June 10, 2021 Planning Commission Meeting

450 Colwell Ln (Condos) Conditional Use Application Packet (page 2)

Kaplin Stewart
Attorneys at Law

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Email: rlewis@kaplaw.com
www.kaplaw.com

December 30, 2020

HAND DELIVERY

Borough of Conshohocken
Attn: Stephanie Cecco, Borough Manager
400 Fayette Street, Suite 200
Conshohocken, PA 19428

RE: 450 Colwell Lane - Application for Conditional Use
Dryden Court Development, LLC - Multi-family Development Stacked Condos
Our Reference No. 16140.009

Dear Ms. Cecco:

I represent Dryden Court Development, LLC ("**DCD**"). As evidenced by the Deed attached hereto, DCD is the legal owner of the property located at 450 Colwell Lane, Conshohocken, PA ("**Property**"). In accordance with the Borough of Conshohocken Zoning Ordinance ("**Zoning Ordinance**") and Borough of Conshohocken Zoning Map the Property is located in the LI-Limited Industrial Zoning District.

As recently discussed with the Borough's staff, DCD proposes to develop the Property for modern, multi-family housing ("**Proposed Use**"). In accordance with Section 1901-B of the Zoning Ordinance, the Proposed Use is a specifically permitted use of Property by conditional use. As detailed on the enclosed plans, and Application, the Proposed Use consists of 48 stacked condo dwelling units within three multi-family buildings.

Enclosed is DCD's application for conditional use approval ("**Application**"). The Application consists of the following materials:

- Borough of Conshohocken Zoning Application;
- Conditional Use Plan Set, prepared by Joseph M. Estock, PE consisting of three (3) sheets; sheet 1 entitled "Sketch Plan D", sheet 2 entitled "Existing Features Plan", and sheet 3 entitled "Aerial Photograph, all dated December 22, 2020;
- Landscape and Lighting Plan Set, prepared by CMC Engineering, consisting of two sheets dated December 29, 2020;

- Traffic Impact Study, prepared by McMahon Associates, Inc., dated December 28, 2020;
- Architectural Plans, entitled "Dryden Court Condos" consisting of 3 sheets;
- A check in the amount of $500.00 payable to the Borough of Conshohocken representing the applicable Conditional Use Application Fee; and
- A check in the amount of $750.00 payable to the Borough of Conshohocken representing the applicable Conditional Use Escrow Deposit.

As set forth in the Borough's "Zoning Application Filing Procedures", in addition to the above referenced Deed, I am enclosing an original, signed and notarized Application as well as twelve (12) additional copies thereof.[1] Please retain the original and eleven copies for your own purposes. Please timestamp and return the remaining copy for my records. An electronic copy of the Application will also be delivered to the Borough contemporaneously herewith by electronic transmission.

Please schedule the Application for consideration by the Borough's Planning Commission at its next available, regularly scheduled meeting date. Please also schedule a hearing on the Application before Borough Council. Kindly provide notice of the scheduling of the meeting and hearing and provide copies of all reviews, correspondence and communications generated and/or received regarding this matter.

If you require anything further or have and questions, please contact me at your convenience.

Best Regards,

Craig R. Lewis

Enclosures

cc (via e-mail w/ enclosures): DJB Properties, LLC
Michael E. Peters, Esq.
Eric P. Johnson, PE, Zoning Officer

[1] The Traffic Impact Study consists of 35 pages. The appendices to the Traffic Study consist of an additional 181 pages. Therefore ,I am enclosing only four copies of the appendices. The appendices will be provided electronically, and additional hard copies will be provided if requested

BOROUGH OF CONSHOHOCKEN
400 Fayette Street, Suite 200, Conshohocken, PA 19428
Phone (610) 828-1092 Fax (610) 828-0920

Zoning Application

Application: _____
Date Submitted: _____
Date Received: _____

1. Application is hereby made for:

☐ Special Exception ☐ Variance

☐ Appeal of the decision of the zoning officer

☑ Conditional Use approval ☐ Interpretation of the Zoning Ordinance

☐ Other _____

2. Section of the Zoning Ordinance from which relief is requested:

Section 27-1901-B - modern multi-family housing units in the Limited Industrial District by Residential Overlay

3. Address of the property, which is the subject of the application:

450 Colwell Lane, Conshohocken, PA 19428

4. Applicant's Name: Dryden Court Development, LLC

Address: c/o DJB Properties, LLC, 1125 Robin Road, Gladwyne, PA 19035

Phone Number (daytime): 610-310-5055

E-mail Address: djbprop@gmail.com

5. Applicant is (check one): Legal Owner ☑ Equitable Owner ☐; Tenant ☐

6. Property Owner: Dryden Court Development, LLC

Address: c/o DJB Properties, LLC, 1125 Robin Road, Gladwyne, PA 19035

Phone Number: 610-310-5055

E-mail Address: djbprop@gmail.com

7. Lot Dimensions: irregular (approx 390' x 238') Zoning District: LI - Limited Industrial

8. Has there been previous zoning relief requested in connection with this Property?

Yes [ ] No [✔] If yes, please describe.

Applicant is unaware of any prior zoning relief sought, or granted fro this property.

9. Please describe the present use of the property including any existing improvements and the dimensions of any structures on the property.

The property is presently improved with a one-story warehouse building and associated parking facilities whcih are depicted on the attached existing conditions plan prepared by Joseph Estock. The existing warehouse is presently vacant. As depicted on the existing conditions plan access to the warehouse is from a single driveway from Colwell Lane that also provides access to the adjacent property. Parking for the warehouse is located along the southern boundray of the property. Both the existing access and portions of the existing parking are located in the 100-year floodplain and thus are currently non-conformign to the requirements of the Floodplain Conservation District.

10. Please describe the proposed use of the property.

Applicant proposes to demolish the existing warehouse and redevelop the property for modern, multi-family housing as depicted on the attached conditional use plans prepared by Joseph Estock. Multi-family housing is permitted in the LI District in accordance with the Residential Overlay district where conditional use approval is obtained in accordance with Section 27-1901-B of the Zoning Ordinance.

11. Please describe proposal and improvements to the property in detail.

As depicted in greater detail on the attached Conditional Use Plans prepared by Jospeh Estock, applicant proposes to demolish the existing warehouse and redevelop the property for three (3) modern, multi-family buildings. Each building will be three-story stacked condos and the development will have a total of 48 dwelling units. Each unit will share an exterior access with one other unit while the remainder of the paired units will be located above and/or below each other. Each unit is served by a 1-car garage as well as one designated parking space behind its designated garage. The existing parking along the southern boundary will remain and will provide supplemental guest parking. The development will be served by two vehicular access points. The principal access being from 5th Avenue with the existing access along Colwell Lane remaining as a secondary access point.

12. Please describe the reasons the Applicant believes that the requested relief should be granted.

Multi-family housing is a specifically permitted use in the LI-District in accordance with Section 27-1901-B of the Residential Overlay District. As will be demonstrated by exhibits and testimony at the hearing in this matter, the proposed development satisfies all of the applicable criteria for the requested conditional use as well as the general criteria applicable to all conditional uses.

13. If a Variance is being requested, please describe the following:

a. The unique characteristics of the property: n/a

b. How the Zoning Ordinance unreasonably restricts development of the property:
n/a

c. How the proposal is consistent with the character of the surrounding neighborhood.
n/a

d. Why the requested relief is the minimum required to reasonably use the property; and why the proposal could not be less than what is proposed.
n/a

14. The following section should be completed if the applicant is contesting the determination of the zoning officer.

a. Please indicate the section of the zoning ordinance that is the subject of the zoning officer's decision (attach any written correspondence relating to the determination).

n/a

b. Please explain in detail the reasons why you disagree with the zoning officer's determination.

n/a

15. If the Applicant is requesting any other type of relief, please complete the following section.

a. Type of relief that is being requested by the applicant.

n/a

b. Please indicate the section of the Zoning Ordinance related to the relief being requested.

n/a

c. Please describe in detail the reasons why the requested relief should be granted.

n/a

16. If the applicant is being represented by an attorney, please provide the following information.

a. Attorney's Name: Craig R. Lewis, Esquire

b. Address: Kaplin Stewart, 910 Harvest Drive, Suite 200, Blue Bell, PA 19422

c. Phone Number: (610) 941-2584

d. E-mail Address: RLewis@kaplaw.com

I/we hereby certify that to the best of my knowledge, all of the above statements contained in this Zoning Application and any papers or plans submitted with this application to the Borough of Conshohocken are true and correct.

DAVID J BROSSO

Applicant

Legal Owner

12/26/2020

Date

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF MONTGOMERY

As subscribed and sworn to before me this 29 day of December, 2020 By David J Brosso

Notary Public

(Seal)

Commonwealth of Pennsylvania - Notary Seal
Kimberly Zera, Notary Public
Montgomery County
My commission expires May 5, 2022
Commission number 1185103
Member, Pennsylvania Association of Notaries

BOROUGH OF CONSHOHOCKEN
400 Fayette Street, Suite 200, Conshohocken, PA 19428
Phone (610) 828-1092 Fax (610) 828-0920

Decision

(For Borough Use Only)

Application Granted ☐ Application Denied ☐

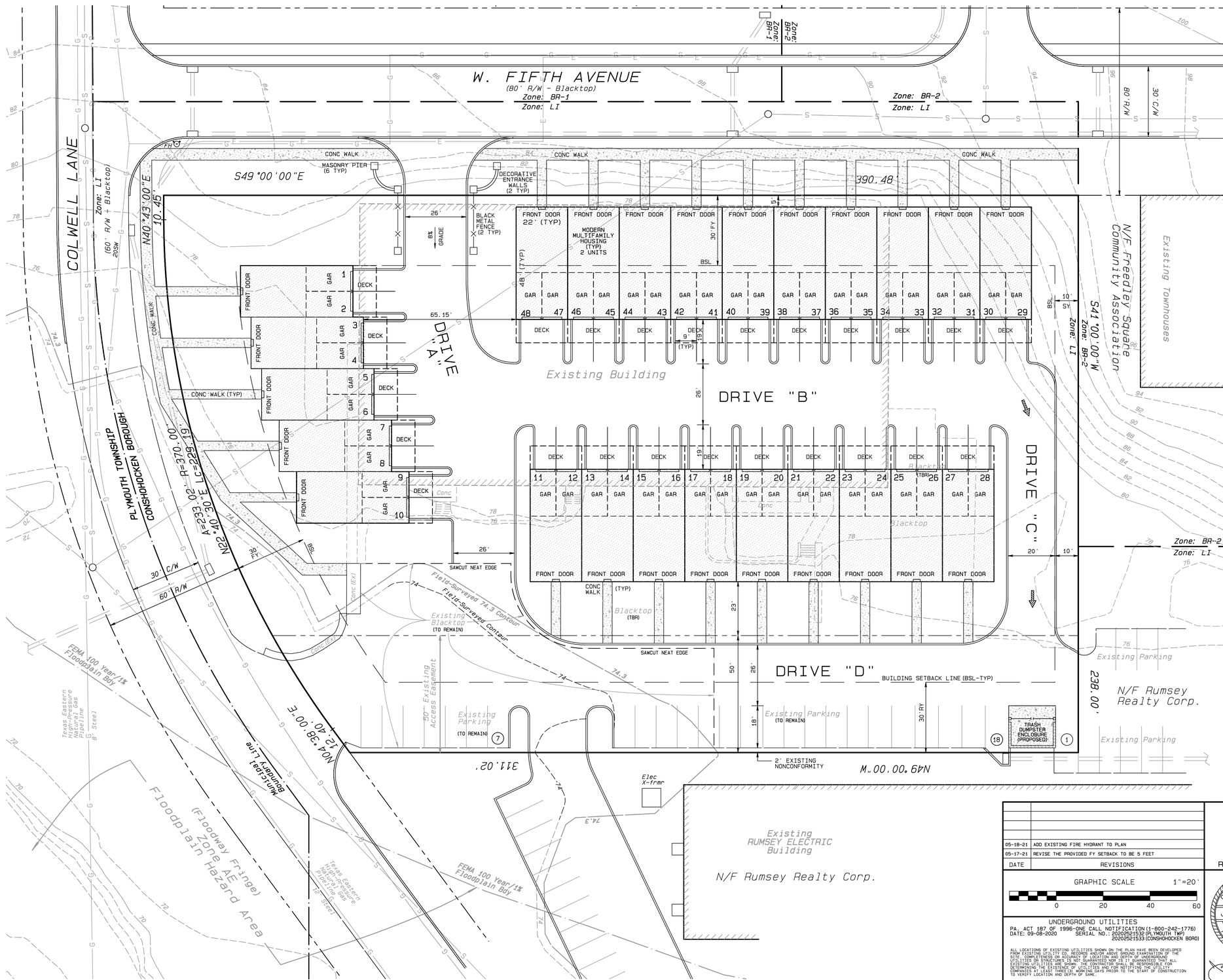
MOTION:

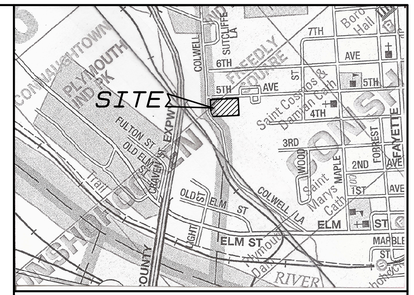
CONDITIONS:

BY ORDER OF THE ZONING HEARING BOARD

	Yes	No
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐

DATE OF ORDER: _____





LOCATION MAP

SCALE : 1" = 2000'

COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE NO. 20509988

LEGEND

- CENTERLINE
- TRACT BOUNDARY
- PROPERTY LINE
- LEGAL R.O.W., EASEMENTS
- REQUIRED R.O.W.
- 100 EXISTING CONTOUR
- 200 PROPOSED CONTOUR
- W EXISTING WATER LINE
- S EXISTING SAN. SEWER LINE
- T EXISTING TELEPHONE LINE
- G EXISTING GAS LINE
- E EXISTING ELECTRIC LINE
- EXISTING STORM SEWER/INLET
- PROPOSED STORM SEWER/INLET
- W PROPOSED WATER LINE
- S PROPOSED SAN. SEWER LINE
- E PROPOSED ELECTRIC LINE
- T PROPOSED TELEPHONE LINE
- G PROPOSED GAS LINE
- MH EXISTING MANHOLE
- MH PROPOSED MANHOLE
- EXISTING CURBLINE
- PROPOSED CURBLINE
- UTILITY POLE
- EXISTING VALVE, VENT, CO.
- PROPOSED BUILDING
- PROPOSED CONCRETE PADS/WALKWAYS

SITE DATA:

OWNER/APPLICANT: DRYDEN COURT DEVELOPMENT, LLC
C/O DAVID J. BROSSO
1125 ROBIN ROAD
GLADWYNE, PA 19035
610-310-5055 (CELL)

PREMISES: 450 COLWELL LANE
TAX MAP BLOCK 28 UNIT 1
TPN 05-00-00103-00-9
DEED BOOK 5865 PG 1668

LOT AREA: 2.0000 ACRES

YIELD: 48 DWELLING UNITS

ZONING DATA:

DISTRICT: "LI" LIMITED INDUSTRIAL DISTRICT/RESEARCH RESIDENTIAL OVERLAY DISTRICT

USE: MODERN MULTIFAMILY HOUSING

REQUIREMENTS	REQUIRED	PROVIDED
DENSITY:	33 DU/AC (MAX)	24 DU/AC
TRACT AREA:	1.0 ACRE (MIN)	2.0 ACRES
SETBACKS:		
FRONT YARD:	30 FT (MIN)	5 FT
REAR YARD:	30 FT (MIN)	73 FT
SIDE YARD:	10 FT (MIN)	20 FT
BUILDING COVERAGE:	40 % (MAX)	29 %
IMPERVIOUS COVERAGE:	80 % (MAX)	76 %
BUILDING HEIGHT:	35 FT (MAX)	35 FT
PARKING SETBACK:	10 FT (MIN)	30 FT
PARKING LOCATION:		REAR OF BLDG
INTERNAL DRIVEWAY SETBACK:	10 FT (MIN)	10 FT
BUILDING SEPARATION:	40 FT (MIN)	65.15 FT
UNIT SIZE:		
0-1 BEDROOM:	700 SF (MIN)	NONE
2 BEDROOMS:	900 SF (MIN)	1,000+ SF
3 BEDROOMS:	1,100 SF (MIN)	1,200+ SF

PARKING:

GARAGE STALLS=	48 PS
PRIVATE STALLS=	48 PS
SHARED STALLS=	26 PS
TOTAL:	122 PS

TOPOGRAPHY:

CONTOURS PLOTTED FROM PENNSYLVANIA SPATIAL DATA ACCESS LIDAR MAPPING RESOURCES (DATUM: NAVD-88)

DATE	REVISIONS
05-18-21	ADD EXISTING FIRE HYDRANT TO PLAN
05-17-21	REVISE THE PROVIDED FY SETBACK TO BE 5 FEET

GRAPHIC SCALE 1"=20'
0 20 40 60

UNDERGROUND UTILITIES
PA. ACT 187 OF 1996-ONE CALL NOTIFICATION (1-800-242-1776)
DATE: 09-08-2020 SERIAL NO.: 20202521532 (PLYMOUTH TWP)
20202521533 (CONSHOHOCKEN BORO)

ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DEVELOPED FROM EXISTING UTILITY OR RECORDS AND/OR ABOVE GROUND EXAMINATION OF THE SITE. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES OR STRUCTURES IS NOT GUARANTEED NOR IS IT GUARANTEED THAT ALL EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES AND FOR NOTIFYING THE UTILITY COMPANIES AT LEAST THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY LOCATION AND DEPTH OF SAME.

REVISION NO.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH M. ESTOCK ENGINEER PE037320E

PROJECT TITLE :

DRYDEN COURT

450 COLWELL LANE

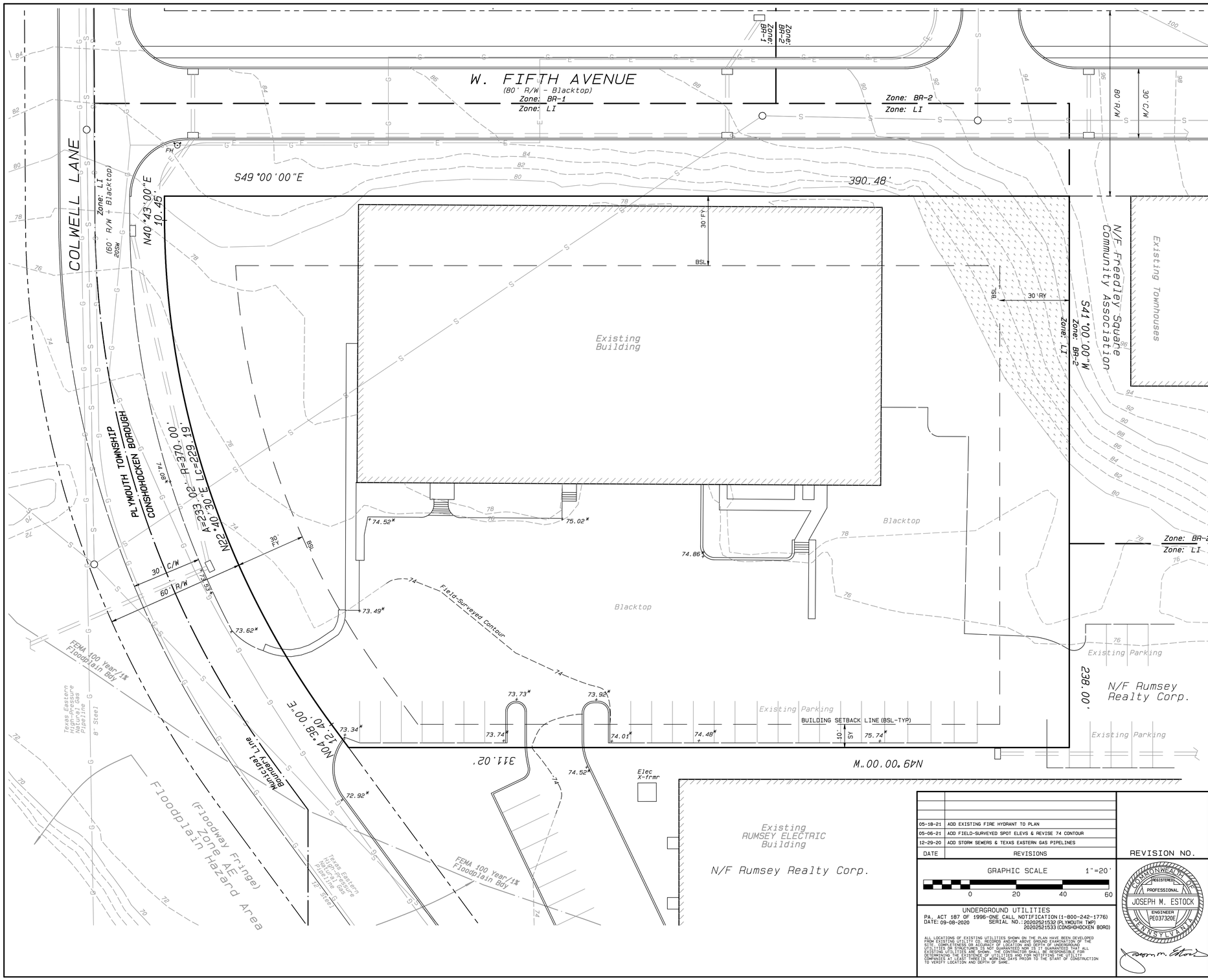
CONSHOHOCKEN BOROUGH - MONTGOMERY COUNTY - PENNSYLVANIA

DRAWING TITLE :

SKETCH PLAN 'G'

PREPARED BY :
JOSEPH M. ESTOCK
Consulting Engineers & Land Surveyors
355 South Henderson Road
King of Prussia, PA 19406-2407
(610) 265-3035 - Fax (610) 962-9855
joe@josephmestock.com

SCALE	DATE	FILE NO.	FIELD BOOK	SHT. NO.
1" = 20'	12 MAY 2021	20033	337	1 of 3



LEGEND

	CENTERLINE
	TRACT BOUNDARY
	PROPERTY LINE
	LEGAL R.O.W., EASEMENTS
	REQUIRED R.O.W.
100	EXISTING CONTOUR
W	EXISTING WATER LINE
S	EXISTING SAN. SEWER LINE
T	EXISTING TELEPHONE LINE
G	EXISTING GAS LINE
E	EXISTING ELECTRIC LINE
	EXISTING STORM SEWER/INLET
MH	EXISTING MANHOLE
	EXISTING CURBLINE
UP	UTILITY POLE
	EXISTING VALVE, VENT, CO.
	FEMA 100 YEAR FLOODPLAIN BOUNDARY LINE
	FEMA 500 YEAR FLOODPLAIN BOUNDARY LINE
(TBR)	TO BE REMOVED

STEEP SLOPE LEGEND

STEEP SLOPES- 15% OR GREATER

SOILS TYPE LEGEND

THE ENTIRE SITE IS COMPRISED OF THE FOLLOWING SOIL TYPE:

UgB URBAN LAND. 0%-8% SLOPES

FLOODPLAIN REFERENCE

THE SITE IS LOCATED IN ZONE 'X', AREAS BOTH WITHIN AND OUTSIDE THE 500 YEAR FLOODPLAIN, AS INDICATED ON FLOOD INSURANCE RATE MAP NO. 42091C0358G, HAVING A MAP REVISED DATE OF MARCH 02, 2016.

+ 73.92* FIELD-SURVEYED SPOT ELEVATION

DATE	REVISIONS
05-18-21	ADD EXISTING FIRE HYDRANT TO PLAN
05-06-21	ADD FIELD-SURVEYED SPOT ELEVS & REVISE 74 CONTOUR
12-29-20	ADD STORM SEWERS & TEXAS EASTERN GAS PIPELINES

REVISION NO.

GRAPHIC SCALE 1"=20'

0 20 40 60

UNDERGROUND UTILITIES

PA. ACT 187 OF 1996-ONE CALL NOTIFICATION (1-800-242-1776)
DATE: 09-08-2020 SERIAL NO.: 20202521532 (PLYMOUTH TWP)
20202521533 (CONSHOHOCKEN BORO)

ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DEVELOPED FROM EXISTING UTILITY CO. RECORDS AND/OR ABOVE GROUND EXAMINATION OF THE SITE. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES OR STRUCTURES IS NOT GUARANTEED NOR IS IT GUARANTEED THAT ALL EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXISTENCE OF UTILITIES AND FOR NOTIFYING THE UTILITY COMPANIES AT LEAST THREE(3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY LOCATION AND DEPTH OF SAME.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH M. ESTOCK
ENGINEER
PE037320E

PROJECT TITLE :

DRYDEN COURT

450 COLWELL LANE

CONSHOHOCKEN BOROUGH - MONTGOMERY COUNTY - PENNSYLVANIA

DRAWING TITLE :

EXISITNG FEATURES PLAN

PREPARED BY :

JOSEPH M. ESTOCK
Consulting Engineers & Land Surveyors

355 South Henderson Road
King of Prussia, PA 19406-2407
(610) 265-3035 - Fax (610) 962-9855
joe@josephmestock.com

SCALE	DATE	FILE NO.	FIELD BOOK	SHT. NO.
1" = 20'	22 DECEMBER 2020	20033	337	2 of 3

DATE	REVISIONS	REVISION NO.

GRAPHIC SCALE 1"=100'

0 100 200 300

UNDERGROUND UTILITIES

PA. ACT 187 OF 1996-ONE CALL NOTIFICATION (1-800-242-1776)
DATE: 09-08-2020 SERIAL NO.: 20202621532 (PLYMOUTH TWP)
20202621533 (CONSHOHOCKEN BORO)

ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DEVELOPED FROM EXISTING UTILITY CO. RECORDS AND/OR ABOVE GROUND EXAMINATION OF THE SITE. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES OR STRUCTURES IS NOT GUARANTEED AND IS IT GUARANTEED THAT ALL EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXISTENCE OF UTILITIES AND FOR NOTIFYING THE UTILITY COMPANIES AT LEAST THREE(3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY LOCATION AND DEPTH OF SAME.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH M. ESTOCK
LAND SURVEYOR
49525-E

PROJECT TITLE :

DRYDEN COURT

450 COLWELL LANE

CONSHOHOCKEN BOROUGH - MONTGOMERY COUNTY - PENNSYLVANIA

DRAWING TITLE :

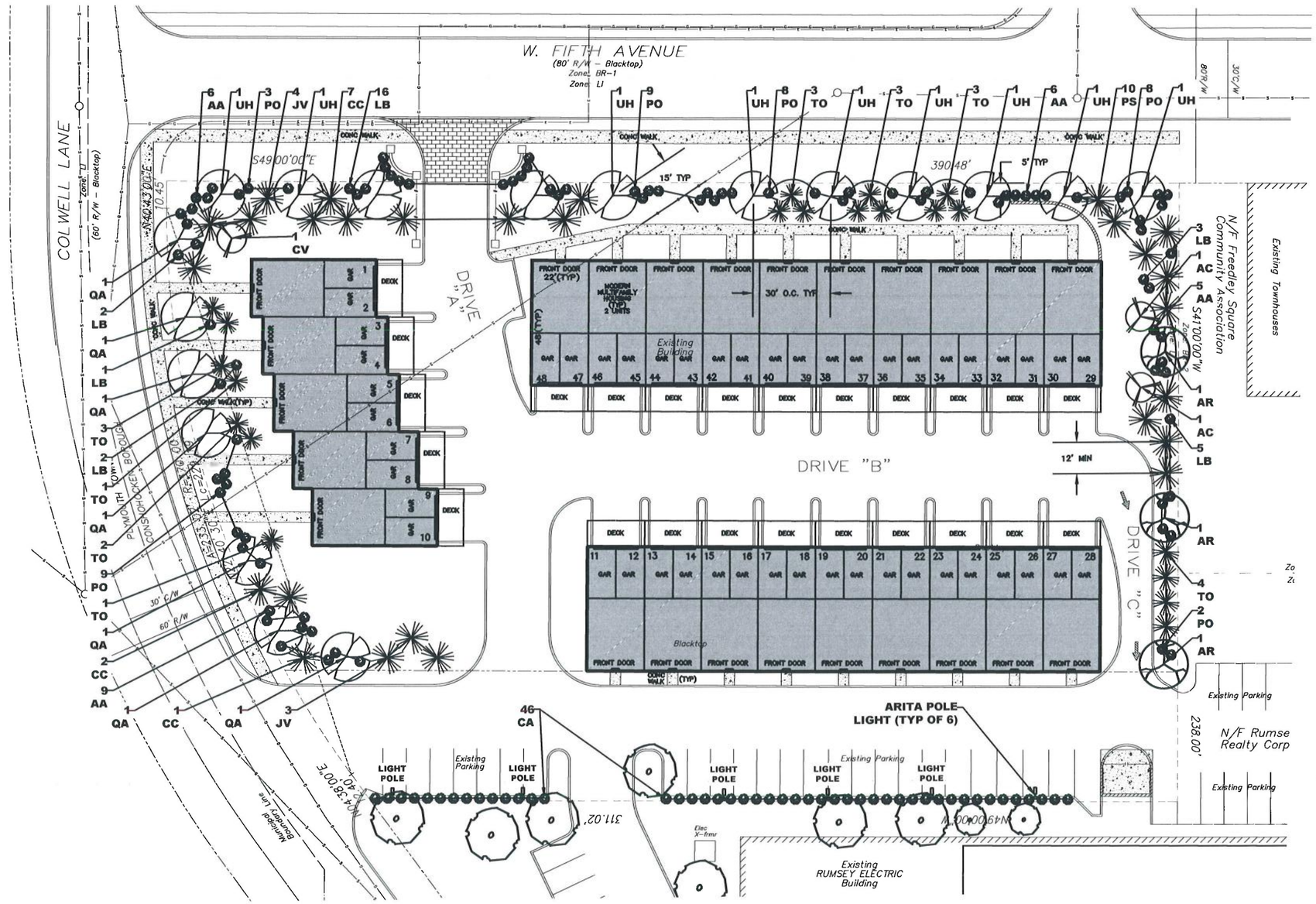
AERIAL PHOTOGRAPH

PREPARED BY :

JOSEPH M. ESTOCK
Consulting Engineers & Land Surveyors

355 South Henderson Road
King of Prussia, PA 19406-2407
(610) 265-3035 - Fax (610) 962-9855
joe@josephmestock.com

SCALE	DATE	FILE NO.	FIELD BOOK	SHT. NO.
1" = 100'	22 DECEMBER 2020	20033	337	3 of 3



LEGEND

- EXISTING SHADE TREE (ADJACENT PROPERTY)
- PROPOSED STREET STREE
- PROPOSED BUFFER SHADE TREE
- PROPOSED BUFFER EVERGREEN TREE
- PROPOSED BUFFER FLOWERING TREE
- PROPOSED BUFFER SHRUB
- 14 HQ — PLANT CALLOUT
- POLE LUMINARY

PLANTING SCHEDULE:

Key	Qty.	Botanical Name	Common Name	Size	Cont.
DECIDUOUS STREET TREES					
UH	11	ULMUS 'HOMESTEAD'	HOMESTEAD ELM	3.5" C	B&B
QA	7	QUERCUS ALBA	WHITE OAK	3.5" C	B&B
DECIDUOUS AND EVERGREEN BUFFER TREES					
AR	5	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3.5" C	B&B
AC	2	AMELANCHIER CANADENSIS	SERVICEBERRY	6' HT	B&B
CC	10	CHAMAECYPARIS THYROIDES	ATLANTIC WHITE CEDAR	6' HT	B&B
CV	1	CHIONANTHUS VIRGINICUS	FRINGE TREE	6' HT	B&B
JV	7	JUNIPERCUS VIRGINIANA	EASTER RED CEDAR	6' HT	B&B
PS	10	PINUS STROBUS	WHITE PINE	6' HT	B&B
TO	20	THUJA OCCIDENTALIS	AMERICAN ARBORVITAE	6' HT	B&B
DECIDUOUS AND EVERGREEN BUFFER SHRUBS					
AA	28	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	36" HT	CONT
CA	46	CLETHERA ALNIFOLIA	SUMMERSWEET CLETHERA	36" HT	CONT
LB	29	LINDERA BENZOIN	SPICEBUSH	36" HT	CONT
PO	39	PHYSOCARPUS OPULIFOLIUS	NINEBARK	36" HT	CONT

PLANTING NOTES:

1. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST
2. ALL PLANTS SHALL BE NURSERY GROWN
3. ALL PLANTS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION
4. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OR GROWTH. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS.
5. SUBSTITUTIONS: WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN A REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE CONTRACTOR, IF APPROVED BY THE OWNER OR HIS REPRESENTATIVE AND THE MUNICIPALITY. CONTRACTOR SHALL NOTIFY THE OWNER, IN WRITING OF ANY PLANT MATERIALS WHICH THEY FEEL WILL NOT BE AVAILABLE OR LIKELY TO THRIVE IN THE LOCATIONS INDICATED ON THE PLAN.
6. MEASUREMENT: DIMENSIONS OF TREES AND SHRUBS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
7. SIZE: ALL PLANTS SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE PLANT LIST, UNLESS AUTHORIZED IN WRITING BY THE OWNER OR HIS REPRESENTATIVE AND THE MUNICIPALITY.
8. BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS. CONTAINER GROWN STOCK SHALL HAVE BEEN GROWN IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM TO HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL TOGETHER FIRM & WHOLE. NO PLANTS SHALL BE LOOSE IN THE CONTAINER.
9. PLANT MATERIALS NOT PLANTED THE DAY OF DELIVERY ARE TO BE HEALED IN SO THAT ROOT SYSTEMS ARE PROTECTED FROM THE DRYING FORCES OF THE WIND AND SUN. TEMPORARY WATER SYSTEMS ARE TO BE USED FOR PLANT MATERIALS WHICH WILL BE STORED FOR MORE THAN ONE WEEK
10. THE OWNER OR HIS REPRESENTATIVE AND THE MUNICIPALITY SHALL BE NOTIFIED PRIOR TO BEGINNING PLANTING OPERATIONS, IN WRITING
11. PLANTS WITH DAMAGED OR BROKEN ROOT BALLS OR EXCESSIVE DAMAGE TO THE CROWN AS DETERMINED BY THE TOWNSHIP ENGINEER WILL NOT BE ACCEPTED AND ARE TO BE REMOVED FROM THE SITE AND REPLACED WITH ACCEPTABLE MATERIAL.
12. TREE STAKING SHALL BE INSTALLED ACCORDING TO THE PLANTING DETAILS. TREE STAKES SHALL BE INSTALLED ON ALL DECIDUOUS AND EVERGREEN TREES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE THE WOODEN STAKES AND GUY WIRES AFTER ONE YEAR. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN WARNING DEVICES ON EACH GUY WIRE AND STAKE.
13. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) STANDARDS TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ONLY DEAD WOOD OR SUCKERS AND ALL BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED AT TIME OF PLANTING. TREES AND SHRUBS ARE TO BE PRUNED ONE YEAR AFTER PLANTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PRUNE TREES AND SHRUBS AT THE APPROPRIATE TIME.
14. MULCH FOR TREES, SHRUBS AND GROUND COVER SHALL BE FINELY SHREDDED OAK BARK, DARK BROWN IN COLOR. AGED AT LEAST ONE YEAR AND CLEAN AND FREE OF WEEDS. PRE-EMERGENT WEED KILLER SHALL BE 'TREFLAN' OR APPROVED EQUAL. SPRAY WEED KILLER TO TOPSOIL PRIOR TO MULCHING BED PLANTINGS. ALL SHRUBS TO BE PLANTED IN CONTINUOUS BEDS UNLESS OTHERWISE NOTED. ALL SHRUB BEDS TO RECEIVE 3" DEEP CONTINUOUS MULCH COVER. MULCH MAY NOT TOUCH THE TRUNKS OF TREES OR THE MAIN STEMS OF SHRUBS.
15. TREES IN LEAF WHEN PLANTED SHALL BE TREATED WITH ANTI-DESICANT SUCH AS WILT-PROOF
16. PREPARATION OF PLANTING SOIL - BEFORE MIXING, CLEAN TOPSOIL OF ROOTS, PLANTS, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH. SOIL (BACKFILL) FOR TREES, SHRUBS, AND GROUNDCOVER SHALL BE A MIXTURE BY VOLUME OF THE FOLLOWING MATERIALS IN QUANTITIES SPECIFIED: 20% PEAT MOSS, 75% TOPSOIL AND 5% ORGANIC MATTER. ADD AN ORGANIC FERTILIZER TO THE ABOVE MIXTURE AT THE RATES SPECIFIED BY THE MANUFACTURER, FOR NEW TREES AND SHRUBS.
17. WARRANT TREES AND SHRUBS FOR A PERIOD OF (2) GROWING SEASONS AFTER WRITTEN DATE OF ACCEPTANCE BY THE MUNICIPALITY AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. PLANTS THAT DIE DURING THE WARRANTY PERIOD SHALL BE REMOVED IMMEDIATELY. REPLACEMENTS SHALL BE PLACED UNDER WARRANTY AN ADDITIONAL 12 MONTH PERIOD. A PLANT SHALL BE CONSIDERED DEAD IF 25% OR MORE OF THE PLANT HAS DIED.
18. CONDITIONS DETRIMENTAL TO PLANTS. THE CONTRACTOR SHALL NOTIFY THE PROJECT REPRESENTATIVE AND THE TOWNSHIP ENGINEER IN WRITING OF ALL SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETRIMENTAL TO THE GROWTH OF PLANTS. HE SHALL STATE THE CONDITIONS AND SUBMIT A PROPOSAL FOR CORRECTING THE CONDITIONS, INCLUDING ANY CHANGE IN COST FOR REVIEW AND ACCEPTANCE BY THE PROJECT REPRESENTATIVE.
19. MINOR ADJUSTMENTS TO TREE LOCATION MAY BE NECESSARY DUE TO FIELD CONDITIONS AND FINAL GRADING. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IF MAJOR ADJUSTMENTS ARE REQUIRED.
20. TOPSOIL SHALL BE REPLACED AT A THICKNESS OF APPROXIMATELY EIGHT (8) INCHES. MINIMUM OF SIX (6) INCHES IN ALL NEWLY ESTABLISHED LAWN AREAS AND A MINIMUM OF TWELVE (12) INCHES IN FOUNDATION PLANTING AREAS. THE MATERIAL MUST MEET THE REQUIREMENTS OF THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION FORM 408 SPECIFICATIONS, AS AMENDED. ANY EXCAVATED ROCK DUE TO LANDSCAPE INSTALLATION MUST BE DISPOSED OF OFF SITE.
21. THE CONTRACTOR SHALL CONTACT THE MUNICIPALITY IN WRITING TO REQUEST A FINAL INSPECTION FOR ACCEPTANCE AT THE END OF THE GUARANTEE PERIOD. THESE INSPECTIONS WILL BE PERFORMED WHEN MATERIALS ARE IN FULL LEAF ONLY (MAY 1 THROUGH NOVEMBER 15). ALL GUARANTEE ESCROW FUNDS WILL BE RELEASED UPON ACCEPTANCE AT THE END OF THE GUARANTEE PERIOD. THE GUARANTEE WILL BE EXTENDED UNTIL THIRTY (30) DAYS AFTER RECEIPT OF THE REQUEST LETTER FOLLOWING MAY 1. SHOULD THE END OF THE GUARANTEE PERIOD OCCUR AFTER NOVEMBER 15, THE GUARANTEE SHALL BE EXTENDED TO MAY 15
22. PERMANENT SEED MIX SHALL BE AS NOTED ON THIS SHEET. THE FALL PLANTING SEASON SHALL EXTEND FROM SEPTEMBER 1 TO OCTOBER 15. THE SPRING PLANTING SEASON SHALL EXTEND FROM APRIL 1 TO MAY 15.

SEEDING NOTES:

1. ALL AREAS, THAT ARE NOT INDICATED TO BE PLANTED OR PAVED, ARE TO BE SEEDED WITH LAWN SEED
2. LAWN SEED MIX SHALL BE AS FOLLOWS:
   - PERENNIAL RYEGRASS 25%
   - CHEWINGS FESCUE 25%
   - KENTUCKY BLUEGRASS 50%

   PERMANENT GRASS SEED MIX SHALL BE SPREAD AT A RATE OF FIVE (5) LBS./1,000 S.F.

GENERAL NOTES:

1. THE LOCATION OF ALL EXISTING VEGETATION FOR THE RUMSEY PROPERTY HAS BEEN OBTAINED THROUGH AERIAL PHOTOGRAPHY. FIELD LOCATIONS MAY VARY. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING VEGETATION AND MAKE ADJUSTMENTS TO THE PROPOSED LANDSCAPING, AS NECESSARY
2. THE EXISTING TREES, LOCATED ON THE RUMSEY PROPERTY, SHALL SERVE TO SATISFY THE REQUIRED PARKING LOT TREE PLANTING OF 3 TREES PER 100 LINEAR FEET. SUFFICIENT SPACING IS NOT AVAILABLE TO PLANT ADDITIONAL TREES WITHIN THIS AREA. NEW SHRUB PLANTINGS ARE PROVIDED WITHIN THIS AREA, AS REQUIRED BY MUNICIPAL CODE
3. A MINIMUM OF 15 FEET SETBACK FROM THE EXISTING MUNICIPAL SANITARY SEWER LINE HAS BEEN MAINTAINED FOR ALL PROPOSED DECIDUOUS AND EVERGREEN TREES
4. PROPOSED STREET TREES ARE SPACED A MAXIMUM OF 30 FEET ON CENTER AND 5 FEET FROM THE PROPERTY LINES, AS PER THE MUNICIPAL CODE

Aloysius T. Grygo, PLA.
PENNSYLVANIA LICENSED LANDSCAPE ARCHITECT
LICENSE NO. LA001517

DRYDEN COURT
450 COLWELL LANE
CONSHOHOCKEN, PA 19428

DRYDEN COURT DEV. LLC
1125 ROBIN ROAD, GLADWYN, PA 19035

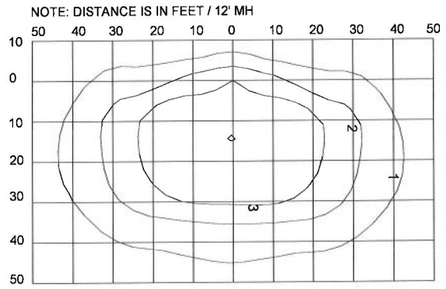
CMC ENGINEERING
LANDSCAPE ARCHITECTURE & PLANNING
320 Fayette Street, Conshohocken, PA 19428-1950
Phone (610) 828-1206 Fax (610) 828-3161

DATE:	12-29-20
SCALE:	1"=20'
AUTOCAD:	AG
CHECKED:	AG
PROJ. MGR:	AG
PROJ:	9021-20-3-PA

LANDSCAPE & LIGHTING PLAN

SHEET:

DWG NO. L-1



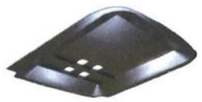
6 LUMINARY ISOFOOTCANDLE LAYOUT

NTS

LUMINARY

LEOTEK ARIETA 13 COMFORT GUIDE LED LUMINARY
MODEL (POLE MOUNT): AR13
WATTAGE: 48
LIGHT COLOR: 3000K
DISTRIBUTION: TYPE 3
QUANTITY: 6
MOUNTING HEIGHT: 12 FT
NOTE: HOUSE SIDE SHIELD OPTION #1 TO BE INSTALLED ON ALL LUMINARIES

SUPPLIED BY:
INDEPENDENCE LIGHTING
256 EAGLEVIEW BLVD., SUITE 211
EXTON, PA 19341
KYLE LAZOR (PHONE: 484-883-5933)



HOUSE SIDE SHIELD
(OPTION #1)

5 POLE MOUNT LUMINARY

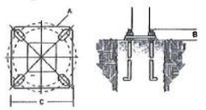
NTS

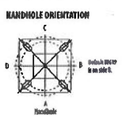
LEOTEK SQ. STEEL POLE
MODEL: SS205G, 10 FT POLE LENGTH, QTY: 6

SUPPLIED BY:: INDEPENDENCE LIGHTING, 256 EAGLEVIEW BLVD., SUITE 211, EXTON, PA 19341
KYLE LAZOR (PHONE: 484-883-5933)

BASE DETAIL

POLE DATA								
Shaft base dia	Bolt circle A	Bolt projection B	Bore diameter C	Base plate thickness	Template description	Anchor bolt description	Anchor bolt and template number	Anchor bolt description
4"ϕ	7"–9"	3.25"–3.75"	1"–1.25"	0.75"	ASTEMPLATE PS50004	A036-0	A0325-4C	3/4"x18"x3"
4"ϕ	9"–11"	3.25"–3.75"	1"–1.25"	0.875"	ASTEMPLATE PS50004	A036-0	A0325-4C	3/4"x30"x3"
5"	10"–12"	3.5"–4"	11"	1"	ASTEMPLATE PS50010	A036-0	A0325-5	7x30"ø"
6"	11"–13"	4"–4.50"	12.5"	1"	ASTEMPLATE PS50011	A036-0	N/A	7x30"ø"

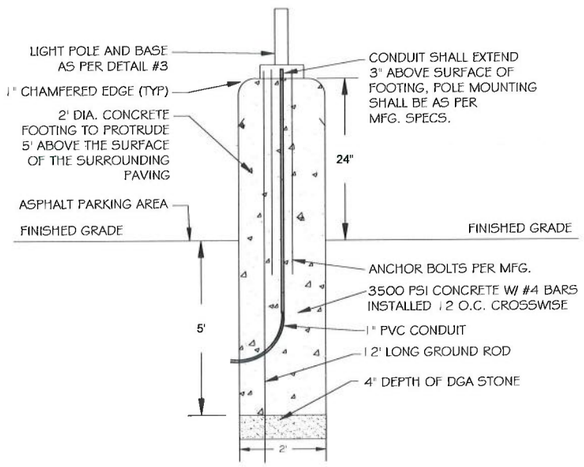




HANDHOLE ORIENTATION

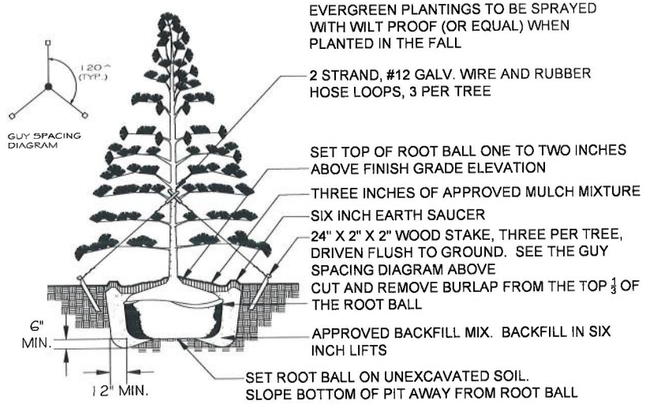
4 POLE DETAIL

NTS



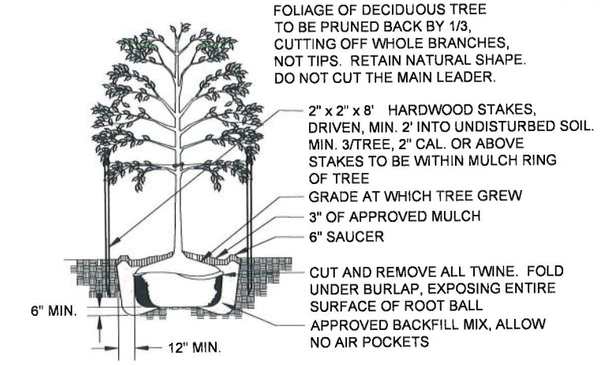
7 PARKING AREA POLE LIGHT BASE DETAIL

NTS



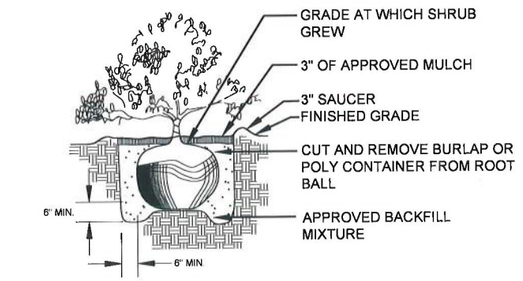
3 EVERGREEN TREE PLANTING DETAIL

NTS



2 DECIDUOUS TREE PLANTING DETAIL

NTS



1 SHRUB PLANTING DETAIL

NTS

Aloysius T. Grygo, PLA.
PENNSYLVANIA LICENSED LANDSCAPE ARCHITECT
LICENSE NO. LA001517

DRYDEN COURT
450 COLWELL LANE
CONSHOHOCKEN, PA 19428

DRYDEN COURT DEV. LLC
1125 ROBIN ROAD, GLADWYN, PA 19035

CMC ENGINEERING
LANDSCAPE ARCHITECTURE & PLANNING
320 Fayette Street, Conshohocken, PA 19428-1960
Phone (610) 828-1208 Fax (610) 828-3161

DATE: 12-29-20
SCALE: NTS
AUTOCADD: AG
CHECKED: AG
PROJ. MGR: AG
PROJ: 9021-20-3-PA

LANDSCAPE & LIGHTING DETAILS

SHEET:

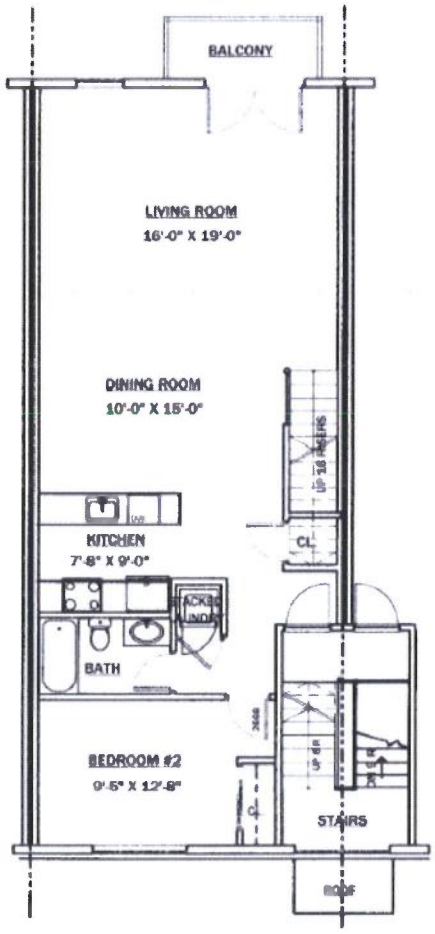
DWG NO. L-2

DRYDEN COURT CONDOS (Conceptual Streetscape View)

Note: Concept plans Only - Actual grade will differ from image. Front entrance may be changed as well. Floor layout dimensions may change.

DRYDEN COURT CONDOS

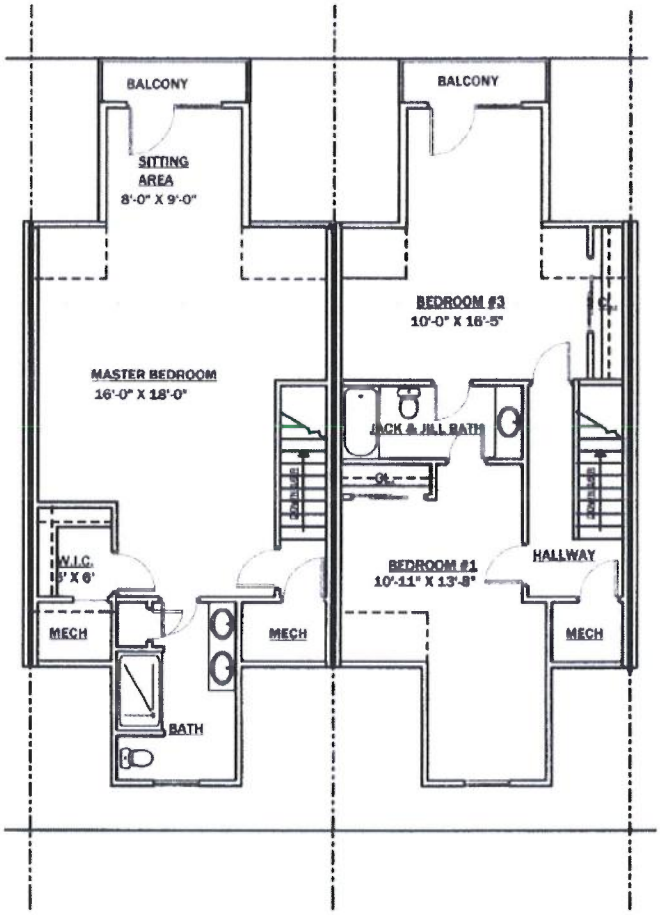
UPPER UNIT (FIRST FLOOR)



AVA MODEL STARDARD MAIN FLOOR

DRYDEN COURT CONDOS

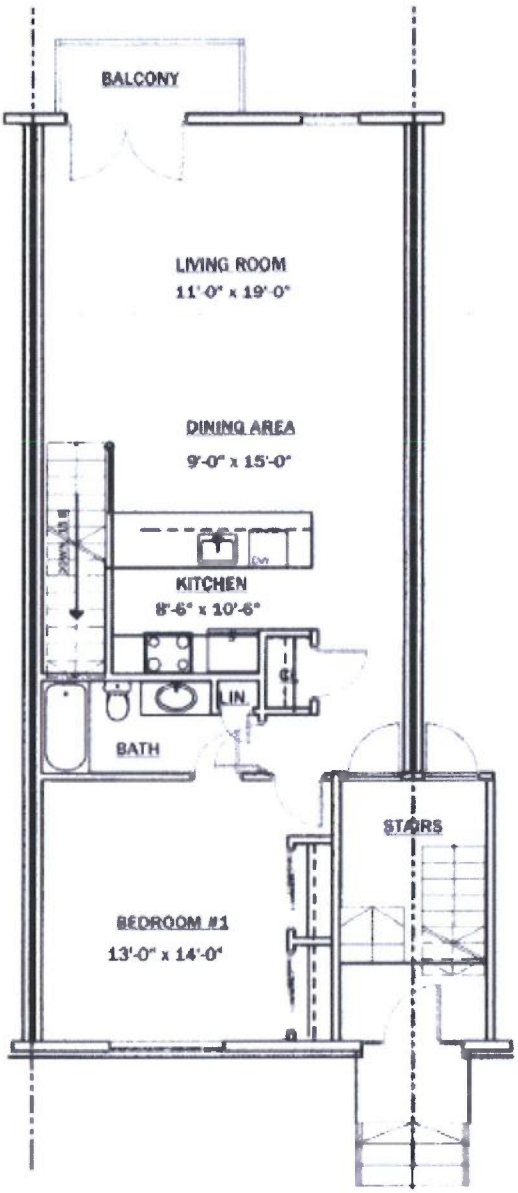
UPPER UNIT (SECOND FLOOR)



AVA MODEL STANDARD LOFT ***AVA MODEL 2 BEDROOM LOFT***

DRYDEN COURT CONDOS

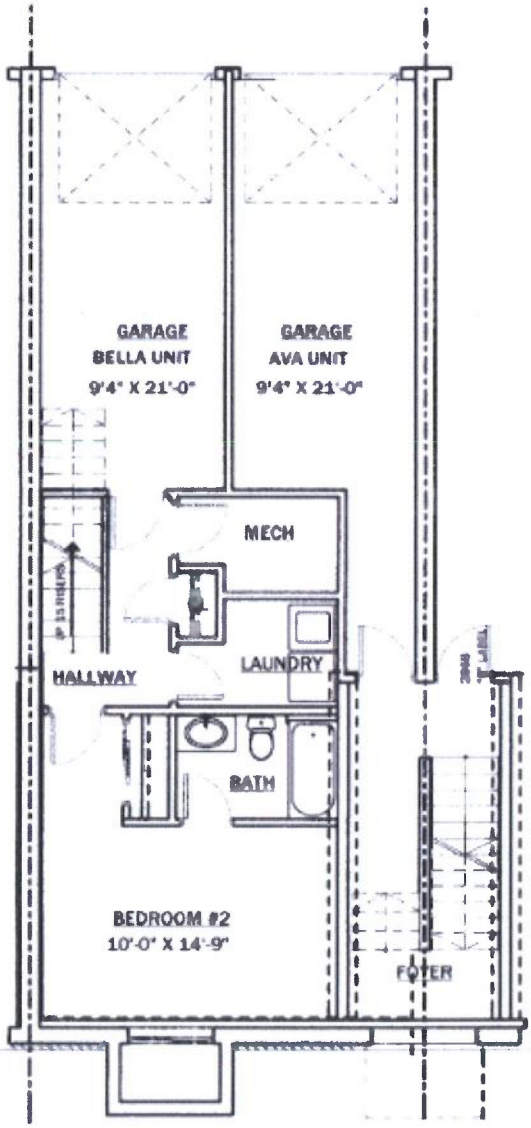
LOWER UNIT (FIRST FLOOR)



BELLA MODEL STANDARD MAIN FLOOR

DRYDEN COURT CONDOS

LOWER UNIT (SECOND FLOOR)



BELLA MODEL STANDARD GROUND FLOOR

Kaplin Stewart
Attorneys at Law

Craig R. Lewis
Direct Dial: (610) 941-2584
Direct Fax: (610) 684-2021
Email: rlewis@kaplaw.com
www.kaplaw.com

January 5, 2021

HAND DELIVERY

Borough of Conshohocken
Attn: Stephanie Cecco, Borough Manager
400 Fayette Street, Suite 200
Conshohocken, PA 19428

RE: 450 Colwell Lane - Application for Conditional Use
Dryden Court Development, LLC - Multi-family Development Stacked Condos
Our Reference No. 16140.009

Dear Ms. Cecco:

I represent Dryden Court Development, LLC ("**DCD**"). On December 30, 2020 DCD submitted an application for Conditional Use Approval ("**Application**") for the property located at 450 Colwell Lane, Conshohocken, PA ("**Property**"). The Application proposes to develop the Property for modern, multi-family housing ("**Proposed Use**") in accordance with Section 1901-B of the Zoning Ordinance.

The Application included all materials required by the Zoning Ordinance including, but not limited to, a Site Plan, Landscape Plan, Traffic Study and architectural plans. The Application was time-stamped and returned on December 30, 2020. As a supplement to the materials submitted with the Application, I am enclosing herewith twelve (12) copies a Post-Construction Stormwater Management Report prepared by Joseph M. Estock, dated December 29, 2020 ("**Stormwater Report**"). An electronic copy of the Stormwater Report will also be delivered to the Borough contemporaneously herewith by electronic transmission.

If you require anything additional copies of the Stormwater Report, or have and questions, please contact me at your convenience.

Best Regards,

Craig R. Lewis

Enclosures

cc (via e-mail w/ enclosures): DJB Properties, LLC
Michael E. Peters, Esq.
Eric P. Johnson, PE, Zoning Officer

JOSEPH M. ESTOCK
Consulting Engineers & Land Surveyors

355 South Henderson Road
King of Prussia, PA 19406-2407
(610) 265-3035
Fax (610) 962-9855

POST-CONSTRUCTION STORMWATER MANAGEMENT WRITTEN NARRATIVE

for

DRYDEN COURT
450 COLWELL LANE
SKETCH PLAN "D"

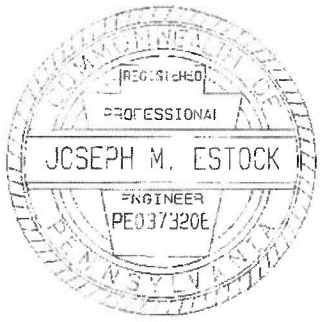
in

Conshohocken Borough
Montgomery County
Pennsylvania

prepared for

Dryden Court Development, LLC
c/o Mr. David J. Brosso
1125 Robin Road
Gladwyne, PA 19035
(610) 310-5055

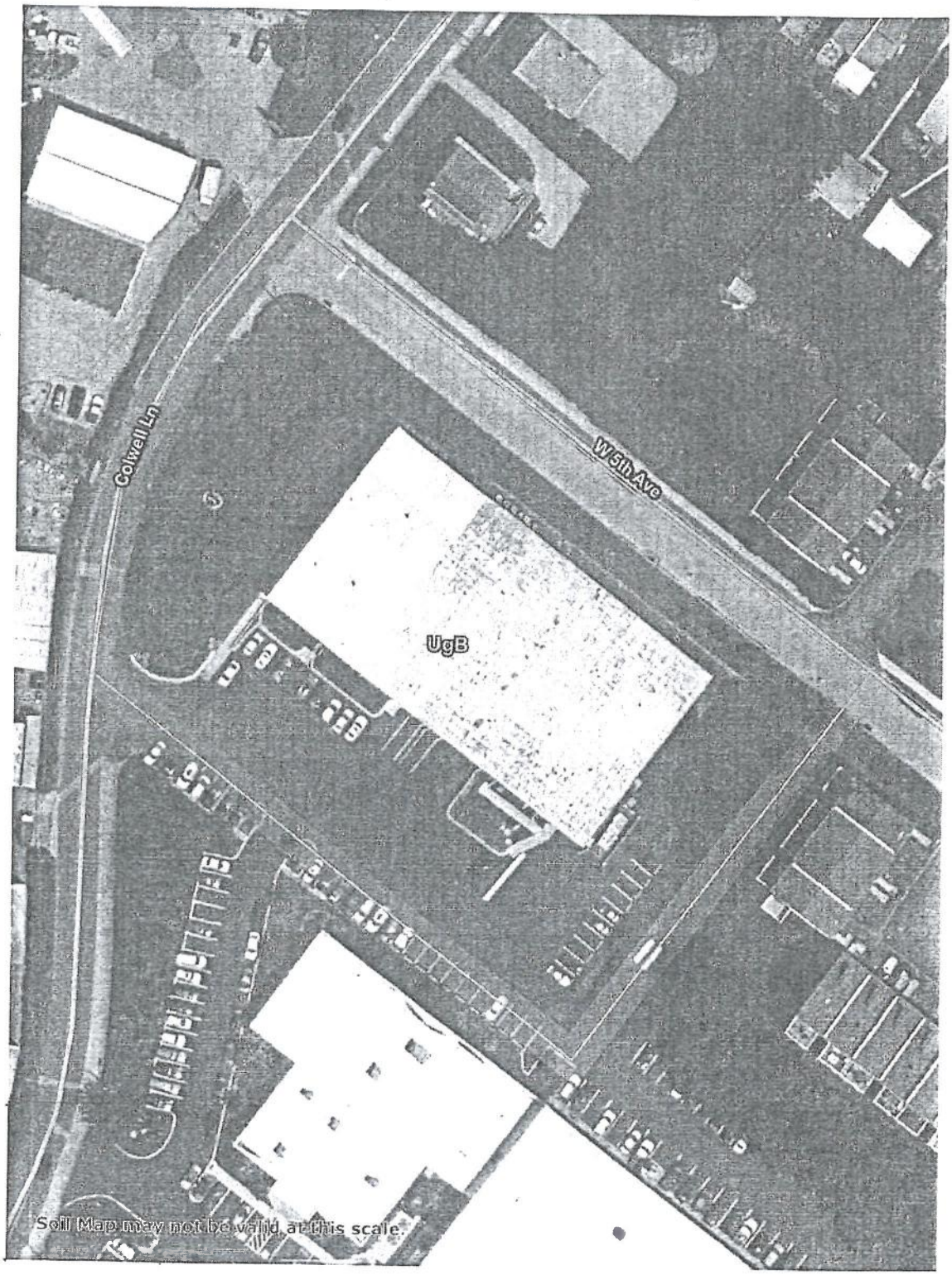
December 29, 2020



75° 18' 40" W

75° 18' 34" W

40° 4' 55" N



40° 4' 48" N

75° 18' 40" W

75° 18' 34" W

Map Scale: 1:1,030 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84

Map Unit Legend (450 Colwell Lane)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
UgB	Urban land, 0 to 8 percent slopes	2.5	100.0%
Totals for Area of Interest		2.5	100.0%

Map Unit Descriptions (450 Colwell Lane)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series.* Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases.* Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas.* Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Montgomery County, Pennsylvania

UgB—Urban land, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2dtyq
Elevation: 800 to 1,500 feet
Mean annual precipitation: 36 to 46 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Parent material: Pavement, buildings and other artifically covered areas human transported material

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Udorthents, unstable fill

Percent of map unit: 10 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

National Flood Hazard Layer FIRMette

FEMA

75°18'56"W 40°5'6"N

250 500 1,000 1,500 2,000 Feet

1:6,000

75°18'19"W 40°4'38"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

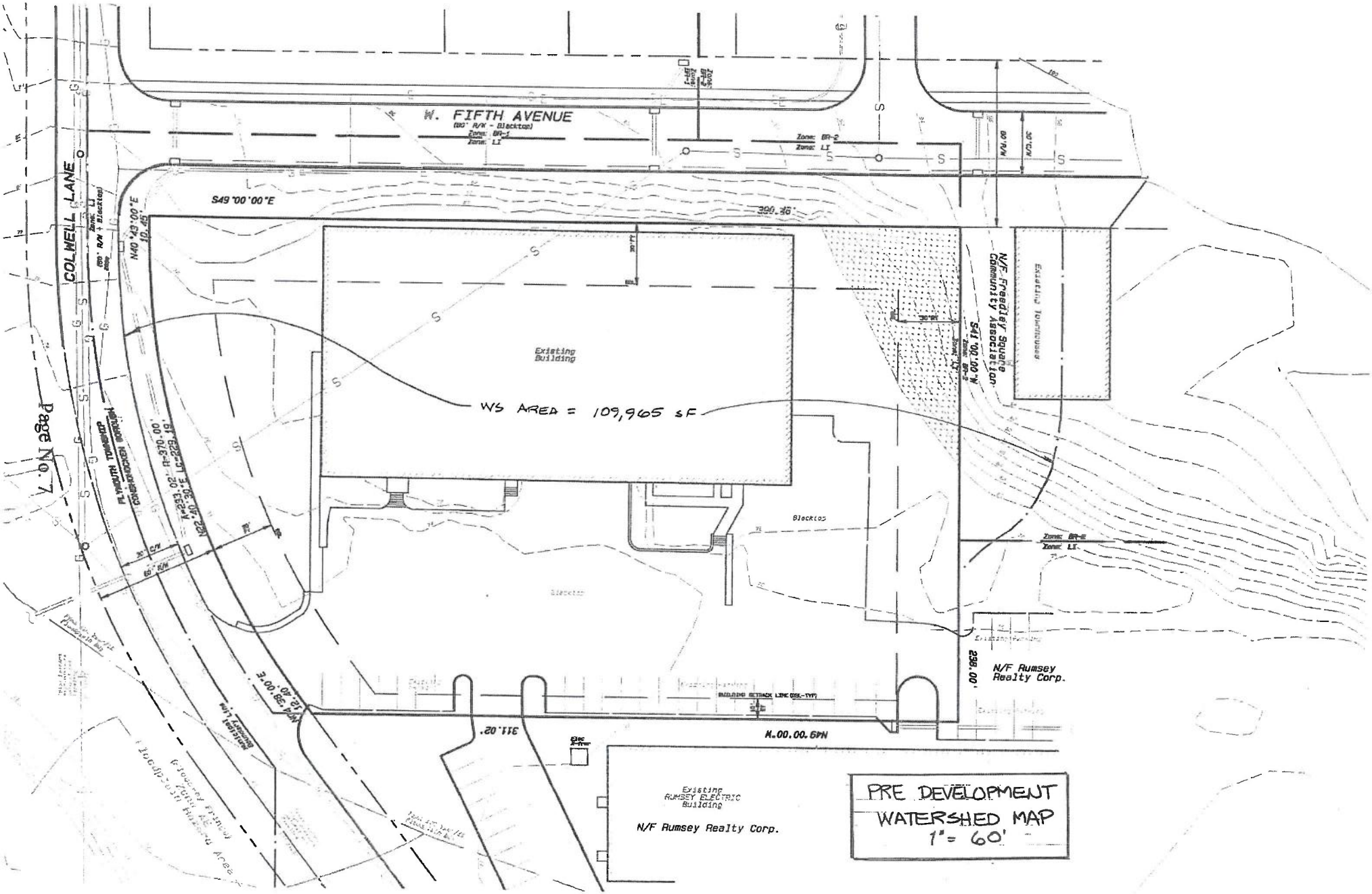
N

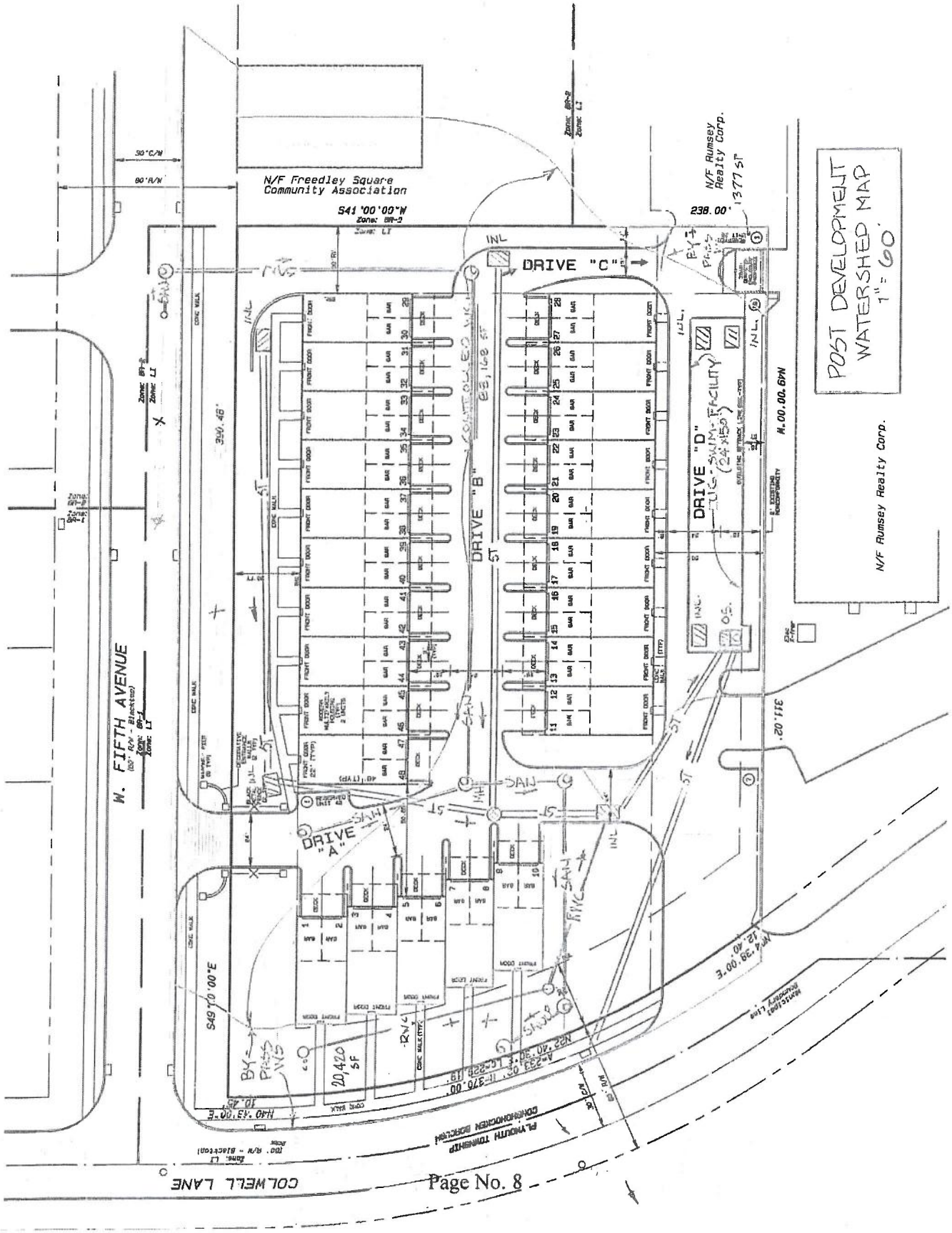
The pin displayed on the map is an approximate point selected by the user and does not represer an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/9/2020 at 8:31 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.


W. FIFTH AVENUE
COLWELL LANE
Existing Building
WS AREA = 109,965 sF
N/F Freedley Square Community Association
N/F Rumsey Realty Corp.
Existing RUMSEY ELECTRIC Building
N/F Rumsey Realty Corp.
PRE DEVELOPMENT WATERSHED MAP
1" = 60'


POST DEVELOPMENT
WATERSHED MAP
1" = 60'
N/F Freedley Square
Community Association
N/F Rumsey
Realty Corp.
N/F Rumsey Realty Corp.
DRIVE "A"
DRIVE "B"
DRIVE "C"
DRIVE "D"
W. FIFTH AVENUE
COLWELL LANE
S41°00'00"W
238.00'
311.02'
390.48'
S49°10'00"E
N40°43'00"E
N14°39'00"E
12.40'
20,420 SF
FLYMOUTH TOWNSHIP
CONSHOHOCKEN BOROUGH
Municipal Boundary Line

RATIONAL 'C' WORKSHEET			
Pre-Development Condition			
Cover Desription	C	Area	CxA
		(sf)	
Impervious	0.95	61,193	58,133
Lawn	0.40	48,772	19,509
Total		109,965	77,642
C (weighted)		=	0.7061
Watershed Area (acres)		=	2.5244

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

1 Year Storm in PA. Region 5 at Pre-Dev
Time of Concentration: 5 min.
Drainage Area: 2.5244 acres.
Weighted 'C' Factor: 0.7061

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.06	0.06	0.75	1.33
10	0.12	0.19	1.49	2.66
15	**0.33**	**0.52**	**4.00**	**7.13**
20	0.18	0.70	2.16	3.84
25	0.09	0.79	1.13	2.02
30	0.08	0.87	0.91	1.61
35	0.05	0.92	0.63	1.13
40	0.05	0.97	0.54	0.97
45	0.04	1.01	0.47	0.84
50	0.03	1.04	0.41	0.74

At time = 125 minutes, the flow is 0.33 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 5 at Pre-Dev
Time of Concentration: 5 min.
Drainage Area: 2.5244 acres.
Weighted 'C' Factor: 0.7061

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.08	0.08	0.96	1.71
10	0.15	0.23	1.82	3.25
15	**0.38**	**0.62**	**4.60**	**8.20**
20	0.21	0.83	2.57	4.59
25	0.12	0.95	1.41	2.52
30	0.10	1.04	1.15	2.04
35	0.07	1.11	0.82	1.46
40	0.06	1.17	0.72	1.27
45	0.05	1.22	0.63	1.12
50	0.05	1.27	0.56	1.00

At time = 125 minutes, the flow is 0.43 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

5 Year Storm in PA. Region 5 at Pre-Dev
Time of Concentration: 5 min.
Drainage Area: 2.5244 acres.
Weighted 'C' Factor: 0.7061

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.09	0.09	1.14	2.03
10	0.19	0.28	2.23	3.98
15	**0.45**	**0.73**	**5.39**	**9.61**
20	0.26	0.99	3.17	5.65
25	0.14	1.14	1.71	3.05
30	0.11	1.25	1.37	2.45
35	0.08	1.33	0.96	1.71
40	0.07	1.40	0.83	1.47
45	0.06	1.46	0.72	1.28
50	0.05	1.51	0.63	1.12

At time = 125 minutes, the flow is 0.56 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 5 at Pre-Dev
Time of Concentration: 5 min.
Drainage Area: 2.5244 acres.
Weighted 'C' Factor: 0.7061

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.11	0.11	1.35	2.41
10	0.21	0.32	2.51	4.47
15	**0.50**	**0.82**	**6.02**	**10.72**
20	0.29	1.11	3.49	6.22
25	0.16	1.28	1.96	3.49
30	0.13	1.41	1.60	2.86
35	0.10	1.51	1.16	2.07
40	0.08	1.59	1.02	1.81
45	0.08	1.67	0.90	1.61
50	0.07	1.73	0.80	1.43

At time = 125 minutes, the flow is 0.69 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 5 at Pre-Dev
Time of Concentration: 5 min.
Drainage Area: 2.5244 acres.
Weighted 'C' Factor: 0.7061

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.13	0.13	1.60	2.85
10	0.25	0.38	2.98	5.31
15	**0.56**	**0.94**	**6.70**	**11.95**
20	0.34	1.28	4.12	7.34
25	0.19	1.48	2.33	4.15
30	0.16	1.64	1.90	3.39
35	0.11	1.75	1.37	2.45
40	0.10	1.85	1.19	2.13
45	0.09	1.94	1.05	1.87
50	0.08	2.02	0.94	1.67

At time = 125 minutes, the flow is 0.79 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 5 at Pre-Dev
Time of Concentration: 5 min.
Drainage Area: 2.5244 acres.
Weighted 'C' Factor: 0.7061

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.17	0.17	2.01	3.58
10	0.31	0.47	3.69	6.58
15	**0.63**	**1.10**	**7.50**	**13.38**
20	0.42	1.52	5.02	8.94
25	0.24	1.76	2.91	5.19
30	0.20	1.96	2.38	4.25
35	0.14	2.10	1.72	3.07
40	0.12	2.23	1.50	2.67
45	0.11	2.34	1.32	2.35
50	0.10	2.44	1.17	2.09

At time = 125 minutes, the flow is 0.92 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 5 at Pre-Dev
Time of Concentration: 5 min.
Drainage Area: 2.5244 acres.
Weighted 'C' Factor: 0.7061

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.20	0.20	2.36	4.20
10	0.35	0.55	4.20	7.48
15	**0.68**	**1.23**	**8.19**	**14.60**
20	0.47	1.70	5.61	10.00
25	0.28	1.98	3.35	5.97
30	0.23	2.21	2.78	4.95
35	0.17	2.38	2.04	3.64
40	0.15	2.53	1.79	3.19
45	0.13	2.66	1.59	2.83
50	0.12	2.78	1.42	2.53

At time = 125 minutes, the flow is 1.10 CFS.

RATIONAL 'C' WORKSHEET			
Post-Development Condition - Bypass			
Cover Desription	C	Area	CxA
		(sf)	
Impervious	0.95	9,975	9,476
Lawn	0.40	11,822	4,729
Total		21,797	14,205
C (weighted)		=	0.6517
Watershed Area (acres)		=	0.5004

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

1 Year Storm in PA. Region 5 at Post-Dev - Bypass
Time of Concentration: 5 min.
Drainage Area: 0.5004 acres.
Weighted 'C' Factor: 0.6517

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.06	0.06	0.75	0.24
10	0.12	0.19	1.49	0.49
15	**0.33**	**0.52**	**4.00**	**1.30**
20	0.18	0.70	2.16	0.70
25	0.09	0.79	1.13	0.37
30	0.08	0.87	0.91	0.30
35	0.05	0.92	0.63	0.21
40	0.05	0.97	0.54	0.18
45	0.04	1.01	0.47	0.15
50	0.03	1.04	0.41	0.14

At time = 125 minutes, the flow is 0.06 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 5 at Post-Dev - Bypass
Time of Concentration: 5 min.
Drainage Area: 0.5004 acres.
Weighted 'C' Factor: 0.6517

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.08	0.08	0.96	0.31
10	0.15	0.23	1.82	0.59
15	**0.38**	**0.62**	**4.60**	**1.50**
20	0.21	0.83	2.57	0.84
25	0.12	0.95	1.41	0.46
30	0.10	1.04	1.15	0.37
35	0.07	1.11	0.82	0.27
40	0.06	1.17	0.72	0.23
45	0.05	1.22	0.63	0.21
50	0.05	1.27	0.56	0.18

At time = 125 minutes, the flow is 0.08 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

5 Year Storm in PA. Region 5 at Post-Dev - Bypass
Time of Concentration: 5 min.
Drainage Area: 0.5004 acres.
Weighted 'C' Factor: 0.6517

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.09	0.09	1.14	0.37
10	0.19	0.28	2.23	0.73
15	**0.45**	**0.73**	**5.39**	**1.76**
20	0.26	0.99	3.17	1.03
25	0.14	1.14	1.71	0.56
30	0.11	1.25	1.37	0.45
35	0.08	1.33	0.96	0.31
40	0.07	1.40	0.83	0.27
45	0.06	1.46	0.72	0.23
50	0.05	1.51	0.63	0.21

At time = 125 minutes, the flow is 0.10 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 5 at Post-Dev - Bypass
Time of Concentration: 5 min.
Drainage Area: 0.5004 acres.
Weighted 'C' Factor: 0.6517

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.11	0.11	1.35	0.44
10	0.21	0.32	2.51	0.82
15	**0.50**	**0.82**	**6.02**	**1.96**
20	0.29	1.11	3.49	1.14
25	0.16	1.28	1.96	0.64
30	0.13	1.41	1.60	0.52
35	0.10	1.51	1.16	0.38
40	0.08	1.59	1.02	0.33
45	0.08	1.67	0.90	0.29
50	0.07	1.73	0.80	0.26

At time = 125 minutes, the flow is 0.13 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 5 at Post-Dev - Bypass
Time of Concentration: 5 min.
Drainage Area: 0.5004 acres.
Weighted 'C' Factor: 0.6517

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.13	0.13	1.60	0.52
10	0.25	0.38	2.98	0.97
15	**0.56**	**0.94**	**6.70**	**2.19**
20	0.34	1.28	4.12	1.34
25	0.19	1.48	2.33	0.76
30	0.16	1.64	1.90	0.62
35	0.11	1.75	1.37	0.45
40	0.10	1.85	1.19	0.39
45	0.09	1.94	1.05	0.34
50	0.08	2.02	0.94	0.31

At time = 125 minutes, the flow is 0.14 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 5 at Post-Dev - Bypass
Time of Concentration: 5 min.
Drainage Area: 0.5004 acres.
Weighted 'C' Factor: 0.6517

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.17	0.17	2.01	0.65
10	0.31	0.47	3.69	1.20
15	**0.63**	**1.10**	**7.50**	**2.45**
20	0.42	1.52	5.02	1.64
25	0.24	1.76	2.91	0.95
30	0.20	1.96	2.38	0.78
35	0.14	2.10	1.72	0.56
40	0.12	2.23	1.50	0.49
45	0.11	2.34	1.32	0.43
50	0.10	2.44	1.17	0.38

At time = 125 minutes, the flow is 0.17 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 5 at Post-Dev - Bypass
Time of Concentration: 5 min.
Drainage Area: 0.5004 acres.
Weighted 'C' Factor: 0.6517

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.20	0.20	2.36	0.77
10	0.35	0.55	4.20	1.37
15	**0.68**	**1.23**	**8.19**	**2.67**
20	0.47	1.70	5.61	1.83
25	0.28	1.98	3.35	1.09
30	0.23	2.21	2.78	0.91
35	0.17	2.38	2.04	0.67
40	0.15	2.53	1.79	0.58
45	0.13	2.66	1.59	0.52
50	0.12	2.78	1.42	0.46

At time = 125 minutes, the flow is 0.20 CFS.

RATIONAL 'C' WORKSHEET			
Post-Development Condition - Controlled			
Cover Desription	C	Area	CxA
		(sf)	
Impervious	0.95	59,594	56,614
Lawn	0.40	28,574	11,430
Total		88,168	68,044
C (weighted)		=	0.7718
Watershed Area (acres)		=	2.0241

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

1 Year Storm in PA. Region 5 at Post-Dev - Control
Time of Concentration: 5 min.
Drainage Area: 2.0241 acres.
Weighted 'C' Factor: 0.7718

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.06	0.06	0.75	1.17
10	0.12	0.19	1.49	2.33
15	**0.33**	**0.52**	**4.00**	**6.25**
20	0.18	0.70	2.16	3.37
25	0.09	0.79	1.13	1.77
30	0.08	0.87	0.91	1.41
35	0.05	0.92	0.63	0.99
40	0.05	0.97	0.54	0.85
45	0.04	1.01	0.47	0.74
50	0.03	1.04	0.41	0.65

At time = 125 minutes, the flow is 0.29 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 5 at Post-Dev - Control
Time of Concentration: 5 min.
Drainage Area: 2.0241 acres.
Weighted 'C' Factor: 0.7718

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.08	0.08	0.96	1.50
10	0.15	0.23	1.82	2.85
15	**0.38**	**0.62**	**4.60**	**7.19**
20	0.21	0.83	2.57	4.02
25	0.12	0.95	1.41	2.20
30	0.10	1.04	1.15	1.79
35	0.07	1.11	0.82	1.28
40	0.06	1.17	0.72	1.12
45	0.05	1.22	0.63	0.98
50	0.05	1.27	0.56	0.88

At time = 125 minutes, the flow is 0.38 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

5 Year Storm in PA. Region 5 at Post-Dev - Control
Time of Concentration: 5 min.
Drainage Area: 2.0241 acres.
Weighted 'C' Factor: 0.7718

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.09	0.09	1.14	1.78
10	0.19	0.28	2.23	3.49
15	**0.45**	**0.73**	**5.39**	**8.42**
20	0.26	0.99	3.17	4.95
25	0.14	1.14	1.71	2.67
30	0.11	1.25	1.37	2.14
35	0.08	1.33	0.96	1.50
40	0.07	1.40	0.83	1.29
45	0.06	1.46	0.72	1.12
50	0.05	1.51	0.63	0.98

At time = 125 minutes, the flow is 0.49 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 5 at Post-Dev - Control
Time of Concentration: 5 min.
Drainage Area: 2.0241 acres.
Weighted 'C' Factor: 0.7718

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.11	0.11	1.35	2.11
10	0.21	0.32	2.51	3.92
15	**0.50**	**0.82**	**6.02**	**9.40**
20	0.29	1.11	3.49	5.45
25	0.16	1.28	1.96	3.06
30	0.13	1.41	1.60	2.50
35	0.10	1.51	1.16	1.82
40	0.08	1.59	1.02	1.59
45	0.08	1.67	0.90	1.41
50	0.07	1.73	0.80	1.25

At time = 125 minutes, the flow is 0.60 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 5 at Post-Dev - Control
Time of Concentration: 5 min.
Drainage Area: 2.0241 acres.
Weighted 'C' Factor: 0.7718

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.13	0.13	1.60	2.50
10	0.25	0.38	2.98	4.65
15	**0.56**	**0.94**	**6.70**	**10.47**
20	0.34	1.28	4.12	6.43
25	0.19	1.48	2.33	3.64
30	0.16	1.64	1.90	2.97
35	0.11	1.75	1.37	2.15
40	0.10	1.85	1.19	1.87
45	0.09	1.94	1.05	1.64
50	0.08	2.02	0.94	1.47

At time = 125 minutes, the flow is 0.69 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 5 at Post-Dev - Control
Time of Concentration: 5 min.
Drainage Area: 2.0241 acres.
Weighted 'C' Factor: 0.7718

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.17	0.17	2.01	3.14
10	0.31	0.47	3.69	5.77
15	**0.63**	**1.10**	**7.50**	**11.72**
20	0.42	1.52	5.02	7.84
25	0.24	1.76	2.91	4.55
30	0.20	1.96	2.38	3.72
35	0.14	2.10	1.72	2.69
40	0.12	2.23	1.50	2.34
45	0.11	2.34	1.32	2.06
50	0.10	2.44	1.17	1.83

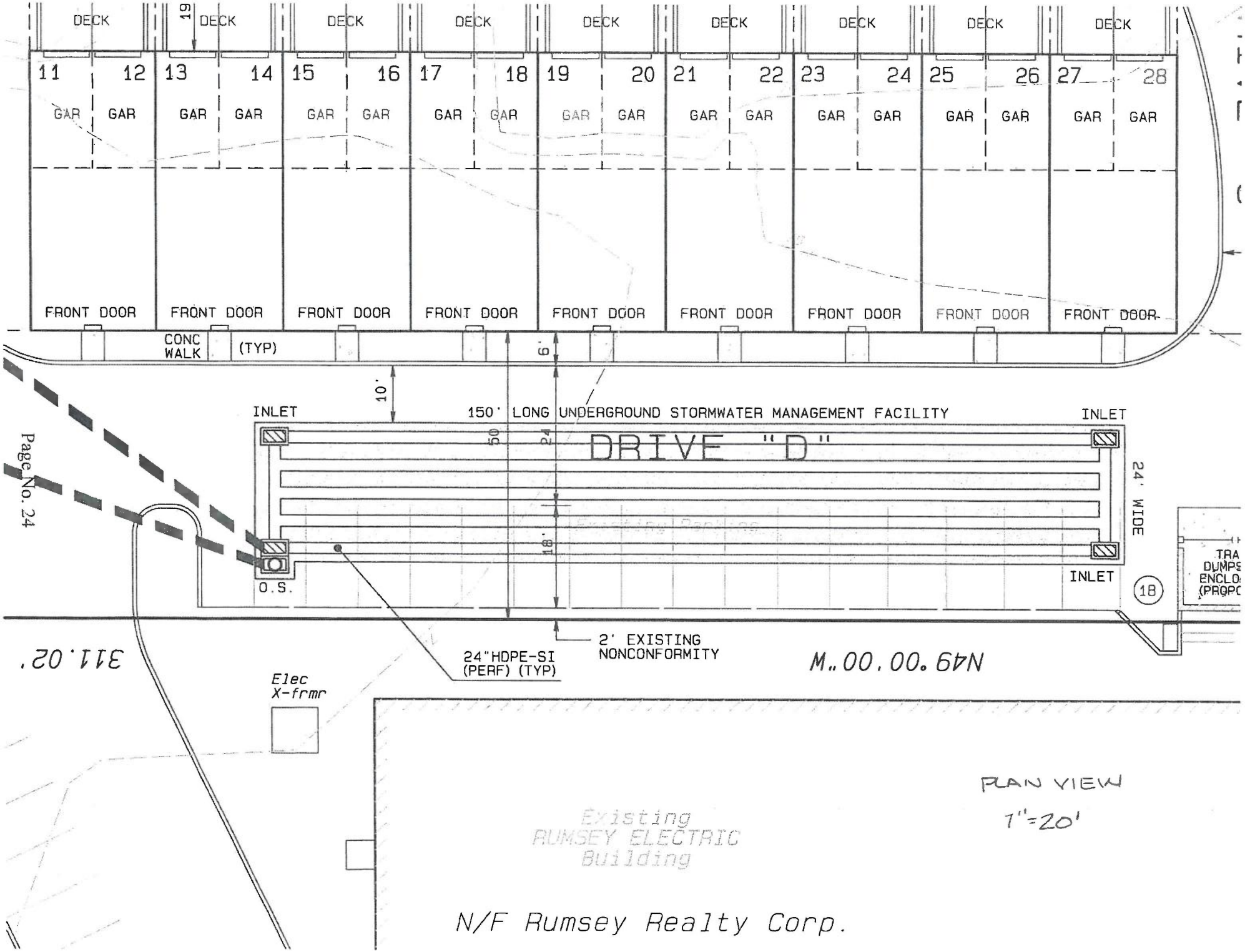
At time = 125 minutes, the flow is 0.80 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 5 at Post-Dev - Control
Time of Concentration: 5 min.
Drainage Area: 2.0241 acres.
Weighted 'C' Factor: 0.7718

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.20	0.20	2.36	3.68
10	0.35	0.55	4.20	6.56
15	**0.68**	**1.23**	**8.19**	**12.79**
20	0.47	1.70	5.61	8.76
25	0.28	1.98	3.35	5.23
30	0.23	2.21	2.78	4.34
35	0.17	2.38	2.04	3.19
40	0.15	2.53	1.79	2.80
45	0.13	2.66	1.59	2.48
50	0.12	2.78	1.42	2.22

At time = 125 minutes, the flow is 0.97 CFS.


DECK
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GAR
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(TYP)
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INLET
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INLET
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DRIVE "D"
24' WIDE
18'
O.S.
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2' EXISTING NONCONFORMITY
24"HDPE-SI (PERF) (TYP)
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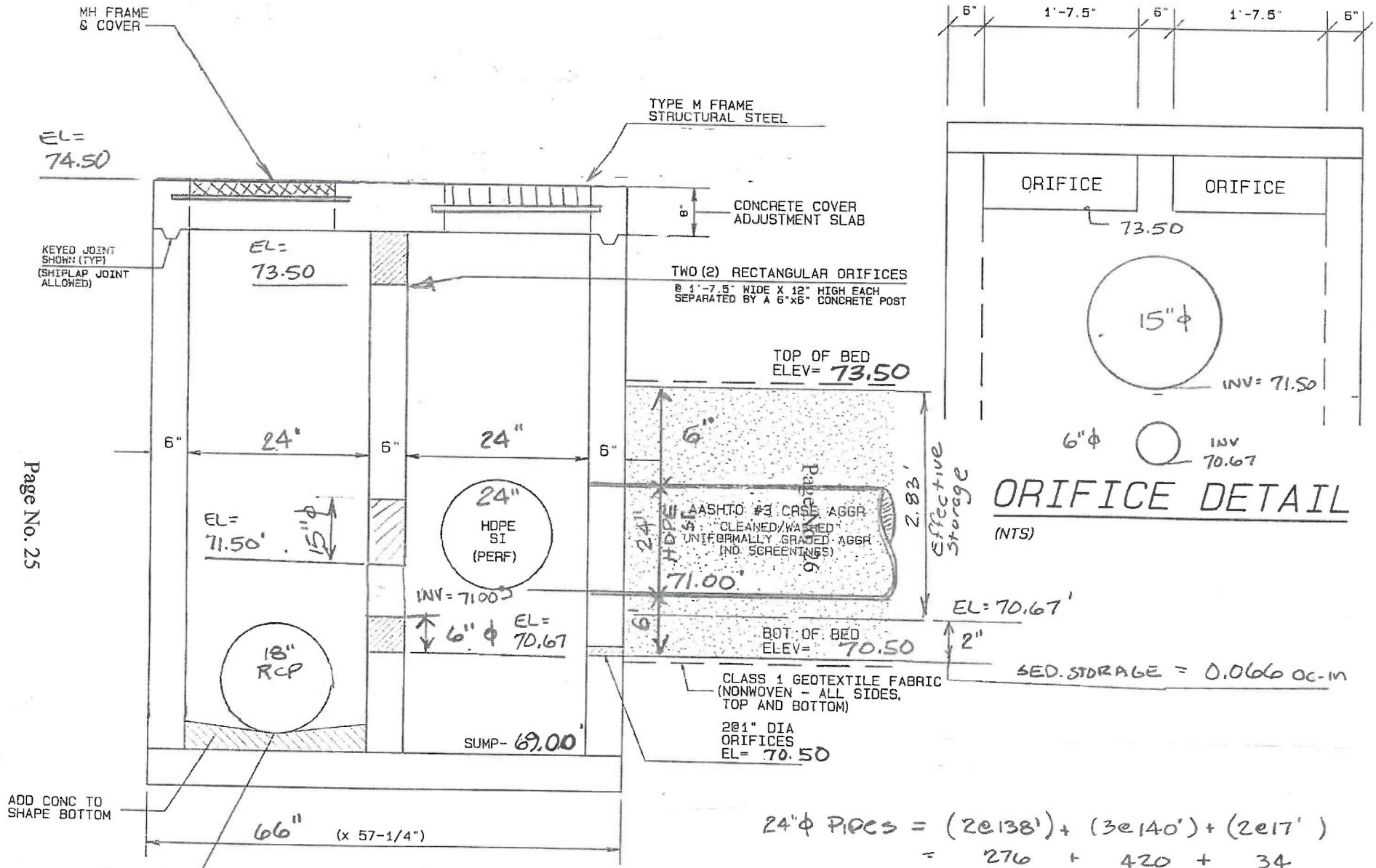
Elec X-frmr
Existing RUMSEY ELECTRIC Building
N/F Rumsey Realty Corp.
PLAN VIEW
1"=20'



ORIFICE DETAIL

(NTS)

(150' L x 24' W x 3' D)

OUTLET STRUCTURE DETAIL

24"ϕ Pipes = (2@138') + (3@140') + (2@17')
= 276 + 420 + 34
= 730 LF

UG-SWM-FACILITY

SEEPAGE BED STORAGE VOLUME WORKSHEET		

TOTAL BED VOLUME		
Length - L	150.0	feet
Width - W	24.0	feet
Depth - D	2.83	feet
Total Bed Volume - BV (LxWxD)	10200.0	cf

TOTAL PIPE VOLUME		
Length - L	730.0	feet
Diameter - D	24.0	Inches
Total Pipe Volume - PV ($\pi \div 4 \times D^2 \times L$)	2293.4	cf

VOLUME OF STONE		
Total Bed Volume - BV	10200.0	cf
Total Pipe Volume - PV	2293.4	cf
Total Stone Volume (BV-PV)	7906.6	cf

VOLUME OF VOIDS		
Total Stone Volume - TSV	7906.6	cf
Void Ratio - VR	0.40	
Total Voids Volume (VV x VR)	3162.7	cf

TOTAL STORAGE		
Total Voids Volume - VV	3162.7	cf
Total Pipe Volume - PV	2293.36	cf
Total Bed Storage (VV + PV)	5456.0	cf

TOTAL BED STORAGE	5456.0	cf

TOTAL BED STORAGE	0.12525	ac-ft

STAGE STORAGE DATA		
Water Surface Elevation (ft)	Total Volume (cf)	Total Volume (ac-ft)
70.67	0.0	0.0000
71.00	641.9	0.0147
71.50	1,604.7	0.0368
72.00	2,567.5	0.0589
72.50	3,530.4	0.0810
73.00	4,493.2	0.1031
73.50	5,456.0	0.1253

Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Storage/Elevation Input

Elevation (ft)	Storage (acre-ft)
70.67	0.0000
71.00	0.0147
71.50	0.0368
72.00	0.0589
72.50	0.0810
73.00	0.1031
73.50	0.1253
74.00	0.1254
74.50	0.1255

Project Files:
Outlet Structure Configuration: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.OSC
Discharge/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.EO

Outlet Structure Configuration for:

Stage 1: Circular Orifice
Invert Elevation = 70.67 feet
Diameter = 0.5 feet
Discharge Coefficient = 0.6

Stage 2: Circular Orifice
Invert Elevation = 71.5 feet
Diameter = 1.25 feet
Discharge Coefficient = 0.6

Stage 3: Rectangular Weir
Crest Elevation = 73.5 feet
Length = 3.27 feet
Discharge Coefficient = 3.1

Stage 4: Outfall Culvert
Invert Elevation = 70.5 feet
Pipe Diameter = 1.5 feet
Pipe Length = 196 feet
Pipe Slope = 0.013 ft/ft
Manning n = 0.012
Entrance Condition = SEH
Number of Barrels = 1

Basin Rating Curve

Basin Water Elevation	Basin Outflow (cfs)	Riser Box Water Elevation	Tailwater Elevation (ft)	Outfall Culvert Control	Outfall Culvert Override?
70.67	0.00	70.50	N/A	INLET	N/A
70.92	0.13	70.66	N/A	INLET	NO
71.17	0.43	70.80	N/A	INLET	NO
71.42	0.56	70.84	N/A	INLET	NO
71.67	0.82	70.92	N/A	INLET	NO
71.92	1.43	71.06	N/A	INLET	NO
72.17	2.37	71.23	N/A	INLET	NO
72.42	3.61	71.41	N/A	INLET	NO
72.67	4.92	71.59	N/A	INLET	NO
72.92	5.53	71.66	N/A	INLET	NO
73.17	6.28	71.76	N/A	INLET	NO
73.42	6.99	71.85	N/A	INLET	NO
73.67	8.06	72.16	N/A	INLET	NO
73.92	10.09	72.79	N/A	INLET	NO
74.17	11.93	73.32	N/A	INLET	NO
74.42	13.44	73.83	N/A	INLET	NO

NOTE: When a 'YES' appears in the Outfall Culvert Override column, the outfall culvert is restricting the pond outflow. The Basin outflow is equal to the outfall culvert capacity at that riser box water elevation.

Modified Puls Routing

Inflow Hydrograph: C:\Users\Andrew\Desktop\Jobs\20033\SWM\Hydrographs - Sketch D\POST\Control\1.HYD
Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Bypass Capacity = 0.00 cfs
Starting Pool Elevation = 70.67 feet
Time Interval = 0.021 hours

1 year

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)	
0.00	0.00	0.00	0.0000	70.67	0.00	0.00	
0.02	0.29	0.29	0.0002	70.68	0.00	0.00	
0.04	0.58	0.58	0.0010	70.69	0.01	0.01	
0.06	0.88	0.88	0.0022	70.72	0.03	0.03	
0.08	1.17	1.17	0.0039	70.76	0.05	0.05	
0.10	1.46	1.46	0.0061	70.81	0.07	0.07	
0.12	1.75	1.75	0.0087	70.87	0.10	0.10	
0.15	2.04	2.04	0.0117	70.93	0.15	0.15	
0.17	2.33	2.33	0.0152	71.01	0.24	0.24	
0.19	3.31	3.31	0.0195	71.11	0.35	0.35	
0.21	4.29	4.29	0.0254	71.24	0.47	0.47	
0.23	5.27	5.27	0.0327	71.41	0.56	0.56	
0.25	6.25	6.25	0.0415	71.61	0.76	0.76	
0.27	5.53	5.53	0.0500	71.80	1.14	1.14	
0.29	4.81	4.81	0.0566	71.95	1.54	1.54	
0.31	4.09	4.09	0.0613	72.05	1.93	1.93	
0.33	3.37	3.37	0.0641	72.12	2.18	2.18	
0.35	2.97	2.97	0.0657	72.15	2.31	2.31	
0.37	2.57	2.57	0.0665	72.17	2.38	2.38	PEAK
0.40	2.17	2.17	0.0664	72.17	2.38	2.38	
0.42	1.77	1.77	0.0658	72.16	2.32	2.32	
0.44	1.68	1.68	0.0648	72.13	2.24	2.24	
0.46	1.59	1.59	0.0639	72.11	2.16	2.16	
0.48	1.50	1.50	0.0629	72.09	2.07	2.07	
0.50	1.41	1.41	0.0619	72.07	1.99	1.99	
0.52	1.31	1.31	0.0609	72.05	1.90	1.90	
0.54	1.20	1.20	0.0599	72.02	1.82	1.82	
0.56	1.09	1.09	0.0588	72.00	1.72	1.72	
0.58	0.99	0.99	0.0577	71.97	1.63	1.63	
0.60	0.95	0.95	0.0566	71.95	1.54	1.54	
0.62	0.92	0.92	0.0557	71.93	1.46	1.46	
0.65	0.88	0.88	0.0548	71.91	1.40	1.40	
0.67	0.85	0.85	0.0539	71.89	1.35	1.35	
0.69	0.82	0.82	0.0530	71.87	1.30	1.30	
0.71	0.79	0.79	0.0522	71.85	1.26	1.26	
0.73	0.77	0.77	0.0514	71.83	1.22	1.22	
0.75	0.74	0.74	0.0507	71.81	1.17	1.17	
0.77	0.72	0.72	0.0499	71.80	1.13	1.13	
0.79	0.69	0.69	0.0492	71.78	1.09	1.09	
0.81	0.67	0.67	0.0486	71.77	1.06	1.06	
0.83	0.65	0.65	0.0479	71.75	1.02	1.02	
0.85	0.63	0.63	0.0473	71.74	0.99	0.99	
0.87	0.61	0.61	0.0467	71.72	0.95	0.95	
0.90	0.59	0.59	0.0461	71.71	0.92	0.92	
0.92	0.58	0.58	0.0455	71.70	0.89	0.89	
0.94	0.56	0.56	0.0450	71.69	0.86	0.86	
0.96	0.55	0.55	0.0445	71.67	0.83	0.83	
0.98	0.53	0.53	0.0440	71.66	0.82	0.82	
1.00	0.52	0.52	0.0435	71.65	0.80	0.80	
1.02	0.51	0.51	0.0430	71.64	0.79	0.79	

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.04	0.50	0.50	0.0425	71.63	0.78	0.78
1.06	0.49	0.49	0.0420	71.62	0.77	0.77
1.08	0.48	0.48	0.0416	71.61	0.76	0.76
1.10	0.47	0.47	0.0411	71.60	0.75	0.75
1.12	0.46	0.46	0.0406	71.59	0.74	0.74
1.15	0.45	0.45	0.0401	71.58	0.72	0.72
1.17	0.44	0.44	0.0396	71.56	0.71	0.71
1.19	0.43	0.43	0.0392	71.55	0.70	0.70
1.21	0.43	0.43	0.0387	71.54	0.69	0.69
1.23	0.42	0.42	0.0383	71.53	0.68	0.68
1.25	0.42	0.42	0.0378	71.52	0.67	0.67
1.27	0.41	0.41	0.0374	71.51	0.66	0.66
1.29	0.41	0.41	0.0370	71.50	0.65	0.65
1.31	0.40	0.40	0.0366	71.49	0.64	0.64
1.33	0.40	0.40	0.0362	71.49	0.63	0.63
1.35	0.39	0.39	0.0358	71.48	0.62	0.62
1.37	0.39	0.39	0.0354	71.47	0.61	0.61
1.40	0.39	0.39	0.0350	71.46	0.60	0.60
1.42	0.38	0.38	0.0346	71.45	0.59	0.59
1.44	0.38	0.38	0.0343	71.44	0.59	0.59
1.46	0.37	0.37	0.0339	71.43	0.58	0.58
1.48	0.37	0.37	0.0336	71.43	0.57	0.57
1.50	0.37	0.37	0.0332	71.42	0.56	0.56
1.52	0.36	0.36	0.0329	71.41	0.56	0.56
1.54	0.36	0.36	0.0326	71.40	0.55	0.55
1.56	0.36	0.36	0.0322	71.40	0.55	0.55
1.58	0.35	0.35	0.0319	71.39	0.55	0.55
1.60	0.35	0.35	0.0316	71.38	0.54	0.54
1.62	0.35	0.35	0.0312	71.37	0.54	0.54
1.65	0.34	0.34	0.0309	71.37	0.53	0.53
1.67	0.34	0.34	0.0306	71.36	0.53	0.53
1.69	0.34	0.34	0.0303	71.35	0.53	0.53
1.71	0.33	0.33	0.0299	71.34	0.52	0.52
1.73	0.33	0.33	0.0296	71.34	0.52	0.52
1.75	0.33	0.33	0.0293	71.33	0.51	0.51
1.77	0.33	0.33	0.0290	71.32	0.51	0.51
1.79	0.32	0.32	0.0287	71.32	0.51	0.51
1.81	0.32	0.32	0.0283	71.31	0.50	0.50
1.83	0.32	0.32	0.0280	71.30	0.50	0.50
1.85	0.32	0.32	0.0277	71.29	0.49	0.49
1.87	0.31	0.31	0.0274	71.29	0.49	0.49
1.90	0.31	0.31	0.0271	71.28	0.49	0.49
1.92	0.31	0.31	0.0268	71.27	0.48	0.48
1.94	0.31	0.31	0.0265	71.27	0.48	0.48
1.96	0.30	0.30	0.0262	71.26	0.48	0.48
1.98	0.30	0.30	0.0259	71.25	0.47	0.47
2.00	0.30	0.30	0.0256	71.25	0.47	0.47
2.02	0.30	0.30	0.0253	71.24	0.47	0.47
2.04	0.29	0.29	0.0250	71.23	0.46	0.46
2.06	0.29	0.29	0.0247	71.23	0.46	0.46
2.08	0.29	0.29	0.0245	71.22	0.45	0.45

Modified Puls Routing

Inflow Hydrograph: C:\Users\Andrew\Desktop\Jobs\20033\SWM\Hydrographs - Sketch D\POST\Control\2.HYD
Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Bypass Capacity = 0.00 cfs
Starting Pool Elevation = 70.67 feet
Time Interval = 0.021 hours

2 year

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)	
0.00	0.00	0.00	0.0000	70.67	0.00	0.00	
0.02	0.38	0.38	0.0003	70.68	0.00	0.00	
0.04	0.75	0.75	0.0013	70.70	0.02	0.02	
0.06	1.13	1.13	0.0028	70.73	0.03	0.03	
0.08	1.50	1.50	0.0050	70.78	0.06	0.06	
0.10	1.84	1.84	0.0078	70.84	0.09	0.09	
0.12	2.17	2.17	0.0110	70.92	0.13	0.13	
0.15	2.51	2.51	0.0148	71.00	0.23	0.23	
0.17	2.85	2.85	0.0189	71.09	0.34	0.34	
0.19	3.93	3.93	0.0241	71.21	0.45	0.45	
0.21	5.02	5.02	0.0309	71.37	0.53	0.53	
0.23	6.10	6.10	0.0394	71.56	0.71	0.71	
0.25	7.19	7.19	0.0493	71.78	1.10	1.10	
0.27	6.40	6.40	0.0586	71.99	1.71	1.71	
0.29	5.61	5.61	0.0655	72.15	2.29	2.29	
0.31	4.81	4.81	0.0701	72.25	2.78	2.78	
0.33	4.02	4.02	0.0727	72.31	3.07	3.07	
0.35	3.57	3.57	0.0738	72.34	3.20	3.20	
0.37	3.11	3.11	0.0740	72.34	3.22	3.22	PEAK
0.40	2.66	2.66	0.0735	72.33	3.16	3.16	
0.42	2.20	2.20	0.0723	72.30	3.03	3.03	
0.44	2.10	2.10	0.0710	72.27	2.88	2.88	
0.46	2.00	2.00	0.0697	72.24	2.73	2.73	
0.48	1.89	1.89	0.0684	72.22	2.60	2.60	
0.50	1.79	1.79	0.0672	72.19	2.46	2.46	
0.52	1.66	1.66	0.0661	72.16	2.34	2.34	
0.54	1.54	1.54	0.0649	72.14	2.24	2.24	
0.56	1.41	1.41	0.0636	72.11	2.14	2.14	
0.58	1.28	1.28	0.0624	72.08	2.03	2.03	
0.60	1.24	1.24	0.0611	72.05	1.92	1.92	
0.62	1.20	1.20	0.0600	72.03	1.83	1.83	
0.65	1.16	1.16	0.0590	72.00	1.74	1.74	
0.67	1.12	1.12	0.0580	71.98	1.66	1.66	
0.69	1.08	1.08	0.0571	71.96	1.58	1.58	
0.71	1.05	1.05	0.0563	71.94	1.51	1.51	
0.73	1.02	1.02	0.0555	71.92	1.45	1.45	
0.75	0.98	0.98	0.0548	71.91	1.40	1.40	
0.77	0.96	0.96	0.0541	71.89	1.36	1.36	
0.79	0.93	0.93	0.0534	71.88	1.32	1.32	
0.81	0.90	0.90	0.0527	71.86	1.29	1.29	
0.83	0.88	0.88	0.0521	71.85	1.25	1.25	
0.85	0.85	0.85	0.0514	71.83	1.22	1.22	
0.87	0.83	0.83	0.0508	71.82	1.18	1.18	
0.90	0.81	0.81	0.0502	71.80	1.15	1.15	
0.92	0.78	0.78	0.0496	71.79	1.12	1.12	
0.94	0.77	0.77	0.0491	71.78	1.09	1.09	
0.96	0.75	0.75	0.0485	71.77	1.06	1.06	
0.98	0.73	0.73	0.0480	71.75	1.03	1.03	
1.00	0.71	0.71	0.0475	71.74	1.00	1.00	
1.02	0.69	0.69	0.0470	71.73	0.97	0.97	

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.04	0.67	0.67	0.0465	71.72	0.95	0.95
1.06	0.65	0.65	0.0461	71.71	0.92	0.92
1.08	0.64	0.64	0.0456	71.70	0.90	0.90
1.10	0.62	0.62	0.0452	71.69	0.87	0.87
1.12	0.61	0.61	0.0448	71.68	0.85	0.85
1.15	0.59	0.59	0.0444	71.67	0.83	0.83
1.17	0.58	0.58	0.0440	71.66	0.81	0.81
1.19	0.57	0.57	0.0436	71.65	0.81	0.81
1.21	0.57	0.57	0.0432	71.64	0.80	0.80
1.23	0.56	0.56	0.0428	71.63	0.79	0.79
1.25	0.55	0.55	0.0424	71.63	0.78	0.78
1.27	0.54	0.54	0.0420	71.62	0.77	0.77
1.29	0.54	0.54	0.0416	71.61	0.76	0.76
1.31	0.53	0.53	0.0412	71.60	0.75	0.75
1.33	0.52	0.52	0.0408	71.59	0.74	0.74
1.35	0.52	0.52	0.0405	71.58	0.73	0.73
1.37	0.51	0.51	0.0401	71.57	0.72	0.72
1.40	0.51	0.51	0.0397	71.57	0.72	0.72
1.42	0.50	0.50	0.0394	71.56	0.71	0.71
1.44	0.50	0.50	0.0390	71.55	0.70	0.70
1.46	0.49	0.49	0.0387	71.54	0.69	0.69
1.48	0.49	0.49	0.0384	71.54	0.68	0.68
1.50	0.48	0.48	0.0380	71.53	0.67	0.67
1.52	0.47	0.47	0.0377	71.52	0.67	0.67
1.54	0.47	0.47	0.0374	71.51	0.66	0.66
1.56	0.46	0.46	0.0370	71.51	0.65	0.65
1.58	0.46	0.46	0.0367	71.50	0.64	0.64
1.60	0.45	0.45	0.0364	71.49	0.64	0.64
1.62	0.45	0.45	0.0361	71.48	0.63	0.63
1.65	0.45	0.45	0.0358	71.48	0.62	0.62
1.67	0.44	0.44	0.0355	71.47	0.61	0.61
1.69	0.44	0.44	0.0352	71.46	0.61	0.61
1.71	0.44	0.44	0.0349	71.46	0.60	0.60
1.73	0.43	0.43	0.0346	71.45	0.59	0.59
1.75	0.43	0.43	0.0344	71.44	0.59	0.59
1.77	0.43	0.43	0.0341	71.44	0.58	0.58
1.79	0.42	0.42	0.0338	71.43	0.58	0.58
1.81	0.42	0.42	0.0336	71.43	0.57	0.57
1.83	0.41	0.41	0.0333	71.42	0.56	0.56
1.85	0.41	0.41	0.0330	71.41	0.56	0.56
1.87	0.40	0.40	0.0328	71.41	0.56	0.56
1.90	0.40	0.40	0.0325	71.40	0.55	0.55
1.92	0.40	0.40	0.0322	71.40	0.55	0.55
1.94	0.40	0.40	0.0320	71.39	0.55	0.55
1.96	0.39	0.39	0.0317	71.39	0.54	0.54
1.98	0.39	0.39	0.0315	71.38	0.54	0.54
2.00	0.39	0.39	0.0312	71.37	0.54	0.54
2.02	0.39	0.39	0.0310	71.37	0.53	0.53
2.04	0.38	0.38	0.0307	71.36	0.53	0.53
2.06	0.38	0.38	0.0304	71.36	0.53	0.53
2.08	0.38	0.38	0.0302	71.35	0.52	0.52

Modified Puls Routing

Inflow Hydrograph: C:\Users\Andrew\Desktop\Jobs\20033\SWM\Hydrographs - Sketch D\POST\Control\5.HYD
Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Bypass Capacity = 0.00 cfs
Starting Pool Elevation = 70.67 feet
Time Interval = 0.021 hours

5 year

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)	
0.00	0.00	0.00	0.0000	70.67	0.00	0.00	
0.02	0.44	0.44	0.0004	70.68	0.00	0.00	
0.04	0.89	0.89	0.0015	70.70	0.02	0.02	
0.06	1.33	1.33	0.0034	70.75	0.04	0.04	
0.08	1.78	1.78	0.0059	70.80	0.07	0.07	
0.10	2.20	2.20	0.0092	70.88	0.11	0.11	
0.12	2.63	2.63	0.0131	70.96	0.18	0.18	
0.15	3.06	3.06	0.0176	71.07	0.30	0.30	
0.17	3.49	3.49	0.0226	71.18	0.43	0.43	
0.19	4.72	4.72	0.0289	71.32	0.51	0.51	
0.21	5.95	5.95	0.0371	71.51	0.65	0.65	
0.23	7.19	7.19	0.0470	71.73	0.97	0.97	
0.25	8.42	8.42	0.0581	71.98	1.67	1.67	
0.27	7.55	7.55	0.0682	72.21	2.58	2.58	
0.29	6.69	6.69	0.0754	72.37	3.37	3.37	
0.31	5.82	5.82	0.0799	72.47	3.89	3.89	
0.33	4.95	4.95	0.0822	72.53	4.17	4.17	
0.35	4.38	4.38	0.0830	72.54	4.26	4.26	
0.37	3.81	3.81	0.0827	72.54	4.23	4.23	PEAK
0.40	3.24	3.24	0.0816	72.51	4.10	4.10	
0.42	2.67	2.67	0.0798	72.47	3.89	3.89	
0.44	2.54	2.54	0.0778	72.43	3.65	3.65	
0.46	2.41	2.41	0.0760	72.39	3.44	3.44	
0.48	2.28	2.28	0.0743	72.35	3.25	3.25	
0.50	2.14	2.14	0.0726	72.31	3.07	3.07	
0.52	1.98	1.98	0.0710	72.27	2.89	2.89	
0.54	1.82	1.82	0.0695	72.24	2.72	2.72	
0.56	1.66	1.66	0.0680	72.21	2.55	2.55	
0.58	1.50	1.50	0.0664	72.17	2.38	2.38	
0.60	1.45	1.45	0.0650	72.14	2.25	2.25	
0.62	1.39	1.39	0.0637	72.11	2.14	2.14	
0.65	1.34	1.34	0.0624	72.08	2.03	2.03	
0.67	1.29	1.29	0.0613	72.05	1.94	1.94	
0.69	1.25	1.25	0.0602	72.03	1.84	1.84	
0.71	1.20	1.20	0.0592	72.01	1.76	1.76	
0.73	1.16	1.16	0.0583	71.99	1.68	1.68	
0.75	1.12	1.12	0.0574	71.97	1.61	1.61	
0.77	1.09	1.09	0.0566	71.95	1.54	1.54	
0.79	1.05	1.05	0.0559	71.93	1.48	1.48	
0.81	1.02	1.02	0.0551	71.92	1.42	1.42	
0.83	0.98	0.98	0.0545	71.90	1.38	1.38	
0.85	0.96	0.96	0.0538	71.88	1.35	1.35	
0.87	0.93	0.93	0.0531	71.87	1.31	1.31	
0.90	0.90	0.90	0.0525	71.85	1.27	1.27	
0.92	0.87	0.87	0.0518	71.84	1.24	1.24	
0.94	0.86	0.86	0.0512	71.83	1.20	1.20	
0.96	0.84	0.84	0.0506	71.81	1.17	1.17	
0.98	0.83	0.83	0.0501	71.80	1.14	1.14	
1.00	0.81	0.81	0.0496	71.79	1.11	1.11	
1.02	0.81	0.81	0.0491	71.78	1.08	1.08	

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.04	0.80	0.80	0.0486	71.77	1.06	1.06
1.06	0.79	0.79	0.0482	71.76	1.03	1.03
1.08	0.78	0.78	0.0477	71.75	1.01	1.01
1.10	0.78	0.78	0.0474	71.74	0.99	0.99
1.12	0.77	0.77	0.0470	71.73	0.97	0.97
1.15	0.77	0.77	0.0467	71.72	0.95	0.95
1.17	0.76	0.76	0.0464	71.72	0.94	0.94
1.19	0.75	0.75	0.0461	71.71	0.92	0.92
1.21	0.74	0.74	0.0458	71.70	0.90	0.90
1.23	0.73	0.73	0.0455	71.70	0.89	0.89
1.25	0.72	0.72	0.0452	71.69	0.87	0.87
1.27	0.72	0.72	0.0450	71.69	0.86	0.86
1.29	0.71	0.71	0.0447	71.68	0.85	0.85
1.31	0.70	0.70	0.0445	71.67	0.83	0.83
1.33	0.69	0.69	0.0443	71.67	0.82	0.82
1.35	0.68	0.68	0.0441	71.66	0.82	0.82
1.37	0.68	0.68	0.0438	71.66	0.81	0.81
1.40	0.67	0.67	0.0436	71.65	0.81	0.81
1.42	0.66	0.66	0.0433	71.65	0.80	0.80
1.44	0.65	0.65	0.0431	71.64	0.79	0.79
1.46	0.65	0.65	0.0429	71.64	0.79	0.79
1.48	0.64	0.64	0.0426	71.63	0.78	0.78
1.50	0.63	0.63	0.0424	71.63	0.78	0.78
1.52	0.62	0.62	0.0421	71.62	0.77	0.77
1.54	0.62	0.62	0.0419	71.61	0.76	0.76
1.56	0.61	0.61	0.0416	71.61	0.76	0.76
1.58	0.61	0.61	0.0414	71.60	0.75	0.75
1.60	0.60	0.60	0.0411	71.60	0.75	0.75
1.62	0.60	0.60	0.0408	71.59	0.74	0.74
1.65	0.59	0.59	0.0406	71.59	0.74	0.74
1.67	0.58	0.58	0.0403	71.58	0.73	0.73
1.69	0.58	0.58	0.0401	71.57	0.72	0.72
1.71	0.57	0.57	0.0399	71.57	0.72	0.72
1.73	0.57	0.57	0.0396	71.56	0.71	0.71
1.75	0.56	0.56	0.0394	71.56	0.71	0.71
1.77	0.56	0.56	0.0391	71.55	0.70	0.70
1.79	0.55	0.55	0.0389	71.55	0.69	0.69
1.81	0.55	0.55	0.0386	71.54	0.69	0.69
1.83	0.54	0.54	0.0384	71.54	0.68	0.68
1.85	0.54	0.54	0.0381	71.53	0.68	0.68
1.87	0.53	0.53	0.0379	71.52	0.67	0.67
1.90	0.53	0.53	0.0377	71.52	0.67	0.67
1.92	0.52	0.52	0.0374	71.51	0.66	0.66
1.94	0.52	0.52	0.0372	71.51	0.65	0.65
1.96	0.52	0.52	0.0370	71.50	0.65	0.65
1.98	0.51	0.51	0.0367	71.50	0.64	0.64
2.00	0.51	0.51	0.0365	71.49	0.64	0.64
2.02	0.51	0.51	0.0363	71.49	0.63	0.63
2.04	0.50	0.50	0.0361	71.48	0.63	0.63
2.06	0.50	0.50	0.0359	71.48	0.62	0.62
2.08	0.49	0.49	0.0356	71.47	0.62	0.62

Modified Puls Routing

Inflow Hydrograph: C:\Users\Andrew\Desktop\Jobs\20033\SWM\Hydrographs - Sketch D\POST\Control\10.HYD
Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Bypass Capacity = 0.00 cfs
Starting Pool Elevation = 70.67 feet
Time Interval = 0.021 hours

10 year

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)	
0.00	0.00	0.00	0.0000	70.67	0.00	0.00	
0.02	0.53	0.53	0.0005	70.68	0.01	0.01	
0.04	1.06	1.06	0.0018	70.71	0.02	0.02	
0.06	1.59	1.59	0.0040	70.76	0.05	0.05	
0.08	2.11	2.11	0.0071	70.83	0.08	0.08	
0.10	2.56	2.56	0.0109	70.92	0.13	0.13	
0.12	3.01	3.01	0.0154	71.02	0.24	0.24	
0.15	3.47	3.47	0.0205	71.13	0.38	0.38	
0.17	3.92	3.92	0.0261	71.26	0.47	0.47	
0.19	5.29	5.29	0.0331	71.42	0.56	0.56	
0.21	6.66	6.66	0.0422	71.62	0.77	0.77	
0.23	8.03	8.03	0.0531	71.87	1.31	1.31	
0.25	9.40	9.40	0.0650	72.14	2.25	2.25	
0.27	8.41	8.41	0.0755	72.38	3.39	3.39	
0.29	7.42	7.42	0.0826	72.54	4.22	4.22	
0.31	6.44	6.44	0.0868	72.63	4.72	4.72	
0.33	5.45	5.45	0.0887	72.68	4.93	4.93	
0.35	4.85	4.85	0.0891	72.68	4.95	4.95	PEAK
0.37	4.26	4.26	0.0884	72.67	4.91	4.91	
0.40	3.66	3.66	0.0870	72.63	4.74	4.74	
0.42	3.06	3.06	0.0848	72.59	4.48	4.48	
0.44	2.92	2.92	0.0825	72.53	4.20	4.20	
0.46	2.78	2.78	0.0804	72.49	3.95	3.95	
0.48	2.64	2.64	0.0784	72.44	3.72	3.72	
0.50	2.50	2.50	0.0766	72.40	3.51	3.51	
0.52	2.33	2.33	0.0749	72.36	3.32	3.32	
0.54	2.16	2.16	0.0732	72.32	3.13	3.13	
0.56	1.99	1.99	0.0716	72.29	2.95	2.95	
0.58	1.82	1.82	0.0699	72.25	2.76	2.76	
0.60	1.76	1.76	0.0684	72.21	2.59	2.59	
0.62	1.70	1.70	0.0670	72.18	2.44	2.44	
0.65	1.65	1.65	0.0658	72.16	2.32	2.32	
0.67	1.59	1.59	0.0647	72.13	2.23	2.23	
0.69	1.54	1.54	0.0636	72.11	2.14	2.14	
0.71	1.50	1.50	0.0627	72.08	2.05	2.05	
0.73	1.45	1.45	0.0617	72.06	1.97	1.97	
0.75	1.41	1.41	0.0609	72.04	1.90	1.90	
0.77	1.37	1.37	0.0600	72.03	1.83	1.83	
0.79	1.33	1.33	0.0593	72.01	1.76	1.76	
0.81	1.29	1.29	0.0585	71.99	1.70	1.70	
0.83	1.25	1.25	0.0579	71.98	1.64	1.64	
0.85	1.22	1.22	0.0572	71.96	1.59	1.59	
0.87	1.19	1.19	0.0566	71.95	1.54	1.54	
0.90	1.16	1.16	0.0560	71.93	1.49	1.49	
0.92	1.13	1.13	0.0555	71.92	1.44	1.44	
0.94	1.11	1.11	0.0549	71.91	1.41	1.41	
0.96	1.08	1.08	0.0544	71.90	1.38	1.38	
0.98	1.05	1.05	0.0539	71.89	1.35	1.35	
1.00	1.03	1.03	0.0534	71.88	1.32	1.32	
1.02	1.03	1.03	0.0529	71.86	1.30	1.30	

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.04	1.02	1.02	0.0525	71.85	1.27	1.27
1.06	1.02	1.02	0.0520	71.84	1.25	1.25
1.08	1.01	1.01	0.0517	71.84	1.23	1.23
1.10	0.99	0.99	0.0513	71.83	1.21	1.21
1.12	0.96	0.96	0.0509	71.82	1.19	1.19
1.15	0.93	0.93	0.0505	71.81	1.16	1.16
1.17	0.91	0.91	0.0501	71.80	1.14	1.14
1.19	0.90	0.90	0.0497	71.79	1.12	1.12
1.21	0.89	0.89	0.0493	71.78	1.10	1.10
1.23	0.88	0.88	0.0490	71.78	1.08	1.08
1.25	0.87	0.87	0.0486	71.77	1.06	1.06
1.27	0.86	0.86	0.0483	71.76	1.04	1.04
1.29	0.84	0.84	0.0480	71.75	1.03	1.03
1.31	0.83	0.83	0.0477	71.75	1.01	1.01
1.33	0.82	0.82	0.0474	71.74	0.99	0.99
1.35	0.81	0.81	0.0471	71.73	0.98	0.98
1.37	0.81	0.81	0.0468	71.73	0.96	0.96
1.40	0.80	0.80	0.0466	71.72	0.95	0.95
1.42	0.79	0.79	0.0463	71.72	0.93	0.93
1.44	0.78	0.78	0.0461	71.71	0.92	0.92
1.46	0.77	0.77	0.0458	71.70	0.91	0.91
1.48	0.77	0.77	0.0456	71.70	0.89	0.89
1.50	0.76	0.76	0.0454	71.69	0.88	0.88
1.52	0.75	0.75	0.0452	71.69	0.87	0.87
1.54	0.74	0.74	0.0450	71.69	0.86	0.86
1.56	0.73	0.73	0.0448	71.68	0.85	0.85
1.58	0.73	0.73	0.0446	71.68	0.84	0.84
1.60	0.72	0.72	0.0444	71.67	0.83	0.83
1.62	0.71	0.71	0.0442	71.67	0.82	0.82
1.65	0.71	0.71	0.0440	71.66	0.82	0.82
1.67	0.70	0.70	0.0438	71.66	0.81	0.81
1.69	0.70	0.70	0.0437	71.66	0.81	0.81
1.71	0.69	0.69	0.0435	71.65	0.80	0.80
1.73	0.69	0.69	0.0433	71.65	0.80	0.80
1.75	0.68	0.68	0.0431	71.64	0.79	0.79
1.77	0.68	0.68	0.0429	71.64	0.79	0.79
1.79	0.67	0.67	0.0427	71.63	0.78	0.78
1.81	0.66	0.66	0.0425	71.63	0.78	0.78
1.83	0.66	0.66	0.0423	71.62	0.78	0.78
1.85	0.65	0.65	0.0421	71.62	0.77	0.77
1.87	0.65	0.65	0.0419	71.61	0.77	0.77
1.90	0.64	0.64	0.0417	71.61	0.76	0.76
1.92	0.64	0.64	0.0415	71.61	0.76	0.76
1.94	0.63	0.63	0.0413	71.60	0.75	0.75
1.96	0.63	0.63	0.0411	71.60	0.75	0.75
1.98	0.63	0.63	0.0409	71.59	0.74	0.74
2.00	0.62	0.62	0.0407	71.59	0.74	0.74
2.02	0.62	0.62	0.0405	71.58	0.73	0.73
2.04	0.61	0.61	0.0403	71.58	0.73	0.73
2.06	0.61	0.61	0.0401	71.57	0.72	0.72
2.08	0.60	0.60	0.0399	71.57	0.72	0.72

Modified Puls Routing

Inflow Hydrograph: C:\Users\Andrew\Desktop\Jobs\20033\SWM\Hydrographs - Sketch D\POST\Control\25.HYD
Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Bypass Capacity = 0.00 cfs
Starting Pool Elevation = 70.67 feet
Time Interval = 0.021 hours

25 year

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)	
0.00	0.00	0.00	0.0000	70.67	0.00	0.00	
0.02	0.62	0.62	0.0005	70.68	0.01	0.01	
0.04	1.25	1.25	0.0021	70.72	0.03	0.03	
0.06	1.87	1.87	0.0047	70.78	0.06	0.06	
0.08	2.50	2.50	0.0084	70.86	0.10	0.10	
0.10	3.04	3.04	0.0129	70.96	0.18	0.18	
0.12	3.58	3.58	0.0182	71.08	0.32	0.32	
0.15	4.12	4.12	0.0241	71.21	0.45	0.45	
0.17	4.65	4.65	0.0308	71.36	0.53	0.53	
0.19	6.11	6.11	0.0390	71.55	0.70	0.70	
0.21	7.56	7.56	0.0493	71.78	1.10	1.10	
0.23	9.02	9.02	0.0609	72.05	1.91	1.91	
0.25	10.47	10.47	0.0734	72.33	3.15	3.15	
0.27	9.46	9.46	0.0840	72.57	4.39	4.39	
0.29	8.45	8.45	0.0913	72.73	5.08	5.08	
0.31	7.44	7.44	0.0960	72.84	5.34	5.34	
0.33	6.43	6.43	0.0987	72.90	5.48	5.48	
0.35	5.73	5.73	0.0996	72.92	5.54	5.54	PEAK
0.37	5.04	5.04	0.0994	72.92	5.52	5.52	
0.40	4.34	4.34	0.0980	72.89	5.45	5.45	
0.42	3.64	3.64	0.0956	72.83	5.31	5.31	
0.44	3.47	3.47	0.0927	72.77	5.15	5.15	
0.46	3.31	3.31	0.0898	72.70	4.99	4.99	
0.48	3.14	3.14	0.0870	72.64	4.74	4.74	
0.50	2.97	2.97	0.0844	72.58	4.43	4.43	
0.52	2.77	2.77	0.0819	72.52	4.14	4.14	
0.54	2.56	2.56	0.0796	72.47	3.86	3.86	
0.56	2.35	2.35	0.0774	72.42	3.60	3.60	
0.58	2.15	2.15	0.0753	72.37	3.36	3.36	
0.60	2.08	2.08	0.0733	72.33	3.15	3.15	
0.62	2.01	2.01	0.0716	72.29	2.95	2.95	
0.65	1.94	1.94	0.0701	72.25	2.78	2.78	
0.67	1.87	1.87	0.0687	72.22	2.63	2.63	
0.69	1.81	1.81	0.0674	72.19	2.49	2.49	
0.71	1.75	1.75	0.0663	72.17	2.37	2.37	
0.73	1.70	1.70	0.0653	72.15	2.28	2.28	
0.75	1.64	1.64	0.0643	72.12	2.20	2.20	
0.77	1.60	1.60	0.0634	72.10	2.12	2.12	
0.79	1.55	1.55	0.0625	72.08	2.04	2.04	
0.81	1.51	1.51	0.0617	72.06	1.97	1.97	
0.83	1.47	1.47	0.0609	72.05	1.91	1.91	
0.85	1.43	1.43	0.0602	72.03	1.84	1.84	
0.87	1.39	1.39	0.0595	72.01	1.79	1.79	
0.90	1.35	1.35	0.0588	72.00	1.73	1.73	
0.92	1.32	1.32	0.0582	71.98	1.68	1.68	
0.94	1.28	1.28	0.0576	71.97	1.62	1.62	
0.96	1.25	1.25	0.0570	71.96	1.57	1.57	
0.98	1.22	1.22	0.0565	71.95	1.53	1.53	
1.00	1.18	1.18	0.0560	71.93	1.48	1.48	
1.02	1.15	1.15	0.0554	71.92	1.44	1.44	

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.04	1.12	1.12	0.0549	71.91	1.41	1.41
1.06	1.08	1.08	0.0544	71.90	1.38	1.38
1.08	1.05	1.05	0.0539	71.89	1.35	1.35
1.10	1.04	1.04	0.0534	71.88	1.33	1.33
1.12	1.04	1.04	0.0529	71.87	1.30	1.30
1.15	1.03	1.03	0.0525	71.86	1.28	1.28
1.17	1.02	1.02	0.0521	71.85	1.25	1.25
1.19	1.01	1.01	0.0517	71.84	1.23	1.23
1.21	1.00	1.00	0.0513	71.83	1.21	1.21
1.23	0.99	0.99	0.0510	71.82	1.19	1.19
1.25	0.98	0.98	0.0506	71.81	1.17	1.17
1.27	0.97	0.97	0.0503	71.81	1.15	1.15
1.29	0.96	0.96	0.0500	71.80	1.14	1.14
1.31	0.95	0.95	0.0497	71.79	1.12	1.12
1.33	0.93	0.93	0.0494	71.78	1.10	1.10
1.35	0.92	0.92	0.0491	71.78	1.09	1.09
1.37	0.92	0.92	0.0488	71.77	1.07	1.07
1.40	0.91	0.91	0.0486	71.77	1.06	1.06
1.42	0.90	0.90	0.0483	71.76	1.04	1.04
1.44	0.89	0.89	0.0481	71.75	1.03	1.03
1.46	0.88	0.88	0.0478	71.75	1.02	1.02
1.48	0.87	0.87	0.0476	71.74	1.00	1.00
1.50	0.86	0.86	0.0474	71.74	0.99	0.99
1.52	0.86	0.86	0.0471	71.73	0.98	0.98
1.54	0.85	0.85	0.0469	71.73	0.97	0.97
1.56	0.84	0.84	0.0467	71.72	0.96	0.96
1.58	0.83	0.83	0.0465	71.72	0.95	0.95
1.60	0.82	0.82	0.0463	71.72	0.93	0.93
1.62	0.81	0.81	0.0461	71.71	0.92	0.92
1.65	0.81	0.81	0.0460	71.71	0.91	0.91
1.67	0.80	0.80	0.0458	71.70	0.90	0.90
1.69	0.79	0.79	0.0456	71.70	0.89	0.89
1.71	0.79	0.79	0.0454	71.70	0.88	0.88
1.73	0.78	0.78	0.0453	71.69	0.88	0.88
1.75	0.78	0.78	0.0451	71.69	0.87	0.87
1.77	0.77	0.77	0.0450	71.68	0.86	0.86
1.79	0.77	0.77	0.0448	71.68	0.85	0.85
1.81	0.76	0.76	0.0447	71.68	0.84	0.84
1.83	0.75	0.75	0.0445	71.67	0.83	0.83
1.85	0.75	0.75	0.0444	71.67	0.83	0.83
1.87	0.74	0.74	0.0442	71.67	0.82	0.82
1.90	0.74	0.74	0.0441	71.67	0.82	0.82
1.92	0.74	0.74	0.0440	71.66	0.82	0.82
1.94	0.73	0.73	0.0438	71.66	0.81	0.81
1.96	0.72	0.72	0.0437	71.66	0.81	0.81
1.98	0.71	0.71	0.0435	71.65	0.80	0.80
2.00	0.71	0.71	0.0434	71.65	0.80	0.80
2.02	0.70	0.70	0.0432	71.65	0.80	0.80
2.04	0.70	0.70	0.0431	71.64	0.79	0.79
2.06	0.69	0.69	0.0429	71.64	0.79	0.79
2.08	0.69	0.69	0.0427	71.63	0.79	0.79

Modified Puls Routing

Inflow Hydrograph: C:\Users\Andrew\Desktop\Jobs\20033\SWM\Hydrographs - Sketch D\POST\Control\50.HYD
Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Bypass Capacity = 0.00 cfs
Starting Pool Elevation = 70.67 feet
Time Interval = 0.021 hours

50 year

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)	
0.00	0.00	0.00	0.0000	70.67	0.00	0.00	
0.02	0.78	0.78	0.0007	70.69	0.01	0.01	
0.04	1.57	1.57	0.0027	70.73	0.03	0.03	
0.06	2.35	2.35	0.0059	70.80	0.07	0.07	
0.08	3.14	3.14	0.0105	70.91	0.12	0.12	
0.10	3.79	3.79	0.0161	71.03	0.26	0.26	
0.12	4.45	4.45	0.0226	71.18	0.43	0.43	
0.15	5.11	5.11	0.0300	71.35	0.52	0.52	
0.17	5.77	5.77	0.0384	71.54	0.68	0.68	
0.19	7.26	7.26	0.0481	71.76	1.03	1.03	
0.21	8.75	8.75	0.0595	72.01	1.78	1.78	
0.23	10.23	10.23	0.0717	72.29	2.96	2.96	
0.25	11.72	11.72	0.0843	72.57	4.42	4.42	
0.27	10.75	10.75	0.0953	72.82	5.29	5.29	
0.29	9.78	9.78	0.1034	73.01	5.79	5.79	
0.31	8.81	8.81	0.1091	73.14	6.17	6.17	
0.33	7.84	7.84	0.1126	73.21	6.40	6.40	
0.35	7.01	7.01	0.1143	73.25	6.51	6.51	
0.37	6.19	6.19	0.1144	73.26	6.52	6.52	PEAK
0.40	5.37	5.37	0.1132	73.23	6.44	6.44	
0.42	4.55	4.55	0.1108	73.17	6.28	6.28	
0.44	4.34	4.34	0.1078	73.11	6.08	6.08	
0.46	4.13	4.13	0.1048	73.04	5.88	5.88	
0.48	3.93	3.93	0.1018	72.97	5.68	5.68	
0.50	3.72	3.72	0.0988	72.90	5.49	5.49	
0.52	3.46	3.46	0.0956	72.83	5.32	5.32	
0.54	3.21	3.21	0.0924	72.76	5.14	5.14	
0.56	2.95	2.95	0.0890	72.68	4.95	4.95	
0.58	2.69	2.69	0.0856	72.61	4.58	4.58	
0.60	2.60	2.60	0.0826	72.54	4.22	4.22	
0.62	2.52	2.52	0.0800	72.48	3.91	3.91	
0.65	2.43	2.43	0.0778	72.43	3.64	3.64	
0.67	2.34	2.34	0.0758	72.38	3.42	3.42	
0.69	2.27	2.27	0.0741	72.34	3.23	3.23	
0.71	2.20	2.20	0.0725	72.31	3.05	3.05	
0.73	2.13	2.13	0.0711	72.28	2.90	2.90	
0.75	2.06	2.06	0.0698	72.25	2.76	2.76	
0.77	2.00	2.00	0.0687	72.22	2.63	2.63	
0.79	1.94	1.94	0.0677	72.20	2.51	2.51	
0.81	1.89	1.89	0.0667	72.18	2.41	2.41	
0.83	1.83	1.83	0.0659	72.16	2.32	2.32	
0.85	1.78	1.78	0.0650	72.14	2.25	2.25	
0.87	1.73	1.73	0.0642	72.12	2.19	2.19	
0.90	1.69	1.69	0.0635	72.10	2.12	2.12	
0.92	1.64	1.64	0.0627	72.09	2.06	2.06	
0.94	1.60	1.60	0.0620	72.07	2.00	2.00	
0.96	1.56	1.56	0.0614	72.06	1.94	1.94	
0.98	1.52	1.52	0.0607	72.04	1.89	1.89	
1.00	1.47	1.47	0.0601	72.03	1.83	1.83	
1.02	1.44	1.44	0.0595	72.01	1.78	1.78	

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.04	1.40	1.40	0.0589	72.00	1.73	1.73
1.06	1.36	1.36	0.0583	71.99	1.68	1.68
1.08	1.32	1.32	0.0578	71.97	1.64	1.64
1.10	1.29	1.29	0.0572	71.96	1.59	1.59
1.12	1.26	1.26	0.0567	71.95	1.55	1.55
1.15	1.23	1.23	0.0562	71.94	1.51	1.51
1.17	1.21	1.21	0.0558	71.93	1.47	1.47
1.19	1.19	1.19	0.0553	71.92	1.43	1.43
1.21	1.17	1.17	0.0549	71.91	1.41	1.41
1.23	1.16	1.16	0.0545	71.90	1.39	1.39
1.25	1.14	1.14	0.0541	71.89	1.37	1.37
1.27	1.13	1.13	0.0538	71.88	1.34	1.34
1.29	1.12	1.12	0.0534	71.88	1.32	1.32
1.31	1.11	1.11	0.0531	71.87	1.31	1.31
1.33	1.10	1.10	0.0527	71.86	1.29	1.29
1.35	1.09	1.09	0.0524	71.85	1.27	1.27
1.37	1.07	1.07	0.0521	71.85	1.25	1.25
1.40	1.06	1.06	0.0518	71.84	1.24	1.24
1.42	1.04	1.04	0.0515	71.83	1.22	1.22
1.44	1.04	1.04	0.0512	71.83	1.20	1.20
1.46	1.03	1.03	0.0509	71.82	1.19	1.19
1.48	1.02	1.02	0.0506	71.81	1.17	1.17
1.50	1.01	1.01	0.0504	71.81	1.16	1.16
1.52	1.00	1.00	0.0501	71.80	1.14	1.14
1.54	0.99	0.99	0.0499	71.80	1.13	1.13
1.56	0.98	0.98	0.0496	71.79	1.12	1.12
1.58	0.97	0.97	0.0494	71.79	1.10	1.10
1.60	0.96	0.96	0.0492	71.78	1.09	1.09
1.62	0.95	0.95	0.0490	71.77	1.08	1.08
1.65	0.94	0.94	0.0487	71.77	1.07	1.07
1.67	0.93	0.93	0.0485	71.77	1.06	1.06
1.69	0.93	0.93	0.0483	71.76	1.04	1.04
1.71	0.92	0.92	0.0481	71.76	1.03	1.03
1.73	0.91	0.91	0.0479	71.75	1.02	1.02
1.75	0.90	0.90	0.0477	71.75	1.01	1.01
1.77	0.90	0.90	0.0476	71.74	1.00	1.00
1.79	0.89	0.89	0.0474	71.74	0.99	0.99
1.81	0.88	0.88	0.0472	71.74	0.98	0.98
1.83	0.88	0.88	0.0470	71.73	0.97	0.97
1.85	0.87	0.87	0.0469	71.73	0.96	0.96
1.87	0.86	0.86	0.0467	71.72	0.96	0.96
1.90	0.86	0.86	0.0466	71.72	0.95	0.95
1.92	0.85	0.85	0.0464	71.72	0.94	0.94
1.94	0.84	0.84	0.0463	71.71	0.93	0.93
1.96	0.84	0.84	0.0461	71.71	0.92	0.92
1.98	0.83	0.83	0.0460	71.71	0.91	0.91
2.00	0.82	0.82	0.0458	71.70	0.91	0.91
2.02	0.82	0.82	0.0457	71.70	0.90	0.90
2.04	0.81	0.81	0.0455	71.70	0.89	0.89
2.06	0.81	0.81	0.0454	71.69	0.88	0.88
2.08	0.80	0.80	0.0453	71.69	0.88	0.88

Modified Puls Routing

Inflow Hydrograph: C:\Users\Andrew\Desktop\Jobs\20033\SWM\Hydrographs - Sketch D\POST\Control\100.HYD
Storage/Elevation Curve: C:\Users\Andrew\Desktop\Jobs\20033\SWM\1.ES

Basin Bypass Capacity = 0.00 cfs
Starting Pool Elevation = 70.67 feet
Time Interval = 0.021 hours

100 year

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)	
0.00	0.00	0.00	0.0000	70.67	0.00	0.00	
0.02	0.92	0.92	0.0008	70.69	0.01	0.01	
0.04	1.84	1.84	0.0031	70.74	0.04	0.04	
0.06	2.76	2.76	0.0070	70.83	0.08	0.08	
0.08	3.68	3.68	0.0123	70.95	0.16	0.16	
0.10	4.40	4.40	0.0189	71.09	0.34	0.34	
0.12	5.12	5.12	0.0263	71.26	0.48	0.48	
0.15	5.84	5.84	0.0349	71.46	0.60	0.60	
0.17	6.56	6.56	0.0443	71.67	0.82	0.82	
0.19	8.12	8.12	0.0550	71.91	1.41	1.41	
0.21	9.68	9.68	0.0670	72.18	2.44	2.44	
0.23	11.23	11.23	0.0796	72.47	3.86	3.86	
0.25	12.79	12.79	0.0925	72.76	5.14	5.14	
0.27	11.79	11.79	0.1042	73.03	5.84	5.84	
0.29	10.78	10.78	0.1131	73.22	6.43	6.43	
0.31	9.77	9.77	0.1194	73.37	6.84	6.84	
0.33	8.76	8.76	0.1231	73.45	7.39	7.39	
0.35	7.88	7.88	0.1243	73.48	7.77	7.77	PEAK
0.37	7.00	7.00	0.1239	73.47	7.63	7.63	
0.40	6.11	6.11	0.1224	73.43	7.19	7.19	
0.42	5.23	5.23	0.1201	73.38	6.88	6.88	
0.44	5.01	5.01	0.1172	73.32	6.70	6.70	
0.46	4.78	4.78	0.1142	73.25	6.51	6.51	
0.48	4.56	4.56	0.1112	73.18	6.31	6.31	
0.50	4.34	4.34	0.1082	73.11	6.11	6.11	
0.52	4.05	4.05	0.1051	73.04	5.90	5.90	
0.54	3.76	3.76	0.1018	72.97	5.68	5.68	
0.56	3.47	3.47	0.0985	72.89	5.47	5.47	
0.58	3.19	3.19	0.0949	72.82	5.28	5.28	
0.60	3.09	3.09	0.0914	72.74	5.08	5.08	
0.62	2.99	2.99	0.0881	72.66	4.87	4.87	
0.65	2.90	2.90	0.0851	72.59	4.51	4.51	
0.67	2.80	2.80	0.0825	72.53	4.20	4.20	
0.69	2.72	2.72	0.0802	72.48	3.94	3.94	
0.71	2.64	2.64	0.0783	72.44	3.70	3.70	
0.73	2.56	2.56	0.0765	72.40	3.50	3.50	
0.75	2.48	2.48	0.0750	72.36	3.33	3.33	
0.77	2.42	2.42	0.0736	72.33	3.18	3.18	
0.79	2.35	2.35	0.0724	72.30	3.04	3.04	
0.81	2.28	2.28	0.0712	72.28	2.91	2.91	
0.83	2.22	2.22	0.0702	72.26	2.80	2.80	
0.85	2.16	2.16	0.0693	72.23	2.69	2.69	
0.87	2.11	2.11	0.0684	72.21	2.59	2.59	
0.90	2.05	2.05	0.0676	72.20	2.50	2.50	
0.92	2.00	2.00	0.0668	72.18	2.42	2.42	
0.94	1.96	1.96	0.0661	72.16	2.35	2.35	
0.96	1.91	1.91	0.0655	72.15	2.29	2.29	
0.98	1.86	1.86	0.0648	72.13	2.24	2.24	
1.00	1.82	1.82	0.0642	72.12	2.18	2.18	
1.02	1.76	1.76	0.0636	72.11	2.13	2.13	

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.04	1.70	1.70	0.0629	72.09	2.08	2.08
1.06	1.64	1.64	0.0623	72.08	2.02	2.02
1.08	1.58	1.58	0.0616	72.06	1.96	1.96
1.10	1.55	1.55	0.0610	72.05	1.91	1.91
1.12	1.52	1.52	0.0604	72.03	1.86	1.86
1.15	1.49	1.49	0.0598	72.02	1.81	1.81
1.17	1.45	1.45	0.0593	72.01	1.76	1.76
1.19	1.44	1.44	0.0588	72.00	1.72	1.72
1.21	1.42	1.42	0.0583	71.99	1.68	1.68
1.23	1.40	1.40	0.0579	71.98	1.64	1.64
1.25	1.39	1.39	0.0575	71.97	1.61	1.61
1.27	1.37	1.37	0.0571	71.96	1.58	1.58
1.29	1.36	1.36	0.0567	71.95	1.55	1.55
1.31	1.34	1.34	0.0564	71.94	1.52	1.52
1.33	1.33	1.33	0.0561	71.94	1.50	1.50
1.35	1.31	1.31	0.0558	71.93	1.47	1.47
1.37	1.30	1.30	0.0556	71.92	1.45	1.45
1.40	1.28	1.28	0.0553	71.92	1.43	1.43
1.42	1.27	1.27	0.0550	71.91	1.41	1.41
1.44	1.25	1.25	0.0548	71.91	1.40	1.40
1.46	1.24	1.24	0.0545	71.90	1.39	1.39
1.48	1.23	1.23	0.0543	71.90	1.37	1.37
1.50	1.22	1.22	0.0540	71.89	1.36	1.36
1.52	1.21	1.21	0.0538	71.88	1.35	1.35
1.54	1.19	1.19	0.0536	71.88	1.33	1.33
1.56	1.18	1.18	0.0533	71.87	1.32	1.32
1.58	1.16	1.16	0.0531	71.87	1.31	1.31
1.60	1.15	1.15	0.0528	71.86	1.29	1.29
1.62	1.15	1.15	0.0526	71.86	1.28	1.28
1.65	1.14	1.14	0.0524	71.85	1.27	1.27
1.67	1.13	1.13	0.0522	71.85	1.26	1.26
1.69	1.12	1.12	0.0519	71.84	1.24	1.24
1.71	1.11	1.11	0.0517	71.84	1.23	1.23
1.73	1.11	1.11	0.0515	71.83	1.22	1.22
1.75	1.10	1.10	0.0513	71.83	1.21	1.21
1.77	1.09	1.09	0.0511	71.82	1.20	1.20
1.79	1.07	1.07	0.0509	71.82	1.19	1.19
1.81	1.06	1.06	0.0507	71.82	1.18	1.18
1.83	1.05	1.05	0.0505	71.81	1.17	1.17
1.85	1.04	1.04	0.0503	71.81	1.16	1.16
1.87	1.04	1.04	0.0502	71.80	1.15	1.15
1.90	1.03	1.03	0.0500	71.80	1.14	1.14
1.92	1.03	1.03	0.0498	71.79	1.13	1.13
1.94	1.02	1.02	0.0496	71.79	1.12	1.12
1.96	1.01	1.01	0.0495	71.79	1.11	1.11
1.98	1.00	1.00	0.0493	71.78	1.10	1.10
2.00	0.99	0.99	0.0491	71.78	1.09	1.09
2.02	0.99	0.99	0.0490	71.78	1.08	1.08
2.04	0.98	0.98	0.0488	71.77	1.07	1.07
2.06	0.97	0.97	0.0486	71.77	1.06	1.06
2.08	0.97	0.97	0.0485	71.76	1.05	1.05

SUMMARY OF PEAK FLOW RATES SKETCH 'D'

FREQ (year)	PRE-DVMT FLOW (cfs)	CONTROLLED POST-DVMT FLOW (cfs)	CONTROLLED ROUTED OUTFLOW (cfs)	BYPASS FLOW (cfs)	CONTROLLED ROUTED OUTFLOW PLUS BYPASS FLOW (cfs)	TOTAL ALLOWED POST-DEV FLOW (cfs)	DECREASE (cfs)	DECREASE (%)	BASIN ELEVATION (ft)
1	7.13	6.25	2.38	1.30	3.68	7.13	3.45	48	72.17
2	8.20	7.19	3.22	1.50	4.72	8.20	3.48	42	72.34
5	9.61	8.42	4.26	1.76	6.02	9.61	3.59	37	72.54
10	10.72	9.40	4.95	1.96	6.91	10.72	3.81	36	72.68
25	11.95	10.47	5.54	2.19	7.73	11.95	4.22	35	72.92
50	13.38	11.72	6.52	2.45	8.97	13.38	4.41	33	73.26
100	14.60	12.79	7.77	2.67	10.44	14.60	4.16	28	73.48

MAYOR
Yaniv Aronson

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Stephanie Cecco
Borough Manager

BOROUGH OF CONSHOHOCKEN

Office of the Borough Manager

MEMORANDUM

Date: May 20, 2021

To: Stephanie Cecco, Brittany Rogers

From: Eric P. Johnson, PE, Zoning Officer

Re: Revised Determination - 450 Colwell Lane – Stacked Condominiums Conditional Use

History of the Site:

450 Colwell Lane is a 2-acre property located at the corner of Colwell Lane and W. 5th Avenue and is currently developed with a one-story warehouse building and parking lot. The property is bordered to the south by the Rumsey Electric Company property. A 50-foot-wide access easement exist along the southern edge of the 450 Colwell Lane property to provide access to the front parking lot and the rear of the Rumsey Electric property. 450 Colwell Lane is located in the LI – Limited Industrial zoning district and the southwest corner of the property is located in the Floodplain Conservation District. The property would be eligible to be developed by Conditional Use under the Residential Overlay District, provided the requirements of the Overlay District are met.

Current Request:

The applicant, Dryden Court Development, LLC, proposes to demolish the existing warehouse and the majority of the parking lot. The existing driveway from Colwell Lane, parking spaces along the southern property line, and cross access driveways servicing the Rumsey Property are proposed to remain. The applicant proposes to construct a forty-eight (48) unit multifamily residential development consisting of three (3) buildings with one residential units stacked on top of one other residential unit. Each unit would share an exterior access with one other unit. The building facing Colwell Lane would contain ten (10) units, the building facing W. 5th Avenue would contain twenty (20) units, and the building interior to the site would contain eighteen (18) units. The applicant is proposing one garage parking space and one parking space located in front of the garage for each unit. The existing parking along the southern property line is proposed to remain for additional parking.

The applicant is seeking Conditional Use approval in accordance with §27-1901-B of the Conshohocken Zoning Ordinance to permit a multifamily residential development utilizing the Residential Overlay District.

Zoning Determination:

Although the Borough repealed Part 19-B – Residential Overlay District of the Conshohocken Zoning Ordinance on January 20, 2021, the applicant had already submitted the application for the proposed development and therefore has vested rights to seek a Conditional Use for development in accordance with the standards of the Residential Overlay District.

Per §27-1901-B, the intent of the Residential Overlay District is to permit modern multifamily housing units by Conditional Use granted by Borough Council, in order to provide a mix of housing types and options available to Borough residents; and to provide specific performance standards designed to enhance this type of housing and preserve the neighboring residential properties.

Per §27-202, a multifamily dwelling is defined as a detached residential building containing three or more dwelling units. Units may not be arranged entirely in vertical rows (like townhouses) and are generally located entirely above or below one another. Units may share outside access and/or internal hallways, lobbies, and similar facilities. The dwelling units cannot be individually lotted, but instead, share the lot or tract on which the building containing them is located. The development is usually under one operating unit, as a rental or condominium development. The proposed stacked dwelling units which share an access with at least one other unit and in a building with more then three units meets the definition of a multifamily housing unit. The applicant will need to confirm the proposed development would be under one operating unit such as a condominium association.

Conditional Use approval would be required for the proposed multifamily development. In considering the request, Borough Council should take into consideration the performance standards outlined in §27-1903-B and the landscaping / buffering standards outlined in §27-1904-B.

Per §27-1903-B.3.A, the minimum required front yard setback is 30 feet measured from the property line. The proposed dwellings along W. 5th Ave are setback 5 feet from the property line, requiring a variance granted by the Zoning Hearing Board.

Per §27-820, refuse collection facilities detached from a building shall be setback a minimum of 10 feet from all property lines, architecturally compatible with the buildings, and screened with a fence and landscaping. The proposed refuse facility is located approximately 2 feet from the property line and is not landscaped. The facility will need to be relocated or a variance granted by the Zoning Hearing Board.

Per §27-826.B(2), in consideration of the Conditional Use, Borough Council should also consult the comments outlined in the Montgomery County Planning Commissions review letter, dated March 4, 2021.

Per §27-826.B(3), when seeking Conditional Use approval the applicant shall demonstrate at the public hearing, to the satisfaction of Borough Council, that the proposed use shall not be contrary to the public health, safety, and welfare of the community. In particular, the applicant shall demonstrate the adequacy of the proposed vehicular circulation, pedestrian circulation, utilities, buffering and screening, and protection of natural resources.

Per §27-1714, development and redevelopment in the Floodplain Conservation District are prohibited. The southwest corner of the property, including the existing site entrance from Colwell Lane, the cross-property vehicle access to the Rumsey Electric front parking lot, and a portion of the parking spaces along the southern property line are located within the Floodplain Conservation District with a defined flood elevation of 74.3 feet. The applicant is proposing to maintain the existing improvements within the Floodplain Conservation District in order not to require a variance from the Zoning Hearing Board.

Per §27-830, decks are only permitted to be constructed at ground level or first floor of a dwelling. The provided building floor plans indicate decks on the upper levels of the dwellings.

Per §27-824, the submitted Traffic Impact Study should be reviewed by the Borough Traffic Engineer.

The provided site plan indicates a sanitary sewer crossing the property under the warehouse building, which should be relocated prior to redevelopment of the property.

If Conditional Use approval is granted, the proposed development will be required to comply with all applicable zoning code sections and will be subject to review during the Land Development process.

MONTGOMERY COUNTY
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SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

March 4, 2021

Stephanie Cecco, Borough Manager
Borough of Conshohocken
400 Fayette Street, Suite 200
Conshohocken, Pennsylvania 19428

Re: MCPC #21-0034-001
Conditional Use- Dryden Court- 450 Colwell Lane (Apartments)
56 units/ 2.0 acres

Re: MCPC #21-0034-002
Conditional Use- Dryden Court- 450 Colwell Lane (Condos)
48 units/ 2.0 acres
Borough of Conshohocken

Dear Ms. Cecco:

We have reviewed the above both of the referenced conditional use submissions as requested by the borough in an electronic documentation received in this office on February 7, 2021. We forward this letter as a report of our review.

BACKGROUND

Conshohocken Borough has submitted for our review two conditional use submissions for the redevelopment of a 2.0-acre, limited-industrial site located at the corner of Colwell Lane and Fifth Avenue. The applicant David J. Brusso, Dryden Court Development, LLC, seeks conditional use approval for two different development exhibits and plans for a 2.0-acre tract located at the corner of Colwell Lane and Fifth Avenue. Both proposed development plans show the demolition of an existing one-story, 28,800 sq. ft. vacant warehouse building. The first plan (MCPC #21-0034-001) proposes a 3-story apartment building with 56 residential units, with surface parking below the structure. The second submission (MCPC #21-0034-002) proposes 48 stacked condominium/townhouses with a single garage underneath the structure.

The redevelopment tract is Tax Parcel # 05-000010-30-09, which is located in the borough's Limited Industrial Zoning District and in the Residential Overlay District. The conditional use proposal was

submitted prior to the repeal of the Residential Overlay (RO) District provisions by the borough council in January 2021. The Residential Overlay permitted the development of multi-family housing units within the Limited Industrial (LI) District by conditional use and provided for various housing types and dimensional regulations. The regulations permitted a maximum of 33 dwellings units per acre. The borough council, in a decision of January 2021, deleted the entirety of the Residential Overlay (RO) for the Limited Industrial Zoning District. Both of the applicant's conditional use plans use the RO provisions as the basis for their submission.

The Montgomery County Planning Commission, in a review letter dated December 15, 2020, supported the deletion of the Residential Overlay provisions for the area surrounding Colwell Lane. We advised the borough against the deletion of the RO provisions in the other two areas of the borough which lie outside the floodplain corridor of the borough. This was due to our concerns that the deletion may limit potential redevelopment opportunities in those areas.

CONSISTENCY WITH THE COUNTY AND BOROUGH PLANS

Consistency with *Montco 2040- A Shared Vision*

The Conditional Use application is inconsistent with both the future land use vision, goals, and intent of *Montco 2040: A Shared Vison*, the comprehensive plan and future land use vision for the county. The plan and Future Land Use Map designates this area as 'Business Area' for future land uses. The designation supports employment-oriented land uses such as offices, research facilities and industrial parks. (Page 83) https://www.montcopa.org/1579/Montco-2040-Comprehensive-Plan).

The comprehensive plan for Montgomery County, *Montco 2040: A Shared Vision* recommends that the county and local governments work together to make every effort to limit development in the floodplain and limit the impacts from ever-increasing flood events. The plan recommends that all local floodplain ordinances prohibit fill and buildings within the floodplain, except for redeveloping brownfield sites. The 24/7 human occupation of flood-prone areas presents a greater number of considerations for public safety than does the nearby office developments which provide significantly less exposure to the potential catastrophic impacts of flooding.

Consistency with Conshohocken Comprehensive Plan Update, June, 2018

The Conditional Use proposal for the residential redevelopment appears incompatible with the borough's future vision for this area as stated in the 2018 Comprehensive Plan's Future Conditions Chapter Five and in the Land Use Map #7. The future land use designation from the map shows this site as 'Industrial'. The purpose of this classification according to the plan is, "to provide for the development and redevelopment of office, commercial, business and varying industrial uses," and to "provide desirable locations for those types of industry that are harmonious with and do not constitute a hazard or nuisance to surrounding areas."

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) has significant reservations in providing a recommendation for Conditional Use approval for either of the residential development proposals presented by the applicant for this site. We believe the location and residential development of the site pose many challenges for the public's safety. It is not clear from the submitted exhibits how

these challenges have been taken into consideration by the applicant in the development plans. Most important in our assessment is that the 100 year floodplain lies along the ingress/egress at Colwell Lane and the 500 year floodplain lies within the development's footprint. Our concern is heightened by future flood risks and the recent adoption by Conshohocken Borough which deleted the residential development option for the Limited Industrial District in large measure, due to the hazards posed and the need to protect the public's safety. These issues are discussed in greater detail in the following comments.

COMMENTS

1. Redevelopment of the Limited Industrial Tract

A. Hazard Flood Risk & Impacts

Given the significant challenges posed by potentially damaging flooding that could endanger the public's safety and welfare, we do not believe that residential redevelopment at this site is an appropriate land use. As shown in the accompanying aerial, the site development's Colwell Lane access is adjacent to the 100 year floodplain boundary, and the 500 year floodplain lies within the southern boundary of the shared access driveway and surface parking lot. We suggest the Schuylkill River and Plymouth Creek floodplain and watershed are dynamic natural environments; often flooding events correspond to mapped boundaries, as shown below. Given the documented flood hazard areas and the ever increasing flooding posed by climate change, future flooding may be even greater. The borough will need to consider the impacts of not only past flooding events but future risks of ever-increasing flood events, and the potential impacts on the residential redevelopment of the site. Given these concerns, we believe that the opportunities afforded by the Limited Industrial land uses are more appropriate than a 24/7 human-occupied residential land use.

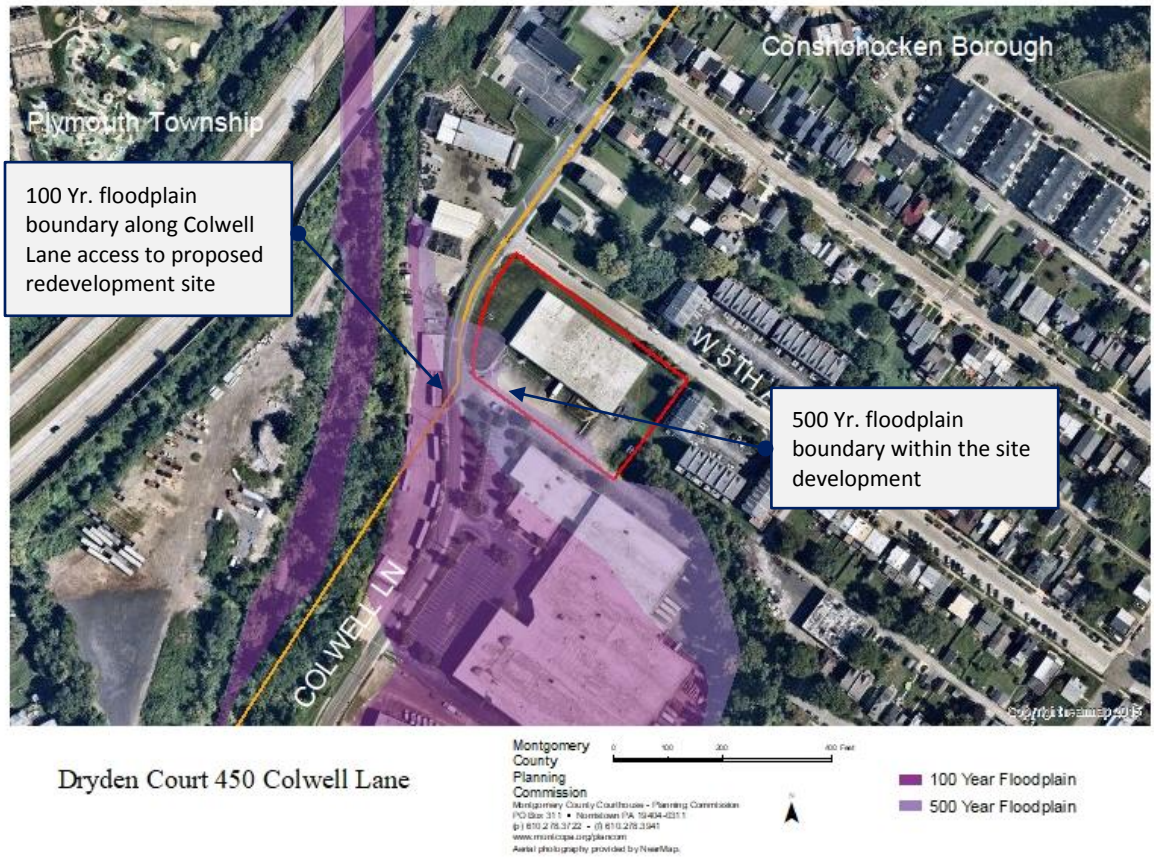
B. Potential Redevelopment Opportunities

We encourage the applicant to seek to redevelop the site within the various permitted uses of the Limited Industrial Zoning District given the environmental constraints and limitations of the infrastructure to support a multi-family residential redevelopment. We support the borough in its efforts to regulate, restrict or prohibit 24/7, human-occupied dwellings within a flood-prone LI- zoned area along Colwell Lane and encourage the applicant to seek an appropriate Limited Industrial use for the redevelopment of this parcel.

2. **Residential Development**

Should the borough determine that a residential redevelopment of the tract is a viable option we believe the proposed apartment building would be the preferred alternative rather than the stacked townhouse development. Our rationale is explained below. We recommend that an emergency plan be developed by the applicant, stakeholders, and the borough which should be given to each new resident of this development at the time of lease agreement or at property settlement. Many residents will potentially need to evacuate, with both vehicles and pets residing within the structures, some of whom may be out-of-town. The applicant should work

with the township to ensure that an effective evacuation plan for residents and their pets is established.



A. Dryden Court- Apartment Proposal-(Sketch Plan 'E')

1. Access & Hazard Mitigation

An apartment dwelling is often a more efficient arrangement when there is a need to evacuate both cars and residents rather than individually-arranged garages and dwelling units shown in this proposal. An apartment development has a more centralized management structure more adapted to emergency response, whereas an individually owned condominium or townhouse development is more decentralized and less responsive. Given the potential for flooding along Colwell Lane we believe that an emergency evacuation plan should be a condition of approval for future development. The Fifth Avenue access route should be the primary access point for residents. In response to the history of flooding along Colwell Lane, we suggest the access driveway that is shared with Rumsey Electrical should have a physical mechanism such as a gate to restrict vehicles when flooding occurs.

2. Site Design

The site design could be improved and more responsive to the pedestrian and connectivity to the borough. It is not clear from the submitted exhibits where the entrance(s) to the building are located and how the building relates to the surroundings. It is a significant issue and an important element in creating a pedestrian-friendly design and connected residential community. We recommend the applicant provide greater details regarding how the site design and the building is connected to the surrounding neighborhood.

B. Dryden Court- Stacked Townhouses/Condominiums Development (Sketch Plan 'D')

1. Architecture and Flooding

The architecture of the stacked townhouses/condominiums should plan for the impacts of flooding and address building resiliency. It appears that a single-car, enclosed garage is proposed for each dwelling unit at ground level. We suggest that one way the townhouses could be made more flood-resilient is by constructing the units on a podium base. This strategy uses a common garage area with openings for flooding to occur with less damage than with individual garage units. Shown here is an example of a podium base with a shared garage underneath for the apartments at Riverview at Betzwood (West Norriton Township along the Schuylkill River floodplain).

Riverview at Betzwood, West Norriton Township

2. Adjustment Needed for Townhouses at Drive 'D'

The stacked townhouse arrangement along Drive 'D' (as shown in Sketch Plan 'D') does not provide adequate space between the building's front façade and the parking lot along the front walkway to establish an effective green pervious area needed for shade trees or shrub groupings. Also, the arrangement is not conducive for a pleasant entry-way with the front door

and facades of the townhouse arranged with a view directly facing the Rumsey Electrical commercial building. This is unattractive and does not address the screening and buffering requirements needed with an adjacent commercial building. We recommend that the plan should be adjusted to provide an area wide enough to establish an effective trees and shrub zone to help mitigate the view.

CONCLUSION

The Montgomery County Planning Commission has reservations in offering our support for either of the proposed Conditional Use submissions for the reasons stated above regarding the submission's 'Consistency with County and Borough Plans' and in our review comments. Please note that any recommendations contained in this report are advisory to the borough and final disposition for the approval of any proposal will be made by the borough.

Should the governing body approve either of the conditional use proposals, the planning commission requests that a paper copy of the decision and conditions of approval be supplied to our offices for our files.

Sincerely,

Barry W. Jeffries

Barry W Jeffries, ASLA, Senior Design Planner
bjeffrie@montcopa.org - 610-278-3444

c: Chair, Borough Planning Commission
Karen MacNair, Borough Engineer
Michael Peters, Borough Solicitor

Dryden Court (Apartments)
450 Colwell Lane
MCPC #210034001

Montgomery County Planning Commission
0 50 100 200 Feet
Montgomery County Courthouse • Planning Commission
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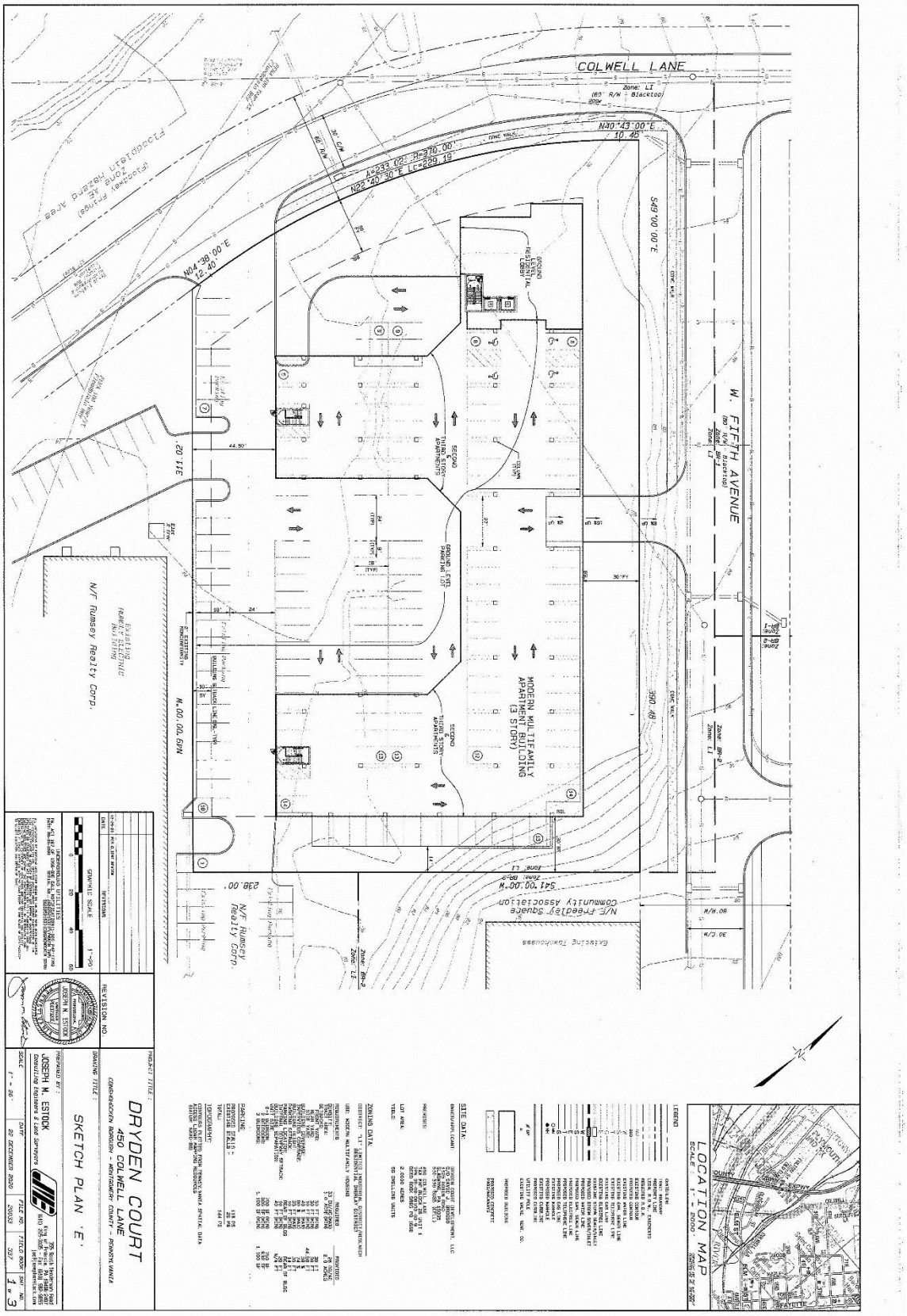
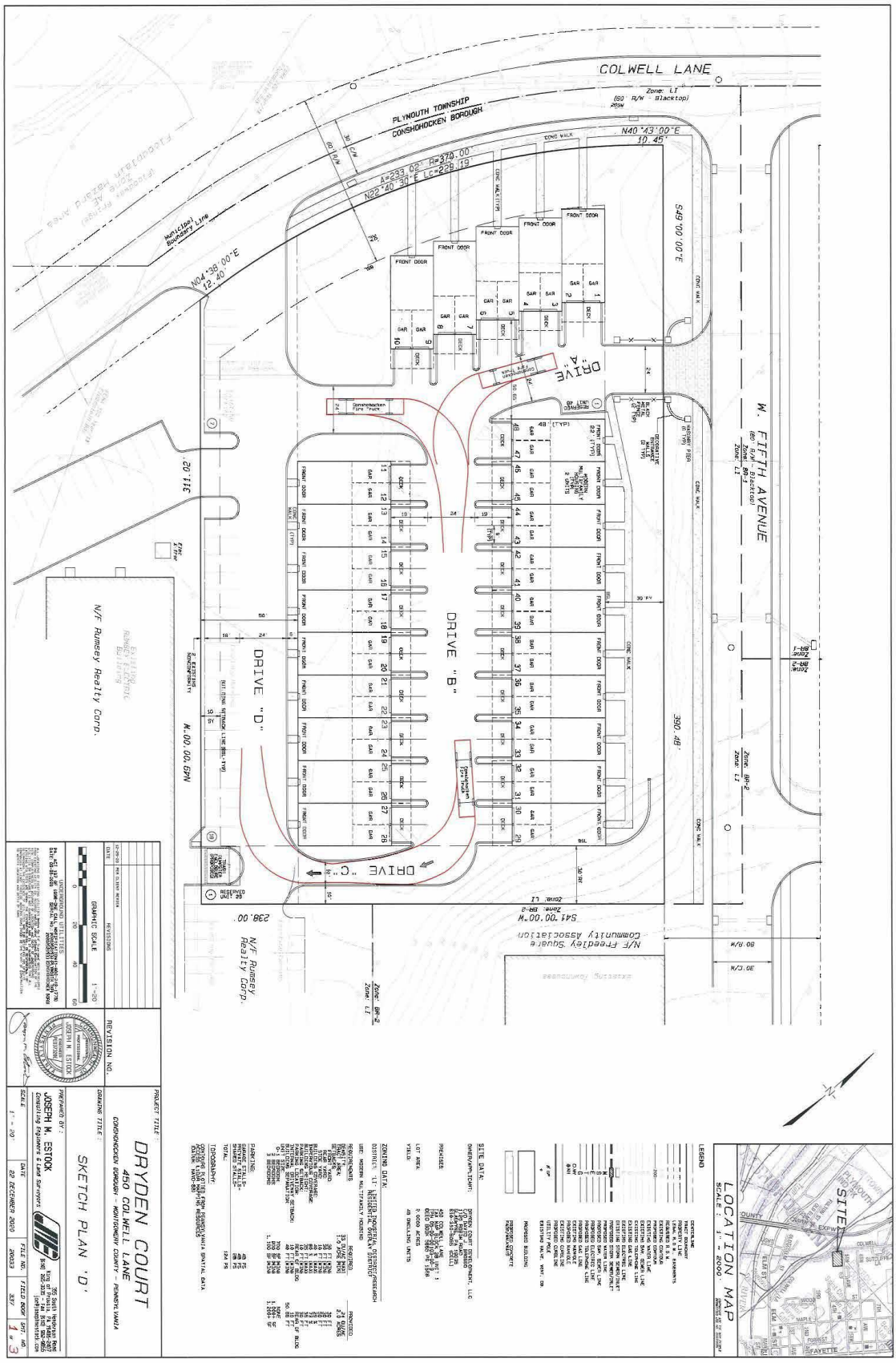
Aerial photography provided by NearMap.


COLWELL LANE
W. FIFTH AVENUE
MODERN MULTIFAMILY APARTMENT BUILDING (3 STORY)
N/F Rumsey Realty Corp.
N/F Freedley Square Community Association
DRYDEN COURT
450 COLWELL LANE
SKETCH PLAN 'E'
JOSEPH M. ESTOCK
LOCATION MAP


COLWELL LANE
PLYMOUTH TOWNSHIP
CONSHOHOCKEN BOROUGH
W. FIFTH AVENUE
DRIVE "A"
DRIVE "B"
DRIVE "C"
DRIVE "D"
N/F Ramsey Realty Corp.
N/F Freedley Square Community Association
DRYDEN COURT
450 COLWELL LANE
CONSHOHOCKEN BOROUGH - MONTGOMERY COUNTY - PENNSYLVANIA
SKETCH PLAN 'D'
LOCATION MAP
SITE
JOSEPH M. ESTOCK
Consulting Engineers & Land Surveyors
22 DECEMBER 2020

MAYOR
Yaniv Aronson

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Karen Tutino, Member

Stephanie Cecco
Borough Manager

BOROUGH OF CONSHOHOCKEN

Date: May 19, 2021

To: Stephanie Cecco, Borough Manager

From: John Robitaille, Commercial Building Inspector
Tim Gunning, Fire Marshal

Re: Response to 450 Colwell Lane Comments

The response dated May 18, 2021 from Craig R. Lewis satisfies comments from Emergency Management group with one exception. During the April 23rd meeting, Mr. Brosso had committed to supplying and installing a lockable gate to be lowered during flood conditions on the Colwell Lane driveway to the property. This item was not addressed in the revised plan dated May 12, 2021 or in the correspondence dated May 18, 2021.