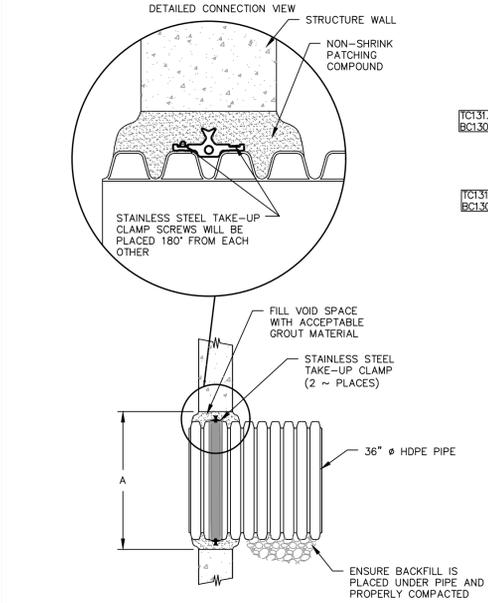


IMPORTANT NOTES:

- CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES SHALL MEAN 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".
- ALL SOIL TESTING FOR STRUCTURAL COMPONENTS TO BE DONE BY OTHERS. THIS INCLUDES BUT IS NOT LIMITED TO STRUCTURAL STABILITY, WATER TABLE ELEVATION, FOOTING DESIGN, PRESENCE OR ABSENCE OF BURIED OR UNSUITABLE MATERIAL AND DEPTH TO ROCK. SITE DESIGN ENGINEER ACCEPTS NO LIABILITY FOR LOST TIME OR ADDITIONAL EXPENSE DUE TO CHANGES OCCURRING FROM AFORESAID CONDITIONS.
- BUILDER/OWNER/CONTRACTOR OR AUTHORIZED REPRESENTATIVE TO APPROVE PROPOSED BUILDING ELEVATIONS AND LOCATION PRIOR TO ANY EXCAVATION. IF CHANGES ARE REQUESTED, THE SITE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY. THE SITE ENGINEER ACCEPTS NO LIABILITY FOR LOST TIME OR ADDITIONAL EXPENSE DUE TO ANY CHANGES OCCURRING FROM FIELD MODIFICATIONS.
- THE OWNER, BY AUTHORIZING FERRERO ENGINEERING, INC. TO PERFORM CONSTRUCTION STAKE OUT OF ANY COMPONENT OF THE WORK HAS ACKNOWLEDGED THEIR REVIEW AND APPROVAL OF THE LOCATION AND ELEVATION OF ALL IMPROVEMENTS SHOWN.
- THESE PLANS ARE NOT VALID UNLESS SIGNED AND SEALED BY THE LICENSED PROFESSIONAL SHOWN HEREON.
- OWNER/APPLICANT/BUILDER/CONTRACTOR TO NOTIFY DESIGN ENGINEER IF ANY PLAN INCONSISTENCIES EXIST.
- CUT SHEETS FOR CURBING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW PRIOR TO INSTALLING CURBING.
- AN AS-BUILT PLAN CERTIFIED BY A PROFESSIONAL LAND SURVEYOR SHALL BE SUPPLIED AT THE COMPLETION OF CONSTRUCTION.
- A NEW JERSEY PROFESSIONAL ENGINEER SHALL CERTIFY THE CONSTRUCTED IMPROVEMENTS ARE BUILT IN ACCORDANCE WITH THE APPROVED PLANS.

NOTE:

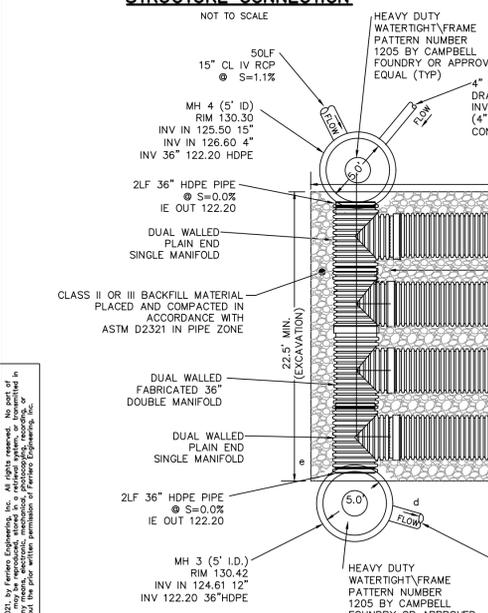
THE EXISTING UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS IS APPROXIMATE AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL INFORMATION. THE CONTRACTOR SHALL CALL UNDERGROUND UTILITIES 1 (800) 272-1000 FOR MARKOUT PRIOR TO EXCAVATION. TEST PITS SHALL BE EXCAVATED BY THE CONTRACTOR AT ALL CROSSINGS PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING LOCATIONS, ELEVATIONS, MATERIALS, AND SIZES. TEST PIT DATA SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED.



PIPE SIZE	PIPE O.D.	A-PROFILE	H-PROFILE	"A" MIN. HOLE DIA.	MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT	ADS PRODUCT CODES
36"	41.1"	41.1"	47.00"	5.5"	5.5"	3602PS
(900mm)	(1043.9mm)	(1043.9mm)	(1193.8mm)	(139.7mm)		

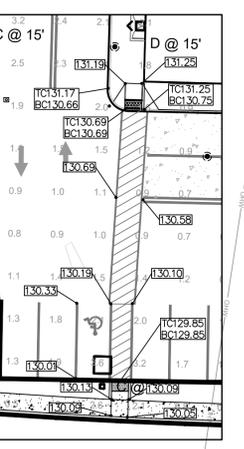
- PERFORMANCE CLAMP DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

36" HDPE WATERSTOP GROUDED STRUCTURE CONNECTION



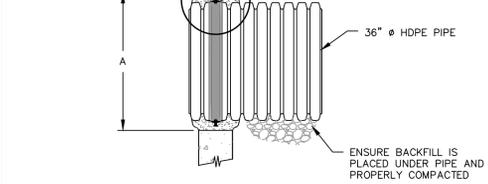
UNDERGROUND DETENTION SYSTEM

NOT TO SCALE



GRADING DETAIL ADA PARKING AND ACCESS

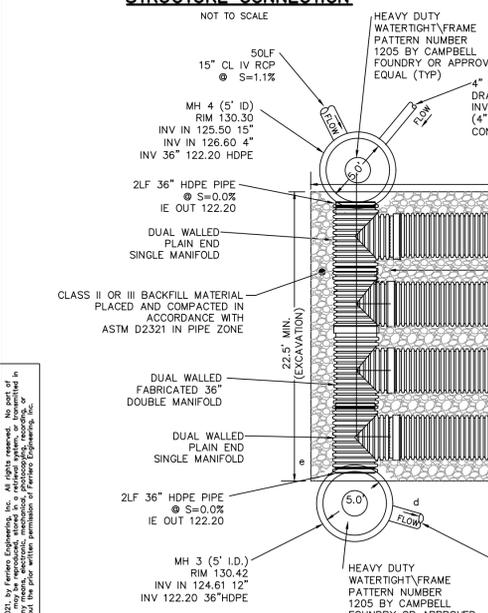
SCALE: 1" = 20"



PIPE SIZE	PIPE O.D.	A-PROFILE	H-PROFILE	"A" MIN. HOLE DIA.	MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT	ADS PRODUCT CODES
36"	41.1"	41.1"	47.00"	5.5"	5.5"	3602PS
(900mm)	(1043.9mm)	(1043.9mm)	(1193.8mm)	(139.7mm)		

- PERFORMANCE CLAMP DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

36" HDPE WATERSTOP GROUDED STRUCTURE CONNECTION



UNDERGROUND DETENTION SYSTEM

NOT TO SCALE

PROPOSED SANITARY SEWER FLOW PER DAY (NJAC 7:14A-23.3)

FAST FOOD RESTAURANT: 15 GAL/DAY/SEAT
14 SEATS
210 GAL/DAY

SANITARY SEWER DISCHARGES TO STAGE II SEWAGE TREATMENT PLANT NJ0026905

Cut/Fill Report

Generated: 2021-09-15 11:04:39
By user: AHanson
Drawing: 2:141046/DWG/BASEMAPS/Montgomery Twp/Revision 9:2:141046/DWG/BASEMAPS/Montgomery Twp/Revision 3:141046-BASEMAP REV 9.dwg

Volume Summary	Name	Type	Cut Factor	Fill Factor	2d Area (Sq Ft)	Cut (Cu Yd)	Fill (Cu Yd)	Net (Cu Yd)
Volume	fill	1.000	1.000	15028.72	10.28	324.05	313.76	FBI-
Total				15028.72	10.28	324.05	313.76	FBI-

PROPOSED UNDERGROUND DETENTION SYSTEM:
22.5' x 91' x 5' = 10237CF / 27 = 380CY
380 - 314 = 66CY EXPORT

LEGEND

- 540 --- EXISTING CONTOUR LINE
- ===== 520 ===== PROPOSED CONTOUR LINE
- 516.3 EXISTING SPOT GRADE
- + 640.00 PROPOSED SPOT GRADE
- ===== EXISTING CURB LINE
- ===== PROPOSED CURB LINE
- ===== EXISTING INLET
- ===== PROPOSED INLET
- ===== EXISTING STORM/SAN PIPE
- ===== PROPOSED STORM SEWER
- ===== EXISTING SITE LIGHT
- ===== PROPOSED SITE LIGHT
- ===== EXISTING GAS LINE
- ===== EXISTING WATER LINE
- ===== EXISTING OVERHEAD WIRE
- ===== EXISTING UTILITY POLE
- ===== EXISTING STONE WALL
- ===== EXISTING FENCE
- ===== PROPOSED CONCRETE
- ===== EXISTING SITE LIGHT
- DC DEPRESSED CURB
- FC FLUSH CURB WITH PAVEMENT
- GF GUTTER FLOW
- SS SANITARY SEWER

BUILDING HEIGHT:

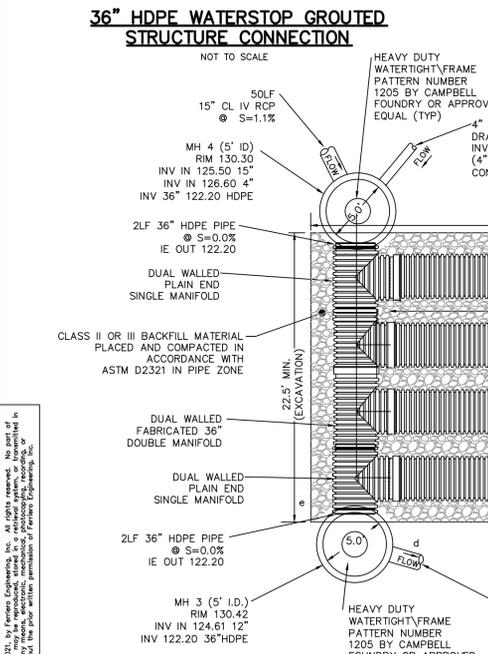
MEAN SPOT GRADE ELEVATION ALONG BUILDING
130.60+131.50+131.50+130.94+130.06+130.45+130.75=915.80/7=130.83

PER 16-21 DEFINITIONS - BUILDING HEIGHT SHALL MEAN THE VERTICAL DISTANCE MEASURED TO THE HIGHEST POINT OF A BUILDING FROM THE MEAN ELEVATION OF THE FINISHED GRADES ALONG ALL SIDES OF THE BUILDING PROVIDED THAT IF THE FINISHED GRADE IS HIGHER THAN THE PREDEVELOPMENT GRADE AT ANY POINT BENEATH THE BUILDING, THEN THE BUILDING HEIGHT SHALL BE MEASURED FROM AN ELEVATION NO HIGHER THAN ONE FOOT ABOVE THE HIGHEST POINT OF THE PREDEVELOPMENT GRADE BENEATH THE BUILDING.

*EXISTING GRADE AT EXISTING BUILDING = 129.1, 129.1 + 1.0 = 130.1 MEAN ELEVATION
MAXIMUM BUILDING HEIGHT ELEVATION AT TOP OF ROOF = 154.33
MAXIMUM BUILDING HEIGHT ELEVATION AT TOP OF CUPOLA = 159.50

MAXIMUM BUILDING HEIGHT (TOP OF ROOF) = (154.33-130.10) = 24.23'
MAXIMUM BUILDING HEIGHT (TOP OF CUPOLA) = (159.50-130.10) = 29.40'

*AVERAGE SPOT GRADE ELEVATION DETERMINED USING THE HIGHEST POINT OF THE PREDEVELOPMENT GRADE BENEATH THE EXISTING BUILDING PLUS ONE FOOT.

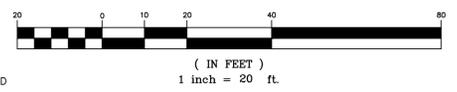


UNDERGROUND DETENTION SYSTEM

NOT TO SCALE

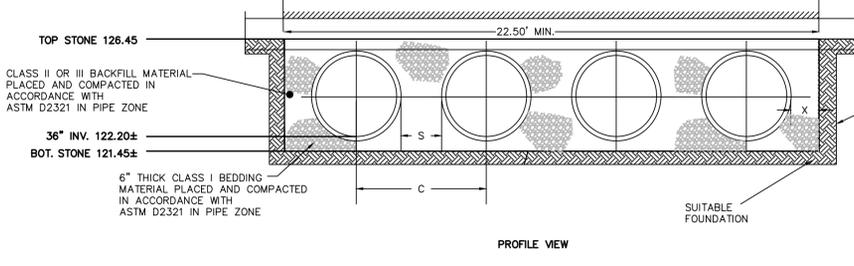
GRADING, DRAINAGE & UTILITY PLAN

GRAPHIC SCALE



NOTES:

- ALL PIPING FOR THE RETENTION SYSTEM SHALL BE SOLID 36-INCH DIAMETER DUAL WALLED CORRUGATED N-12 POLYETHYLENE WATER TIGHT PIPE MANUFACTURED BY ADS OR EQUIV.
- DETENTION SYSTEM OPEN EXCAVATION DIMENSIONS: (22'-6" x 91'-0" MIN.)



PROFILE VIEW

NOTES:

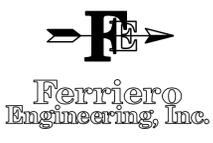
- ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
- MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 6" (150mm) FOR 30"-60" (750mm-900mm).
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

NO.	DATE	REVISION
3	9/23/2021	SUPPLEMENT TO REVISION 2
2	9/15/2021	PER BOARD REVIEW COMMENTS
1	5/20/2021	PER TWP COMPLETENESS REVIEW

DRAWN BY: SCALE: FIELD BOOK:
AMH 1" = 20'

CHKD BY: FILE:
PWF 11046/DWG/BASEMAPS/BASEMAPS-9-2020

PAUL W. FERRERO
N.J. PROFESSIONAL ENGINEER
NO. GE32978



180 MAIN STREET P.O. BOX 571
CHESTER, NEW JERSEY 07930
908-879-6209

CERTIFICATE OF AUTHORIZATION 24GA27935400

GRADING, DRAINAGE & UTILITY PLAN

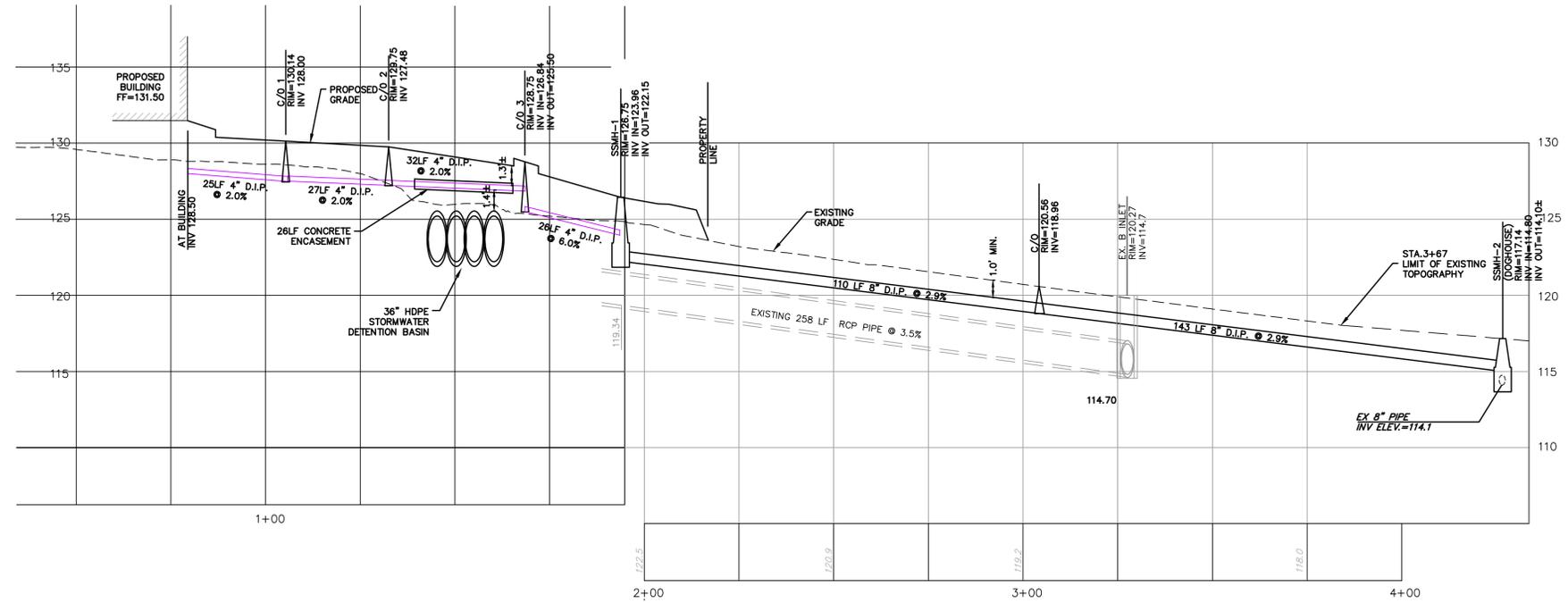
DUNKIN!

LOT 64 BLOCK 28005
MONTGOMERY TOWNSHIP
SOMERSET COUNTY
NEW JERSEY

SHEET
4 OF 14

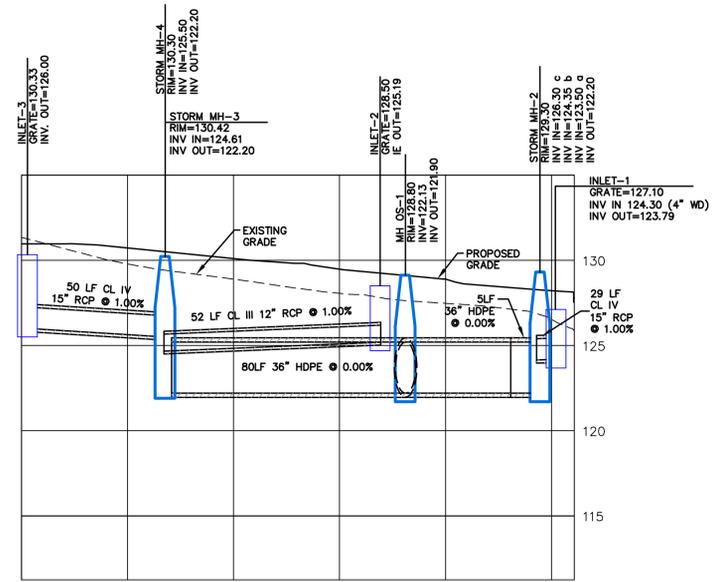
DATE: 2/25/2021 PROJECT NO:
REVISION: 141046

THESE PLANS HAVE BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL AND MAY NOT BE USED FOR CONSTRUCTION UNTIL ALL PERMITS HAVE BEEN OBTAINED

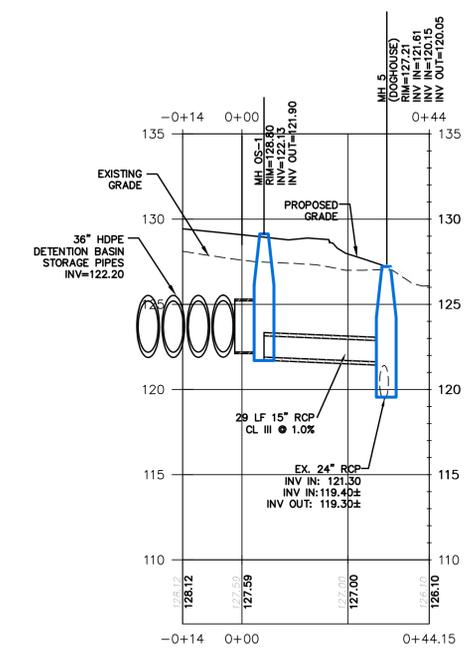


SANITARY SEWER PROFILE
 SCALE: 1" = 20' HORIZ.
 1" = 5' VERT.

PROPOSED SANITARY SEWER FLOW PER DAY (NJAC 7:14A-23.3)
 FAST FOOD RESTAURANT: 15 GAL/DAY/SEAT
 14 SEATS
 210 GAL/DAY
 SANITARY SEWER DISCHARGES TO STAGE II SEWAGE TREATMENT PLANT NJ0026905



DRAINAGE PIPES TO DETENTION BASIN
 SCALE: 1" = 20' HORIZ.
 1" = 5' VERT.



DETENTION BASIN TO OUTFALL
 SCALE: 1" = 20' HORIZ.
 1" = 5' VERT.

IMPORTANT NOTES:

- CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES SHALL MEAN 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".
- ALL SOIL TESTING FOR STRUCTURAL COMPONENTS TO BE DONE BY OTHERS. THIS INCLUDES BUT IS NOT LIMITED TO STRUCTURAL STABILITY, WATER TABLE ELEVATION, FOOTING DESIGN, PRESENCE OR ABSENCE OF BURIED OR UNSUITABLE MATERIAL AND DEPTH TO ROCK. SITE DESIGN ENGINEER ACCEPTS NO LIABILITY FOR LOST TIME OR ADDITIONAL EXPENSE DUE TO CHANGES OCCURRING FROM AFORESAID CONDITIONS.
- BUILDER/OWNER/CONTRACTOR OR AUTHORIZED REPRESENTATIVE TO APPROVE PROPOSED BUILDING ELEVATIONS AND LOCATION PRIOR TO ANY EXCAVATION. IF CHANGES ARE REQUESTED, THE SITE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY. THE SITE ENGINEER ACCEPTS NO LIABILITY FOR LOST TIME OR ADDITIONAL EXPENSE DUE TO ANY CHANGES OCCURRING FROM FIELD MODIFICATIONS.
- THE OWNER, BY AUTHORIZING FERRIERO ENGINEERING, INC. TO PERFORM CONSTRUCTION STAKE OUT OF ANY COMPONENT OF THE WORK HAS ACKNOWLEDGED THEIR REVIEW AND APPROVAL OF THE LOCATION AND ELEVATION OF ALL IMPROVEMENTS SHOWN.
- THESE PLANS ARE NOT VALID UNLESS SIGNED AND SEALED BY THE LICENSED PROFESSIONAL SHOWN HEREON.
- OWNER/APPLICANT/BUILDER/CONTRACTOR TO NOTIFY DESIGN ENGINEER IF ANY PLAN INCONSISTENCIES EXIST.
- CUT SHEETS FOR CURBING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW PRIOR TO INSTALLING CURBING.
- AN AS-BUILT PLAN CERTIFIED BY A PROFESSIONAL LAND SURVEYOR SHALL BE SUPPLIED AT THE COMPLETION OF CONSTRUCTION.
- A NEW JERSEY PROFESSIONAL ENGINEER SHALL CERTIFY THE CONSTRUCTED IMPROVEMENTS ARE BUILT IN ACCORDANCE WITH THE APPROVED PLANS.

FERRIERO ENGINEERING, INC. IS AN EQUAL OPPORTUNITY EMPLOYER. THE COMPANY DOES NOT DISCRIMINATE IN EMPLOYMENT PRACTICES ON THE BASIS OF RACE, GENDER, ETHNICITY, NATIONAL ORIGIN, RELIGION, SEX, OR AGE.

NO.	DATE	REVISION
3	9/23/2021	SUPPLEMENT TO REVISION 2
2	9/15/2021	PER BOARD REVIEW COMMENTS
1	5/20/2021	PER TWP COMPLETENESS REVIEW

DRAWN BY: SCALE: FIELD BOOK:
 AMH AS NOTED
 CHKD BY: FILE:
 PWF 11046/DWG/BASEMAPS/BASEMAPS-9-2020

PAUL W. FERRIERO
 N.J. PROFESSIONAL ENGINEER
 NO. GE32978

180 MAIN STREET P.O. BOX 571
 CHESTER, NEW JERSEY 07930
 908-879-6209
 CERTIFICATE OF AUTHORIZATION 24GA27935400

SANITARY & STORM SEWER PROFILES
DUNKIN!
 LOT 64 BLOCK 28005
 MONTGOMERY TOWNSHIP
 SOMERSET COUNTY
 NEW JERSEY

SHEET
 5 OF 14

DATE: 2/25/2021 PROJECT NO:
 REVISION: 141046

