BENSALEM TOWNSHIP

Building and Planning Department
2400 Byberry Road ▪ Bensalem PA 19020
215-633-3644 ▪ FAX 215-633-3653

Exhibit Z-4

Zoning Hearing Board

Appeal Number: _____

RECEIVED
JUN 26 2017
BENSALEM TOWNSHIP
BUILDING AND PLANNING

Township of Bensalem, Bucks County, Pennsylvania
Notice of Appeal

Appeal is hereby made by the undersigned from the action of the Zoning Officer.

Check applicable item(s):

- ☐ Certification of Non-Conforming Use
- ☐ Application for Validity Challenge
- ☐ Administrative Officer in refusing my application for a building permit dated: _____
- ☐ Special Exception
- ☒ Variance from the terms of the Zoning Ordinance of the Township of Bensalem

Appellant Name: Soutchay Chareunsack

Address: _____

Phone No. 267-283-5508

E-Mail Address: scworkinggroupinc@gmail.com

Owner's Name: Soutchay Chareunsack

Address: _____

Phone No. 267-283-5508

E-Mail Address: scworkinggroupinc@gmail.com

Attorney Name: N/A

Address: _____

Phone No. _____

Interest of appellant, if not owners (agent, lessee, etc.): _____

1. **Application relates to the following:**

Check items if applicable:

☐	**Use**	☐	**Lot Area**
☐	**Height**	☐	**Yards**
☒	**Existing Building**	☐	**Proposed Building**
☐	**Occupancy**		
☒	**Other:** (describe) Request for variance for addition + new construction Flood zone		

2. **Brief description of Real Estate affected:**

Tax Parcel Number: 2-64-126

Location: 2155 River Rd., Bensalem, PA 19020

Lot Size: Bensalem, PA 19020

Present Use: Residential - Single Family

Proposed Use: _____

Present Zoning Classification: _____

Present Improvement upon Land: _____

Deed recorded at Doylestown in Deed Book _____ Page _____

3. **If this is an appeal to challenge, provide statement and/or basis for challenge to the validity of the zoning ordinance.**

4. **If this is an Appeal from action of the Zoning Administrative Officer then complete the following:**

Date Determination was made: _____

Your statement of alleged error of Zoning Administrative Office: _____

1. Specific reference to section of the Zoning Ordinance upon which application for special exception or variance is based (if special or variance is desired):

2. Action desired by appellant or applicant (statement of relief sought or special exception or variance desired):

Would like variance for rejection of permit application pursuant to 2009 IECC sec. 403.62a(b) and as referenced project pursuant to Chapter 232 Zoning.

3. Reasons appellant believes board should approve desired action (refer to section or sections of ordinance under which it is felt that desired action may be allowed, and not whether hardship is (or is not) claimed, and the specific hardship.

4. Has previous appeal or application for special exception or variance been filed in connection with these premises?

☐ YES ☒ NO

Specifications of errors must state separately the appellant's objections to the action of the zoning administrative office with respect to each question of law and fact which is sought to be reviewed.

I, hereby depose and say that all of the above statements and the statements contained in any papers or plans submitted herewith, are true to the best of my knowledge and belief.

Soutchay Chanmsack

Appellant's or Owner's Signature

6/24/2017

Date

A SIGNED COPY OF THIS APPLICATION IS REQUIRED UPON SUBMISSION OF DOCUMENTS

Sworn to and subscribed before me this

24th day of JUNE 2017

Notary Public F. Clarence Brown

My commission expires: JUNE 15, 2019

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
FRED CLARENCE BROWN, Notary Public
City of Philadelphia, Phila. County
My Commission Expires June 15, 2019

BENSALEM TOWNSHIP

Building and Planning Department
Office 215-633-3644 • Fax 215-633-3753
Matthew K. Takita
Director of Building and Planning
2400 Byberry Road • Bensalem, PA 19020

March 16, 2017

Sautchay Chareunsack
2155 River Road
Bensalem, PA 19020

Project:	**NEW HOME**
Project Address:	**2155 RIVER RD BENSALEM, PA 19020**
Tax Parcel:	**02-064-126**
Property Owner:	**SAME AS ADDRESSED**
Permit Status:	**APPLICATION DENIED**

Electronic Review Status

Dear Sir/Madam:

A review was conducted on the application for the referenced project pursuant to Chapter 232 ZONING, The attached sheets lists the reasons for rejection and this information is required to complete the permit application for the above referenced project. This letter shall also serve as a formal rejection of your building permit application pursuant to 2009 UCC Section 403.62a(b).

You are required to resubmit plans with revisions and will need to burn the **complete** set of plans with revisions to a new disc. Return it to the Building & Planning Department. You are to include a summary list of **all** changes that were made to the plans including those required by the Township. For each change made to the plans, note the sheet number, drawing title, and a brief description of the change made. Please label the disc with the project address, date and revision number to distinguish it from any earlier submissions.

It is possible that upon receipt of the revised plans, additional items for compliance may be required. This letter shall serve as formal notice that your permit application has been rejected for said project until such time as the requested information has been provided.

You have the right to appeal this rejection letter. Applications for the Zoning Hearing Board can be obtained from the Building and Planning Department located in the Municipal Building at 2400 Byberry Road, Bensalem.

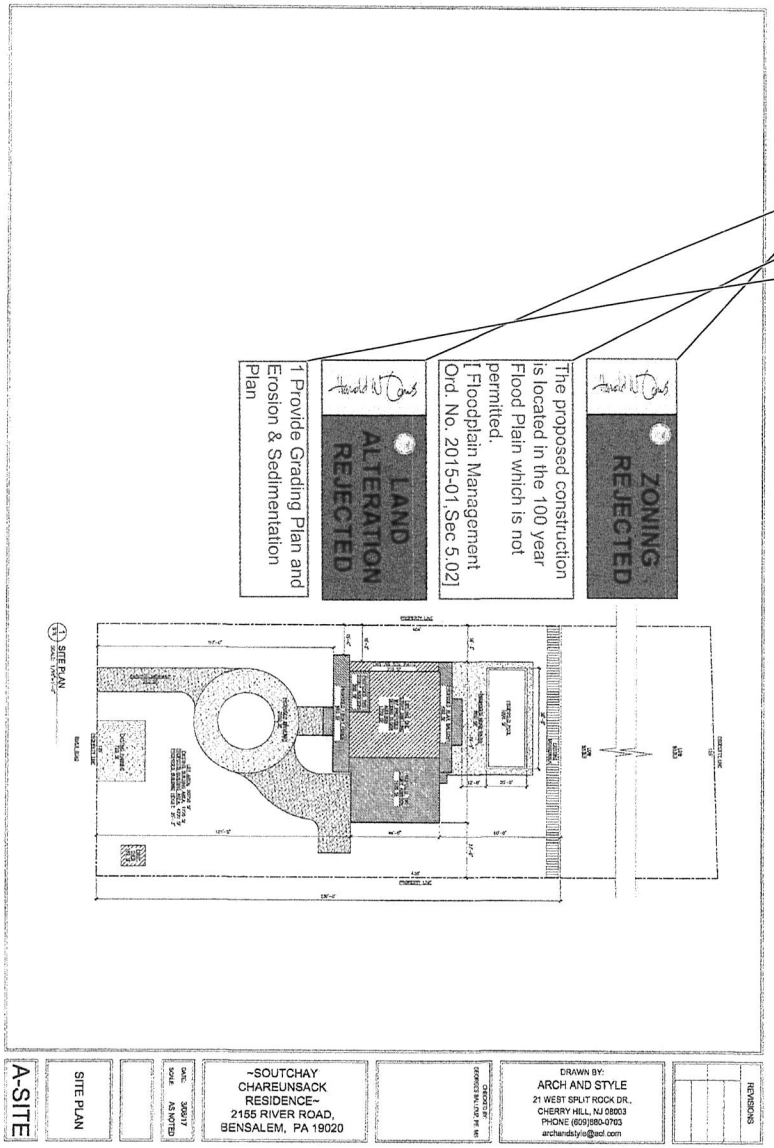
Respectfully,

Harold W Gans

Harold W. Gans, P.E., P.L.S.
Township Engineer

scworkinggroupinc@gmail.com
EMAIL ADDRESS

HWG/lva
Enclosures



Summary of Comments on PLANS.pdf

Page: 1

Author: rgans Subject: ZONING REJECTED Date: 3/16/2017 1:35:57 PM

Author: rgans Subject: LAND ALTERATION REJECTED Date: 3/16/2017 1:42:46 PM

Author: rgans Subject: Text Box Date: 3/16/2017 1:42:41 PM
The proposed construction is located in the 100 year Flood Plain which is not permitted.
[Floodplain Management Ord. No. 2015-01,Sec 5.02]

Author: rgans Subject: Text Box Date: 3/16/2017 1:44:50 PM
1 Provide Grading Plan and Erosion & Sedimentation Plan

BUCKS COUNTY RECORDER OF DEEDS

55 East Court Street
Doylestown, Pennsylvania 18901
(215) 348-6209

Instrument Number - 2016071164
Recorded On 11/14/2016 At 2:00:39 PM * Total Pages - 5
* Instrument Type - DEED
Invoice Number - 836173 User - KGB
* Grantor - SIHN, SANG C
* Grantee - CHAREUNSACK, SOUTCHAY
* Customer - SIMPLIFILE LC E-RECORDING
* FEES

STATE TRANSFER TAX	$3,900.00
RECORDING FEES	$77.00
BENSALEM SCHOOL DISTRICT REALTY TAX	$1,950.00
BENSALEM TOWNSHIP	$1,950.00
TOTAL PAID	$7,877.00

Bucks County UPI Certification
On November 14, 2016 By SEC

This is a certification page

DO NOT DETACH

This page is now part of this legal document.

RETURN DOCUMENT TO:
EQUITY ONE ABSTRACT, LLC
668 WOODBOURNE RD SUITE 108
LANGHORNE, PA 19047

I hereby CERTIFY that this document is recorded in the Recorder of Deeds Office of Bucks County, Pennsylvania.

THE RECORDERS OFFICE OF THE BUCKS COUNTY, PA.

Joseph J. Szafran, Jr.
Recorder of Deeds

TRUE AND CORRECT COPY
OF ORIGINAL RECORDED
IN BUCKS COUNTY
RECORDER OF DEEDS OFFICE
DATE 11-17-16

* - Information denoted by an asterisk may change during the verification process and may not be reflected on this page.

1252ED

Prepared by and Return to:

Equity One Abstract, LLC
668 Woodbourne Road # 108
Langhorne, PA 19047
215-750-7300

File No. EOA-16-1336

UPI # 02-064-126

CERTIFIED PROPERTY IDENTIFICATION NUMBERS
02-064-126- - BENSALEM TWP
CERTIFIED 11/14/2016 BY SEC

This Indenture, made the 10th day of November, 2016,

Between

SANG C. SIHN

(hereinafter called the Grantor), of the one part, and

SOUTCHAY CHAREUNSACK, A SINGLE MAN

(hereinafter called the Grantee), of the other part,

Witnesseth, that the said Grantor for and in consideration of the sum of **Three Hundred Ninety Thousand And 00/100 Dollars ($390,000.00)** lawful money of the United States of America, unto him well and truly paid by the said Grantee, at or before the sealing and delivery hereof, the receipt whereof is hereby acknowledged, has granted, bargained and sold, released and confirmed, and by these presents does grant, bargain and sell, release and confirm unto the said Grantee, as sole owner

ALL THAT CERTAIN lot or tract of land with the buildings and improvements thereon erected situate in the Township of Bensalem, County of Bucks, and State of Pennsylvania, being known and designated as part of Section "C", Plan No. 2 on Map or Plan of "Echo Beach" made by Edward Pickering, Registered Surveyor, Woodbourne, Pennsylvania on the 28th day of May. A.D. 1932 and recorded in the Recorder's Office at Doylestown, Pennsylvania in Plan Book No. 2 page 88, and more
particularly bounded and described as follows:

BEGINNING at a corner in line of lands of John Hagen in the bed of Sycamore Avenue (40 feet wide); thence extending. South 23 degrees 03 minutes East 404.1 feet more or less to low water line of the Delaware River; thence down the same by various courses 125 feet more or less to land of Echo Beach Improvement Association; thence extending by said land North 23 degrees 14 minutes West 408.00 feet more or less to a point in the bed of Sycamore Avenue aforesaid; thence along the bed of said Sycamore Avenue North 66 degrees 57 minutes East 125.06 feet to the first mentioned point and place of beginning.

Tax ID / Parcel No. 2-64-126

Being the same premises which Robert J. Herbert Executor of the Estate of Howard Herbert by Deed dated 4/16/1999 and recorded 4/23/1999 in Bucks County in Deed Book 1821 Page 938 conveyed unto Sang Chael Sihn and Yura Ra Hwang, in fee.

Being the same premises which Sang C. Sihn and Yura Sihn by Deed dated 2/20/2014 and recorded 3/20/2014 in Bucks County in 2014013128 conveyed unto Sang C. Sihn, in fee.

Together with all and singular the buildings and improvements, ways, streets, alleys, driveways, passages, waters, water-courses, rights, liberties, privileges, hereditaments and appurtenances, whatsoever unto the hereby granted premises belonging, or in anywise appertaining, and the reversions and remainders, rents, issues, and profits thereof; and all the estate, right, title, interest, property, claim and demand whatsoever of him, the said grantor, as well at law as in equity, of, in and to the same.

To have and to hold the said lot or piece of ground described above, with the buildings and improvements thereon erected, hereditaments and premises hereby granted, or mentioned and intended so to be, with the appurtenances, unto the said Grantee, his heirs and assigns, to and for the only proper use and behoof of the said Grantee, his heirs and assigns, forever.

And the said Grantor, for himself and his heirs, executors and administrators, does, by these presents, covenant, grant and agree, to and with the said Grantee, his heirs and assigns, that he, the said Grantor, and his heirs, all and singular the hereditaments and premises herein described and granted, or mentioned and intended so to be, with the appurtenances, unto the said Grantee, his heirs and assigns, against him, the said Grantor, and his heirs, and against all and every other person and persons whosoever lawfully claiming or to claim the same or any part thereof, shall and will

Warrant and Forever Defend.

In Witness Whereof, the party of the first part has hereunto set his hand and seal. Dated the day and year first above written.

Sealed and Delivered
in the Presence of Us:

_____

_____{SEAL}
Sang C. Sihn

Commonwealth of Pennsylvania
County of Bucks } ss

On this, the 10th day of November, 2016, before me, the undersigned Notary Public, personally appeared **Sang C. Sihn**, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public
My commission expires 11-14-18

The precise residence and the complete post office address of the above-named Grantee is:

2155 River Road
Bensalem, PA 19020

On behalf of the Grantee

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
GARY N. YOUNG, Notary Public
Middletown Twp., Bucks County
My Commission Expires November 14, 2018

Deed

UPI # 02-064-126

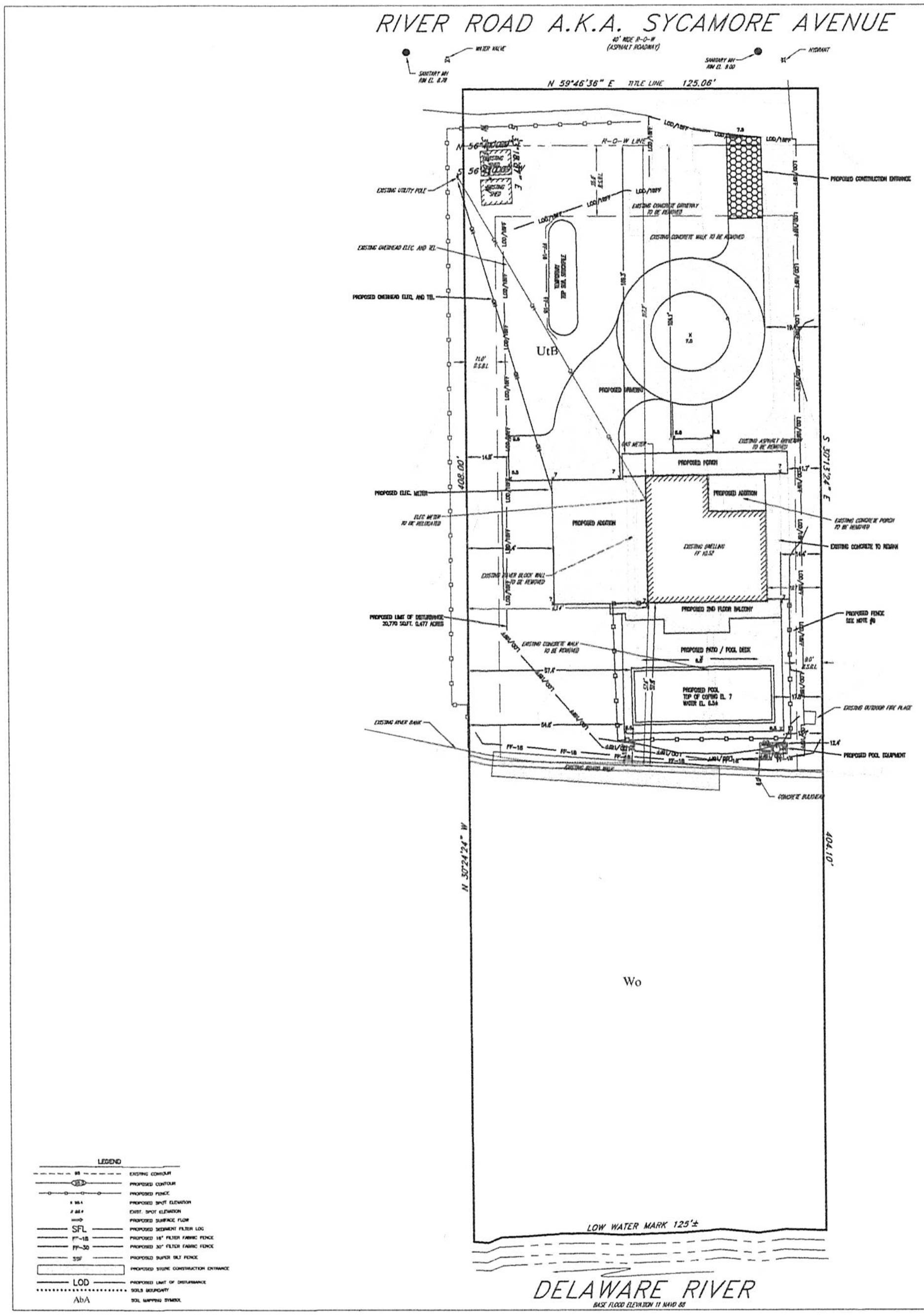
Sang C. Sihn

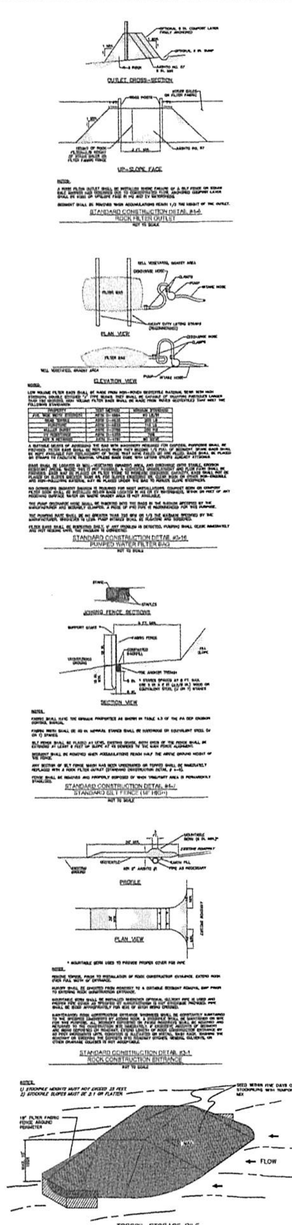
TO

Soutchay Chareunsack, a single man

Equity One Abstract, LLC
668 Woodbourne Road # 108
Langhorne, PA 19047
Telephone: 215-750-7300 Fax: 215-750-7305

BUCKS COUNTY
Inst.# 2016071164 - Page 5 of 5
Inst. # 2016071164 - Page 5 of 5





E&S STANDARD NOTES

SEEDING SPECIFICATIONS

CONSTRUCTION SEQUENCE

2. INSTALL SEDIMENT BARRIERS AND CONSTRUCTION ENTRANCE* AS SHOWN IN PLAN VIEW ALONG WITH TREE PROTECTION FENCING. AREAS PROPOSED FOR INFILTRATION BMPS SHALL BE PROTECTED FROM SEDIMENTATION AND COMPACTION DURING CONSTRUCTION.

3. CLEAR AND GRUB PROPOSED CONSTRUCTION AREA OF EXISTING VEGETATION. STRIP TOPSOIL AND STOCKPILE.

4. GRADE REMAINING PORTIONS OF LOT WHICH ARE NECESSARY TO FACILITATE CONSTRUCTION.

5. CONSTRUCT PROPOSED POOL, POOL DECK AND EQUIPMENT PAD.

6. COMPLETE PLUMBING AND ELECTRICAL WIRING.

7. FINAL GRADE ALL DENUDED AREAS AND SPREAD STOCKPILED TOPSOIL AT MINIMUM OF 8". IMMEDIATELY STABILIZE ALL DENUDED AREAS TO REESTABLISH VEGETATION.

8. UPON RE-ESTABLISHMENT OF ALL DENUDED AREAS, INSTALL INFILTRATION BMP**

9. IMMEDIATELY RE-STABILIZE ANY RE-DISTURBED AREAS.

** INFILTRATION BMP SHALL NOT BE CONSTRUCTED OR RECEIVE RUN OFF UNTIL ENTIRE CONTRIBUTORY AREA HAS RECEIVED FINAL STABILIZATION. TOWNSHIP ENGINEER SHALL BE NOTIFIED 3 THREE DAYS PRIOR TO CONSTRUCTION OF INFILTRATION BMP.

* IF THE EXISTING DRIVEWAY WILL BE USED AS THE CONSTRUCTION ENTRANCE, THE STABILIZED ROCK CONSTRUCTION ENTRANCE MAY BE OMITTED. ALL DIRT AND MUD MUST BE REMOVED FROM VEHICLES PRIOR TO ENTRY ONTO A PUBLIC CARTWAY. FAILURE TO DO SO MAY RESULT IN DIRECTION FROM THE TOWNSHIP TO INSTALL THE STABILIZED ROCK CONSTRUCTION ENTRANCE TO ITS PROPOSED OR FULL LENGTH, WHATEVER IS REQUIRED TO ALLEVIATE THE SITUATION. THE HOMEOWNER CONTRACTOR SHALL MAINTAIN THE DRIVEWAY DURING THE PROJECT TO PREVENT SOIL FROM BEING TRACKED ONTO THE PUBLIC ROADWAY.

SOILS RESOLUTIONS

DUE TO SOIL CONSTRAINTS THE FOLLOWING RESOLUTIONS MAY BE APPLICABLE AND SHOULD BE UTILIZED ACCORDINGLY.

1. LOW PH: FOR SOILS WITH PH VALUES LOWER THAN 5.5 ADJUST PH BY APPLYING LIME AT RATES DETERMINED BY SOILS TESTING IN COMBINATION WITH SELECTING AND PLANTING VEGETATIVE SPECIES TOLERANT OF ACIDIC CONDITIONS.

2. LOW FERTILITY: INCORPORATE ADDITIONAL SOIL NUTRIENTS AT RATES DETERMINED BY SOILS TESTING IN COMBINATION WITH SELECTING AND PLANTING VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY CONDITIONS.

3. HIGH WATER TABLE OR WET/HYDRIC SOILS PRONE TO FLOODING: SELECT VEGETATIVE SPECIES TOLERANT OF WET CONDITIONS. IF BUILDINGS ARE LOCATED IN SAID SOILS, PROVIDE SUMP PUMPS WITH BACK FLOW PREVENTION DEVICES IN BASEMENTS. IF HIGH WATER IS ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR SHALL UTILIZE PUMPED WATER FILTRATION METHODS (I.E. DIRT BAG). FOR BASIN AND FACILITIES IN AREAS OF WET SOILS, PREFERABLY RELOCATE STORMWATER, SEDIMENT BASINS AND FACILITIES IN SOILS MORE CONDUCIVE TO SUCH FACILITIES. IF FACILITIES CANNOT BE RELOCATED, PROVIDE PUMP WATER SEDIMENTS REMOVAL FACILITIES FOR BASIN CONSTRUCTION, LIMIT RESERVOIR DEPTHS AND LIMIT CLEANOUT ELEVATIONS.

4. ERODIBLE SOILS: FOR SOILS WITH ERODIBILITY VALUES HIGHER THAN 0.38 CONTRACTOR SHOULD INCORPORATE SOME OR ALL OF THE FOLLOWING STABILIZATION TECHNIQUES. IN PROPOSED CHANNELS PROVIDE TEMPORARY LININGS UNTIL GRASS IS ESTABLISHED, PROVIDE PERMANENT GRASS REINFORCED LININGS THROUGH THE INSTALLATION OF SOD OR SELECT PERMANENT LININGS OTHER THAN GRASSES. DECREASE CHANNEL GRADES AND INCREASE CHANNEL WIDTHS TO HELP REDUCE EROSION.

5. SOILS PRONE TO INSTABILITY PIPING AND SEEPING: IF STORM WATER OR SEDIMENT BASIN/TRAPS CANNOT BE RELOCATED TO OTHER SOIL TYPES, LIMIT EMBANKMENT SLOPE STEEPNESS, PROVIDE CLAY EMBANKMENT CORES AND IMPORT OTHER SOILS FOR CONSTRUCTION OF EMBANKMENT FACILITIES AS NECESSARY.

6. SOILS UNSUITABLE FOR WINTER GRADING, PRONE TO FROST ACTION OR DIFFICULT TO COMPACT: GRADING DURING PERIODS PRONE TO FROST SHOULD BE LIMITED. CONSTRUCTION OF STRUCTURAL EMBANKMENTS SHOULD BE PERFORMED DURING THE PERIOD OF MAY TO OCTOBER IF SUCH FACILITIES CANNOT BE RELOCATED TO AN AREA WITH MORE CONDUCIVE SOILS.

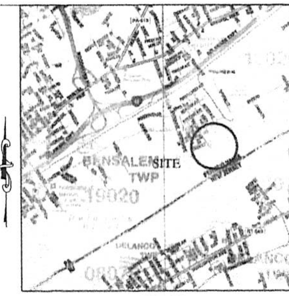
7. SOILS SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNEL/CHAMBER FORMATION: LOCATE SEDIMENT BASIN, TRAPS AND STORM WATER MANAGEMENT DETENTION, RETENTION AND INFILTRATION FACILITIES IN AREAS DESIGNATED WITH SOILS MORE SUITABLE FOR SAID FACILITIES. IF THE FACILITIES CANNOT BE RELOCATED TO A MORE SUITABLE AREA, STANDING WATER DEPTHS AND RETENTION TIMES SHOULD BE LIMITED. IMPERMEABLE RESERVOIR LININGS SHOULD BE UTILIZED FOR WATER RETENTION FACILITIES, AND/OR STORMWATER DETENTION FACILITIES WITH EXTENSIVE HOLDING TIMES.

ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE DEP'S SOLID WASTE MANAGEMENT REGULATIONS AND/OR ANY ADDITIONAL LOCAL, STATE, OR FEDERAL REGULATIONS. NO BUILDING MATERIAL OR WASTE OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

SOILS LEGEND AND TABLE OF LIMITATIONS & RESOLUTIONS
BASED ON USDA NRCS WEB SOIL SURVEY OF BUCKS COUNTY

SYMBOL	MAPPING UNITS	SLOPE	HYDRIC RATING	HYDROLOGIC GROUP	DEPTH TO ANY RESTRICTIVE LAYER	DWELLINGS WITH BASEMENTS	DEPTH TO WATER TABLE	SEWAGE EFFLUENT BY ON-SITE SEPTIC TANK
ReB	URBAN LAND MANTAPIKE	0-8%	0	NOT RATED	135 CM	NOT RATED	>200 CM	NOT RATED
Wo	WATER	—	0	—	—	—	—	—

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.



VICINITY MAP

GENERAL NOTES:

1. ZONING SUMMARY
R-2 RESIDENTIAL DISTRICT

CURRENT USE; SINGLE FAMILY DETACH DWELLING

	REQUIRED
MINIMUM LOT SIZE (S.F.)	7,500
MINIMUM LOT FRONTAGE / WIDTH (FT.)	75
MAXIMUM IMPERVIOUS SURFACE RATIO (%)	45
MAXIMUM BUILDING AREA (%)	40
MAXIMUM BUILDING HEIGHT (FT.)	35
MINIMUM YARDS (FT.)	
FRONT	25
SIDE	8 MIN. / 20AGG
REAR	25

2. OWNER/APPLICANT: CHAREUNSACK, SOUTCHAY
2155 RIVER ROAD
BENSALEM, PA 19020

3. PROPERTY: TAX MAP PARCEL 02-064-126
2155 RIVER ROAD
BENSALEM TOWNSHIP
BUCKS COUNTY, PA.
AREA: 50,397± SQ.FT. 1.157± ACRES

4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD AND OTHER REFERENCE MATERIAL LISTED HEREON.

5. THIS SURVEY IS SUBJECT TO ALL APPLICABLE ZONING CODES IN EFFECT AS OF THE DATE OF SURVEY.

6. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.
LOT SERVED BY PUBLIC WATER SEWER AND GAS.

7. VERTICAL DATUM BASED ON NAVD 88 ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS). HORIZONTAL DATUM BASED ON NAD 83 PA SOUTH ZONE ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS).

8. REFER TO ENGINEERING DRAWING FOR POOL SPECIFICATIONS.

9. SEC. 232-588. SWIMMING POOLS.
(A) AREA REGULATIONS FOR SWIMMING POOLS ACCESSORY TO ONE AND TWO-FAMILY DETACHED RESIDENTIAL DWELLINGS. SWIMMING POOLS, SPAS, AND HOT TUBS HAVING A DEPTH OF 18 INCHES OR MORE SHALL NOT BE LOCATED IN ANY FRONT YARD, AND SHALL FURTHER BE LOCATED SO AS TO ALLOW AT LEAST TEN FEET FROM ANY PROPERTY LINE TO ANY POINT ON THE POOL. IN THE CASE OF CORNER LOTS, THE POOL SHALL NOT BE LOCATED WITHIN ANY FRONT YARD SETBACKS, NO CLOSER TO THE STREET LINE THAN THE PRINCIPLE BUILDING, AND NO CLOSER THAN TEN FEET TO ANY SIDE PROPERTY LINE. IN ADDITION, ALL SUCH SWIMMING POOLS, SPAS, AND HOT TUBS SHALL BE ENCLOSED IN ACCORDANCE WITH SECTION 421.10 OF THE BOCA NATIONAL BUILDING CODE OF 1993, AS AMENDED.
ALL FENCES AND WALLS MUST COMPLY WITH THE REQUIREMENTS OF SECTION 232-584 OF THIS CHAPTER RELATING TO OBSTRUCTIONS WHICH PROHIBIT ANY STRUCTURE, WALL, FENCE, PLANTING OR OTHER VISUAL OBSTRUCTION BETWEEN THE HEIGHT OF TWO FEET AND SEVEN FEET ABOVE THE LEVEL OF INTERSECTING STREETS BEING CONSTRUCTED OR ERECTED WITHIN ANY CLEAR SIGHT TRIANGLE FOR A CORNER LOT.
NO FENCE CAN BE CONSTRUCTED FOR THE PURPOSE OF CUTTING OFF THE LIGHT OR AIR OF ANY ADJOINING PROPERTY, NOR CONSTRUCTED OF UNSIGHTLY MATERIALS FOR THE PURPOSE OF ANNOYANCE OR HARASSMENT.
FENCES SHALL BE SUBJECT TO ALL OF THE REQUIREMENTS OF THE TOWNSHIP PROPERTY MAINTENANCE CODE.
SEC. 232-584. VISION OBSTRUCTION.
ON ANY CORNER LOT A CLEAR SIGHT TRIANGLE SHALL BE PROVIDED. WITHIN SUCH TRIANGLES NO STRUCTURE, WALL, FENCE, PLANTING OR OTHER VISUAL OBSTRUCTION BETWEEN THE HEIGHT OF TWO FEET AND SEVEN FEET ABOVE THE LEVEL OF THE INTERSECTING STREETS SHALL BE PERMITTED. SUCH TRIANGLES SHALL BE DELINEATED BY A LINE DRAWN ACROSS A LOT TO CONNECT POINTS ON THE TWO STREET LINES AT THE FOLLOWING MINIMUM DISTANCES:
(1) TWENTY-FIVE FEET FROM THE POINT OF INTERSECTION OF THE STREET LINES OF TWO STREETS WHERE BOTH ARE LOCAL STREETS.
(2) THIRTY-FIVE FEET FROM THE POINT OF INTERSECTION OF THE STREET LINES OF TWO STREETS WHERE ONE IS A COLLECTOR STREET.
(3) FORTY-FIVE FEET FROM THE POINT OF INTERSECTION OF TWO STREETS WHERE ONE IS AN ARTERIAL STREET.
WHENEVER A PORTION OF THE LINE OF SUCH TRIANGLES OCCUR WITHIN THE PROPOSED BUILDING SETBACK LINE, SUCH PORTION SHALL BE CONSIDERED A BUILDING SETBACK LINE. (ORD. NO. 96-05, ART. XIII(1303), 6-3-96)

10. CONTRACTOR TO VERIFY LOCATION OF ALL PROPOSED FACILITIES BOTH VERTICALLY AND HORIZONTALLY BEFORE CONSTRUCTION.

11. NO WATER SHALL BE PLACED IN THE POOL UNTIL A FENCE, AS REQUIRED BY THE TOWNSHIP ORDINANCE HAS BEEN COMPLETED.

12. ENTIRE PROPERTY IS LOCATED IN FLOOD HAZARD ZONE AE (1% CHANCE ANNUAL FLOOD) BASE FLOOD EL. 11 NAVD 88

13. PROPERTY LOCATED IN STORM WATER MANAGEMENT DIRECT DISCHARGE DISTRICT

IMPERVIOUS SURFACE CALCULATIONS:

EXISTING DWELLING	1,830 S.F.
EXISTING ASPHALT DRIVEWAY	1,620 S.F.
EXISTING CONCRETE DRIVEWAY	650 S.F.
EXISTING CONCRETE WALKS	360 S.F.
EXISTING CONCRETE PORCH	500 S.F.
EXISTING SHEDS	192 S.F.
EXISTING STEPS	40 S.F.
EXISTING OUTDOOR FIREPLACE	18 S.F.
TOTAL EXISTING	5,010 S.F.
PROPOSED ADDITIONS	1,720 S.F.
PROPOSED DRIVEWAY	3,681 S.F.
PROPOSED BALCONY	468 S.F.
PROPOSED PATIO / POOL DECK	1,128 S.F.
PROPOSED COPING	132 S.F.
EXISTING ASPHALT DRIVEWAY TO BE REMOVED	-1,620 S.F.
EXISTING CONCRETE DRIVEWAY TO BE REMOVED	-650 S.F.
EXISTING CONCRETE WALKS TO BE REMOVED	-360 S.F.
PORTION OF EXISTING CONCRETE PORCH	-281 S.F.
TOTAL PROPOSED	4,576 S.F.

PERCENT OF TOTAL IMPERVIOUS SURFACES EXISTING 5,010 / 50,397 = 9.9%
PERCENT OF TOTAL IMPERVIOUS SURFACES EXISTING & PROPOSED 9,586 / 50,397 = 19.0%
PROPERTY ZONED R-2 MAXIMUM ALLOWABLE IMPERVIOUS SURFACES 45% OR 22,679 S.F.

REFERENCES:

1. THE OFFICIAL TAX MAPS OF BUCKS COUNTY, BENSALEM TOWNSHIP COMMONWEALTH OF PENNSYLVANIA
2. USDA WEB SOIL SURVEY
3. FLOOD INSURANCE RATE MAP BUCKS COUNTY, PENNSYLVANIA (ALL JURISDICTIONS) PANEL 504 OF 532 MAP NO. 42017C0504K, EFFECTIVE DATE MARCH 21, 2017
4. SECTION C, PLAN NO. 2 ECHO BEACH MADE BY ED PICKERING REGISTERED SURVEY DATED 05/28/1932 AND RECORDED IN PLAN BOOK 2 PAGE 08

RECIEVING STREAM DATA

NEAREST STREAM: DELAWARE RIVER

WATERSHED DATA

DELAWARE RIVER SOUTH
SOURCE: BUCKS COUNTY WATERSHED MAP PREPARED BY THE BUCKS COUNTY PLANNING COMISSION

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776
PROJECT SERIAL NO.: 20171251282
FOR DESIGN PURPOSES
PLACED ON May 5, 2017

No.	Revision/Issue	Date

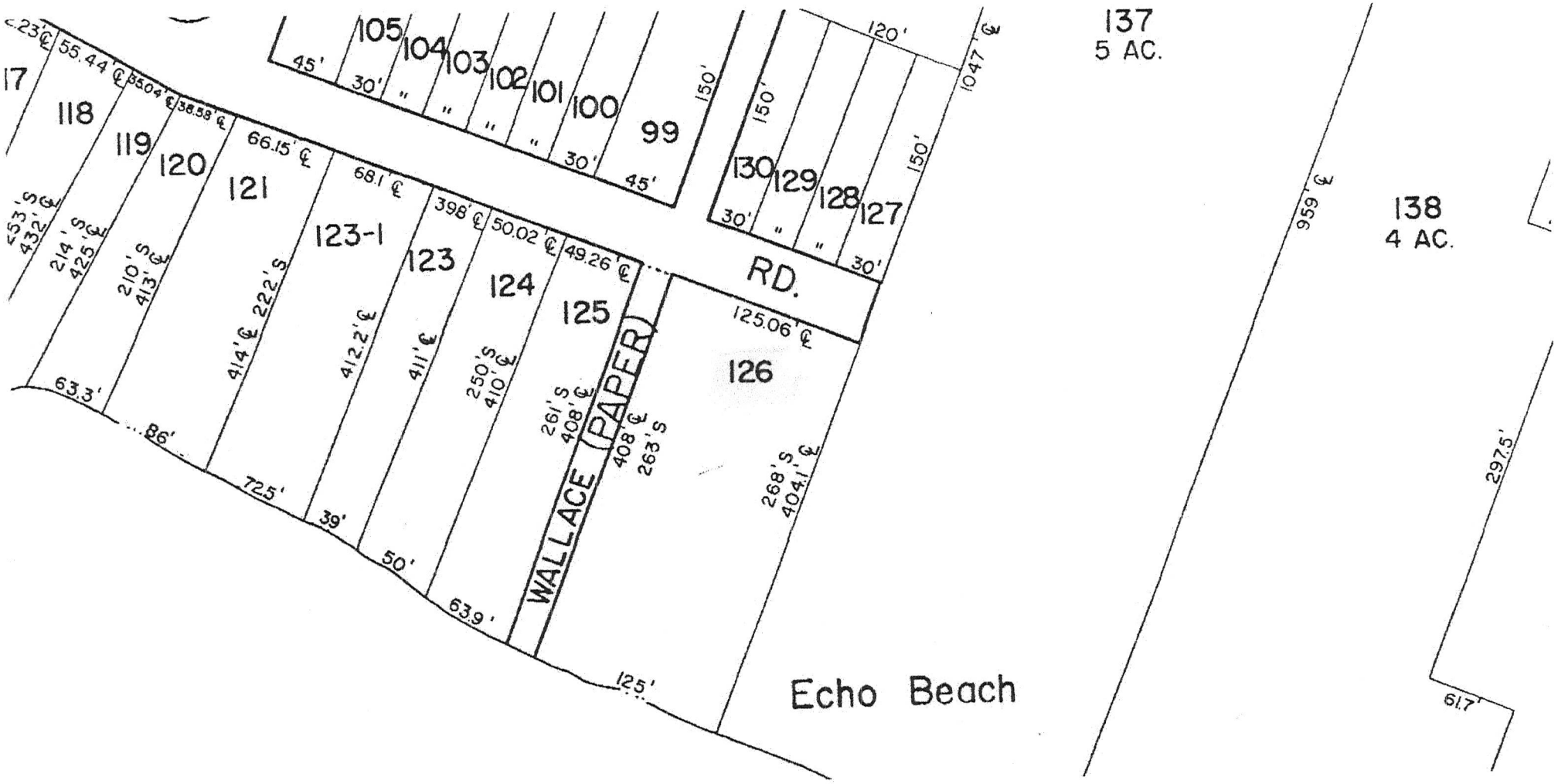
THOMAS L. COOLBAUGH
PENNSYLVANIA PROFESSIONAL LAND SURVEYOR #SU075718

TLC Surveying, Inc.
Professional Land Surveying
5749 Belmont Manor Drive
Pipersville, Pa. 18947
215-766-2167(office), 215-766-2112(fax)
E-MAIL tlcsurveying@comcast.net

ZONING PERMIT PLAN
CHAREUNSACK RESIDENCE
2155 RIVER ROAD
TAX MAP PARCEL 20-064-126
BENSALEM TOWNSHIP, BUCKS COUNTY
COMMONWEALTH OF PENNSYLVANIA

DATE: 05/04/17	SCALE: 1"=20'
DESIGN: T.L.C.	DRAWN: T.L.C.
POINT FILE: 17-089.CSV	RAW DATA FILE: 17-089.RAW
JOB NO.	17-089
SHEET NO.:	1 of 1

2155 River Rd
2-64-126



GENERAL NOTES

1. IF DURING THE PROGRESS OF THE WORK THE CONTRACTOR MAY DISCOVER ANY ERROR, INCONSISTENCY OR OMISSION IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL AT ONCE SO REPORT TO THE ARCHITECT/ENGINEER. EXTRAS WILL NOT BE ALLOWED FOR CORRECTION OF PROBLEMS THAT COULD HAVE BEEN AVOIDED BY CAREFUL REVIEW AND THE MINOR ADJUSTMENT OF SIZE AND/OR LOCATION OF VARIOUS ITEMS FOR PROPER FIT.

2. ANY ITEM NOT SPECIFICALLY LISTED OR SHOWN ON THE CONTRACT DOCUMENTS BUT IS INCIDENTAL TO THE COMPLETION OF THE PROJECT OR PACKAGE WILL BE CONSIDERED AS PART OF THE CONTRACT SCOPE OF WORK.

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. PROVIDE ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT. IN THE EVENT THAT THE CONTRACTOR DETERMINES THAT SHEETING OR SHORING IS REQUIRED, THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER FOR DESIGN AND DOCUMENTATION OF ALL SHEETING, SHORING AND TEMPORARY BRACING REQUIRED FOR THE WORK.

5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

6. ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

7. SHOULD THE CONTRACTOR SEEK APPROVAL OF A PRODUCT OTHER THAN THE BRAND OR BRANDS NAMED IN THESE SPECIFICATIONS, IT SHALL FURNISH WRITTEN EVIDENCE THAT SUCH PRODUCT CONFORMS IN ALL RESPECTS TO THE SPECIFIED REQUIREMENTS, AND THAT IT HAS BEEN USED SUCCESSFULLY ELSEWHERE UNDER SIMILAR CONDITIONS. WHERE THE SPECIFIED REQUIREMENTS INVOLVE CONFORMANCE TO RECOGNIZED CODES OR STANDARDS THE CONTRACTOR SHALL FURNISH EVIDENCE OF SUCH CONFORMANCE IN THE FORM OF TEST OR INSPECTION REPORTS, PREPARED BY A RECOGNIZED AGENCY, AND BEARING AN AUTHORIZED SIGNATURE.

8. MANUFACTURERS' STANDARD DATA AND CATALOG CUT SHEETS WILL NOT BE CONSIDERED SUFFICIENT IN THEMSELVES, AND THE ENGINEER OF RECORD WILL NOT BE RESPONSIBLE FOR SEEKING FURTHER DATA FROM THE MANUFACTURER, OR FOR OTHERWISE RESEARCHING THE PRODUCT. FAILURE TO PROVIDE COMPLETE DATA WILL RESULT IN THE REJECTION OF THE ENTIRE PRODUCT.

***** THE ENGINEER OF RECORD IS NOT AND SHALL NOT BE HELD LIABLE FOR SITE SAFETY ISSUES *****

CONCRETE NOTES

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).

2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:
   a. FOUNDATIONS: 4000 PSI
   ALL CONCRETE SUBJECT TO FREEZE/THAW CYCLE SHALL BE AIR-ENTRAINED.

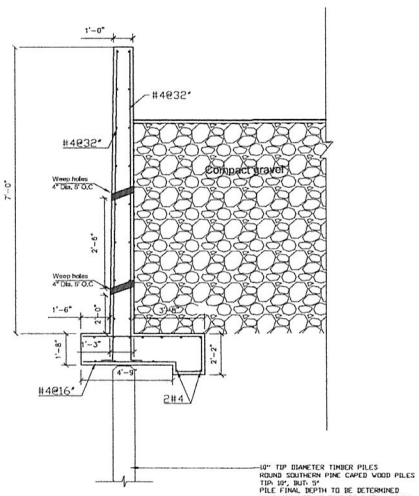
3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

4. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.

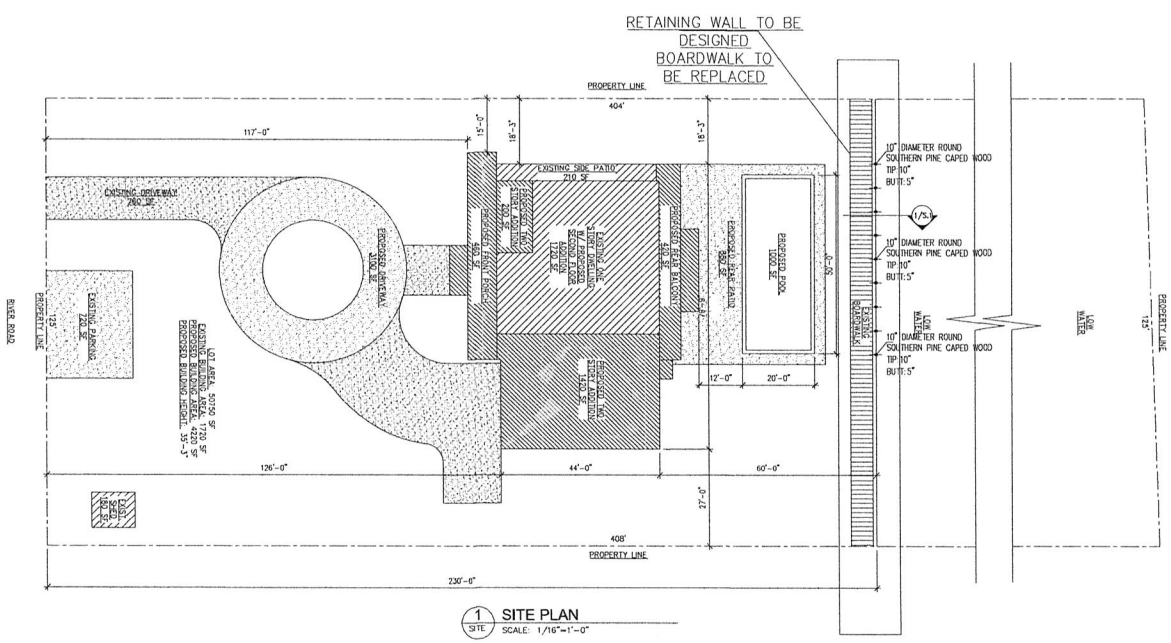
5. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE CLASS "A" TENSION LAP SPLICES FOR ALL HORIZONTAL WALL REINFORCING UNLESS OTHERWISE SHOWN ON PLAN. PROVIDE CLASS "B" TENSION LAP SPLICES FOR ALL HORIZONTAL GRADE BEAM REINFORCING.

6. WELDING OF REINFORCEMENT IS NOT PERMITTED.

7. LAP ALL BARS MINIMUM 40 DIAMETERS. LAP ALL WWF A MINIMUM OF 6 INCHES.



1 / S-1 RETAINING WALL-FOUNDATION SECTION
SCALE: 1/3" = 1'-0"



1 / SITE SITE PLAN
SCALE: 1/16"=1'-0"

ALFA ENGINEERING & CONSTRUCTION
1444 S 13TH ST.
PHILADELPHIA, PA 19147
PHONE: 267.253.8668
WWW.ALFAENGINEERINGINC.COM

2155 RIVER RD BENSALEM, PA PLANS

SCALE: AS STATED

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN FIELD. IF DISCREPANCIES ARE FOUND, NOTIFY ARCHITECT IMMEDIATELY. CONTRACTOR IS RESPONSIBLE FOR SELECTING APPROPRIATE CONSTRUCTION PROCESSES, COORDINATING WORK WITH THAT OF ALL OTHER TRADES, AND PERFORMING WORK IN A SAFE MANNER. NOTATED DIMENSIONS WILL TAKE PRECEDENCE. DRAWINGS ARE NOT TO BE SCALED.

NO.	DATE	REVISION

ALFA ENGINEERING HEREBY RESERVES ITS COMMON LAW COPYRIGHT & OTHER PROPERTY RIGHTS IN THESE DRAWINGS, IDEAS AND DESIGNS. THE INFORMATION ON THIS SHEET IS NOT TO BE REPRODUCED, MODIFIED OR USED IN ANY MANNER. THE INFORMATION ON THIS SHEET IS NOT TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT THE EXPRESSED WRITTEN CONSENT OF ALFA DESIGN & PLANNING.

04/27/17

DRAWING NO.

S1.0

INTERNATIONAL RESIDENTIAL CODE 2006

HEIGHT: 1 STORIES, 14' HIGH

DESIGN CRITERIA

LIVE LOADS:

WIND 90 m.p.h. (3 sec. gust) / 75 m.p.h. fastest mile. Exposure B

SNOW (ROOF) 30 p.s.f. / 10 P.S.F. DEAD

GENERAL SPECIFICATIONS

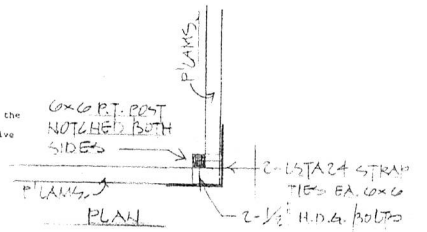
1. All work to be in accordance with local, state, national codes and standards.
2. Footings to bear on undisturbed soil, 3'-0" min. below final grade.
3. Excavations for footings shall be true and clean and shall be poured immediately after local approval.
4. All measurements are stud to stud. Do not scale drawings.
5. Any changes affecting the design of this structure shall be subject to the approval of the Architect/P.E..
6. The contractor shall field verify all dimensions and conditions at the job site prior to start of work and report any discrepancies to the Architect/P.E. before starting work or phase.
7. The contractor shall be responsible for visiting the site, verifying all existing conditions and dimensions, and familiarize themself with the scope of the work prior to starting work.
8. Actual dimensions of finished areas and spaces may vary from dimensions shown on plans due to field conditions.

LUMBER:

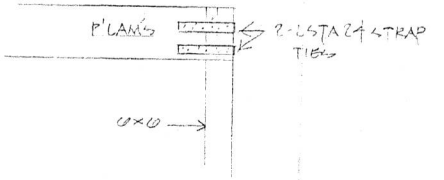
All structural lumber shall be Hem-Fir No. 2 or better, unless otherwise noted.
All lumber in contact with concrete, masonry, or exposed weather shall be pressure .25 ACQ treated No. 2 Southern Yellow Pine, or Cedar.

CONCRETE:

1. All concrete shall conform to the latest A.C.I. 318 standard.
2. All welded wire fabric shall conform to ASTM A-185 specifications and shall be placed in the middle of the slab thickness.
3. Concrete for footings shall have a minimum compressive strength of 2500 p.s.i. at 28 days.



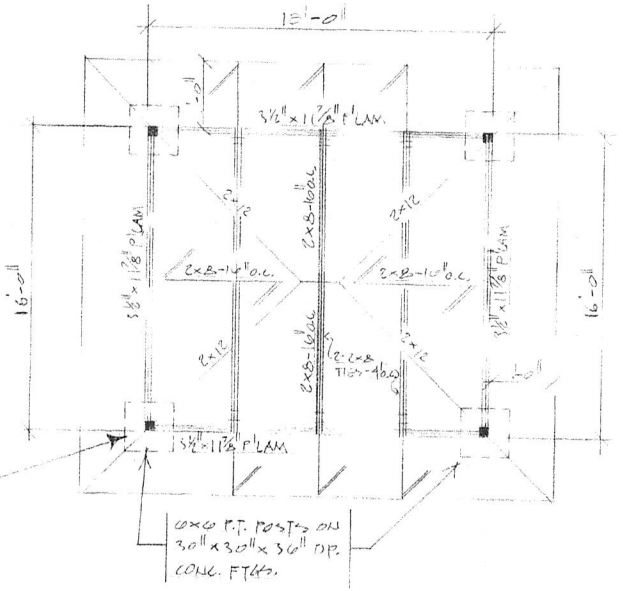
PLAN



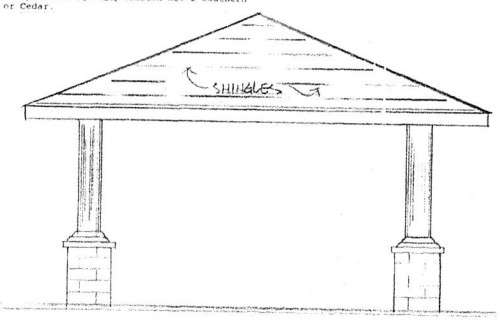
ELEVATION

6x6 CORNER DETAIL

N.T.S.



FOOTING/FRAMING PLAN ¼"=1'-0"



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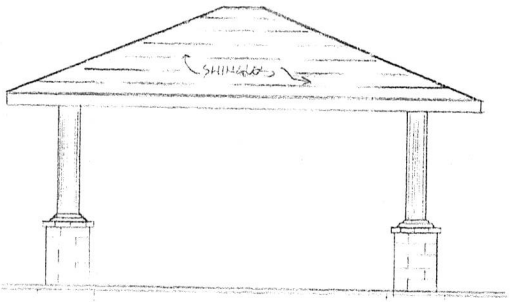
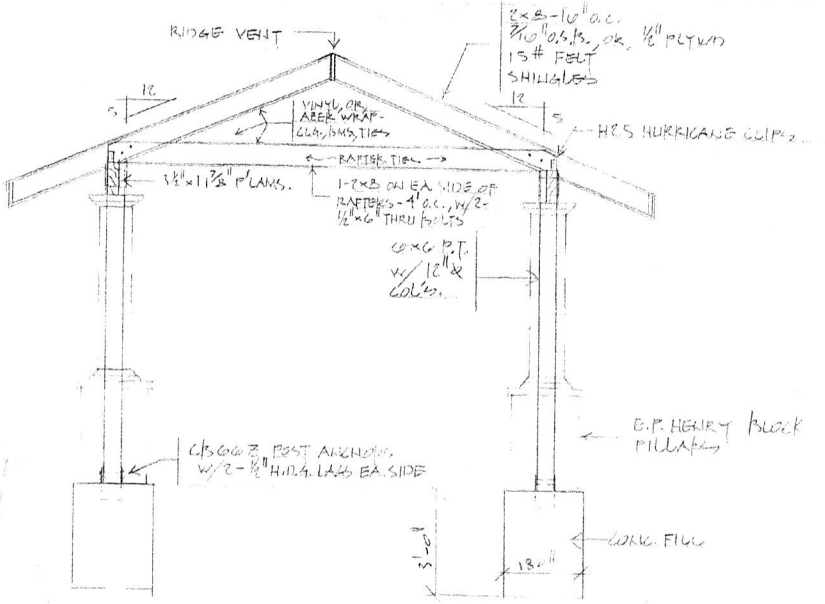


ELEVATION ¼"=1'-0"

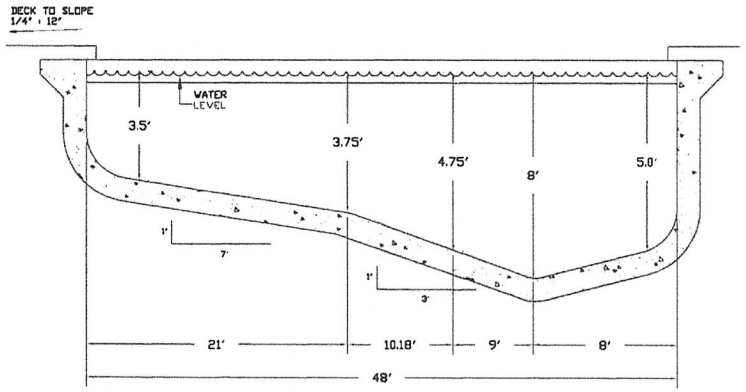


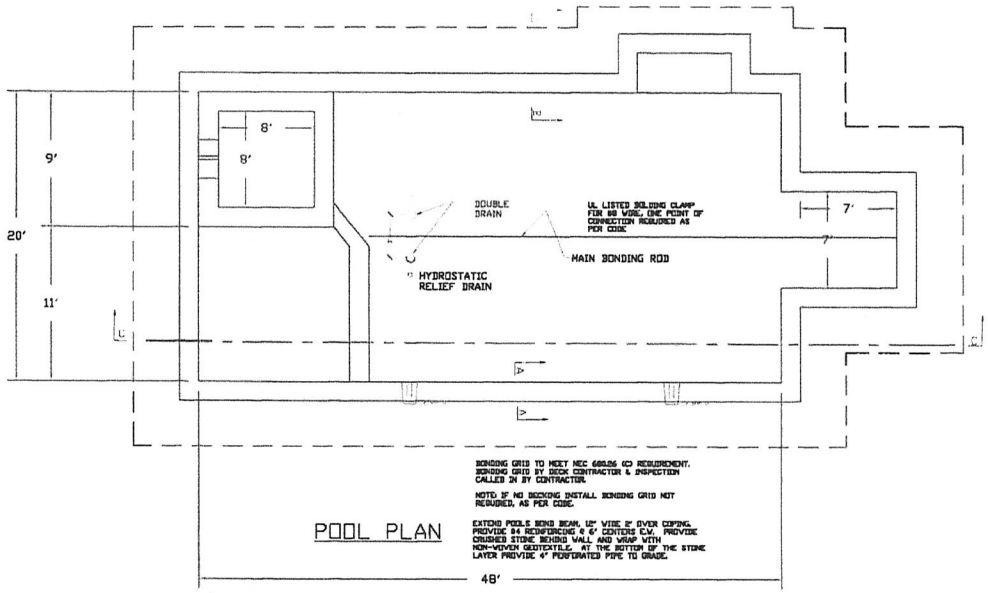
SECTION ⅜"=1'-0"

PATIO ROOF STRUCTURE
CHAREUNSACK RESIDENCE
2155 RIVER RD
BENSALEM PA 19020

General Notes:

1. Pool floor to be placed on undisturbed natural soil. Natural soil shall be a well-draining granular type with a minimum allowable bearing capacity = 2,000 PSF.
2. Pool structure designed in accordance with the American Concrete Institute (ACI) standard for building code requirements for reinforced concrete - 318
3. Pool gunite to develop a minimum compressive strength of 4,000 PSI @ 28 days.
4. All steel reinforcing shall be deformed bars complying with American Society for Testing and Materials (ASTM) specifications A615-40. Lap bars a minimum of 15 inches.
5. These construction documents are standards and apply to all pool shapes.
6. Pool shell construction shall be in conformance with all applicable ANSI/NSPI/IRC 2009 pool standards, latest editions.
7. All suction drains shall have a minimum separation of 36".
8. All suction covers must comply with ANSI/ASME A112.19.17





POOL PLAN

5-17-17 - REVISED POOL DEPTH

PROJECT SITE LOCATION:
SOUTCHAY CHAREUNSACK
2155 RIVER ROAD
BENSALEM PA 19020

20'X48' POOL DESIGN
BENSALEM TOWNSHIP
for K&S GREENDAY

DUMACK & ENGINEERING
A PROFESSIONAL CORPORATION
CONSULTING ENGINEERS & SURVEYORS
677 DURHAM ROAD * P.O. BOX 467 * PENNS PARK, PA 18943
(215) 598-1220

DRAWN BY: H.A.D.	CHECKED BY:	DRAWING NO:
SCALE: AS NOTED	DATE: 05-10-17	6330
		SHEET 1 OF 2

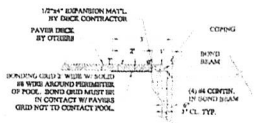
Construction Notes
Specification - 2009 IBC
Performance. The bonding required by this section shall be installed to eliminate voltage gradients in the pool area as prescribed.
FPN: This section does require that the 8 AWG or larger solid copper bonding conductor be extended or attached to any remote panelboard, service equipment, or any electrode.
Bonded parts. The parts specified in 680.26(B)(1) through (B)(5) shall be bonded together.
Metallic structural components. All metallic parts of the pool structure, including the reinforcing metal of the pool shell, coping stones, and deck, shall be bonded. The usual steel tie wires shall be considered suitable for bonding the reinforcing steel together, and welding or special clamping shall not be required. These tie wires shall be made tight. If reinforcing steel is effectively insulated by an encapsulating nonconductive compound at the time of manufacture and installation, it shall not be required to be bonded. Where reinforcing steel is encapsulated with a nonconductive compound, provisions shall be made for an alternate means to eliminate voltage gradients that would otherwise be provided by unencapsulated, bonded reinforcing steel.
Metal Fittings. All metal fittings within or attached to the pool structure shall be bonded. Isolated parts that are not over 100 mm (4 in.) in any dimension and do not penetrate into the pool structure more than 25 mm (1 in.) shall not require bonding.
Electrical equipment. Metal parts of electrical equipment associated with the pool water circulating system, including pump motors and metal parts of equipment associated with pool covers, including electric motors, shall be bonded. Metal parts of listed equipment incorporating an approved system of double insulation and providing a means for grounding internal nonaccessible, non-current-carrying metal parts shall not be bonded.
Where a double-insulated water-pump motor is installed under the provisions of this rule, a solid 8 AWG copper conductor that is of sufficient length to make a bonding connection to a replacement motor shall be extended from the bonding grid to an accessible point in the motor vicinity. Where there is no connection between the swimming pool bonding grid and the equipment grounding system for the premises, this bonding conductor shall be connected to the equipment grounding conductor of the motor circuit.
Underwater lighting. All forming shells and mounting brackets shall be bonded unless a listed low voltage lighting system is used.
Metal wiring methods and equipment. Metalsheathed cables and raceways, metal piping, and all fixed metal parts except those separated from the pool by a permanent barrier shall be bonded that are within the following distances of the pool:

1. Within 1.5m (5 ft) horizontally of the inside wall of the pool.
2. Within 3.7m (12 ft) measured vertically above the maximum water level of the pool, or any observation stands, towers, or platforms, or any diving structures.

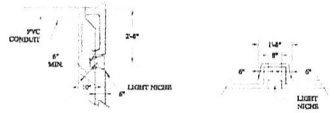
Common bonding grid. The parts specified in 680.26(B) shall be connected to a common bonding grid with a solid copper conductor insulated, covered, or bare, not smaller than 8 AWG. Connection shall be made by exothermic welding or by pressure connectors or clamps that are labeled as being suitable for the purpose and are of stainless steel, brass, copper, or copper alloy. The common bonding grid shall be permitted to be any of the following:

1. The structural reinforcing steel of a concrete pool where the reinforcing rods are bonded together by the usual steel tie wires or the equivalent.
2. The wall of a bolted or welded metal pool.
3. A solid copper conductor, insulated, covered, or bare, not smaller than 8 AWG
4. Rigid metal conduit or intermediate metal conduit of brass or other identified corrosion-resistant metal conduit.

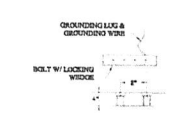
Entrapment protection for swimming - in accordance with ansi-nspi-5 2003 section 9.12 pool and spa suction outlets.
AG106.1 General.
Suction outlets shall be designed to produce circulation throughout pool or spa. Single-outlet systems, such as automatic vacuum cleaner systems, or multiple suction outlets, whether isolated by valves or otherwise, shall be protected against user entrapment.
AG106.2 Suction fittings.
Pool and spa suction outlets shall have a cover that conforms to ANSI/ASME A112.19.8M, or an 18 inch x 23 inch (457 mm x 584 mm) drain grate or larger, or an approved channel drain system.



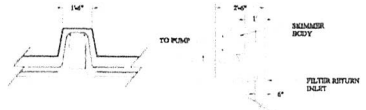
BONDING GRID W/ PAVERS



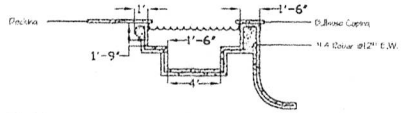
LIGHT NICHE DETAIL PLAN



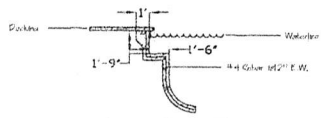
DECK MOUNTED STAIR / SPA RAIL SOCKET DETAIL



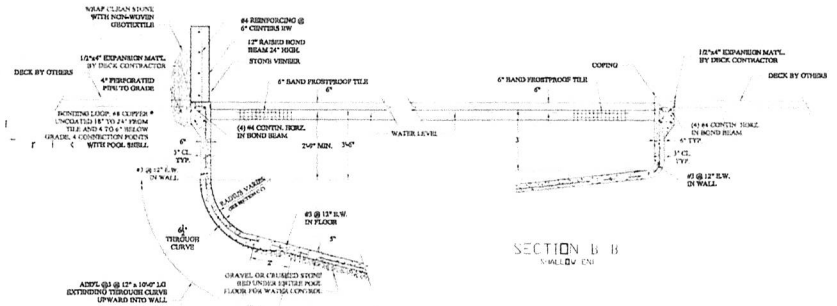
SKIMMER DETAIL PLAN



7' Diameter Spa Detail attached to Pool

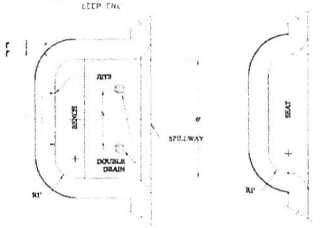


Love Seat Detail

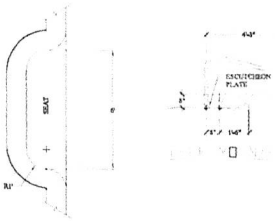


SECTION B-B
SHALLOW END

SECTION A-A
DEEP END



PLAN



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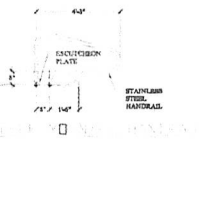
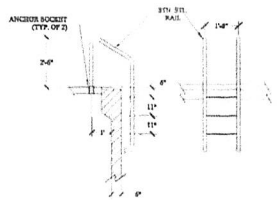


RECESSED HANDRAIL



LADDER DETAIL

ANSI / NSPI-5 A12

POOL	MAX. DIVING BOARD LENGTH	MAX. HEIGHT OVER WATER	MINIMUM DEPTH AT POINT				MINIMUM LENGTH BETWEEN POINTS					
			A	B	C	D	A	B	C	D	E	
	8' 10"/6' 3"	20'	6'-0"				7'-6"	VARIES	6'-0"	28'-9"		

PROJECT SITE LOCATION:
SOUTCHAY CHAREUNSACK
2155 RIVER ROAD
BENSALEM PA 19020

20'X48' POOL DESIGN
BENSALEM TOWNSHIP
for K&S GREENDAY

DUMACK & ENGINEERING
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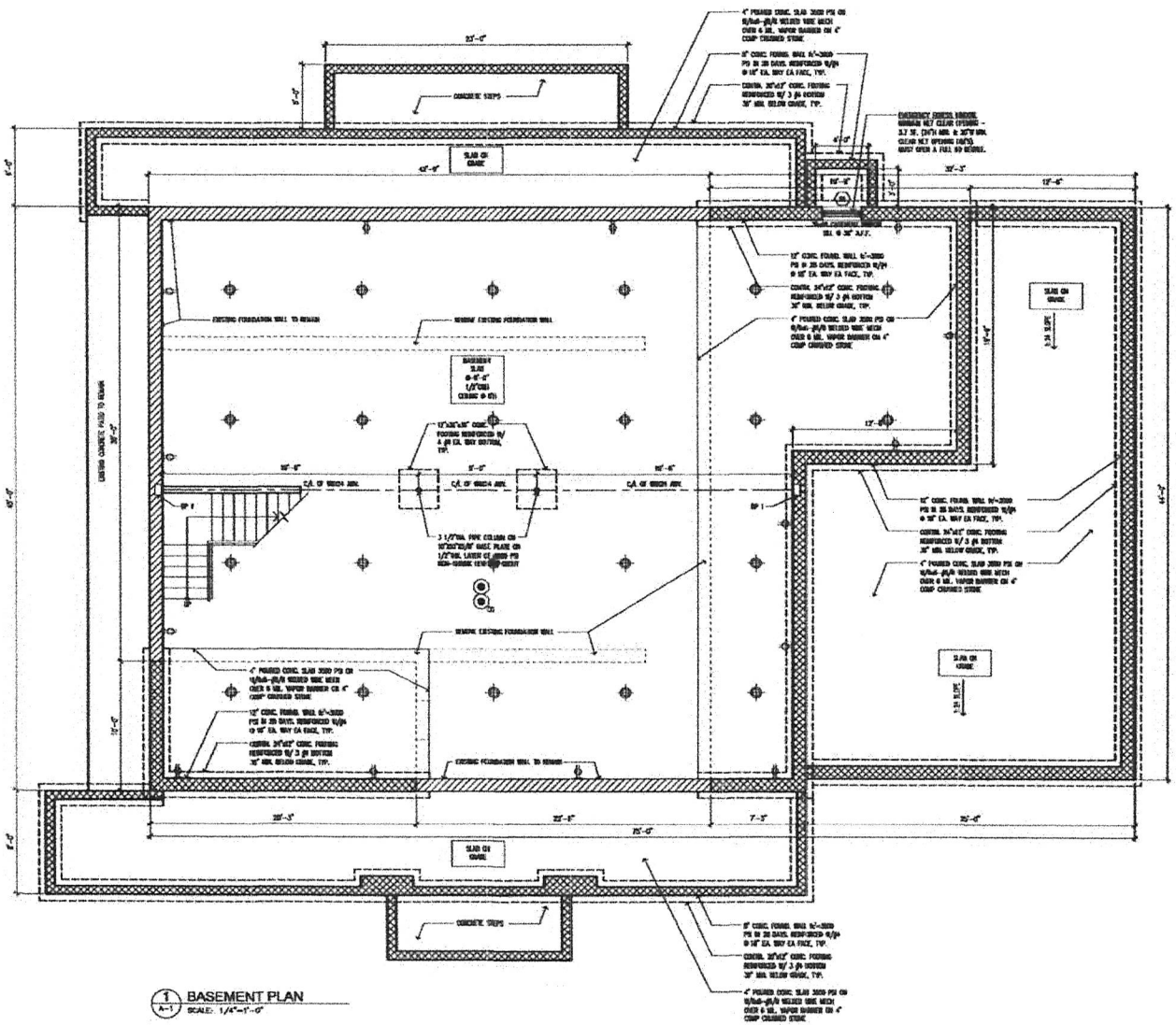
677 DURHAM ROAD * P.O. BOX 487 * PENNS PARK, PA 18943
(215) 598-1250

DRAWN BY: H.A.D.	CHECKED BY:	DRAWING NO:
SCALE: AS NOTED	DATE: 05-10-17	6330
		SHEET 2 OF 2



1 BASEMENT PLAN
A-1 SCALE: 1/4"=1'-0"

REVISIONS

DRAWN BY:
ARCH AND STYLE
21 WEST SPLIT ROCK DR.,
CHERRY HILL, NJ 08003
PHONE (609)680-0703
archandstyle@aol.com

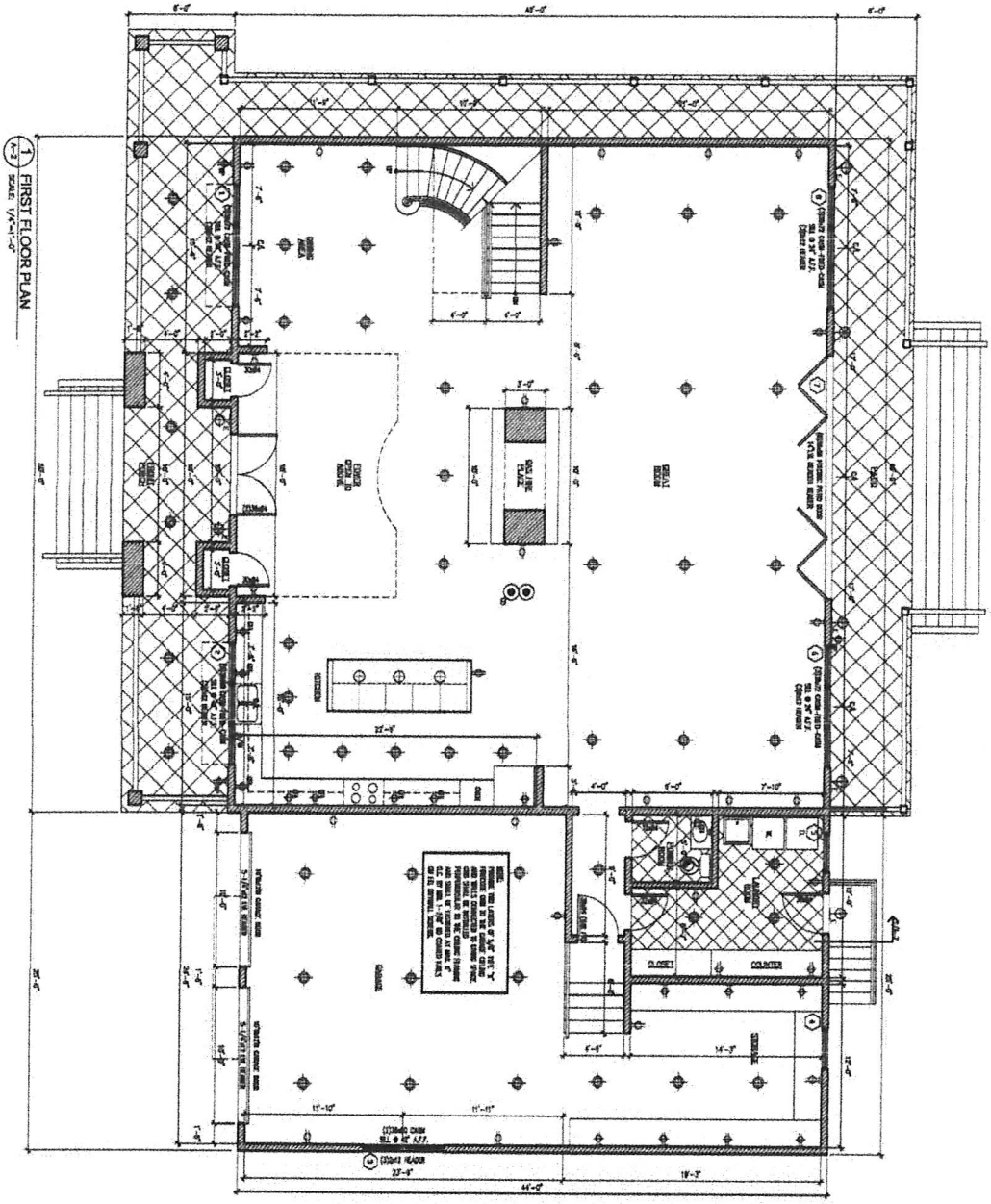
CHECKED BY:
GEORGES BALLOUZ, PE, MS

~SOUTCHAY CHAREUNSACK RESIDENCE~
2155 RIVER ROAD,
BENSALEM, PA 19020

DATE: 3/08/17
SCALE: AS NOTED

BASEMENT PLAN

A-1



	DUPLEX CONVENIENCE OUTLET
	DUPLEX OUTLET ABOVE COUNTER
	GFI DUPLEX OUTLET ABV. COUNTER
	WEATHER PROOF DUPLEX OUTLET
	RECESSED INSULT COMPATIBLE DIRECT
	RECESSED INCANDESCENT LIGHT FIXTURE
	WALL MOUNTED INCANDESCENT LIGHT FIXTURE
	EXTERIOR LIGHT FIXTURE
	SUSPENDED DECORATIVE LIGHT FIXTURE
	PENDANT LIGHT FIXTURE
	EXHAUST FAN / LIGHT COMBINATION
	AC POWERED INTERCONNECTED SMOKE/FIRE DETECTOR
CO	CARBON DETECTOR

A-2

FIRST FLOOR PLAN

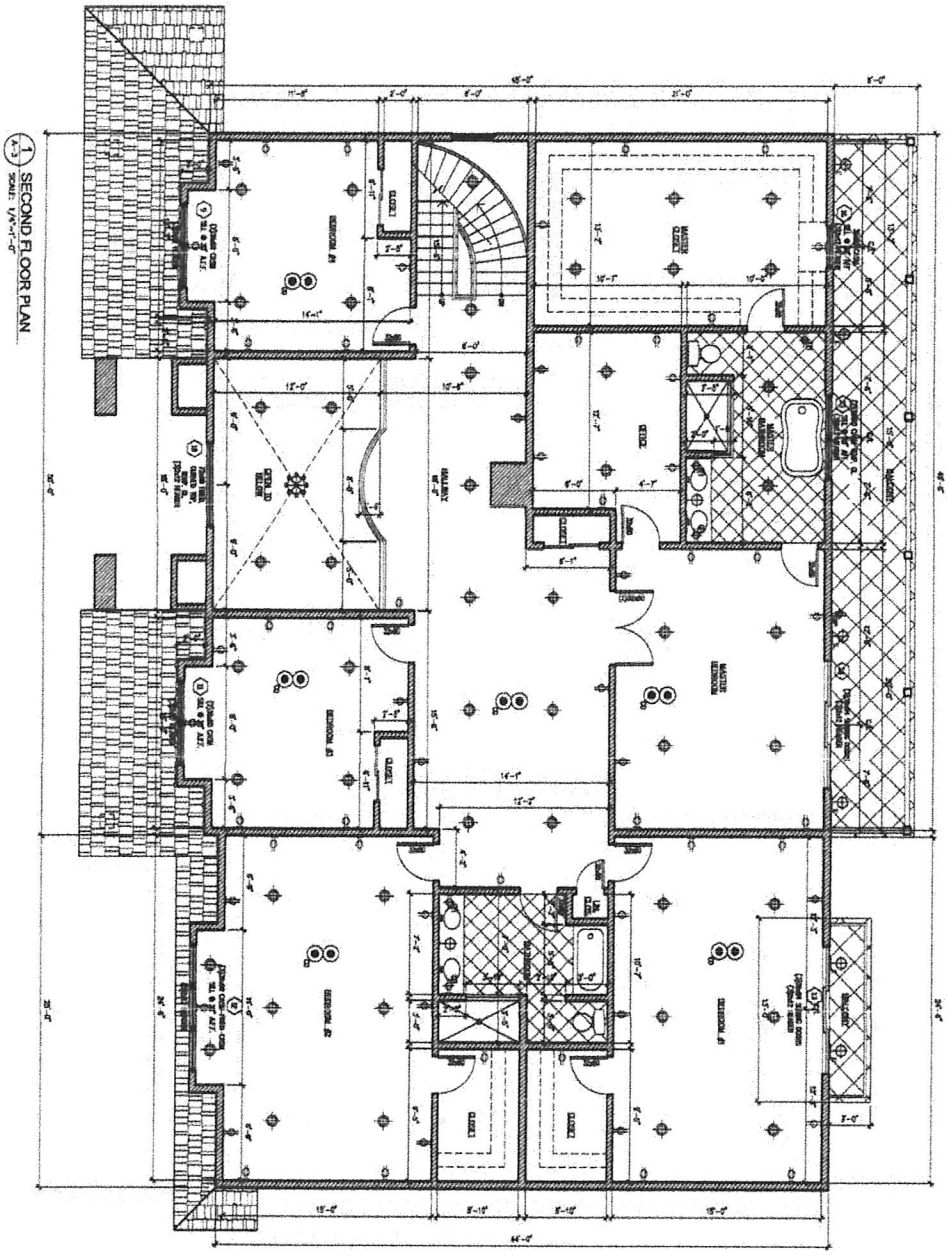
DATE: 3/08/17
SCALE: AS NOTED

~SOUTCHAY CHAREUNSACK RESIDENCE~
2155 RIVER ROAD,
BENSALEM, PA 19020

CHECKED BY:
GEORGES BALLOUZ, PE, MS

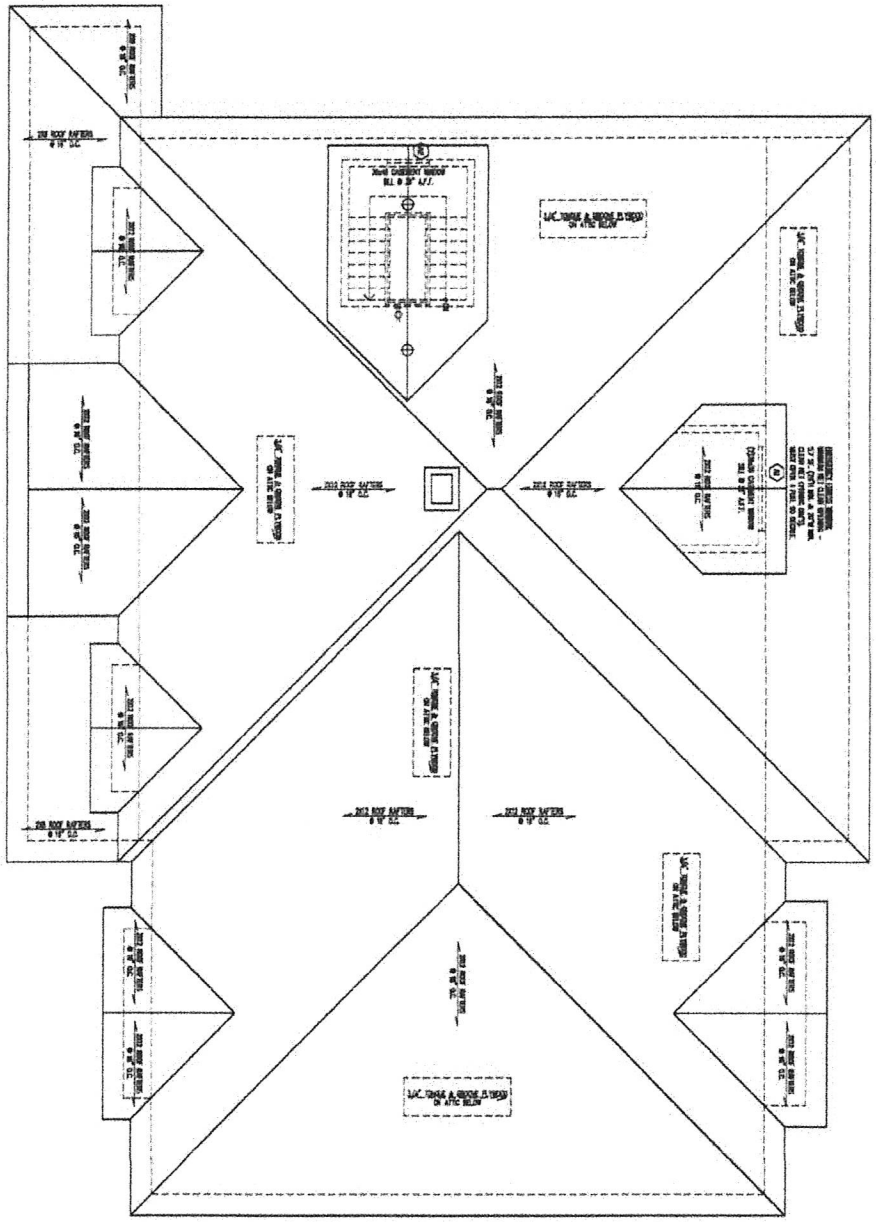
DRAWN BY:
ARCH AND STYLE
21 WEST SPLIT ROCK DR.,
CHERRY HILL, NJ 08003
PHONE (609)680-0703
archandstyle@aol.com

REVISIONS



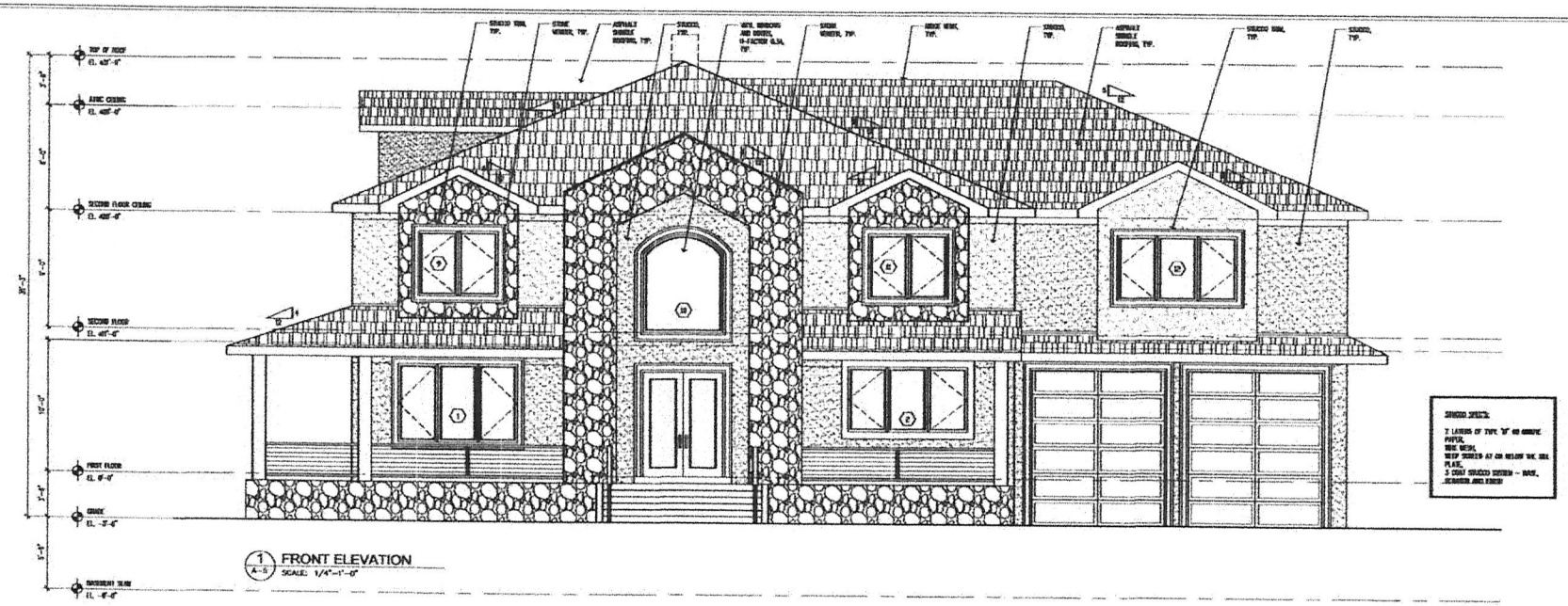
1 SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"

A-3	SECOND FLOOR PLAN		DATE: 3/08/17 SCALE: AS NOTED	~SOUTCHAY CHAREUNSACK RESIDENCE~ 2155 RIVER ROAD, BENSALEM, PA 19020	CHECKED BY: GEORGES BALLOUZ, PE, MD	DRAWN BY: ARCH AND STYLE 21 WEST SPLIT ROCK DR., CHERRY HILL, NJ 08003 PHONE (609)680-0703 archandstyle@aol.com	REVISIONS

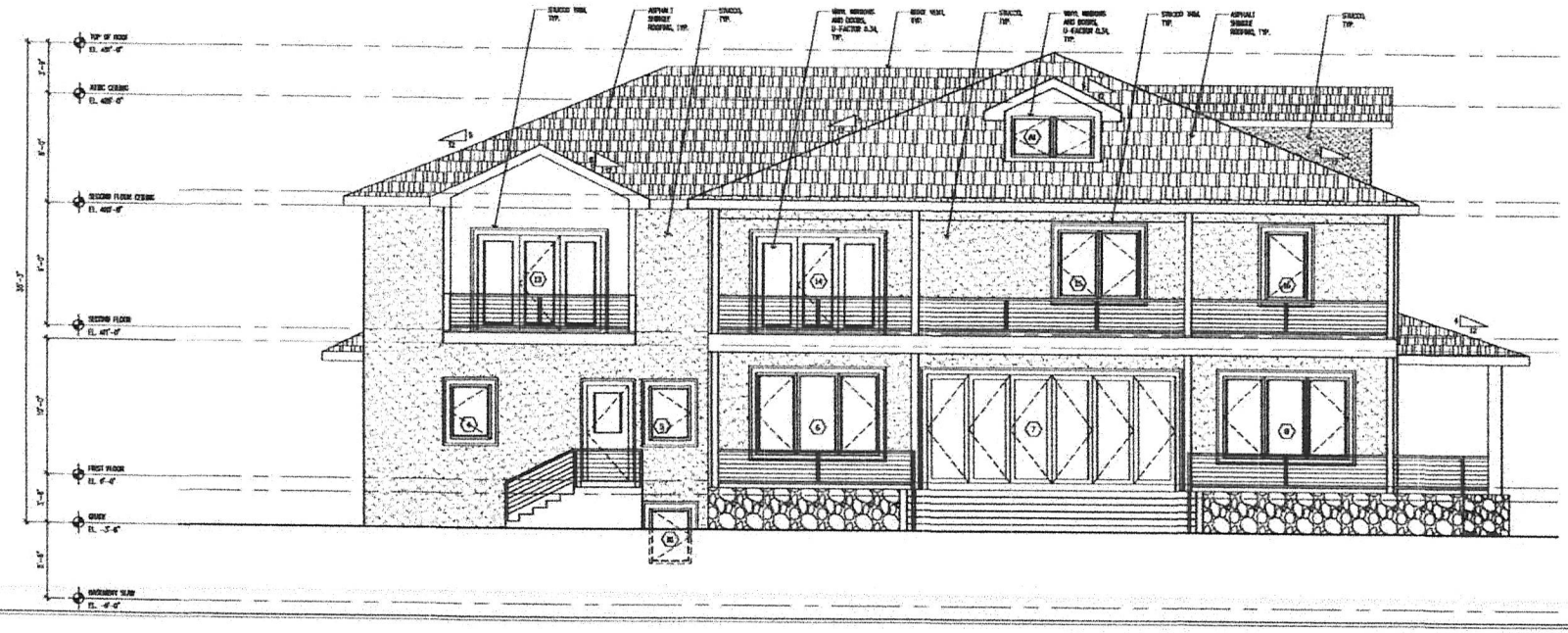


1 A-4 ROOF PLAN
SCALE: 1/4"=1'-0"

A-4	ROOF PLAN		DATE: 3/08/17 SCALE: AS NOTED	~SOUTCHAY CHAREUNSACK RESIDENCE~ 2155 RIVER ROAD, BENSALEM, PA 19020	CHECKED BY: GEORGES DALLOUZ, PE, MS	DRAWN BY: ARCH AND STYLE 21 WEST SPLIT ROCK DR., CHERRY HILL, NJ 08003 PHONE (609)680-0703 archandstyle@aol.com	REVISIONS



1 FRONT ELEVATION
A-5 SCALE: 1/4"=1'-0"



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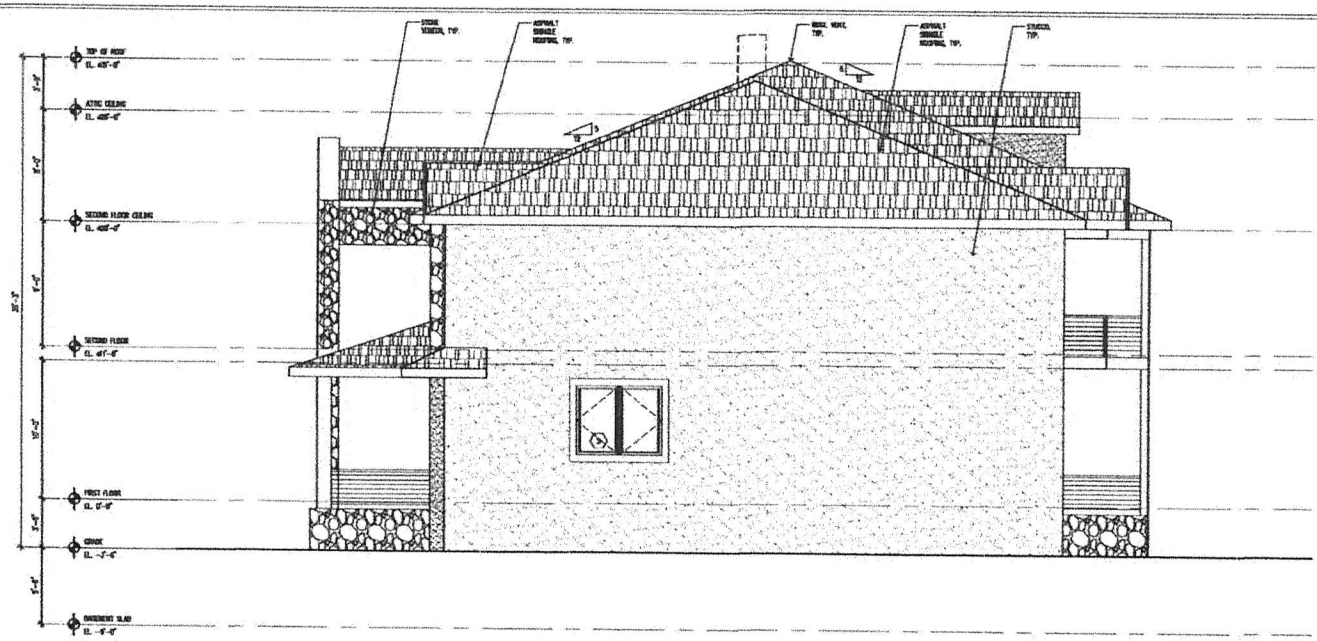
CHECKED BY:
GEORGES BALLOUZ, PE. MS

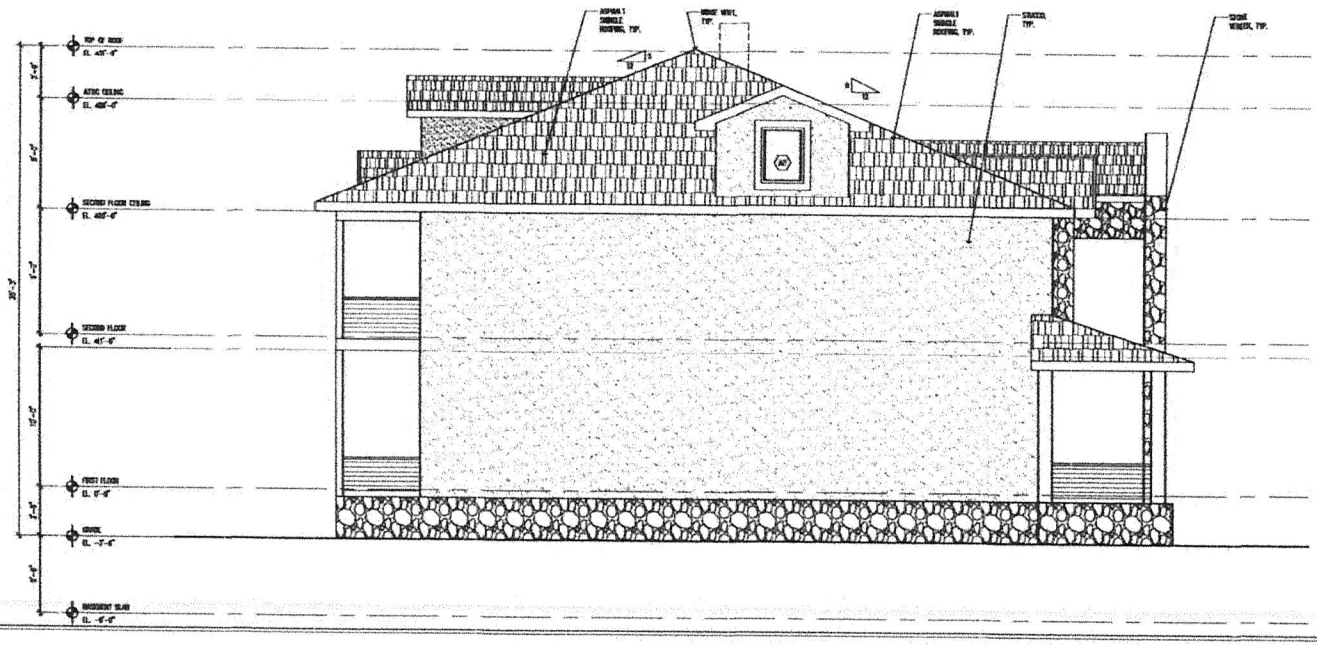
~SOUTCHAY CHAREUNSACK RESIDENCE~
2155 RIVER ROAD,
BENSALEM, PA 19020

DATE: 3/08/17
SCALE: AS NOTED

BUILDING ELEVATIONS

A-5





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CHECKED BY:
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~SOUTCHAY
CHAREUNSACK
RESIDENCE~
2155 RIVER ROAD,
BENSALEM, PA 19020

DATE: 3/08/17
SCALE: AS NOTED

BUILDING
ELEVATIONS

A-6

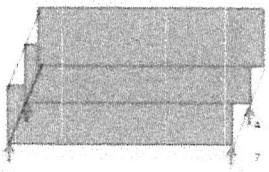
External Pressure Coefficient Cp

Roof Pressure Coefficients, C_p, for use with q_h

Notes

Shear at each side of building

2nd	4000 lb
1st	7000 lb



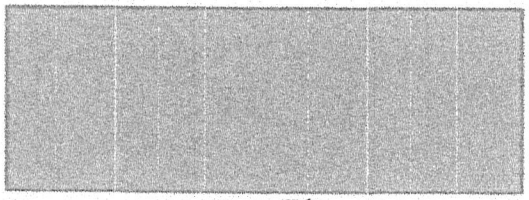
2nd floor 4kip
1st floor 7kip

Design

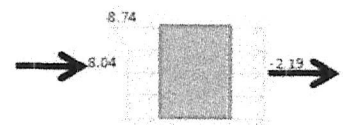
Select 15/32 plywood, fasten sheating w/8d nails at 13 in. o.c. @ edges and and 12" o.c. in plane fillets & provide nail blocking
Allowable shear per foot= 490 lb/ft

2nd floor	L shear	8.16 ft	9ft	both sides
1st floor	L shear	14.29 ft	15ft	both sides

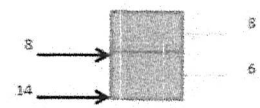
plan



elev.



Total shear



H	20 ft					
V(philadelphia)	90 mph					
			Kz		qz	
Exposure Category	B	0-15	0.57		11.82	
Risk Catagory	II	20	0.62		12.86	
I	1					
L/B	2.09					
G	0.85					

Windward	Leeward
Cp 0.8	cp -0.2
p	p
8.04 psf	-2.19 psf
8.74 psf	-2.19 psf
	psf

Load 10.89 Kip Load -2.93 Kip

Load **13.82** Kip

M-overtur **442.13** kip-ft

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19147
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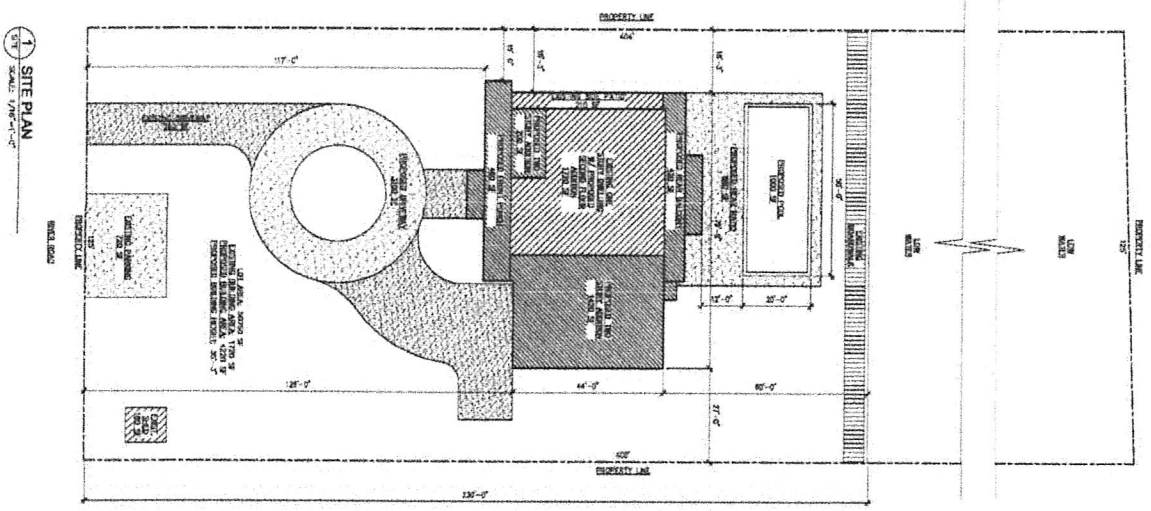
Bracing
3431 MANOR ROAD,
HUNTINGDON VALLEY, PA

SCALE: NAT'L

NO.	DATE	REVISION

03/08/17

DRAWING NO.
S7.0



1 SITE PLAN
SCALE: 1/16"=1'-0"

A-SITE	SITE PLAN		DATE: 3/08/17 SCALE: AS NOTED	~SOUTCHAY CHAREUNSACK RESIDENCE~ 2155 RIVER ROAD, BENSALEM, PA 19020	CHECKED BY: GEORGES BALLOUZ, PE, MS	DRAWN BY: ARCH AND STYLE 21 WEST SPLIT ROCK DR., CHERRY HILL, NJ 08003 PHONE (609)680-0703 archandstyle@aol.com	REVISIONS

LINTEL/ HEADER SCHEDULE:

STEEL LINTELS/ MASONRY OPENINGS

MAX MASONRY OPENING	WALL THICKNESS		
	4" VENEER	8" WALL	12" WALL
3'-0"	3-1/2"X3-1/2"X1/4"	(2) 3-1/2"X3-1/2"X1/4"	(3) 3-1/2"X3-1/2"X1/4"
4'-0"	4"X3-1/2"X1/4"	(2) 4-1/2"X3-1/2"X1/4" LLV	(3) 4-1/2"X3-1/2"X1/4" LLV
5'-0"	4"X3-1/2"X5/16"	(2) 4-1/2"X3-1/2"X5/16" LLV	(3) 4-1/2"X3-1/2"X5/16" LLV
6'-0"	5"X3-1/2"X5/16"	(2) 5-1/2"X3-1/2"X5/16" LLV	(3) 5-1/2"X3-1/2"X5/16" LLV
8'-0"	6"X3-1/2"X5/16"	(2) 6-1/2"X3-1/2"X5/16" LLV	(3) 6-1/2"X3-1/2"X5/16" LLV

** LLV- LONG LEG VERTICAL

WOOD HEADERS/ FRAMED WALLS

MAX SPAN	STUD WALLS		
	2X4	2X6	
3'-0"	[illegible]	[illegible]	
4'-0"	[illegible]	[illegible]	
5'-0"	[illegible]	[illegible]	

NOTE:
ALL FLOOR JOIST FRAMED FLUSH WITH BEAMS SHALL HAVE FULL DEPTH TOP BEARING JOIST HANGERS FULLY NAILED TO STRUCTURAL MEMBER. JOIST SHALL HAVE FULL DEPTH BEARING OF HANGER SEAT DIMENSION

WALL BRACING/HOLDOWN SCHEDULE

A	**Outside and inside 15/32 plywood, fasten sheathing w/8d nails at 3"o.c @edges and 12"o.c in panel fields & provide nail blocking.**

GENERAL NOTES

1. IF DURING THE PROGRESS OF THE WORK THE CONTRACTOR MAY DISCOVER ANY ERROR, INCONSISTENCY OR OMISSION IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL AT ONCE SO REPORT TO THE ARCHITECT/ENGINEER. EXTRAS WILL NOT BE ALLOWED FOR CORRECTION OF PROBLEMS THAT COULD HAVE BEEN AVOIDED BY CAREFUL REVIEW AND THE MINOR ADJUSTMENT OF SIZE AND/OR LOCATION OF VARIOUS ITEMS FOR PROPER FIT.

2. ANY ITEM NOT SPECIFICALLY LISTED OR SHOWN ON THE CONTRACT DOCUMENTS BUT IS INCIDENTAL TO THE COMPLETION OF THE PROJECT OR PACKAGE WILL BE CONSIDERED AS PART OF THE CONTRACT SCOPE OF WORK.

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. PROVIDE ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT. IN THE EVENT THAT THE CONTRACTOR DETERMINES THAT SHEETING OR SHORING IS REQUIRED, THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER FOR DESIGN AND DOCUMENTATION OF ALL SHEETING, SHORING AND TEMPORARY BRACING REQUIRED FOR THE WORK.

5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

6. ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

7. SHOULD THE CONTRACTOR SEEK APPROVAL OF A PRODUCT OTHER THAN THE BRAND OR BRANDS NAMED IN THESE SPECIFICATIONS, IT SHALL FURNISH WRITTEN EVIDENCE THAT SUCH PRODUCT CONFORMS IN ALL RESPECTS TO THE SPECIFIED REQUIREMENTS, AND THAT IT HAS BEEN USED SUCCESSFULLY ELSEWHERE UNDER SIMILAR CONDITIONS. WHERE THE SPECIFIED REQUIREMENTS INVOLVE CONFORMANCE TO RECOGNIZED CODES OR STANDARDS THE CONTRACTOR SHALL FURNISH EVIDENCE OF SUCH CONFORMANCE IN THE FORM OF TEST OR INSPECTION REPORTS, PREPARED BY A RECOGNIZED AGENCY, AND BEARING AN AUTHORIZED SIGNATURE.

8. MANUFACTURERS' STANDARD DATA AND CATALOG CUT SHEETS WILL NOT BE CONSIDERED SUFFICIENT IN THEMSELVES, AND THE ENGINEER OF RECORD WILL NOT BE RESPONSIBLE FOR SEEKING FURTHER DATA FROM THE MANUFACTURER, OR FOR OTHERWISE RESEARCHING THE PRODUCT. FAILURE TO PROVIDE COMPLETE DATA WILL RESULT IN THE REJECTION OF THE ENTIRE PRODUCT.

*** THE ARCHITECT OF RECORD IS NOT AND SHALL NOT BE HELD LIABLE FOR SITE SAFETY ISSUES ***

STRUCTURAL DESIGN CRITERIA:

IRC 2009, ASCE 7-05

GRAVITY LOADS: 20 PSF

FLOOR LIVE LOAD: 40 PSF

SNOW LOADS:

Pg - GROUND SNOW LOAD - 25 PSF

LUMBER NOTES

1. ALL STRUCTURAL LUMBER SHALL BE HF#2 or BETTER (MINIMUM) STRESS GRADE LUMBER OR APPROVED EQUAL WITH THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:
Fb =850 psi E =1,300,000 psi

2. ALL STRUCTURAL LUMBER TO BE STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION'S "CONSTRUCTION MANUAL".

3. ALL GLUED LAMINATED BEAMS SHALL BE SOUTHERN PINE, HEM-FIR OR APPROVED EQUAL CONFORMING TO AITC SPECIFICATION 117-93 "DESIGN STANDARD SPECIFICATION FOR STRUCTURAL GLUED LAMINATED TIMBER OF SOFTWOOD SPECIES". THE MINIMUM ALLOWABLE PROPERTIES FOR GLUED LAMINATED BEAMS ARE AS FOLLOWS:
Fb = 2000 psi TENSION ZONE
Fv = 155 psi E = 1,500,000 psi

4. ALL MICROLLAM (LVL) BEAMS SHALL BE AS ENGINEERED AND MANUFACTURED BY TRUS JOIST MACMILLAN OR APPROVED EQUAL WITH THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:
Fb =2925 psi Fv =285 psi E =2,000,000 psi

5. ALL PARALLAM (PSL) BEAMS TO BE AS ENGINEERED AND MANUFACTURED BY TRUS JOIST MACMILLAN OR APPROVED EQUAL WITH THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:
Fb = 2900 psi Fv = 290 psi E = 2,000,000 psi

6. TJI/L - SERIES JOISTS TO BE AS MANUFACTURED BY TRUS JOIST MACMILLAN CORP. OR APPROVED EQUAL. BRACING AND BRIDGING TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. WOOD FOR JOISTS TO BE FIRE RETARDANT.

7. ALL TIMBER AND TIMBER CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND CODES AS SPECIFIED BELOW: AMERICAN INSTITUTE OF TIMBER CONSTRUCTION: TIMBER CONSTRUCTION MANUAL. AMERICAN FOREST AND PAPER ASSOCIATION. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, AMERICAN PLYWOOD ASSOCIATION: PLYWOOD DESIGN SPECIFICATION, AMERICAN WOOD PRESERVERS ASSOCIATION STANDARDS.

8. ALL TIMBER CONNECTIONS ARE TO BE MADE USING PREFABRICATED CONNECTORS. CONNECTORS NOTED ON DRAWINGS ARE BASED ON "SIMPSON STRONG-TIE." INSTALL ALL SPECIFIED FASTENERS, IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, BEFORE LOADING THE CONNECTION. TOE-NAILING WILL NOT BE PERMITTED. SUBSTITUTES SHALL BE SUBMITTED IN ACCORDANCE WITH THE GENERAL NOTES.

9. HEADERS AT NON-BEARING CONDITIONS SHALL BE AS FOLLOWS:

OPENING SIZE	HEADER
UP TO 6'-0	(2) 2"x8"
UP TO 9'-0	(2) 2"x10"

10. PROVIDE A MINIMUM OF ONE LINE OF BLOCKING/CROSS-BRIDGING FOR ALL SPANS. IN ADDITION, PROVIDE CONTINUOUS SOLID BLOCKING OR CROSS-BRIDGING LINES AT 8'-0" O.C. MAXIMUM SPACING, FOR ALL WOOD JOISTS/WOOD RAFTERS/ROOF TRUSSES/FLOOR TRUSSES/PROVIDE ADDITIONAL X-BRIDGING AS REQUIRED BY FABRICATOR. ALSO, PROVIDE SOLID BLOCKING AT ALL BEARING ENDS FOR JOIST, RAFTERS, ETC.

11. PROVIDE PRESSURE TREATED LUMBER WHERE LUMBER IS IN CONTACT WITH CONCRETE OR OUTSIDE OF BUILDING. PRESSURE TREATMENT TO BE ACQ, ALL NAILS OR SCREWS FASTENERS ANCHOR BOLTS TRUSS TIE DOWN PLATES, ETC. TO BE HOT DIPPED GALVANIZED, STAINLESS STEEL, TRIPLE ZINC COATED (Z-MAX) OR APPROVED EQUAL.

12. PLYWOOD SUBFLOORING AND PLYWOOD ROOF SHEATHING SHALL BE: 5/8" INCH THICK STRUCTURAL 2 C-D INT-APA PLYWOOD WITH EXTERIOR GLUE OR 3/4" INCH THICK STURD-I-FLOOR INT-APA. EDGES SHALL BE TONGUE AND GROOVE. ALL JOINTS SHALL BE STAGGERED. NAILING SHALL COMPLY WITH APA REQUIREMENTS FOR PLYWOOD FLOOR/ROOF DIAPHRAGMS.

13. HEAVY TIMBER DECKING TO BE TONGUE AND GROOVE TYPE, HEM-FIR COMMERCIAL GRADE OR BETTER, MEETING AITC STANDARD 112-93. DECKING TO BE INSTALLED WITH TONGUES UP. EACH PIECE TO BE ATTACHED TO SUPPORTS WITH 16d NAILS--ONE FACE-NAILED AND ONE TOE-NAILED THROUGH THE TONGUE.

14. ALL PRESSURE TREATED LUMBER SHALL BE SOUTHERN YELLOW PINE NO. 2 STRESS GRADING RULES SPIB.

CONCRETE NOTES

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).

2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:

a. FOUNDATIONS: 4000 PSI
ALL CONCRETE SUBJECT TO FREEZE/THAW CYCLE SHALL BE AIR-ENTRAINED.

3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

4. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.

5. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE CLASS "A" TENSION LAP SPLICES FOR ALL HORIZONTAL WALL REINFORCING UNLESS OTHERWISE SHOWN ON PLAN. PROVIDE CLASS "B" TENSION LAP SPLICES FOR ALL HORIZONTAL GRADE BEAM REINFORCING.

6. CLEARANCES FOR REINFORCEMENT:

a. CONCRETE PLACED DIRECTLY ON EARTH, FOOTINGS: 3"
b. SLABS, FROM TOP UNLESS OTHERWISE NOTED: 1"
c. FORMED SURFACES EXPOSED TO WEATHER OR EARTH:
#5 BAR OR SMALLER: 1 1/2"
#6 BAR OR LARGER: 2"

7. WELDING OF REINFORCEMENT IS NOT PERMITTED.

8. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GR. 36 UNLESS NOTED OTHERWISE.

9. LAP ALL BARS MINIMUM 40 DIAMETERS. LAP ALL WWF A MINIMUM OF 6 INCHES.

FOUNDATION NOTES

1. BEARING CAPACITY: 2000 psf BASED ON GEOTECH BY GEOTECHNICAL ENGINEER.
2. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.

3. ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE BUILDING LIMIT.

4. THE EXCAVATION FOR PLACEMENT OF COMPACTED STRUCTURAL FILL SHOULD EXTEND BEYOND THE EDGE OF FOOTINGS A MINIMUM DISTANCE EQUAL TO THE DEPTH OF FILL.

5. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 3 FEET BELOW THE EXTERIOR FINISH GRADE FOR PROTECTION AGAINST FROST.

ALFA ENGINEERING & CONSTRUCTION
1444 S 13TH ST
PHILADELPHIA, PA 19147
PHONE: 267.[illegible]

General Notes
2155 River ROAD,
Bensalem, Pa

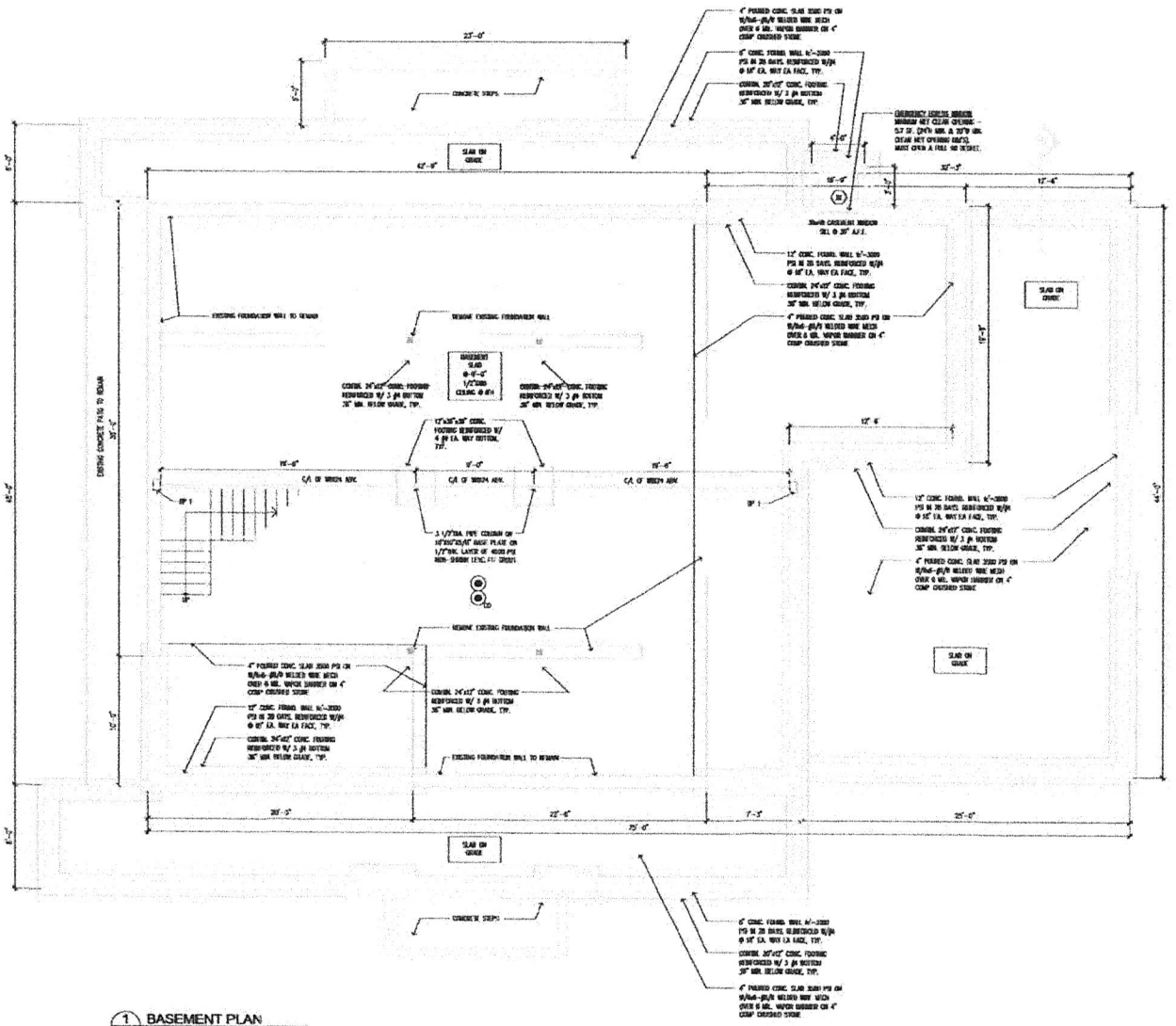
SCALE: 1/4"=1'

NO.	DATE	REVISION

03/08/17

DRAWING NO.

S0.0



1 BASEMENT PLAN
S-1 SCALE: 1/4"=1'-0"

FOUNDATION NOTES:

1. BP-1 – INDICATES FIRST FLOOR DRIVE BEARING PLATE.
10"X6"X1/2" WIDE (2) - 1/2" DIA. 4" LONG SHEAR STUDS.
2. F.P.C. – INDICATES PRECAST MASONRY LOUVER (3) – 4"DEEP, WIDTH TO=#4 WIDE MIN. BOTTOM.

DESIGN LOADING CRITERIA:

FIRST FLOOR: DEAD LOAD 15-10 PSF, LIVE LOAD LL=40 PSF.
SECOND FLOOR: DEAD LOAD 15-10 PSF, LIVE LOAD LL=40 PSF.
ROOF: DEAD LOAD 15-10 PSF, LIVE LOAD LL= 25 PSF.
WIND: Pz=20 PSF, EXP. FACTOR Cz=0.7, IMP. FACTOR I=1.0, Pf=22 PSF.
SNOW: Pg=30 PSF, EXP. "B", Pf=22 PSF (UNHEATED), Pf=1 PSF (HEATED)
CODE: INTERNATIONAL RESIDENTIAL CODE IRC 2009

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Foundation Details
2155 River ROAD,
Bensalem, PA

SCALE: 1/4"=1'

Contractor is responsible for verifying all dimensions in the field and shall notify Architect of any discrepancies before proceeding with the work. Contractor is responsible for coordinating all work done by all other trades and for providing same as a part thereof. Details shown are typical. Similar conditions elsewhere shall be constructed accordingly.

NO.	DATE	REVISION

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03/08/17

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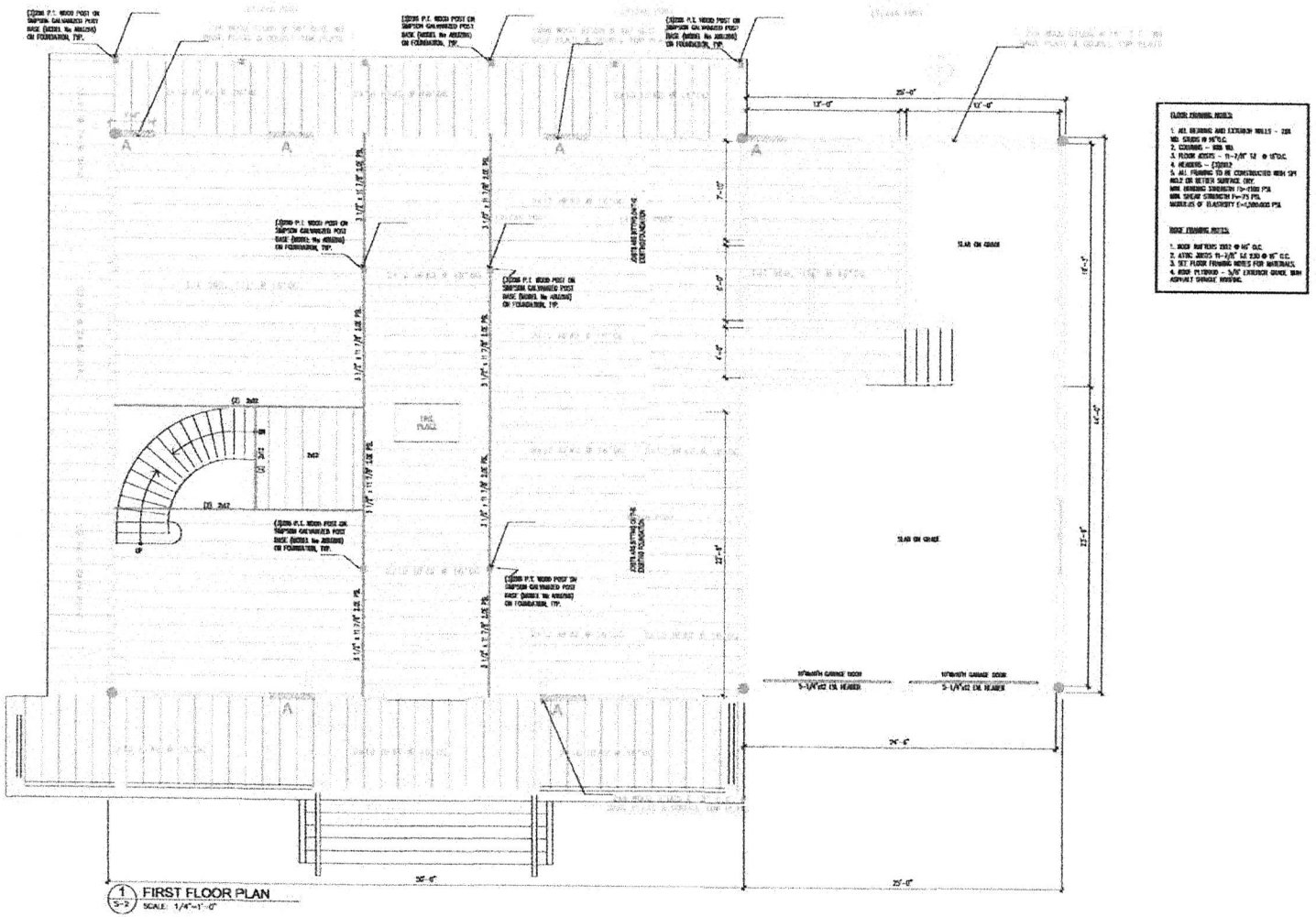


1 FIRST FLOOR PLAN
3-2 SCALE: 1/4"=1'-0"

ALFA ENGINEERING & CONSTRUCTION

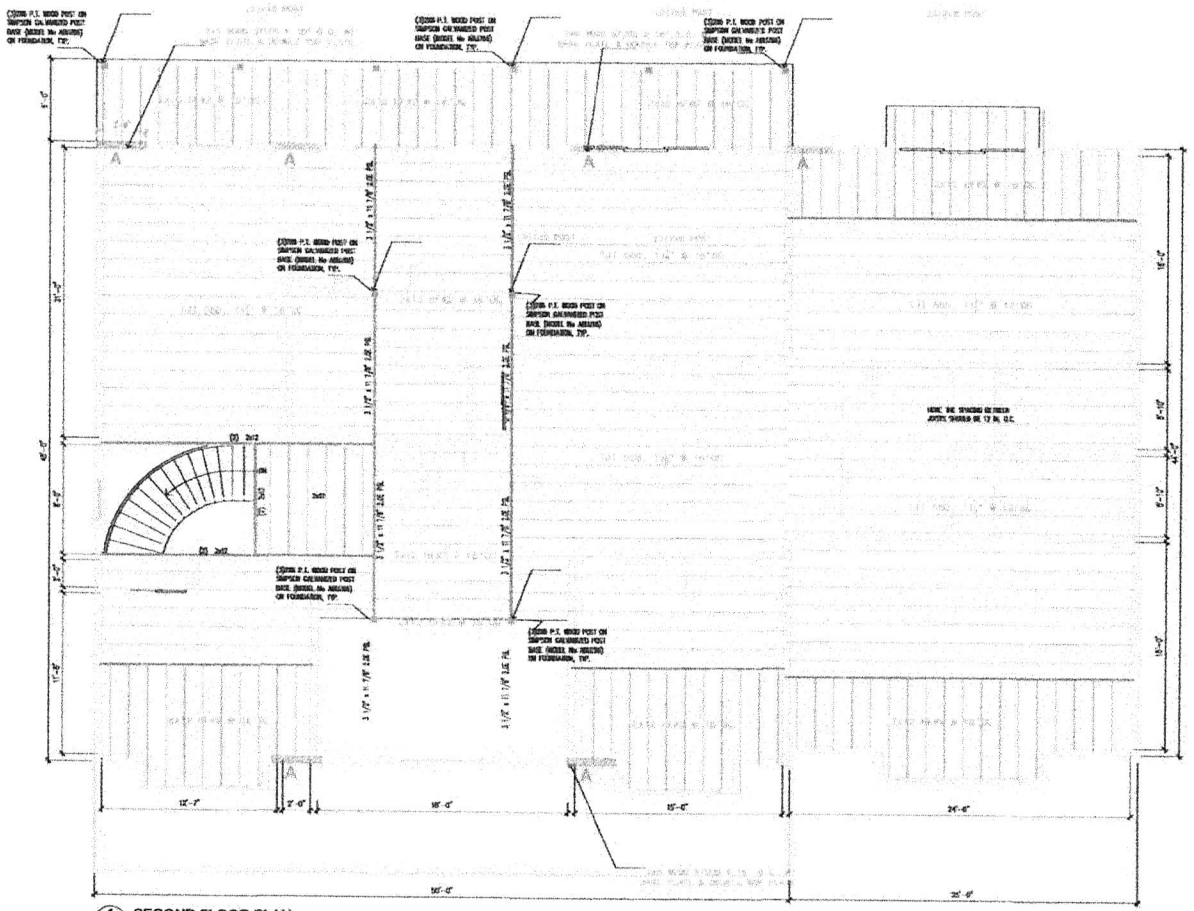
1st Floor Plan
2155 River ROAD,
Bensalem, Pa

SCALE: 1/4"=1'

NO.	DATE	REVISION

03/08/17

DRAWING NO.
S2.0



1 SECOND FLOOR PLAN
S-3 SCALE: 1/4"=1'-0"

FLOOR FRAMING NOTES:

1. ALL HEADING AND EXTERIOR WALLS – 2X8 MIN. STUDS @ 16"O.C.
2. COLUMNS – 6X6 MIN.
3. FLOOR JOISTS – 11-7/8" T.J. @ 16"O.C.
4. HEADERS – (2)2X12
5. ALL FRAMING TO BE CONSTRUCTED WITH SPF HOLE OR BETTER SURFACE DRY.
MIN. BENDING STRENGTH Fb=1800 PSI.
MIN. SHEAR STRENGTH Fv=75 PSI.
MODULUS OF ELASTICITY E=1,500,000 PSI.

ROOF FRAMING NOTES:

1. ROOF RAFTERS 2X12 @ 16" O.C.
2. ATTIC JOISTS 11-7/8" T.J. 2X10 @ 16" O.C.
3. SEE FLOOR FRAMING NOTES FOR MATERIALS.
4. ROOF PLYWOOD – 5/8" EXTERIOR GRADE WITH ASPHALT SHINGLE ROOFING.

ALFA ENGINEERING & CONSTRUCTION
1444 S. 12TH ST.
PHILADELPHIA, PA 19147
PHONE: 267.259.6680
WWW.ALFAENGINEERINGWORKS.COM

1st Floor Plan
2155 River ROAD,
Bensalem, Pa

SCALE: 1/4"=1'

NO.	DATE	REVISION

03/08/17

DRAWING NO.
S3.0

ALFA ENGINEERING
& CONSTRUCTION

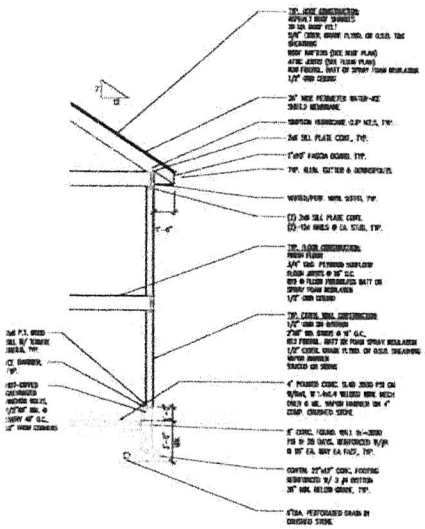
Roof
2155 River ROAD,
Bensalem, Pa

SCALE: 1/4"=1'

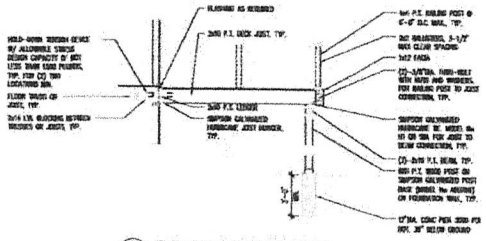
NO	DATE	REVISIONS

03/08/17

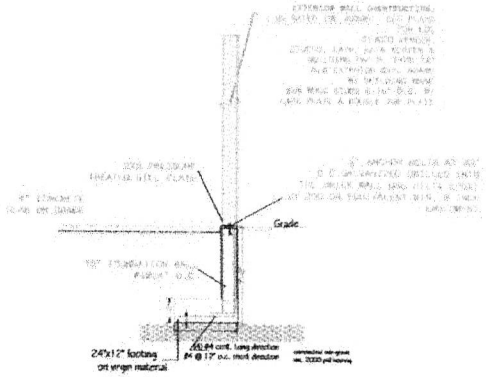
DRAWING NO.
S4.0



2 TYP. NEW WALL SECTION
S-5 SCALE: 1/4"=1'-0"



3 TYPICAL DECK SECTION
S-5 SCALE: 1/4"=1'-0"



1 SECTION 1
S5 SCALE: 1/8"=1'-0"

ALFA ENGINEERING
RECONSTRUCTION
4444 S 12TH ST.
PHILADELPHIA, PA
19147
PHONE: 267.948.4666
WWW.ALFAENGINEERINGINC.COM

Sections
2155 River ROAD,
Bensalem, Pa

SCALE: 1/4"=1'

NO.	DATE	REVISION

05/08/17

DRAWING NO.
S5.0

HOLDOWN DETAIL

HOLDOWN AT FRONT AND REAR CORNERS.

A	Outside 15/32 plywood, fasten sheathing w/8d nails at 3"o.c @edges and 12"o.c in panel fields & provide nail blocking.
●	SIMPSON HDU8 SHEARWALL HOLDOWN.

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Bracing
2155 River ROAD,
Bensalem, Pa

SCALE: 1/4"=1'

NO.	DATE	REVISION

03/08/17

DRAWING NO.
S6.0