

Entry 4 Sidewalk & Lot 2 Stairs

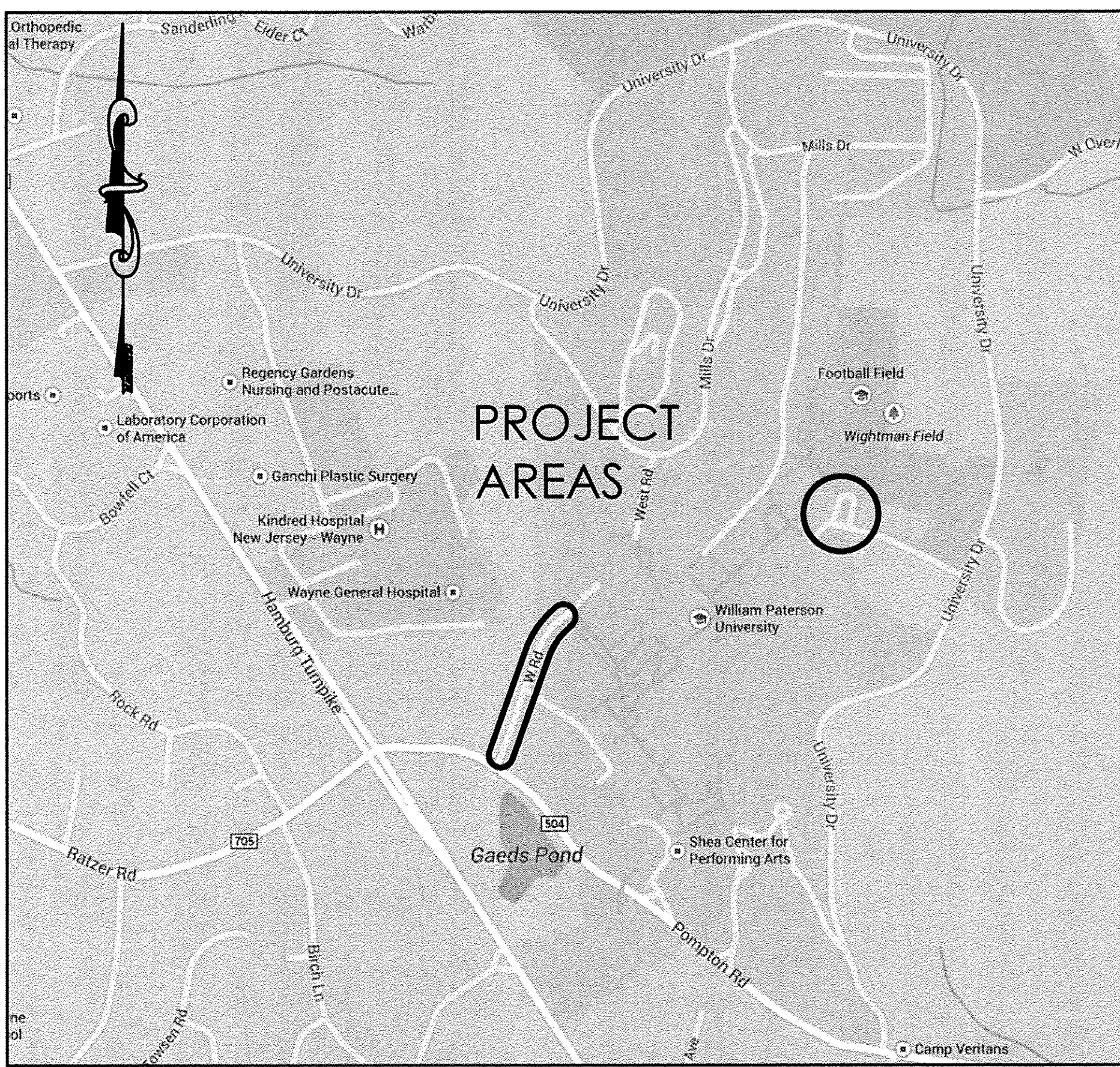
William Paterson University

Township of Wayne, Passaic County, New Jersey

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET AND SUMMARY OF QUANTITIES
2	PLAN LEGEND
3-4	CONSTRUCTION PLANS
5-6	GRADING AND LAYOUT PLANS
7-8	SOIL EROSION & SEDIMENT CONTROL PLANS
9	SOIL EROSION AND SEDIMENT CONTROL DETAILS
10-12	CONSTRUCTION DETAILS

PUBLIC UTILITIES

GAS: PUBLIC SERVICE ELECTRIC AND GAS (GAS)
ELECTRIC: PUBLIC SERVICE ELECTRIC AND GAS (ELECTRIC)
CABLE: CABLEVISION
TELEPHONE: VERIZON
WATER: TOWNSHIP OF WAYNE
SEWER: TOWNSHIP OF WAYNE
STORM: WILLIAM PATERSON UNIVERSITY



PROJECT LOCATION MAP
N.T.S.
[MAP COURTESY OF GOOGLE MAPS, 2014]

Plans prepared by:
BOSWELL ENGINEERING
330 PHILLIPS AVENUE
SOUTH HACKENSACK, NEW JERSEY 07606
Tel (201) 641-0770 . Fax (201) 641-1831
NJ Certificate of Authorization No. 24GA27958000

STEPHEN T. BOSWELL
PROFESSIONAL ENGINEER N.J. LIC. 34680

CHRISTOPHER J. NASH
PROFESSIONAL ENGINEER N.J. LIC. 31605



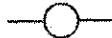



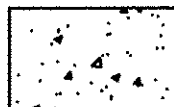















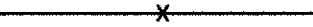




Christopher Nash

JOB NO. 16-119-BD

May 19, 2016

Note: This project is governed by 2007 New Jersey
Department of Transportation Standard Specifications
for Road and Bridge Construction and Standard
Roadway Construction/Traffic Control/Bridge
Construction Details, as amended herein.

LEGEND

	EXISTING FIRE HYDRANT		TREE REMOVAL (INCLUDED UNDER 'CLEARING SITE')
	EXISTING UTILITY POLE		REGULATORY AND WARNING SIGN
	FULL DEPTH PAVEMENT RESTORATION		SOLID WHITE LINE
	CONCRETE SIDEWALK/ STAIRS		SOLID YELLOW LINE
	CONCRETE VERTICAL CURB FULL HEIGHT		SOLID BLUE LINE
	CONCRETE VERTICAL CURB DROP/FLUSH CURB		BOTTOM OF WALL
	STAIR RAILING		TOP OF WALL
	RESET EXISTING CASTING		GRATE
	RECONSTRUCTED INLET/MANHOLE		INVERT
	LAWN INLET		DROP CURB
	LIMIT OF DISTURBANCE		FLUSH CURB
	SILT FENCE		TYPICAL
	INLET FILTER, TYPE 1		CURB RAMP TYPE
			TO BE REMOVED



BOSWELL ENGINEERING

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION NO. 24GA27958000

STEPHEN T. BOSWELL

PROFESSIONAL ENGINEER N.J. LIC. 34680

CHRISTOPHER J. NASH

PROFESSIONAL ENGINEER N.J. LIC. 31605

ENTRY 4 SIDEWALK & LOT 2 STAIRS

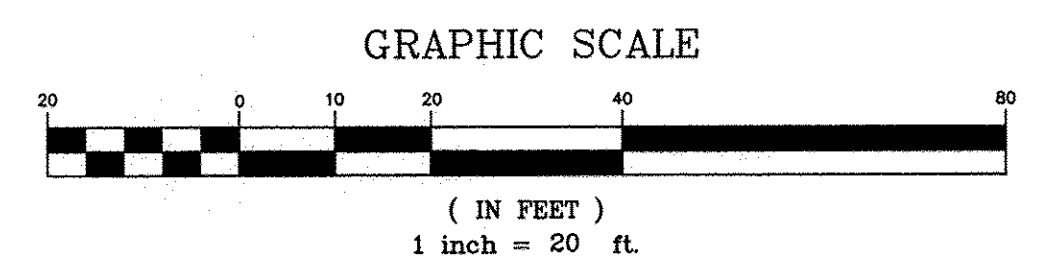

PLAN LEGEND

TOWNSHIP OF WAYNE

PASSAIC COUNTY			NEW JERSEY	
SURVEYED BY: AB	DESIGNED BY: JUM	SCALE:	JOB NO.	DATE:
DRAWN BY: JUM	CHECKED BY: CJN	N.T.S.	16-119-BD	5/19/16
CADD FILE: 16-119-DQ(BD)			SHEET 2	OF 12

GENERAL NOTES:

1. NOT ALL UTILITY POLES, UTILITY LINES, VALVES, DRIVEWAYS, INLETS, TREES AND OTHER EXISTING TOPOGRAPHIC FEATURES HAVE BEEN SHOWN ON PLAN. ASCERTAIN ALL LOCATIONS PRIOR TO CONSTRUCTION.
2. STAKEOUT, COORDINATION OF ALL WORK WITH UTILITY COMPANIES, AND TEMPORARY SUPPORT OF UTILITY POLES, IF REQUIRED, IS THE RESPONSIBILITY OF THE CONTRACTOR.
4. MONITOR ALL GRADES INCLUDING PAVEMENT, DRIVEWAY, DRAINAGE, CURB AND SIDEWALK THROUGHOUT THE PROJECT SO THAT POSITIVE DRAINAGE IS MAINTAINED AND PONDING DOES NOT OCCUR. SEPARATE PAYMENT WILL NOT BE MADE FOR THE MONITORING OF GRADES BUT THE COST WILL BE INCLUDED IN VARIOUS PAY ITEMS IN THE PROJECT.
6. PERFORM ALL CONSTRUCTION WORK IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES MEANS THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS AND ADDITIONS THERETO OF THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S "OCCUPATIONAL SAFETY AND HEALTH STANDARDS" (OSHA); "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" OF THE STATE OF NEW JERSEY, DEPARTMENT OF LABOR AND INDUSTRY, BUREAU OF ENGINEERING AND SAFETY; "CONSTRUCTION SAFETY CODE," AND "MAINTENANCE, CONSTRUCTION AND DEMOLITION," AND "BUILDING CODE."
7. ALL SAWCUTTING REQUIRED TO INSTALL THE PROPOSED IMPROVEMENTS SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROJECT.
8. RESET AND/OR RELOCATE SIGNS AS DIRECTED BY THE RE. ALL COSTS SHALL BE INCLUDED UNDER THE VARIOUS PAY ITEMS IN THE PROJECT.
9. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKEOUT/LAYOUT. THE CONSTRUCTION STAKEOUT/LAYOUT SHALL BE PERFORMED BY A QUALIFIED NEW JERSEY LICENSED PROFESSIONAL LAND SURVEYOR.
10. CONTRACTOR SHALL GRADE THE SITE AS SHOWN ON THE GRADING AND LAYOUT PLAN. ALL ASSOCIATED COSTS WILL NOT BE MEASURED FOR SEPARATE PAYMENT BUT INCLUDED IN THE UNIT PRICE BID FOR 'CLEARING SITE.'
11. CONTRACTOR SHALL RESTORE SITE WITH TOPSOILING, SEEDING, AND FERTILIZER AND STRAW MULCHING TO THE DISTURBANCE LIMITS SHOWN ON THE PLANS. ANY AREA DISTURBED OUTSIDE THESE LIMITS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
12. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TWO (2) SETS OF CONCRETE STAIRS INCLUDING, BUT NOT LIMITED TO, EXCAVATION, CONCRETE STAIRS, CONCRETE LANDINGS, CONCRETE FOOTINGS, ETC. SHALL BE INCLUDED UNDER THE LUMP SUM BID PRICE FOR 'CONCRETE STAIRS.' THE COST FOR THE HANDRAIL WILL BE MEASURED AND PAID FOR SEPARATELY AS INDICATED IN THE CONSTRUCTION DOCUMENTS.

[illegible]

Boswell ENGINEERING

ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS

330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

N.J. CERTIFICATE OF AUTHORIZATION NO. 24GA27958000

STEPHEN T. BOSWELL

PROFESSIONAL ENGINEER N.J. LIC. 34680

CHRISTOPHER J. NASH

PROFESSIONAL ENGINEER N.J. LIC. 31605

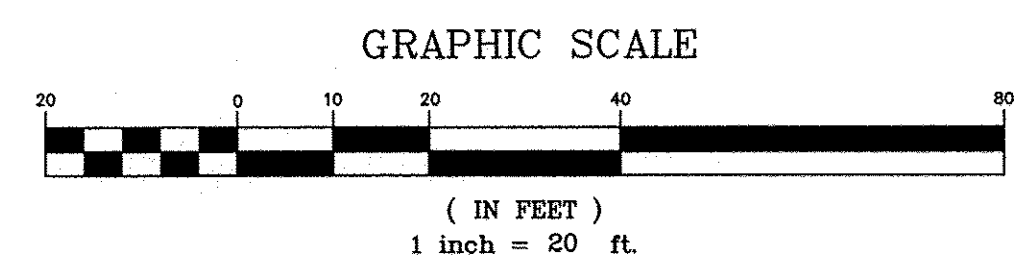
ENTRY 4 SIDEWALK & LOT 2 STAIRS
LOT 2
CONSTRUCTION PLAN -2-
TOWNSHIP OF WAYNE

PASSAIC COUNTY		NEW JERSEY		
SURVEYED BY: AB DRAWN BY: JJM	DESIGNED BY: JJM CHECKED BY: CJN	SCALE: 1"=20'	JOB NO. 16-119-BD	DATE: 5/19/16
CADD FILE: 16-119-CP(BD)		SHEET 4 OF 12		



SURVEY NOTES:

1. HORIZONTAL AND VERTICAL CONTROL TAKEN FROM INFORMATION FOUND ON NJSPCS COORDINATE MAP, STATE OF NEW JERSEY, DEPARTMENT OF THE TREASURY, DIVISION OF BUILDING AND CONSTRUCTION, WILLIAM PATERSON COLLEGE OF NEW JERSEY," PREPARED BY THE RBA GROUP AND SIGNED ON 9/2/90.
2. BEARING BASIS IS NJPCS, NAD 1927. ELEVATIONS ARE REFERENCED TO NGVD 1929.

[illegible]

BOSWELL ENGINEERING

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION NO. 24GA27958000

STEPHEN T. BOSWELL

PROFESSIONAL ENGINEER N.J. LIC. 34680

CHRISTOPHER J. NASH

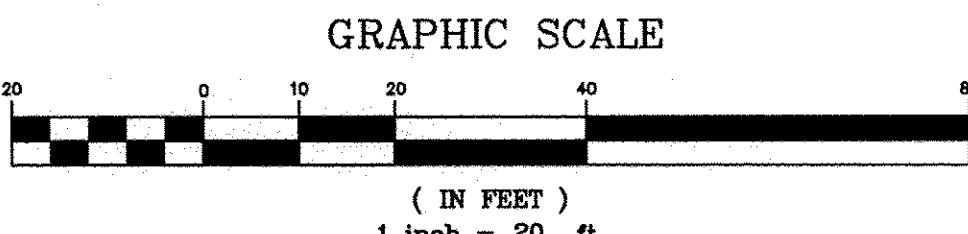
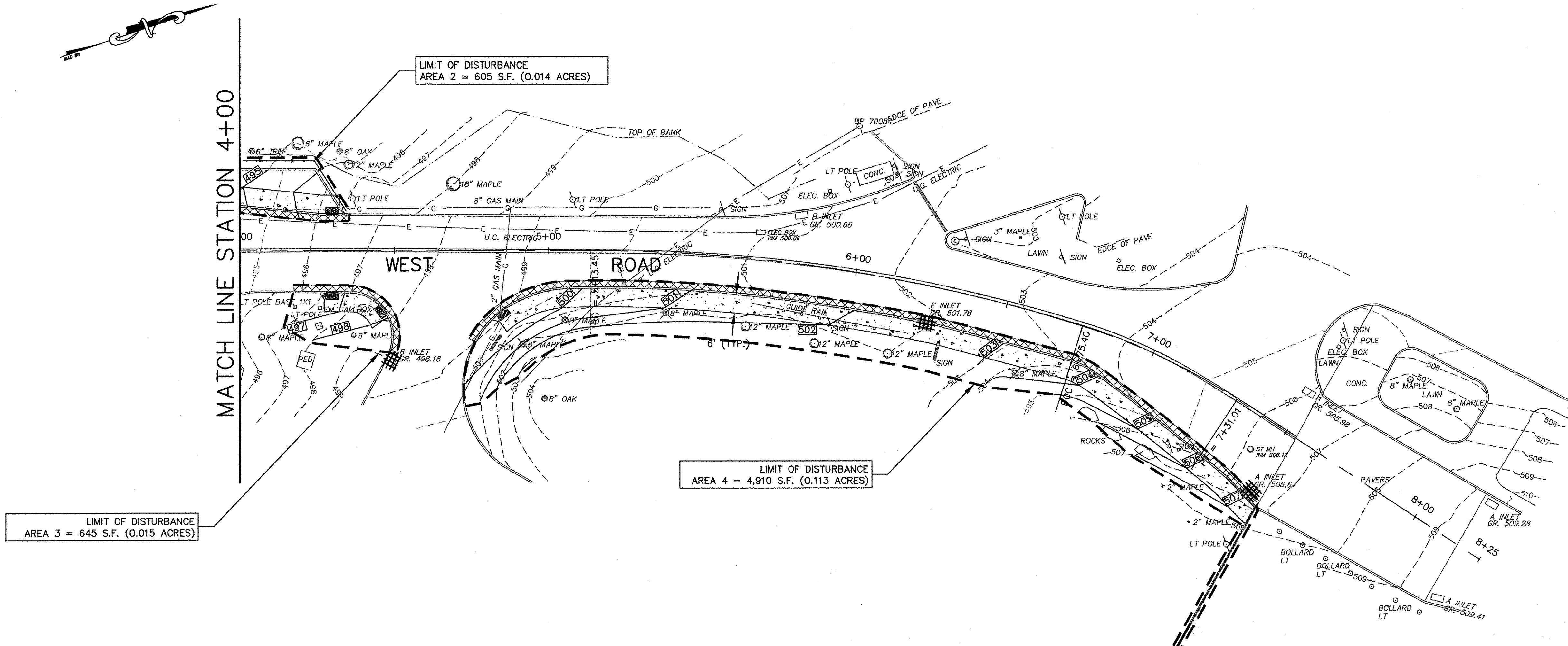
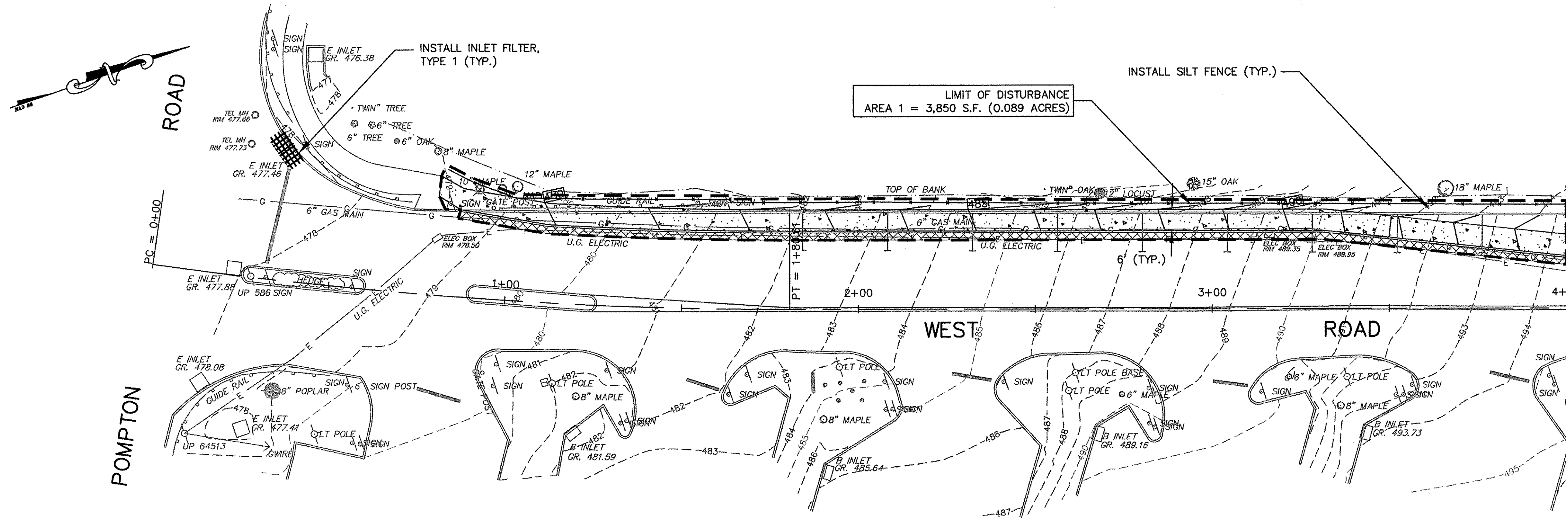
PROFESSIONAL ENGINEER N.J. LIC. 31605

ENTRY 4 SIDEWALK & LOT 2 STAIRS
LOT 2
GRADING AND LAYOUT PLAN -2-
TOWNSHIP OF WAYNE


PASSAIC COUNTY		NEW JERSEY	
SURVEYED BY: AB	DESIGNED BY: JJM	SCALE:	JOB NO.
DRAWN BY: JJM	CHECKED BY: CJN	1"=20'	16-119-BD
DATE: 5/19/16			
CADD FILE: 16-119-GP(BD)		SHEET 6 OF 12	

ITEM	TO BE CONSTRUCTED	UNIT	QUANTITY
1	INLET FILTER, TYPE 1	S.F.	125
2	SILT FENCE	L.F.	375

SOIL DISTURBANCE SUMMARY TABLE		
AREA 1	3,850 S.F.	0.089 ACRES
AREA 2	605 S.F.	0.014 ACRES
AREA 3	645 S.F.	0.015 ACRES
AREA 4	4,910 S.F.	0.113 ACRES
SUBTOTAL	10,010 S.F.	0.231 ACRES



NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

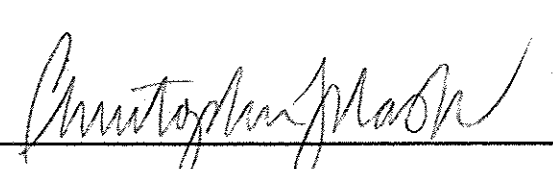


Boswell ENGINEERING
ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION NO. 246A27958000

STEPHEN T. BOSWELL

PROFESSIONAL ENGINEER N.J. LIC. 34680

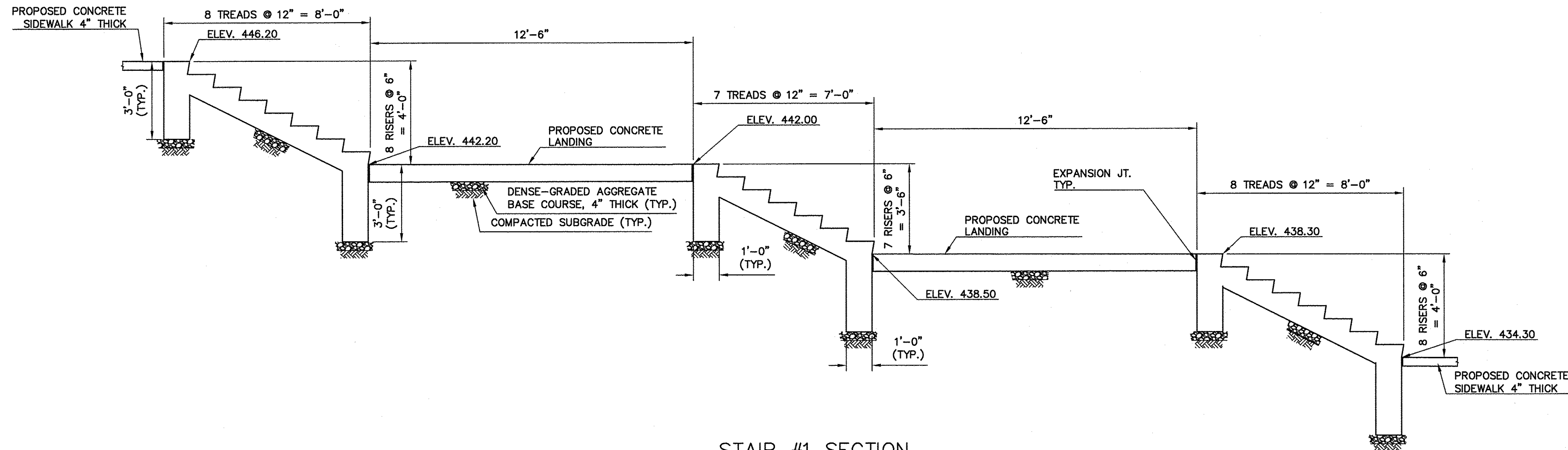
CHRISTOPHER J. NASH


PROFESSIONAL ENGINEER N.J. LIC. 31605

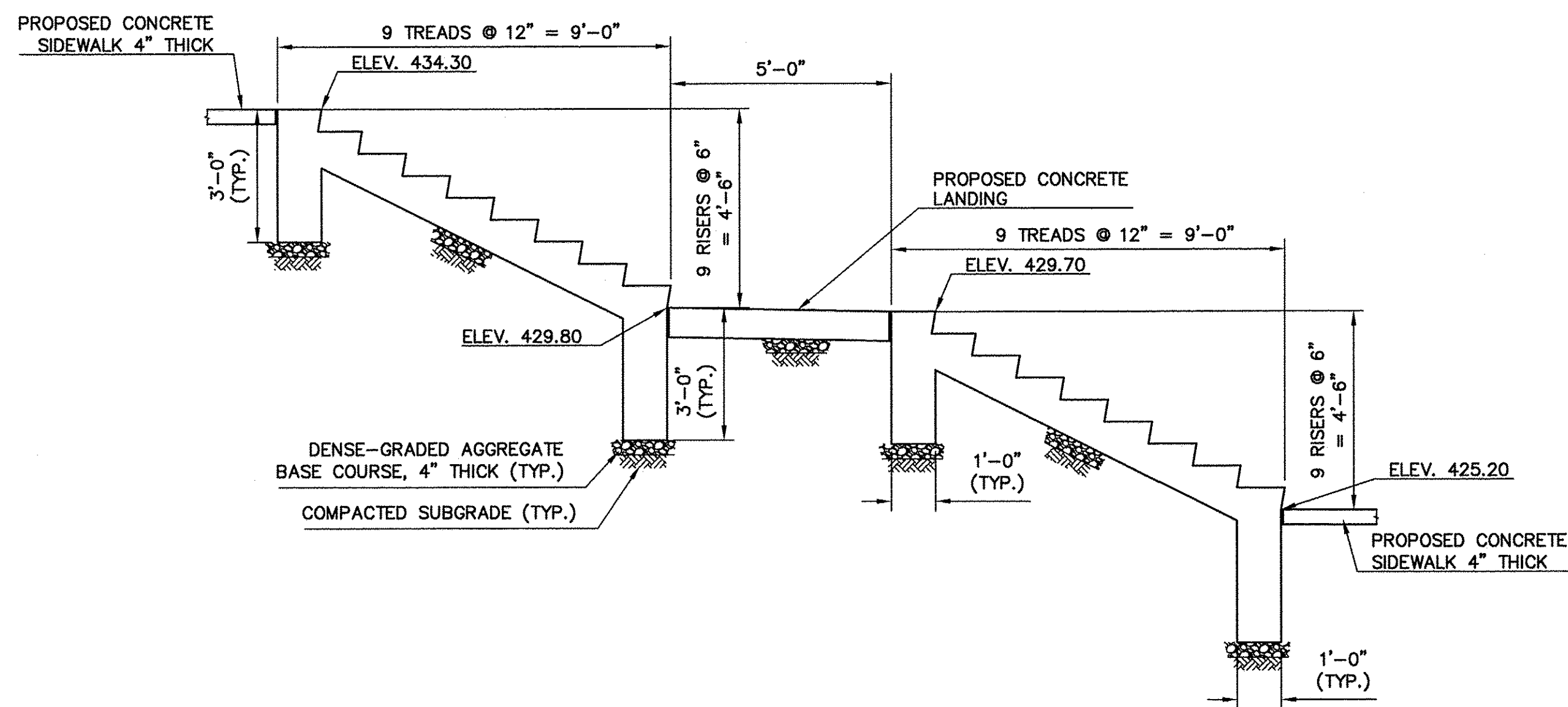
ENTRY 4 SIDEWALK & LOT 2 STAIRS
ENTRY 4
SOIL EROSION & SEDIMENT CONTROL PLAN -1-
TOWNSHIP OF WAYNE
PASSAIC COUNTY NEW JERSEY

SURVEYED BY: AB	DESIGNED BY: JUM	SCALE: 1"=20'	JOB NO. 16-119-BD	DATE: 5/19/16
DRAWN BY: JUM	CHECKED BY: CJN			

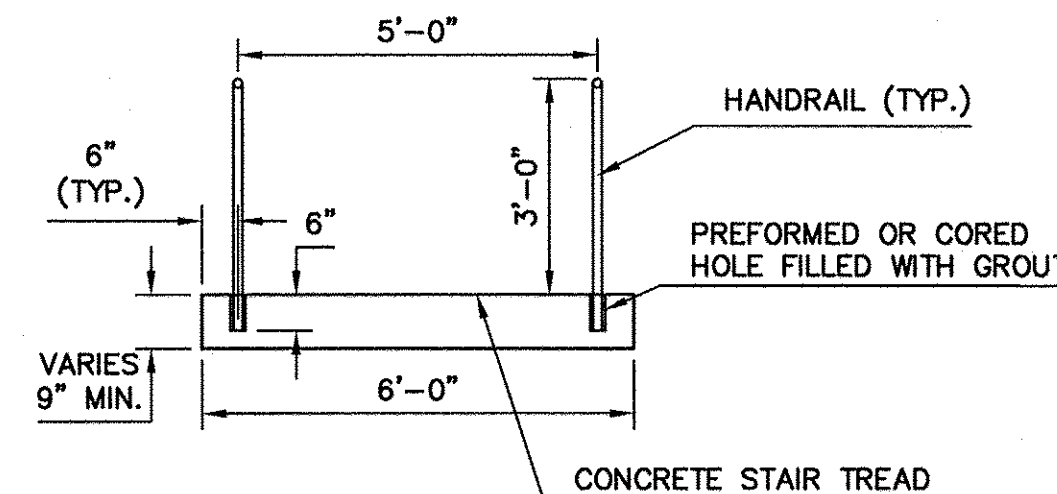
CADD FILE: 16-119-SESC(BD) SHEET 7 OF 12



STAIR #1 SECTION
SCALE: N.T.S.



STAIR #2 SECTION
SCALE: N.T.S.



TYPICAL STAIR SECTION
SCALE: N.T.S.

GENERAL NOTES

1. ALL CONTRACTORS ARE RESPONSIBLE FOR ADHERING TO THE REQUIREMENTS AS SPELLED OUT IN THESE NOTES. ALL PARTIES MUST CAREFULLY STUDY ALL NOTES FOR ITEMS WHICH MAY PERTAIN TO THEIR TRADES. FAILURE TO READ THESE NOTES DOES NOT PERMIT THE CONTRACTOR TO DEVIATE FROM THEIR REQUIREMENTS.
2. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND CHECK ALL MEASUREMENTS ON THE JOB AND SHALL BE RESPONSIBLE FOR SAME.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT BUILDING CODE OF ALL GOVERNING AUTHORITIES.
4. ALL CONTRACTORS ON THIS PROJECT SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THEIR WORK, COORDINATION WITH OTHER TRADES, METHODS, SAFETY AND SECURITY ON THE JOB SITE. THE OWNER, ITS AGENTS, AND EMPLOYEES ARE NOT RESPONSIBLE OR LIABLE FOR THE ABOVE AND SHALL BE HELD HARMLESS AND INDEMNIFIED BY ALL CONTRACTORS AND SUBCONTRACTORS FROM ANY AND ALL CLAIMS, LOSSES, SUITS AND LEGAL ACTION WHATSOEVER ARISING FROM THE PERFORMANCE OF WORK ON THIS PROJECT.

STAIR AND RAILING NOTES

1. SEE SHEET 4 FOR STAIR LOCATIONS.
2. ALL STAIRS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE IBC 2015 NJ EDITION.
3. TREADS SHALL BE CONSTRUCTED TO PITCH WATER AWAY FROM THE RISER WITH A MAXIMUM SLOPE OF 1 TO 48 (2%).
4. ALL JOINTS SHALL BE SEALED WITH AN ELASTOMERIC SEALANT.
5. HANDRAILS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY 6063-T52.

CONCRETE

1. ALL CONCRETE WORK IS DESIGNED IN ACCORDANCE WITH ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". ALL CONCRETE WORK SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH ACI 318.
2. CONCRETE WORK SHALL BE PROPORTIONED IN ACCORDANCE WITH ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 211.11 "RECOMMENDED PRACTICE FOR SELECTING PROPORTIONS FOR NORMAL WEIGHT CONCRETE" TO PRODUCE A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI., UNLESS OTHERWISE NOTED.
3. ADMIXTURES MAY BE USED ONLY AFTER APPROVAL BY THE ENGINEER.
4. ALL CONCRETE TO BE PUMPED SHALL BE DESIGNED ACCORDINGLY AND SHALL COMPLY WITH SLUMP LIMITATIONS STATED HEREIN ABOVE AND WITH ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 304, "PLACING CONCRETE BY PUMPING METHODS COMMITTEE REPORT".
5. A MINIMUM OF A 3 INCH INSIDE DIAMETER PUMP AND PIPE SHALL BE USED TO TRANSPORT CONCRETE.
6. ALL CONCRETE SHALL BE CONSOLIDATED THROUGH USE OF MECHANICAL VIBRATORS.
7. ADEQUATE VERTICAL AND HORIZONTAL SHORING SHALL BE PROVIDED TO SAFELY SUPPORT ALL CONSTRUCTION LOADS.
8. ALL STRUCTURAL CONCRETE IS TO BE CURED IN ACCORDANCE WITH ACI 318.

REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL COMPLY WITH ASTM A-615, A-616, AND/OR A-617, GRADE 60 (60.0 KSI. YIELD STRENGTH).
2. ALL REINFORCING SHALL HAVE A MINIMUM CONCRETE COVER OF 2" UNLESS OTHERWISE NOTED.
3. PLACEMENT DRAWINGS AND BAR LISTS SHALL CONFORM WITH ACI 318, "MANUAL FOR STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES". ALL SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW IN ACCORDANCE WITH SPECIFICATIONS.
4. DETAILS FOR CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCEMENT STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", UNLESS OTHERWISE INDICATED.
5. ALL WELDING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE AWS D12.1.
6. ALL REINFORCEMENT STEEL SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED, AND FIRMLY TIED IN PLACE WITH BAR SUPPORTS AND SPACERS, IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 301 AND ACI 318.
7. ALL LAP LENGTHS SHALL BE 40 BAR DIAMETERS UNLESS OTHERWISE NOTED.

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

PLOT BY: cline PLOT DATE: 5/20/2016 11:40 AM



Boswell ENGINEERING

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION NO. 24GA27958000

STEPHEN T. BOSWELL

PROFESSIONAL ENGINEER N.J. LIC. 34680

JOHN R. VALENTIN

PROFESSIONAL ENGINEER N.J. LIC. 37568

ENTRY 4 SIDEWALK & LOT 2 STAIRS

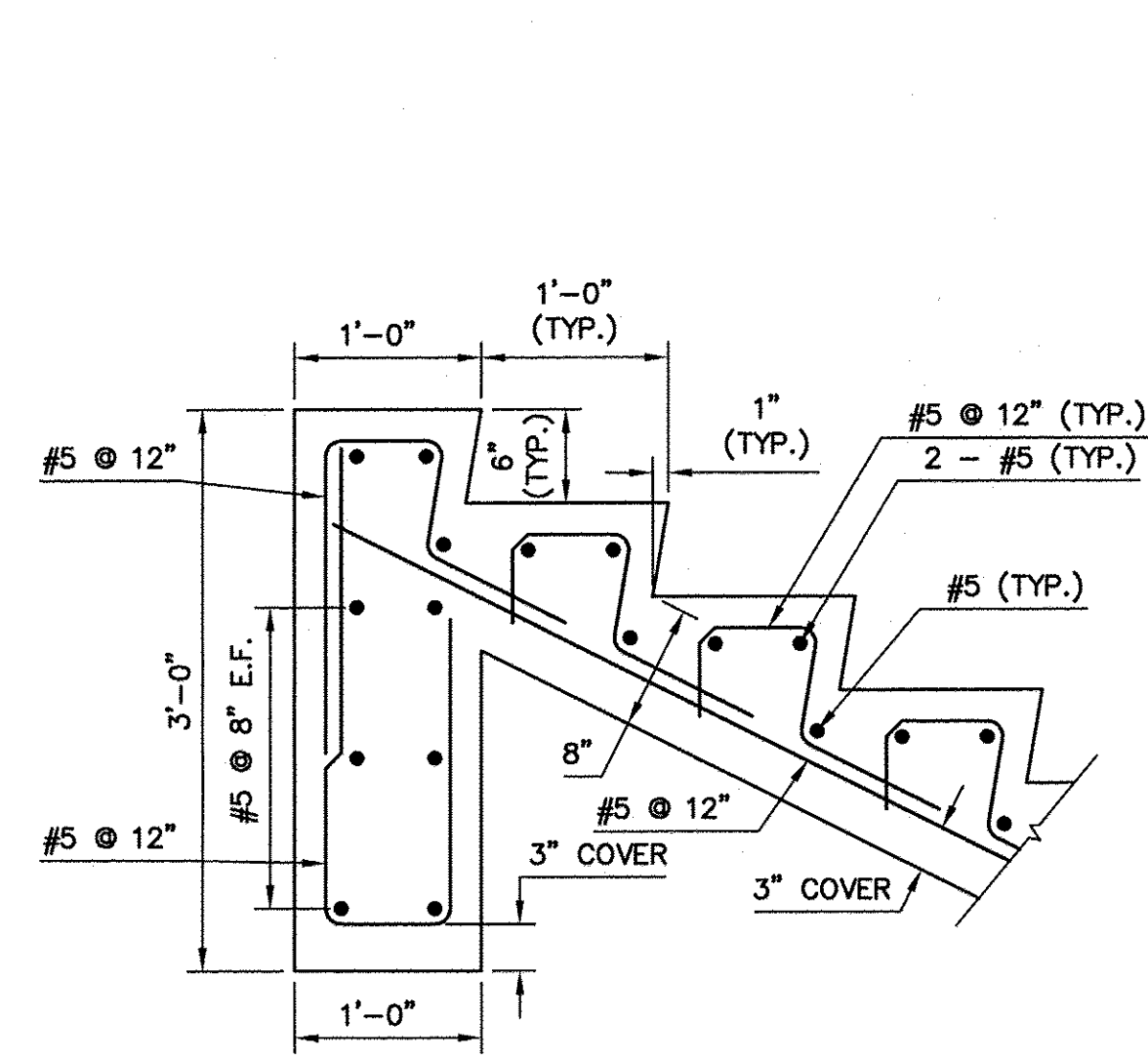
LOT 2 DETAILS SECTIONS
TOWNSHIP OF WAYNE

PASSAIC COUNTY NEW JERSEY

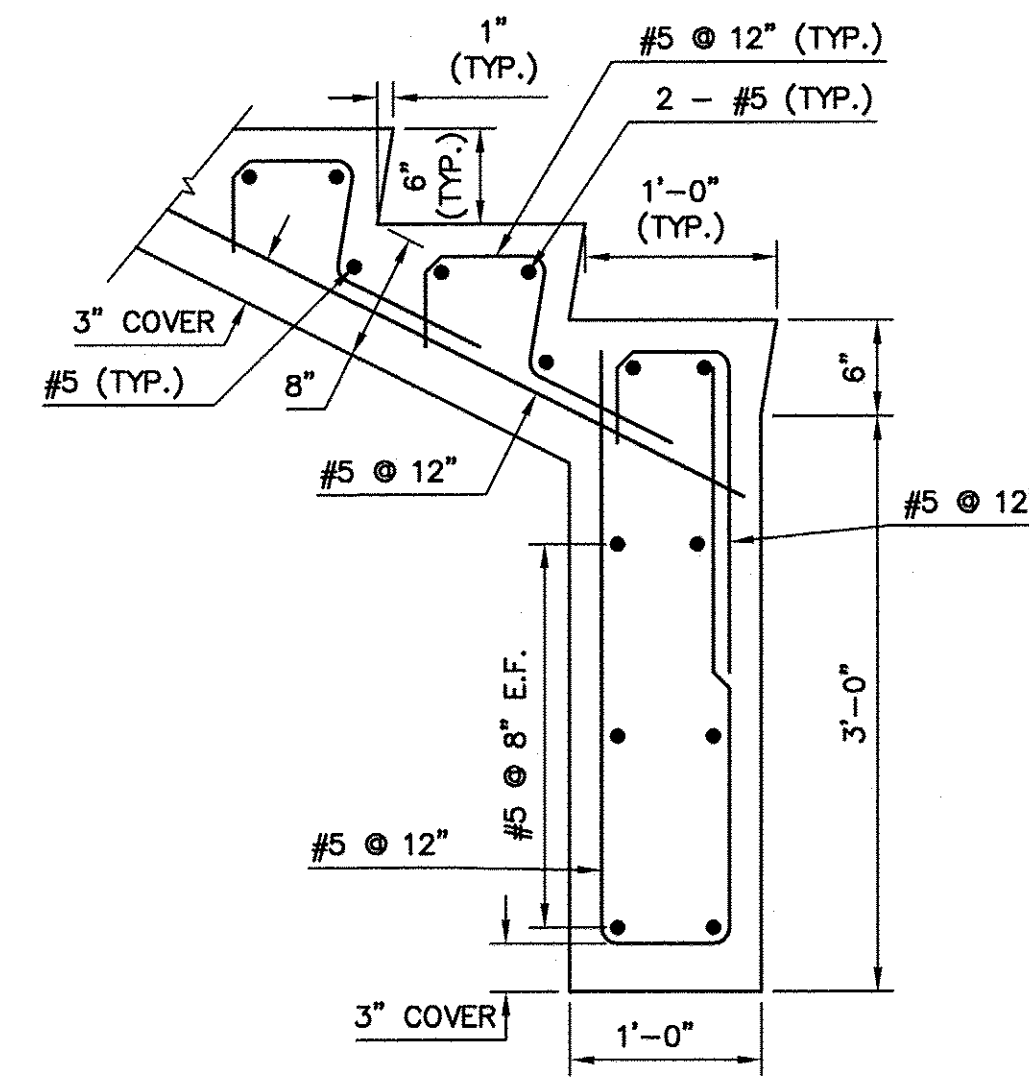
SURVEYED BY:	DESIGNED BY: TWO	SCALE:	JOB NO.	DATE:
DRAWN BY: TWO/CL	CHECKED BY: JRV	AS NOTED	16-119-AC	5/2/16

CADD FILE: 16-119-ST (BD)

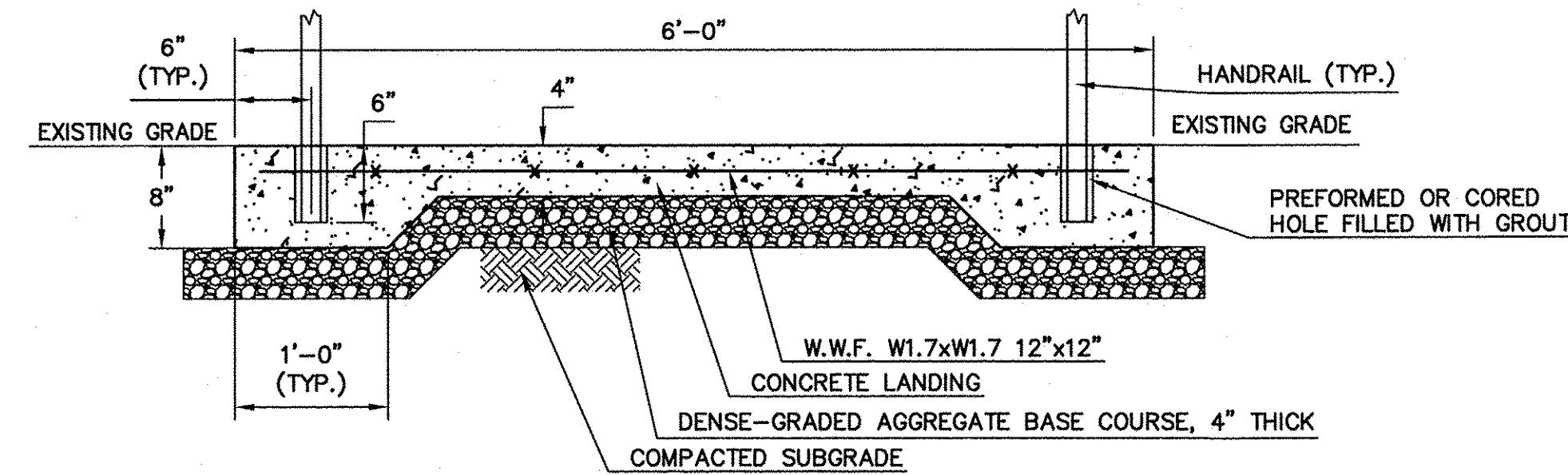
SHEET 11 OF 12



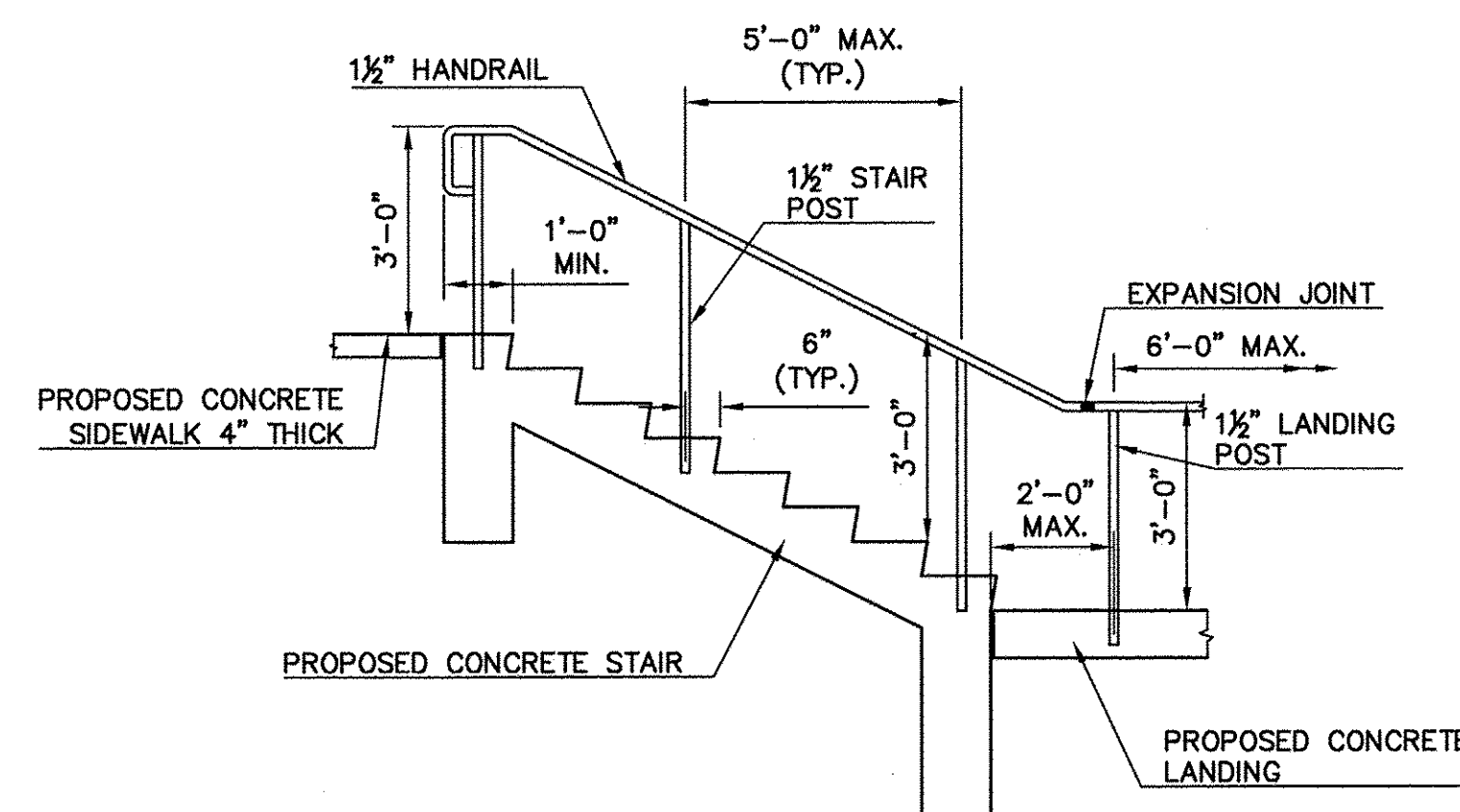
STAIR DETAIL (TOP)
SCALE: N.T.S.



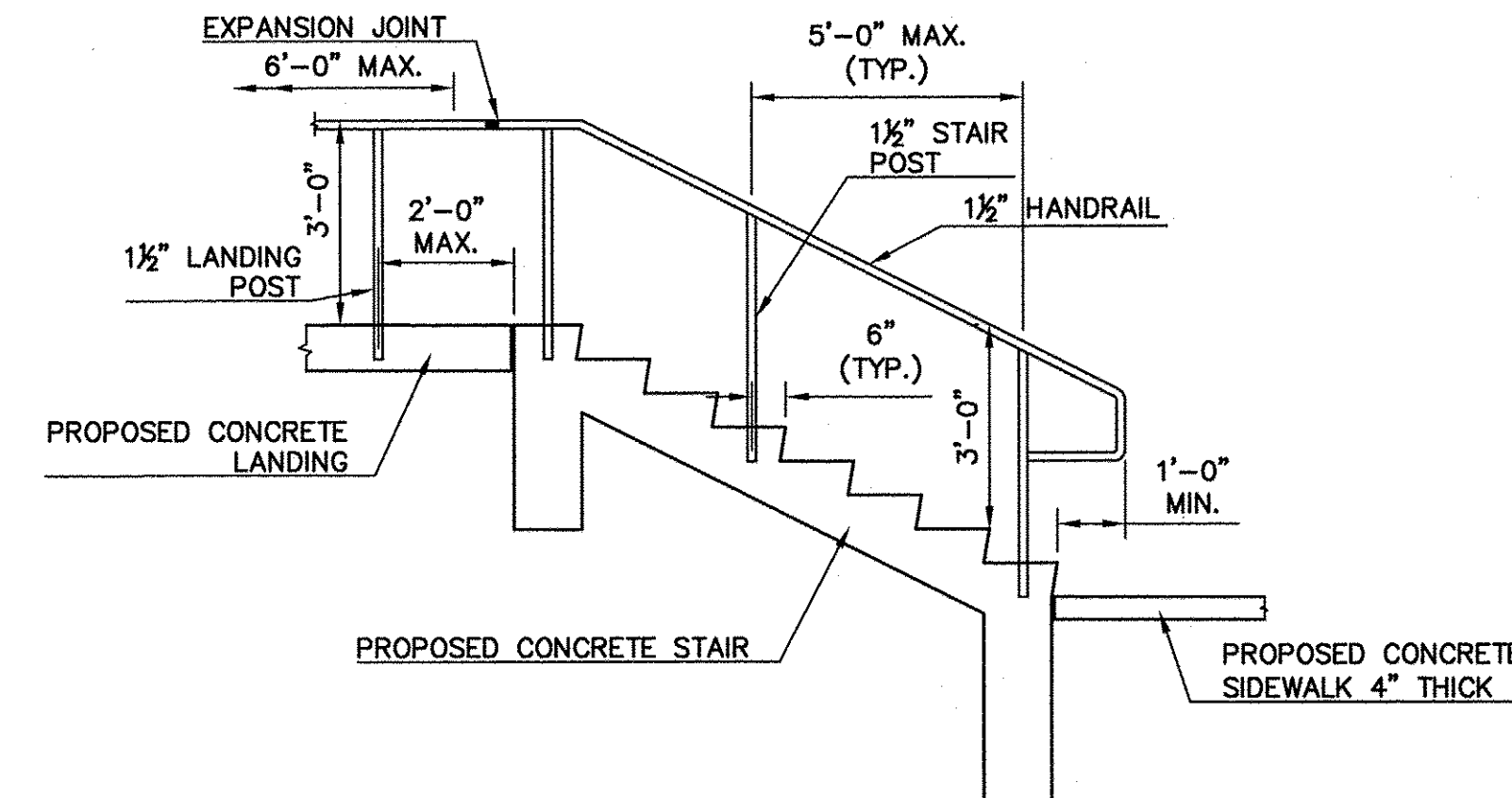
STAIR DETAIL (BOTTOM)
SCALE: N.T.S.



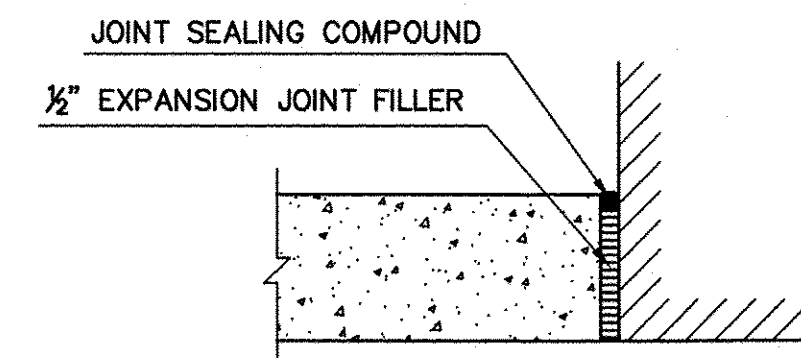
CONCRETE LANDING DETAIL
SCALE: N.T.S.



RAILING DETAIL
(TOP FLIGHT OF STAIRS)
SCALE: N.T.S.



RAILING DETAIL
(BOTTOM FLIGHT OF STAIRS)
SCALE: N.T.S.



ISOLATION JOINT DETAIL
N.T.S.

NOTES:

1. FOR STAIR NOTES, SEE SHEET 11.
2. FOR SECTIONS OF STAIRS, SEE SHEET 11.
3. FOR STAIRS LOCATIONS, SEE SHEET 4.

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

Boswell ENGINEERING
 EST. 1924
 ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS
 330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
 TEL: (201) 641-0770 • FAX: (201) 641-1831
 N.J. CERTIFICATE OF AUTHORIZATION NO. 24GA27958000

STEPHEN T. BOSWELL

PROFESSIONAL ENGINEER N.J. LIC. 34680

JOHN R. VALENTIN

PROFESSIONAL ENGINEER N.J. LIC. 37568

ENTRY 4 SIDEWALK & LOT 2 STAIRS

LOT 2 DETAILS
TOWNSHIP OF WAYNE

PASSAIC COUNTY		NEW JERSEY	
SURVEYED BY:	DESIGNED BY: TWO	SCALE:	JOB NO.
DRAWN BY: TWO/CL	CHECKED BY: JRV	AS NOTED	16-119-AC
DATE: 5/2/16		DATE: 5/2/16	
CADD FILE: 16-119-ST (BD)		SHEET 12 OF 12	