td> <td>DRAWN BY</td> </tr> <tr> <td>JS</td> <td></td> </tr> <tr> <td>REVIEWED BY</td> <td>CHECKED BY</td> </tr> <tr> <td>BPM</td> <td>1423.0016</td> </tr> <tr> <td>SHEET NO.</td> <td></td> </tr> <tr> <td>13B</td> <td>49</td> </tr> </table>	DESIGN BY	DATE	CSM	01/14/21	CHECKED BY	SCALE	JS	1"=30'	DESIGNED BY	DRAWN BY	JS		REVIEWED BY	CHECKED BY	BPM	1423.0016	SHEET NO.		13B	49
DESIGN BY	DATE																					
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BPM	1423.0016																					
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13B	49																					

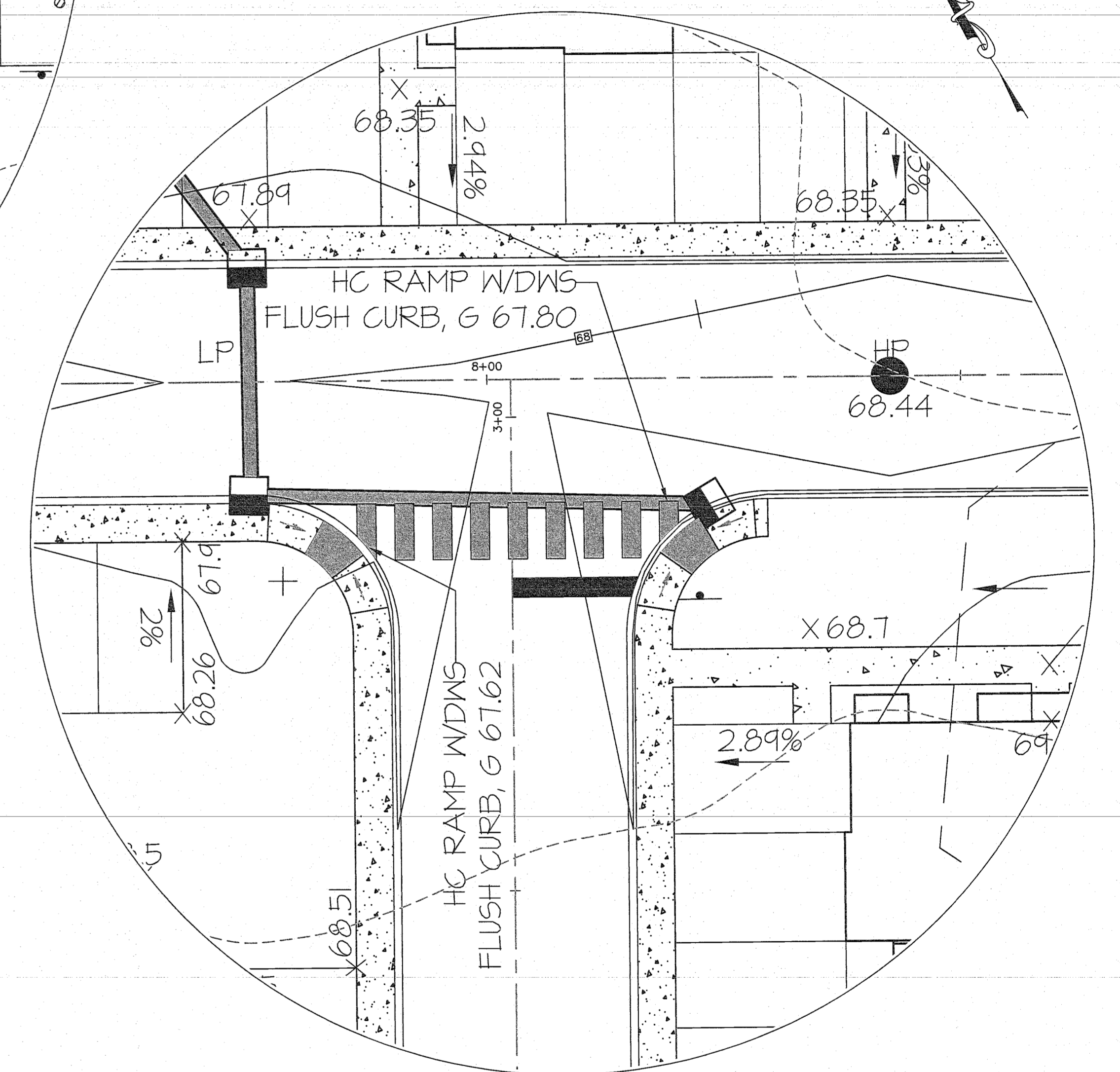
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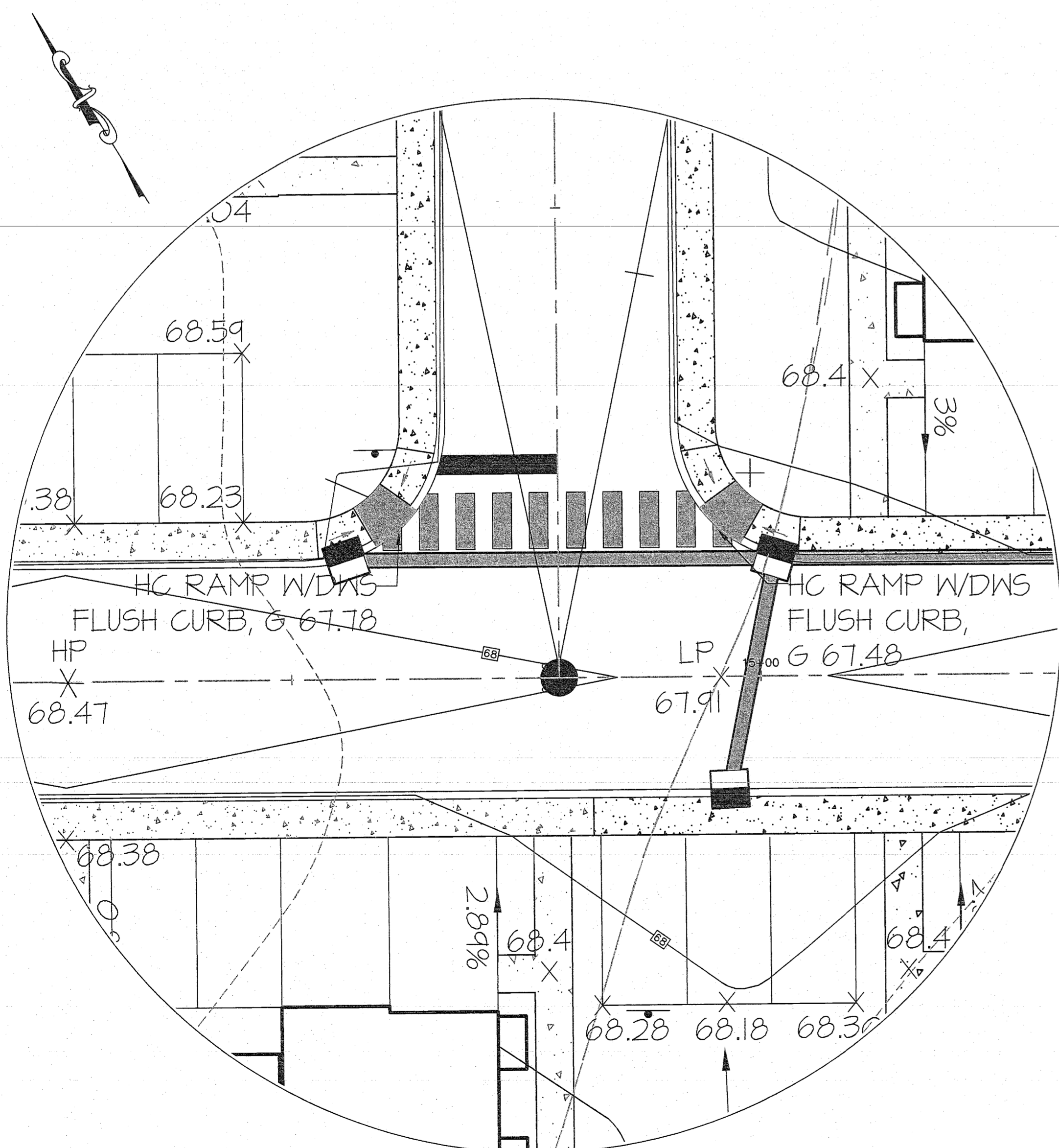
**HANDICAP RAMP DETAIL**  
(JESSICA WAY & EMILY DRIVE DRIVE, N.W.)



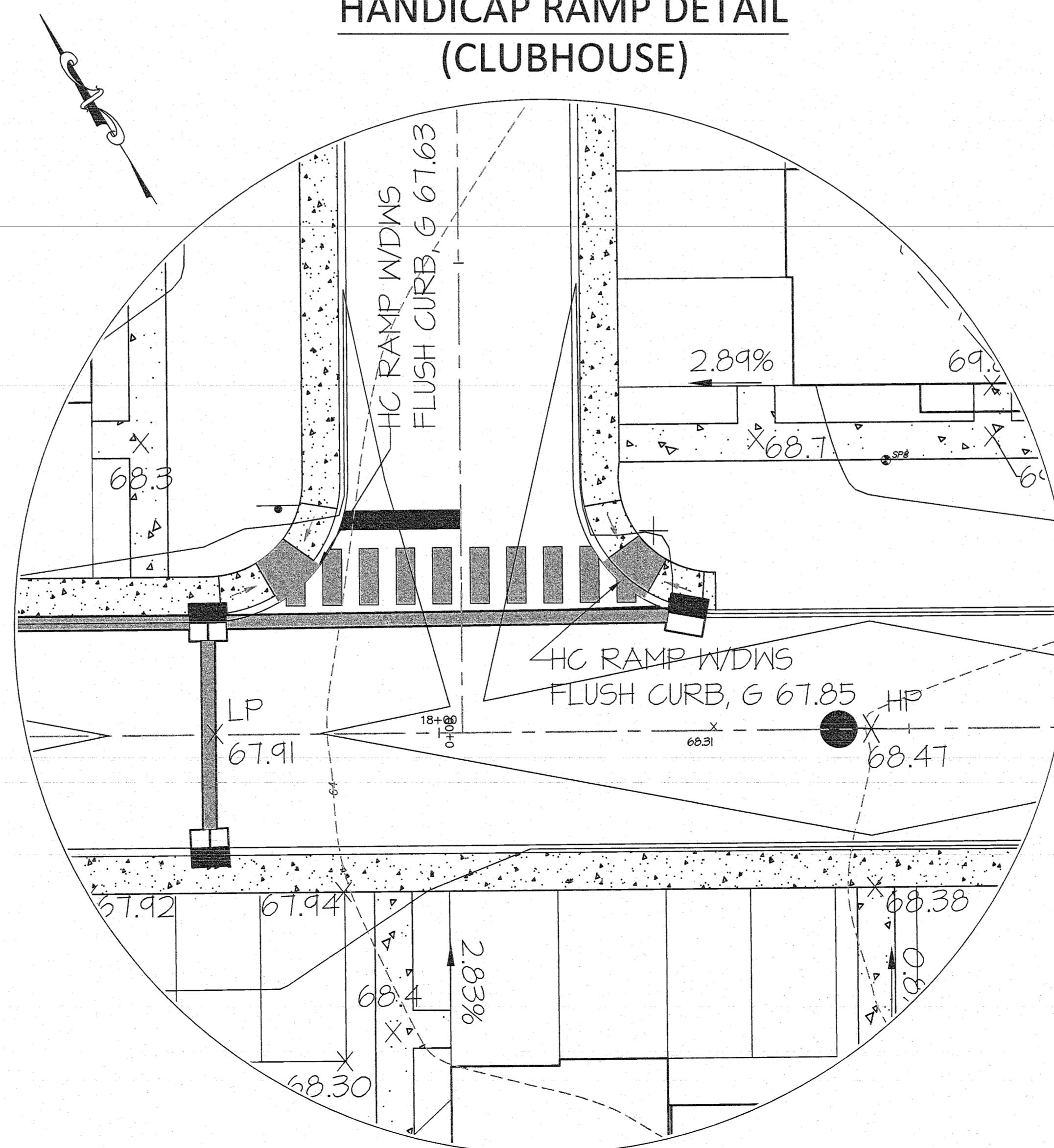
**HANDICAP RAMP DETAIL**  
(CLUBHOUSE)



**HANDICAP RAMP DETAIL**  
(JESSICA WAY & LYNN LANE, N.E.)

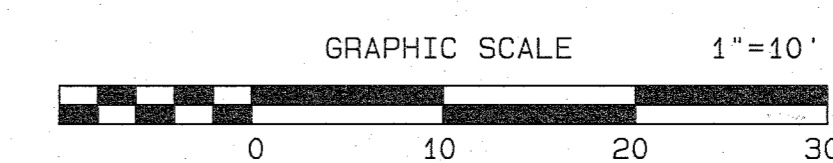


**HANDICAP RAMP DETAIL**  
(EMILY DRIVE DRIVE & CHRISSY WAY, S.W.)



**HANDICAP RAMP DETAIL**  
(LYNN LANE & CHRISSY WAY, S.E.)

- LEGEND**
- 75 — EXISTING CONTOUR
  - 75 — PROPOSED CONTOUR
  - x (87.5) EXISTING SPOT ELEVATION
  - 75.42 PROPOSED SPOT ELEVATION
  - PROPOSED STORM SEWER
  - FF: 15.00 FINISH FLOOR ELEVATION
  - G.F. 15.00 GARAGE FLOOR ELEVATION
  - B.F. 15.00 BASEMENT FLOOR ELEVATION
  - ~~~~~ WOODS LINE



01/14/21	REV. PER PHASING LIMITS	SA	JS
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
DATE	REVISION	DRAWN	CHECKED
		RELEASED	

**HANDICAP RAMP DETAILS**

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION  
**LOT 15.01 ~ BLOCK 44**  
TAX MAP SHEET NO. 8  
SITUATED IN  
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

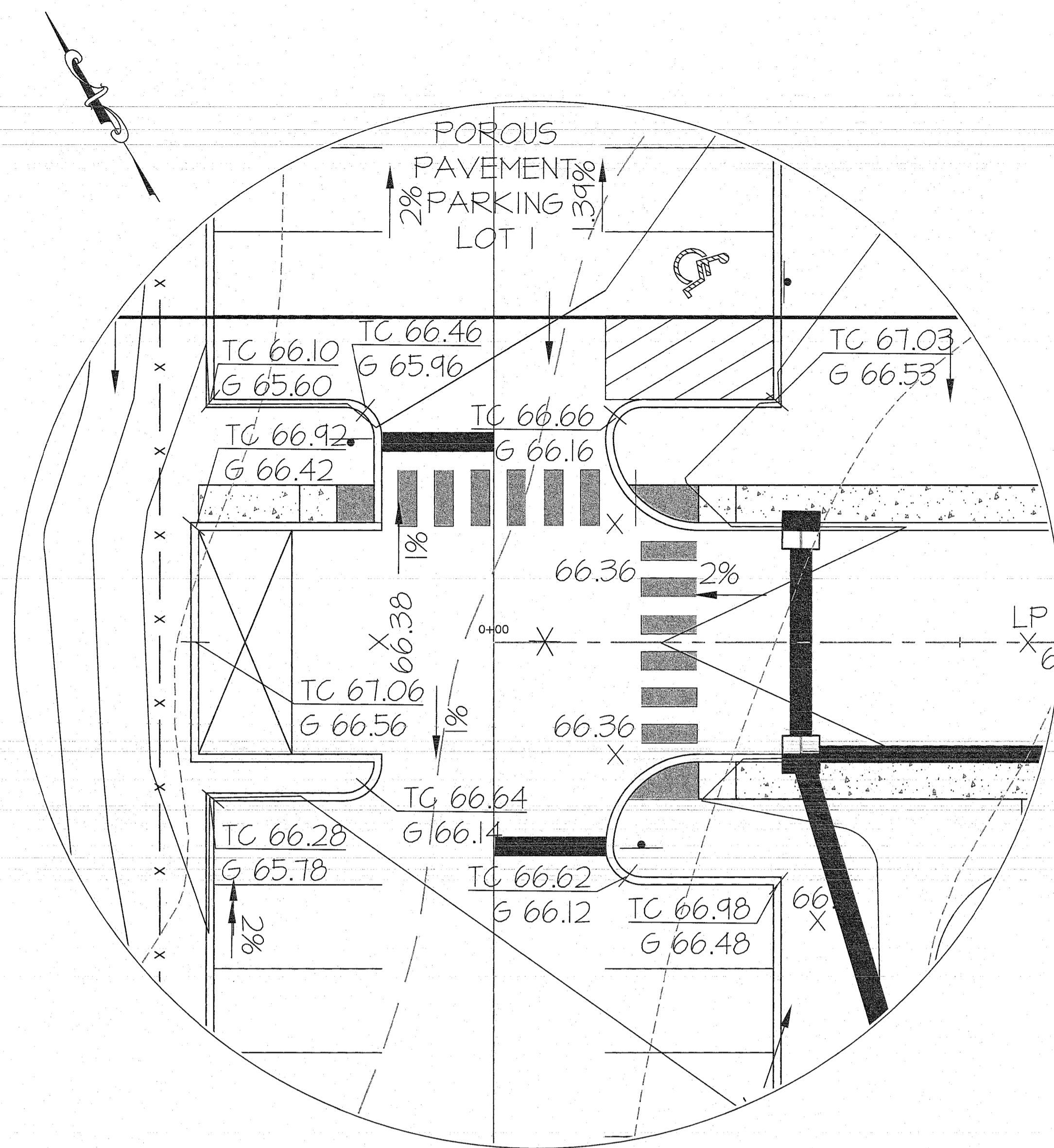
**FWH ASSOCIATES, P.A.**  
1856 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223

CIVIL ENGINEERS  
LAND SURVEYORS  
PLANNERS  
LANDSCAPE ARCHITECTS  
RESERVE SPECIALISTS  
ARCHITECTS

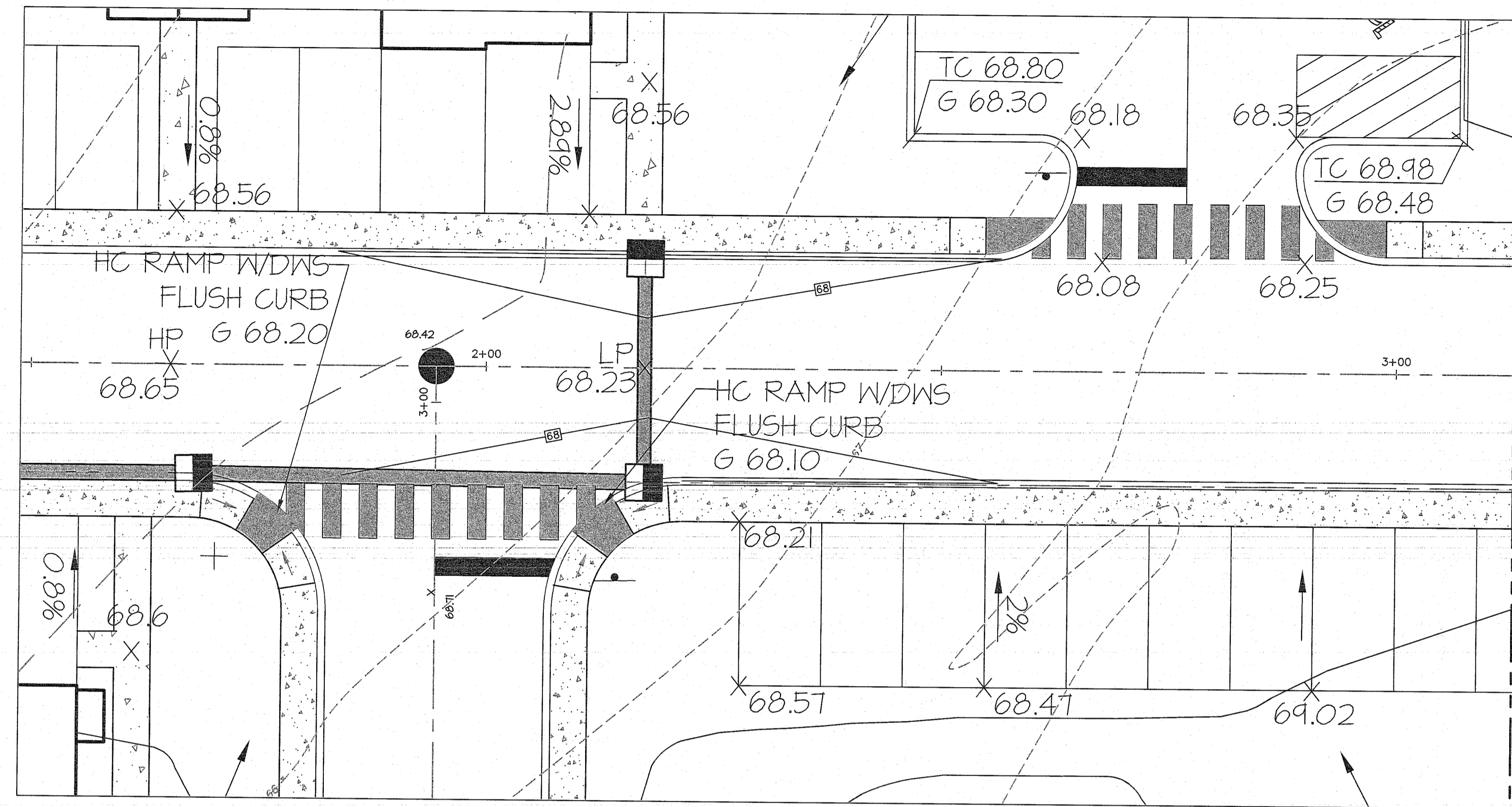
**FWHASSOCIATES.COM**

DRAWN BY: CSM DATE: 10/22/19  
CHECKED BY: JS SCALE: 1"=10'  
DESIGNED BY: JS DRAWN NO.: PD-170  
PROJECT NO.: 1423.0016  
PROJECT NO.: 13C 49

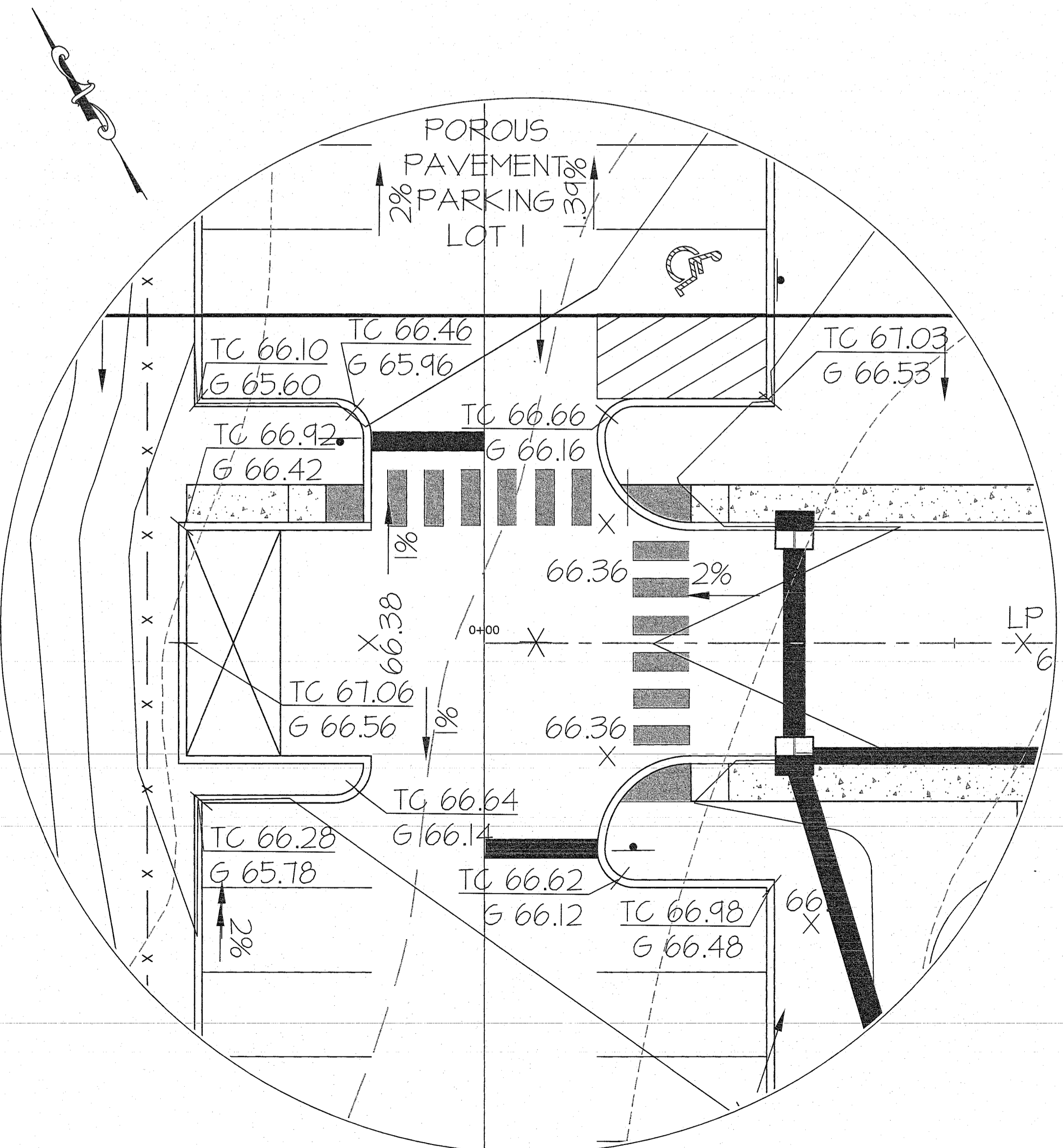
**Brian P. Murphy**  
PROFESSIONAL ENGINEER  
N.J. LIC. NO. 42000



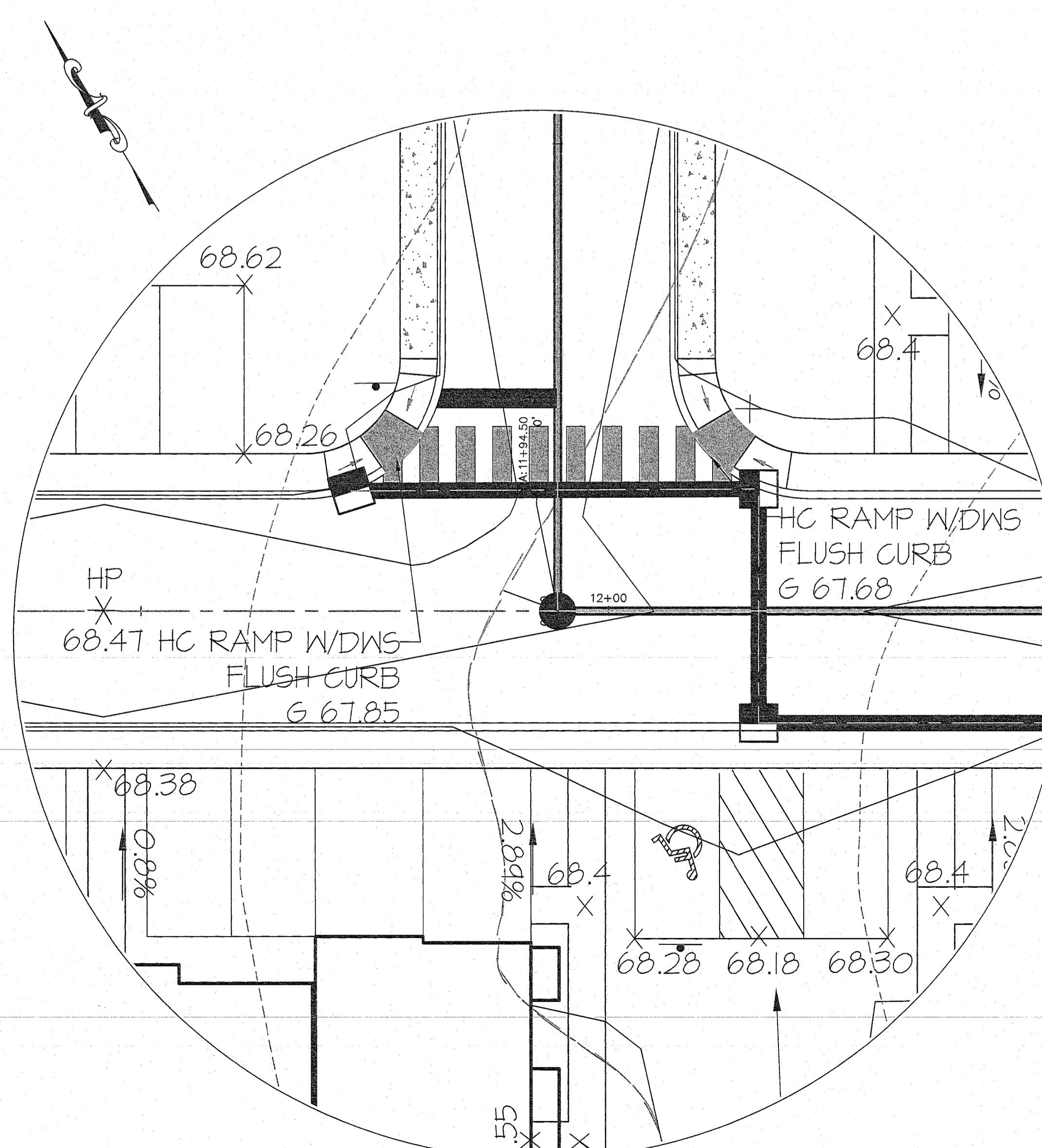
HANDICAP RAMP DETAIL  
(JESSICA WAY, N.W.)



HANDICAP RAMP DETAIL  
(JESSICA WAY & LISA LANE, NORTH)

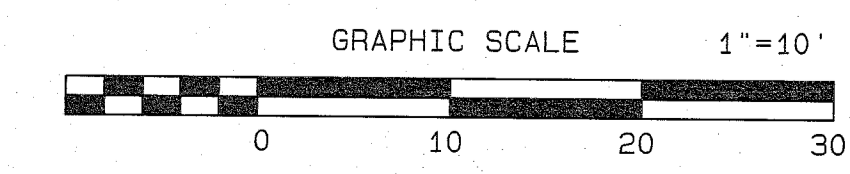


HANDICAP RAMP DETAIL  
(CHRISSY WAY TERMINUS, S.W.)



HANDICAP RAMP DETAIL  
(LISA LANE & CHRISSY WAY, SOUTH)

- LEGEND
- 75 — EXISTING CONTOUR
  - 87.5 — PROPOSED CONTOUR
  - x (87.5) EXISTING SPOT ELEVATION
  - 15.42 x PROPOSED SPOT ELEVATION
  - — PROPOSED STORM SEWER
  - FF: 75.00 FINISH FLOOR ELEVATION
  - GF: 75.00 GARAGE FLOOR ELEVATION
  - BF: 75.00 BASEMENT FLOOR ELEVATION
  - ~~~~~ WOODS LINE



01/14/21	REV. PER PHASING LIMITS	SA	JS
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
DATE	REVISION	DRAWN	CHECKED
			RELEASED

**HANDICAP RAMP DETAILS**

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION  
**LOT 15.01 ~ BLOCK 44**

TAX MAP SHEET NO. 8  
SITUATED IN  
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

**FWH ASSOCIATES, P.A.**

CIVIL ENGINEERS  
LAND SURVEYORS  
PLANNERS  
LANDSCAPE ARCHITECTS  
RESERVE SPECIALISTS  
ARCHITECTS

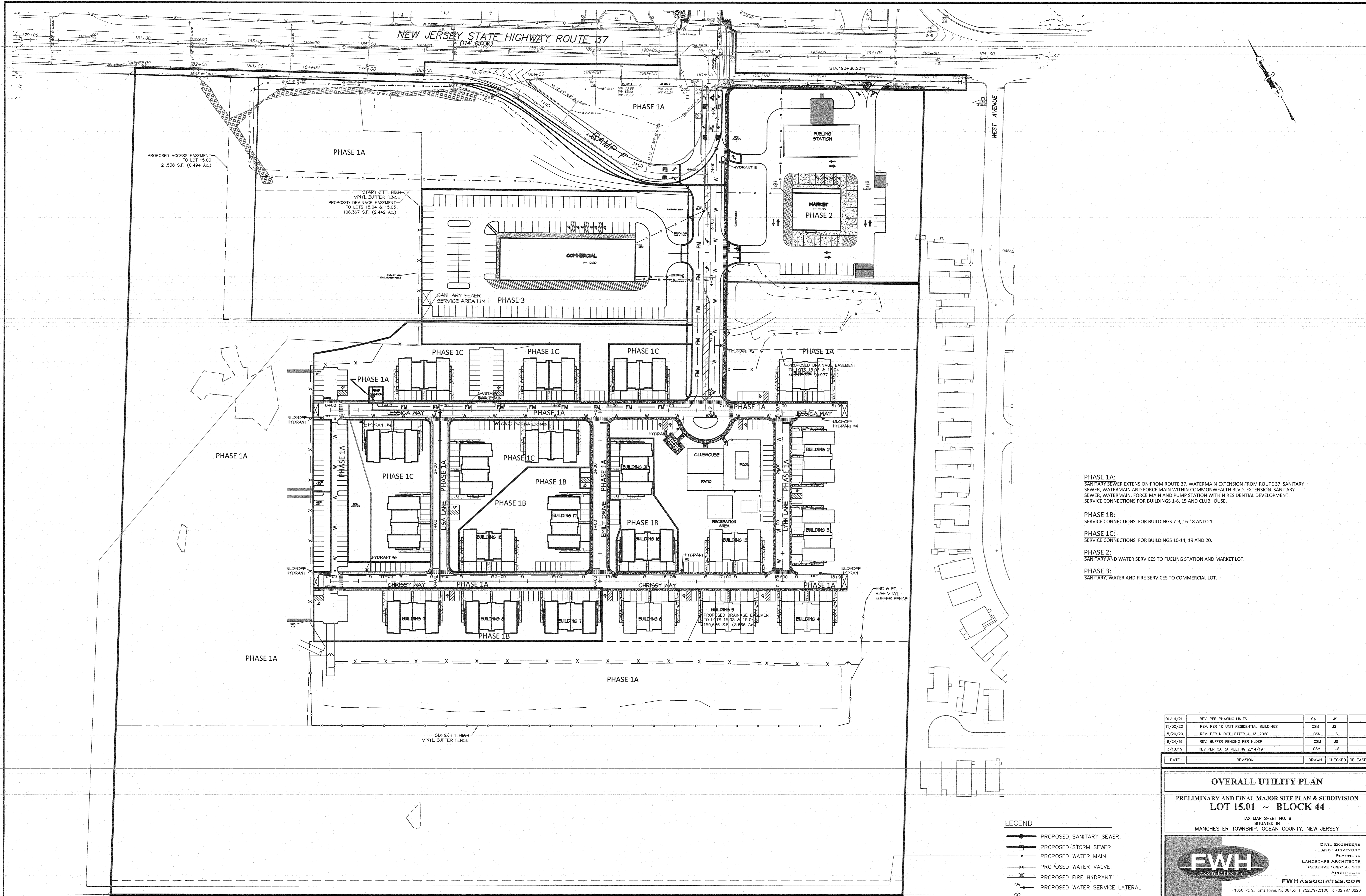
**FWHASSOCIATES.COM**

1866 Rt. 9, Toms River, NJ 08756 T: 732.797.3100 F: 732.797.3223

**Brian P. Murphy**

PROFESSIONAL ENGINEER  
N.J. LIC. NO. 42000

DATE	CSM	DATE	10/22/19
DESIGNED BY	JS	SCALE	1"=10'
CHECKED BY	JS	DRAWING NO.	PD-170
REVISION BY	BPM	PROJECT NO.	1423.0016
DATE		DATE	
			49



**PHASE 1A:**  
SANITARY SEWER EXTENSION FROM ROUTE 37. WATERMAIN EXTENSION FROM ROUTE 37. SANITARY SEWER, WATERMAIN AND FORCE MAIN WITHIN COMMONWEALTH BLVD. EXTENSION. SANITARY SEWER, WATERMAIN, FORCE MAIN AND PUMP STATION WITHIN RESIDENTIAL DEVELOPMENT. SERVICE CONNECTIONS FOR BUILDINGS 1-6, 15 AND CLUBHOUSE.

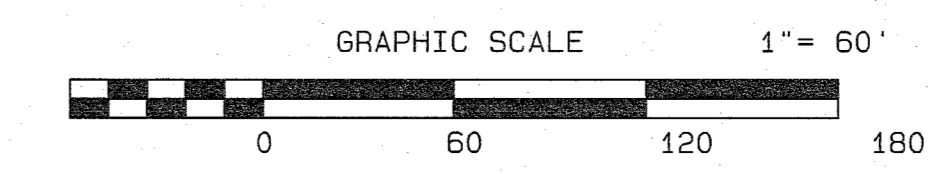
**PHASE 1B:**  
SERVICE CONNECTIONS FOR BUILDINGS 7-9, 16-18 AND 21.

**PHASE 1C:**  
SERVICE CONNECTIONS FOR BUILDINGS 10-14, 19 AND 20.

**PHASE 2:**  
SANITARY AND WATER SERVICES TO FUELING STATION AND MARKET LOT.

**PHASE 3:**  
SANITARY, WATER AND FIRE SERVICES TO COMMERCIAL LOT.

- LEGEND**
- PROPOSED SANITARY SEWER
  - PROPOSED STORM SEWER
  - ▲— PROPOSED WATER MAIN
  - PROPOSED WATER VALVE
  - X— PROPOSED FIRE HYDRANT
  - PROPOSED WATER SERVICE LATERAL
  - PROPOSED SANITARY SEWER LATERAL



SEE SHEET 2 FOR ALL UTILITY NOTES

01/14/21	REV. PER PHASING LIMITS	SA	JS
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS
5/20/20	REV. PER N.JDOT LETTER 4-13-2020	CSM	JS
9/24/19	REV. BUFFER FENCING PER N.JDOT	CSM	JS
3/18/19	REV. PER CARRA MEETING 2/14/19	CSM	JS

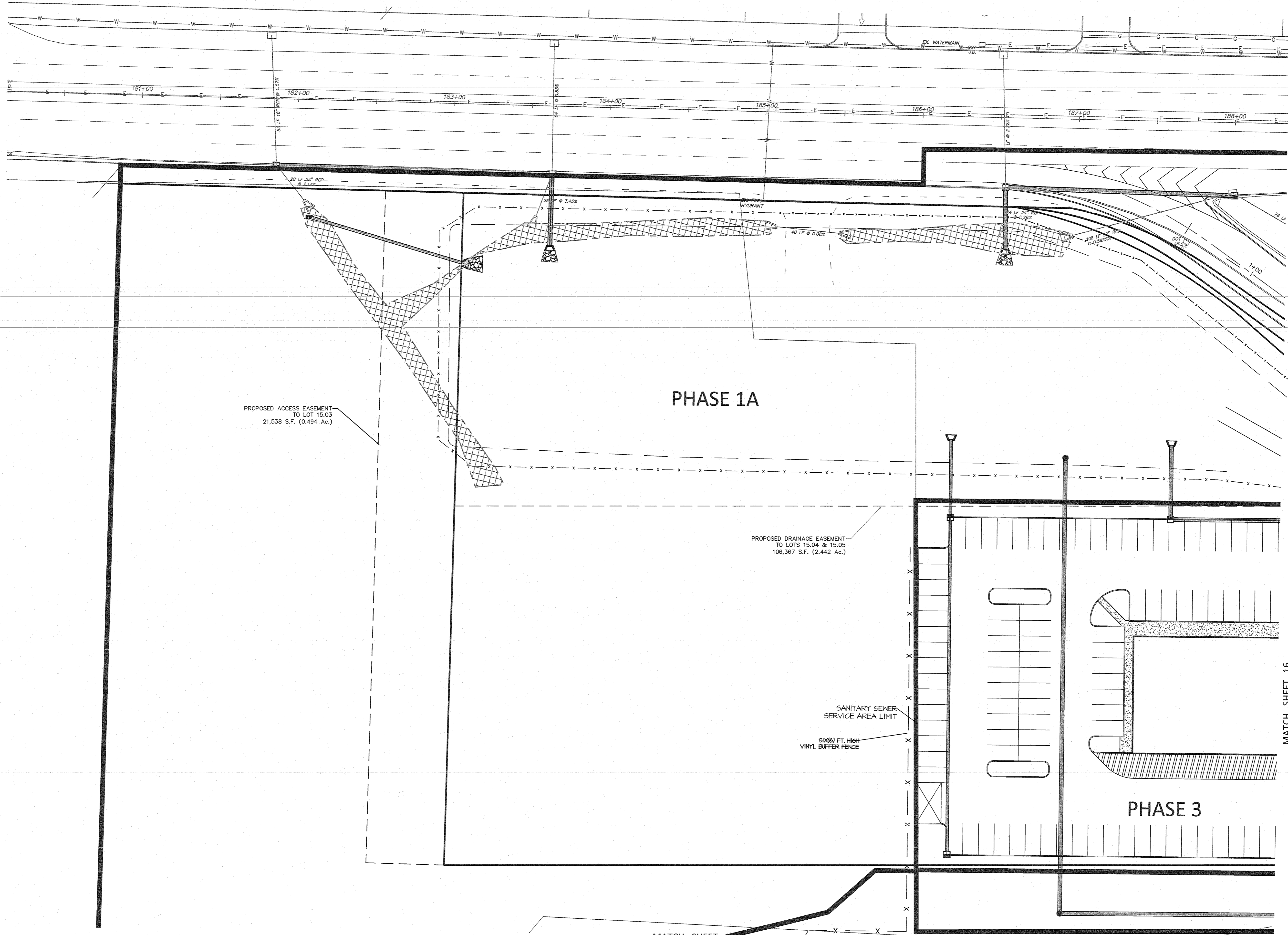
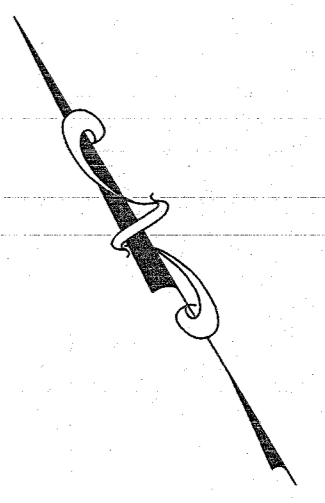
DATE	REVISION	DRAWN	CHECKED	RELEASED
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**OVERALL UTILITY PLAN**  
 PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION  
**LOT 15.01 ~ BLOCK 44**  
 TAX MAP SHEET NO. 8  
 SITUATED IN  
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

**FWH ASSOCIATES, P.A.**  
 CIVIL ENGINEERS  
 LAND SURVEYORS  
 PLANNERS  
 ARCHITECTS  
 RESERVE SPECIALISTS  
 ARCHITECTS  
**FWHASSOCIATES.COM**  
 1856 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223

**Brian P. Murphy**  
 PROFESSIONAL ENGINEER  
 N.J. LIC. NO. 42000

DRAWN BY	CSM	DATE	8/10/18
DESIGNED BY	JS	SCALE	1"=60'
CHECKED BY	JS	DRAWING NO.	PD-170
RELEASED BY	BPM	PRESBY. NO.	1423.0016
SHEET NO.	14	TOTAL SHEETS	49



Crossing #	Sanitary	Water	Storm	Clearance	C.C.
1	inv 62.53		inv 64.68	1.25'	
2	inv 61.57		inv 65.15	2.68'	
3	inv 60.89		inv 64.81	3.42'	
4	inv 59.82		inv 62.4	1.61'	
5	inv 59.38		inv 64.27	3.92'	
6	inv 62.25		inv 64.49	2.71'	
7	inv 61.77		inv 63.29	0.95'	
8	inv 61.28		inv 64.49	2.31'	
9	inv 60.69		inv 63.84	2.25'	
10	inv 60.20		inv 64.49	3.39'	
11	inv 59.60		inv 62.00	1.44'	
12	inv 58.90		inv 62.78	2.98'	
13	inv 58.42		inv 64.36	5.04'	
14	inv 65.01	inv 68.43		2.71'	
15		inv 59.79	inv 61.57	0.92'	
16	inv 62.21	inv 64.42		1.50'	
17		inv 62.84	inv 64.72	1.00'	
18		inv 63.24	inv 65.32	1.00'	
19		inv 62.80	inv 64.78	1.00'	
20		inv 60.45	inv 62.42	1.00'	
21		inv 60.23	inv 64.19	3.06'	
22	inv 63.08			4.48'	
23	inv 57.89	inv 63.51	inv 64.39	1.00'	
24		inv 60.95	inv 62.81	1.00'	
25	inv 58.89	inv 61.95	inv 62.81	2.95'	
26		inv 60.06	inv 62.00	1.00'	
27		inv 63.65	inv 64.52	1.00'	
28		inv 62.00	inv 63.88	1.00'	
29		inv 62.00	inv 64.45	1.57'	
30		inv 61.35	inv 62.29	1.00'	
31		inv 62.58	inv 64.46	1.00'	
32		inv 62.72	inv 64.60	1.14'	
33		inv 62.43	inv 64.69	1.38'	
34		inv 62.43	inv 64.81	1.57'	
35	inv 65.87		inv 62.08	1.57'	

PROPOSED ACCESS EASEMENT TO LOT 15.03  
21,538 S.F. (0.494 Ac.)

PHASE 1A

PROPOSED DRAINAGE EASEMENT TO LOTS 15.04 & 15.05  
106,367 S.F. (2.442 Ac.)

SANITARY SEWER SERVICE AREA LIMIT  
SIX(6) FT. HIGH VINYL BUFFER FENCE

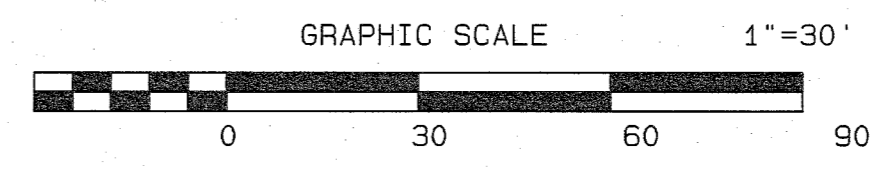
PHASE 3

MATCH SHEET 18

MATCH SHEET 16

LEGEND

- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- ▲— PROPOSED WATER MAIN
- x— PROPOSED WATER VALVE
- *— PROPOSED FIRE HYDRANT
- PROPOSED WATER SERVICE LATERAL
- PROPOSED SANITARY SEWER LATERAL



SEE SHEET 2 FOR ALL UTILITY NOTES

DATE	REVISION	DRAWN	CHECKED	RELEASED
01/14/21	REV. PER PHASING LIMITS	SA	JS	
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS	
5/20/20	REV. PER NJDOT LETTER 4-13-2020	CSM	JS	
9/24/19	REV. BUFFER FENCING PER NJDEP	CSM	JS	
3/18/19	REV. PER CAPRA MEETING 2/14/19	CSM	JS	

**UTILITY PLAN**

PRELIMINARY AND FINAL MAJOR SITE PLAN & SUBDIVISION  
**LOT 15.01 ~ BLOCK 44**  
TAX MAP SHEET NO. 8  
SITUATED IN  
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

**FWH ASSOCIATES, P.A.**  
1866 Rt. 9, Toms River, NJ 08755 T: 732.797.3100 F: 732.797.3223

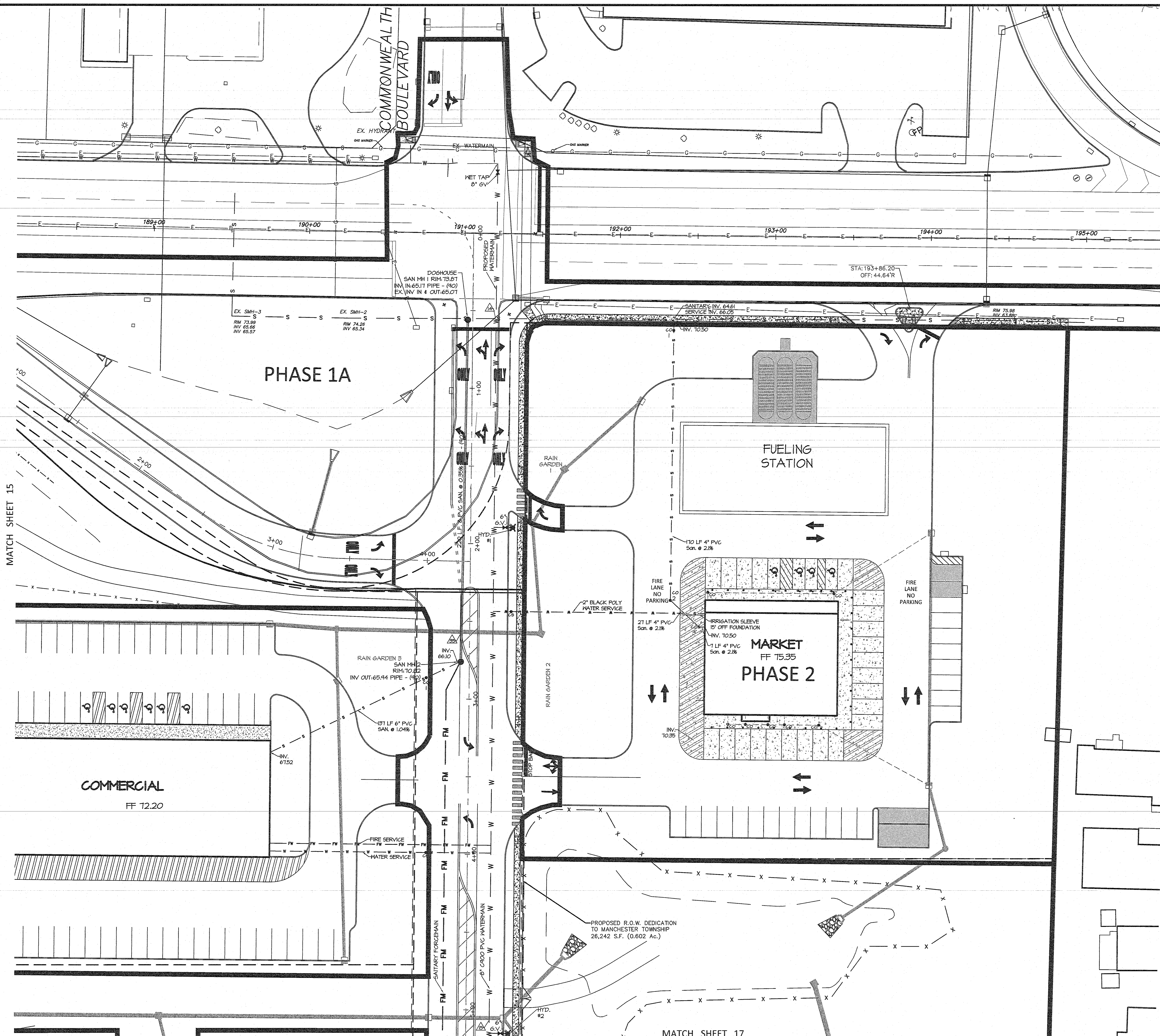
CIVIL ENGINEERS  
LAND SURVEYORS  
PLANNERS  
LANDSCAPE ARCHITECTS  
RESERVE SPECIALISTS  
ARCHITECTS

**FWHASSOCIATES.COM**

DATE: 8/10/18  
DESIGNED BY: CSM  
CHECKED BY: JS  
DRAWN BY: JS  
PROJECT NO: PD-170  
SHEET NO: 15 OF 49

**Brian P. Murphy**  
 PROFESSIONAL ENGINEER  
 LIC. NO. 42000





Crossing #	Sanitary	Water	Storm	Clearance	C.C.
1	Inv 62.53		Inv 64.68	1.25'	
2	Inv 61.57		Inv 65.15	2.68'	
3	Inv 60.49		Inv 64.81	3.42'	
4	Inv 59.82		Inv 62.4	1.61'	
5	Inv 59.38		Inv 64.27	3.92'	
6	Inv 62.25		Inv 64.49	2.71'	
7	Inv 61.77		Inv 63.23	0.50'	C.C.
8	Inv 61.28		Inv 64.49	2.31'	
9	Inv 60.69		Inv 63.84	2.25'	
10	Inv 60.20		Inv 64.49	3.39'	
11	Inv 59.60		Inv 62.00	1.44'	C.C.
12	Inv 58.90		Inv 62.78	2.98'	
13	Inv 58.42		Inv 64.36	5.04'	
14	Inv 65.01	Inv 68.43	Inv 61.57	2.71'	
15		Inv 59.79	Inv 61.57	0.82'	C.C.
16	Inv 62.21	Inv 64.42	Inv 61.57	1.50'	
17		Inv 62.84	Inv 64.72	1.00'	C.C.
18		Inv 63.24	Inv 65.12	1.00'	C.C.
19		Inv 62.90	Inv 64.78	1.00'	C.C.
20		Inv 60.45	Inv 62.42	1.00'	C.C.
21		Inv 60.23	Inv 64.19	3.06'	
22	Inv 57.89	Inv 63.08	Inv 64.39	4.48'	
23	Inv 62.51	Inv 64.39	Inv 62.81	1.00'	C.C.
24		Inv 60.95	Inv 62.81	1.00'	C.C.
25	Inv 58.89	Inv 61.95	Inv 62.81	2.35'	
26		Inv 60.06	Inv 62.00	1.00'	C.C.
27		Inv 62.65	Inv 64.52	1.00'	C.C.
28		Inv 62.00	Inv 63.88	1.00'	C.C.
29		Inv 62.00	Inv 64.45	1.57'	
30		Inv 61.35	Inv 63.29	1.00'	C.C.
31		Inv 62.58	Inv 64.46	1.00'	C.C.
32		Inv 62.72	Inv 64.60	1.14'	C.C.
33		Inv 62.43	Inv 64.69	1.38'	C.C.
34		Inv 62.43	Inv 64.81	1.5'	C.C.
35	Inv 65.87		Inv 62.08	1.5'	C.C.

DATE	REVISION	DRAWN	CHECKED	RELEASED
01/14/21	REV. PER PHASING LIMITS	SA	JS	
11/30/20	REV. PER 10 UNIT RESIDENTIAL BUILDINGS	CSM	JS	
5/20/20	REV. PER NJDOT LETTER 4-13-2020	CSM	JS	
10/22/19	REV. PER CLIENT REQUESTED REVISIONS	CSM	JS	
3/18/19	REV. PER CMRA MEETING 2/14/19	CSM	JS	

**UTILITY PLAN**

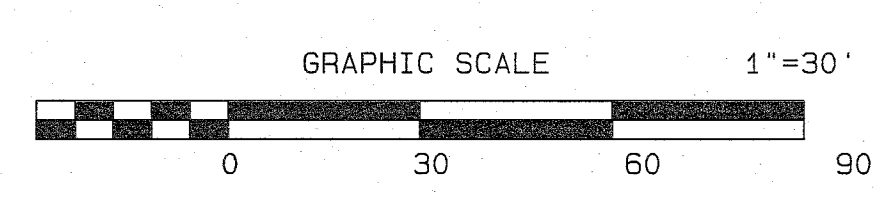
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**Brian P. Murphy**  
 PROFESSIONAL ENGINEER  
 N.J. LIC. NO. 42000

DESIGNED BY	CSM	DATE	8/10/18
DRAWN BY	JS	SCALE	1"=30'
CHECKED BY	JS	DRAWER NO.	PD-170
RELEASED BY	BPM	PROJECT NO.	1423.0016
SHEET NO.	16	OF	49

- LEGEND**
- PROPOSED SANITARY SEWER
  - PROPOSED STORM SEWER
  - PROPOSED WATER MAIN
  - PROPOSED WATER VALVE
  - PROPOSED FIRE HYDRANT
  - PROPOSED WATER SERVICE LATERAL
  - PROPOSED SANITARY SEWER LATERAL



SEE SHEET 2 FOR ALL UTILITY NOTES

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