

GROTTO PIZZA RESTAURANT

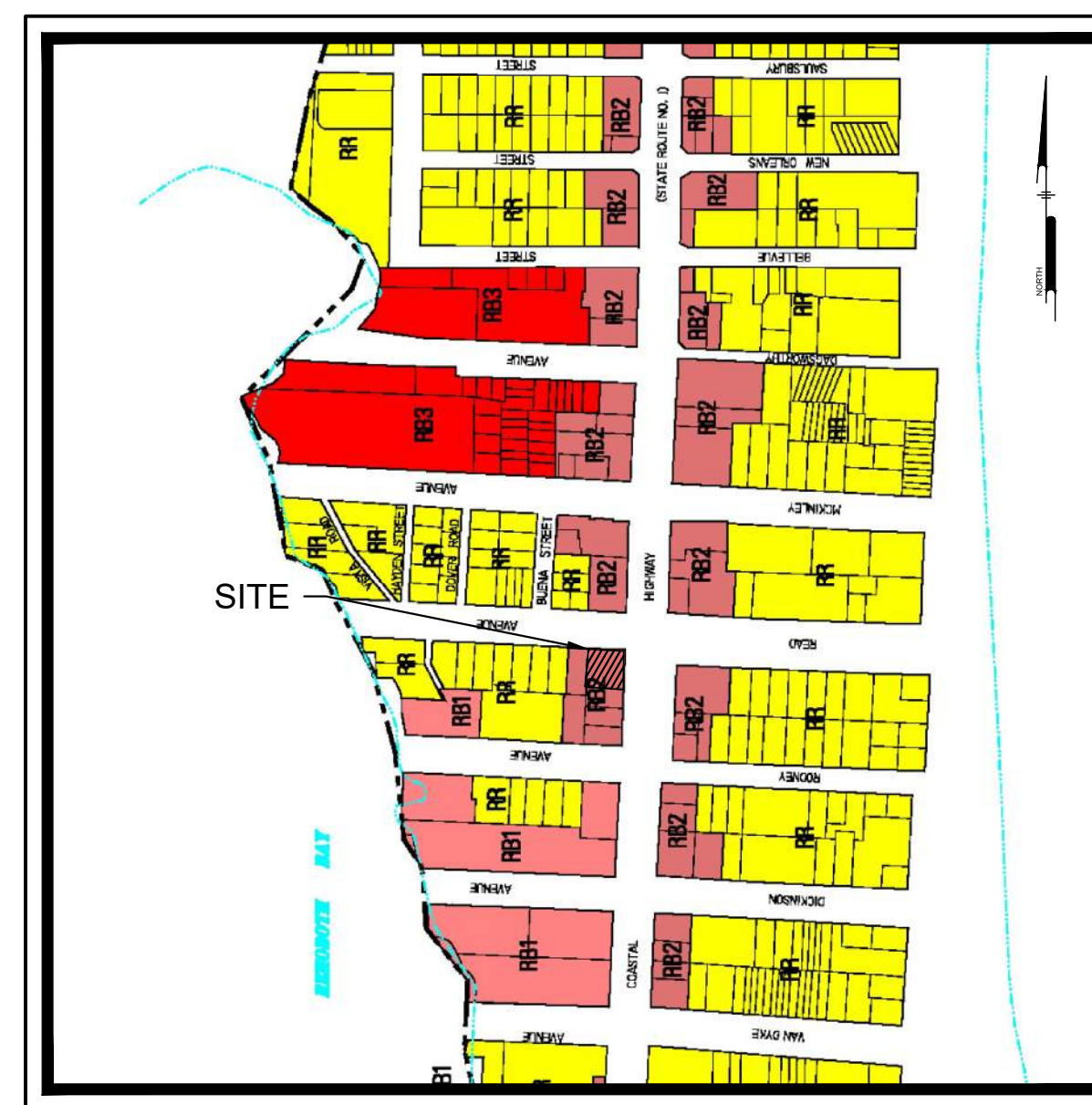
CONDITIONAL USE AND PRELIMINARY SITE PLAN APPLICATION

1509 COASTAL HIGHWAY

TOWN OF DEWEY BEACH
SUSSEX COUNTY, DELAWARE
SUBMISSION: MAY 12, 2022

PREPARED FOR:
OWNER/DEVELOPER
GROTTO PIZZA INC.
20376 COASTAL HIGHWAY
REHOBOTH BEACH, DELAWARE 19971

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LOCATION MAP
Scale: 1" = 500'

PREPARED BY:
PENNONI ASSOCIATES INC.



Christiana Executive Campus
121 Continental Drive, Suite 207
Newark, DE 19713-4310
T 302.655.4451
F 302.654.2895

LEGEND	
<p>EXISTING BUILDING</p> <p>RIGHT-OF-WAY / PROPERTY LINE</p> <p>CURB</p> <p>SIDEWALK</p> <p>PAVEMENT</p> <p>SIGN</p> <p>UTILITY POLE AND LIGHT</p> <p>HYDRANT</p> <p>MAJOR CONTOUR</p> <p>MINOR CONTOUR</p> <p>WATER LINE</p> <p>UNDERGROUND GAS LINE</p> <p>UNDERGROUND STEAM LINE</p> <p>SANITARY SEWER</p> <p>COMBINED SEWER</p> <p>OVERHEAD ELECTRIC LINE</p> <p>UNDERGROUND ELECTRIC LINE</p> <p>UNDERGROUND TELECOMM LINE</p> <p>UNDERGROUND COMMUNICATIONS LINE</p> <p>MANHOLES</p> <p>VALVES</p> <p>INLET</p> <p>TREE</p> <p>PROPOSED BUILDING</p> <p>PROPOSED PROPERTY LINE</p> <p>PROPOSED CONCRETE CURB</p>	<p>DEMOLISH EXISTING PAVING</p> <p>DEMOLISH EXISTING BUILDING</p> <p>PROPOSED HEAVY DUTY CONCRETE</p> <p>PROPOSED LIGHT DUTY CONCRETE</p> <p>PROPOSED MAJOR CONTOUR</p> <p>PROPOSED MINOR CONTOUR</p> <p>TB</p> <p>BS</p> <p>EP</p> <p>EC</p> <p>TC/BC</p> <p>TS/BS</p> <p>TWBW</p> <p>EXISTING TO BE DEMOLISHED</p> <p>PROPOSED SANITARY SEWER</p> <p>PROPOSED WATER MAIN</p> <p>PROPOSED UNDERGROUND ELECTRIC</p> <p>PROPOSED UNDERGROUND COMMUNICATIONS</p> <p>PROPOSED UNDERGROUND NATURAL GAS</p> <p>PROPOSED STORM SEWER ≤ 12"</p> <p>PROPOSED STORM SEWER > 12"</p> <p>PROPOSED SITE LIGHTING</p> <p>LIMIT OF DISTURBANCE</p> <p>COMPOST FILTER SOCK 12"</p> <p>DRAINAGE AREA</p> <p>STONE CONSTRUCTION ENTRANCE</p> <p>INLET PROTECTION</p> <p>CONCRETE WASH</p>

CALL BEFORE YOU DIG
Call Miss Utility of Delmarva
800-282-8555
Ticket Number(s): 221110815

NOT FOR CONSTRUCTION

TOWN MAYOR APPROVAL	
MAYOR _____	DATE _____
TOWN ENGINEER CERTIFICATION	
I, _____, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN REVIEWED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS CONFORMITY TO THE APPLICABLE TOWN STANDARDS.	
DATE _____	
ENGINEER CERTIFICATION	
I, STEVEN ANDERSON, PE, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN REVIEWED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.	
DATE _____	
OWNER CERTIFICATION	
AS AUTHORIZED REPRESENTATIVE OF GROTTO PIZZA INC. I, _____, HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DISCRETION, AND THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED ACCORDING TO LAW.	
GROTTO PIZZA INC. DATE _____	

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GROTTO PIZZA RESTAURANT
1509 COASTAL HWY., DE-1
DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

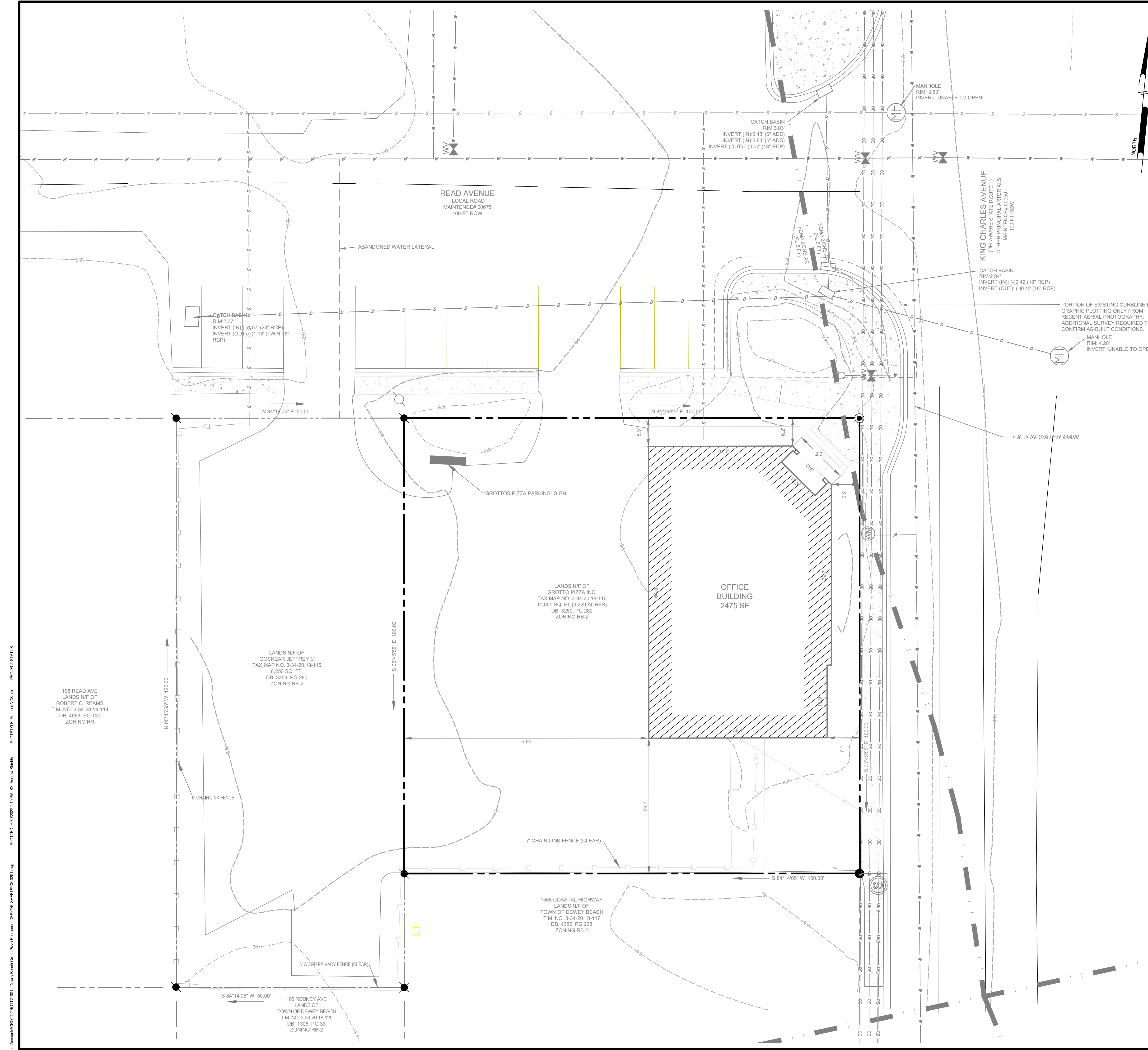
COVER SHEET

GROTTO PIZZA INC.
20376 COASTAL HIGHWAY
REHOBOTH BEACH, DELAWARE 19971

NO.	DATE	REVISIONS	BY
1	6/30	PER TOWN COMMENTS (6/21/22)	JAB

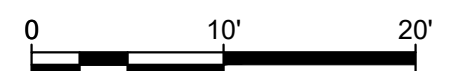
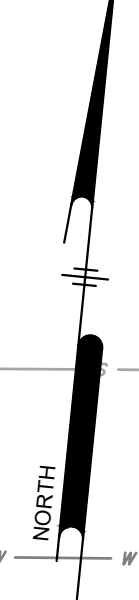
PROJECT	GROTT21001
DATE	2022-06-24
DRAWING SCALE	N.T.S.
DRAWN BY	ALS
APPROVED BY	GBR
CS-0001	
SHEET 1 OF 11	

PROJECT STATUS: PLOTTED: 6/30/2022 2:10 PM BY: Andrew Shields

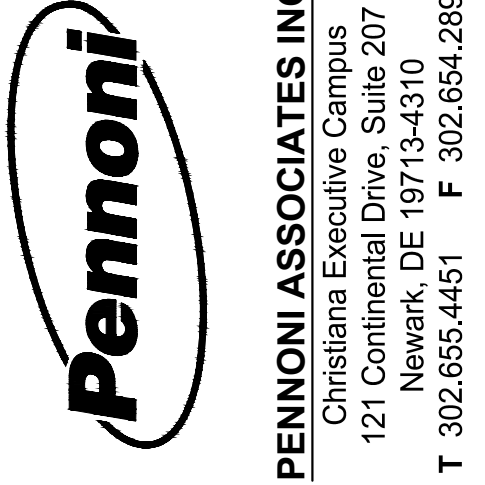


EXISTING CONDITIONS NOTES:

1. THE BOUNDARY INFORMATION SHOWN ON THIS PLAT WAS COMPILED FROM DOCUMENTS OF PUBLIC RECORD AND AN ACTUAL FIELD SURVEY BY SIMPLER SURVEYING & ASSOCIATES INC., PERFORMED IN JANUARY 2020. ALL PROVIDED EASEMENTS ARE SHOWN ON THIS PLAN; HOWEVER, THIS PLAT AND SURVEY DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHT-OF-WAYS OR EASEMENTS.
2. THE SITE BENCHMARK _____, DATUM NAVD 88 AND NAD 83.
3. DEED REFERENCE: DB 3259, PG 282
4. BASED UPON FLOOD INSURANCE RATE MAP (FIRM) NUMBER 10005C0356K, MAP ISSUED MARCH 16, 2015, THE ENTIRETY OF THE PROPERTY IS LOCATED IN AN AREA DESIGNATED AS ZONE "AE", (SHADED) WHICH IS AN AREA TO BE DETERMINED WITHIN THE 100 - YEAR FLOODPLAIN, BFE V 5.0 (NAV D 88).
5. WETLANDS INFORMATION: A CURSORY REVIEW OF THE SITE HAS BEEN CONDUCTED, GIVING EXISTING CONDITIONS, NO POTENTIAL WETLANDS EXISTING ON-SITE. NO FURTHER INVESTIGATIONS ARE WARRANTED.
6. THIS PROPERTY IS CURRENTLY ZONED RB2 (RESORT BUSINESS DISTRICT).
7. MISS UTILITY SHALL BE NOTIFIED THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.
8. ALL SIGNING FOR MAINTENANCE OF TRAFFIC IS THE CONTRACTORS RESPONSIBILITY, AND SHALL FOLLOW THE GUIDELINES SHOWN IN LATEST EDITION OF "DELAWARE TRAFFIC CONTROLS FOR STREETS AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND EMERGENCY OPERATIONS."
9. UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:
 - 9.1. RIGHTS OR INTEREST OF THE UNITED STATES OF AMERICA OR STATE OF DELAWARE OVER LANDS NOW OR FORMERLY FLOWED BY TIDAL WATERS, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OR ANY FEDERAL, STATE, OR LOCAL AGENCY.
 - 9.2. BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
 - 9.3. ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS, INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
10. UTILITY NOTES:
 - 10.1. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE. LOCATIONS OF UTILITIES AS SHOWN AND MAY OR MAY NOT BE COMPLETE. THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO INITIATING ANY ACTIVITY THAT MAY AFFECT THEIR USE OR LOCATION.
 - 10.2. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
 - 10.3. THE CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
 - 10.4. IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDINGS WITH WORK.



NOT FOR CONSTRUCTION



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 Christina Executive Campus
 121 Continental Drive, Suite 207
 Newark, DE 19713-4310
 T 302.655.4451 F 302.654.2885

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GROTTO PIZZA RESTAURANT
 1508 COASTAL HWY., DE-1
 DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

EXISTING CONDITIONS PLAN

GROTTO PIZZA INC.
 20376 COASTAL HIGHWAY
 REHOBOTH BEACH, DELAWARE 19971

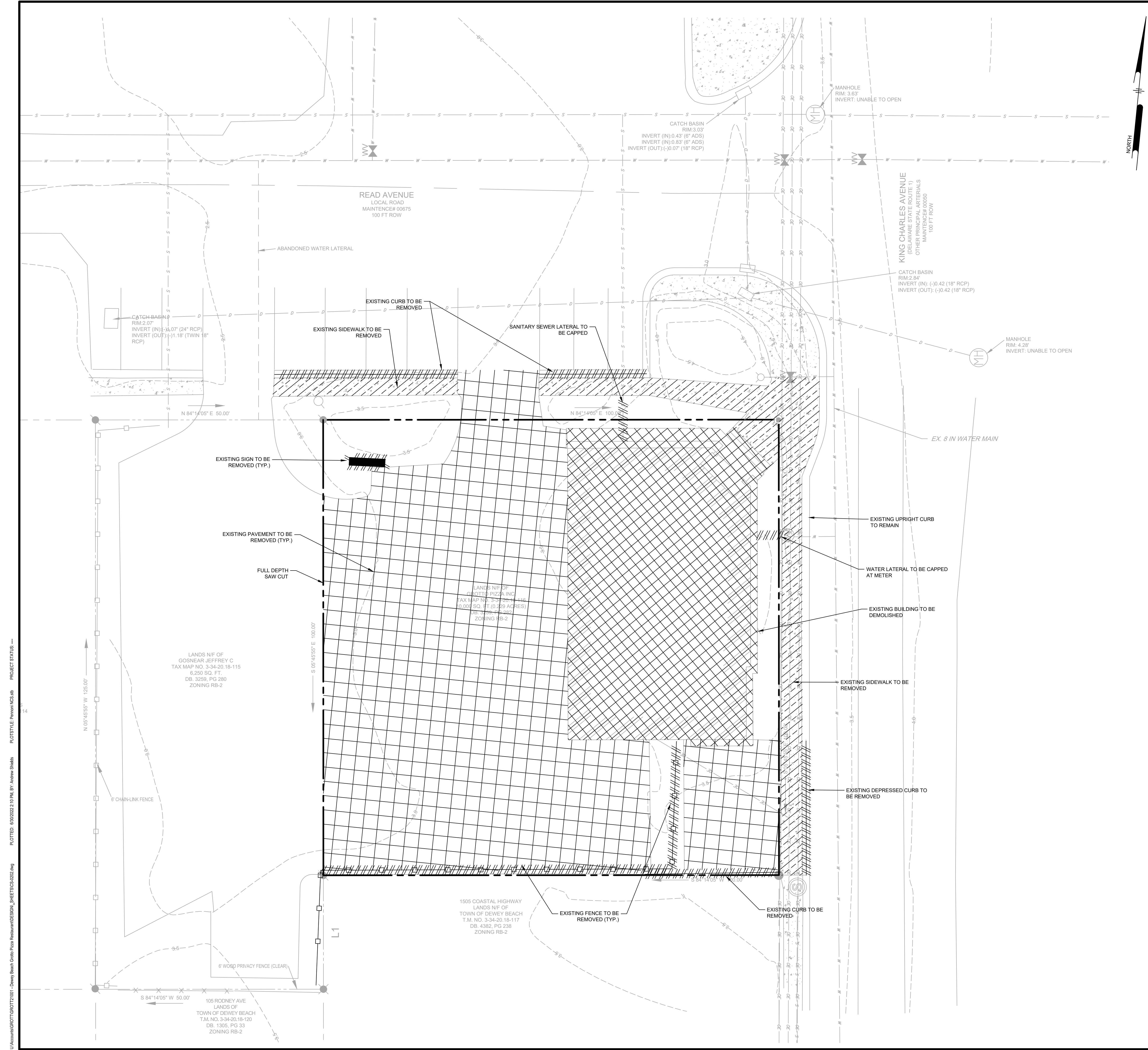
NO.	DATE	REVISIONS	BY
1	6/30	PER TOWN COMMENTS (6/21/22)	JAB

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES, AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	GROTT21001
DATE	2022-06-24
DRAWING SCALE	1"=10'
DRAWN BY	ALS
APPROVED BY	GBR

CS-0201
 SHEET 2 OF 11

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 PLOTTED: 6/30/2022 2:10 PM BY: Andrew Shields PROJECT STATUS: ---
 PLOTTED: Pennoni Inc.



DEMOLITION NOTES:

- UNLESS OTHERWISE INDICATED, DEMOLITION WASTE BECOMES PROPERTY OF CONTRACTOR.
- ON-SITE STORAGE OF REMOVED ITEMS OR MATERIALS IS NOT PERMITTED.
- REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION, IMPROVEMENTS, OR OBSTRUCTIONS INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION. REMOVE SUCH ITEMS WITHIN THE EASEMENT LIMITS AND WITHIN THE PUBLIC RIGHT-OF-WAYS AS SHOWN ON THE DRAWINGS. REMOVAL INCLUDES DIGGING OUT STUMPS AND ROOTS.
- SITE CLEARING INCLUDES, BUT IS NOT LIMITED TO:
 - PROTECT EXISTING TREES TO REMAIN.
 - CLEAR AND GRUB ALL TREES AND VEGETATION WHERE CONSTRUCTION ACTIVITIES OF THE PROJECT WILL BE CONDUCTED.
 - TOPSOIL STRIPPING AND STOCKPILING ON SITE.
 - DISPOSE OF VEGETATION AND OTHER DEBRIS RESULTING FROM CLEARING OPERATIONS.
 - REMOVE EXISTING PAVEMENTS AND BASES AS SHOWN ON THE DRAWINGS.
 - DISPOSE OF ALL TREE STUMPS RESULTING FROM THE CLEARING OPERATIONS.
 - REMOVE EXISTING OBSTRUCTIONS INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION.
- PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE, AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING AND BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
- PROTECT BENCH MARKS AND EXISTING STRUCTURES, ROADS, SIDEWALKS, PAVING AND CURBS AGAINST DAMAGE FROM VEHICULAR OR FOOT TRAFFIC.
- MAINTAIN DESIGNATED TEMPORARY ROADWAYS, WALKWAYS AND DETOURS, FOR VEHICULAR AND PEDESTRIAN TRAFFIC.
- ALL STUMPS, BRUSH, PAVEMENT AND WASTE MATERIAL GENERATED BY CLEARING OPERATIONS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM THE SITE FOR SAFE, LEGAL, OFF-SITE DISPOSAL.
- MAINTAIN UTILITY, ELECTRICAL, AND MECHANICAL SERVICES/SYSTEMS INDICATED TO REMAIN AND PROTECT THEM AGAINST DAMAGE.
- LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS SERVING AREAS TO BE SELECTIVELY DEMOLISHED.
- PIPING TO BE REMOVED: REMOVE PORTION OF PIPING INDICATED TO BE REMOVED AND CAP OR PLUG REMAINING PIPING WITH SAME OR COMPATIBLE PIPING MATERIAL.
- PIPING TO BE ABANDONED IN PLACE: DRAIN PIPING AND CAP OR PLUG PIPING WITH SAME OR COMPATIBLE PIPING MATERIAL AND LEAVE IN PLACE.
- SEWER SERVICE LATERAL LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL TEST PIT AND LOCATE PRIOR TO CONSTRUCTION.
- WATER SERVICE LATERAL LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL TEST PIT AND LOCATE PRIOR TO CONSTRUCTION.

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GROTTO PIZZA RESTAURANT
 1508 COASTAL HWY, DE-1
 DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

DEMOLITION PLAN

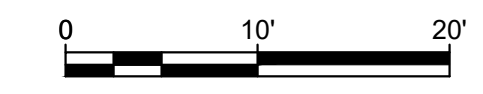
GROTTO PIZZA INC.
 20376 COASTAL HIGHWAY
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NO.	DATE	REVISIONS	BY

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PROJECT: **GROTT21001**
 DATE: **2022-06-24**
 DRAWING SCALE: **1"=10'**
 DRAWN BY: **ALS**
 APPROVED BY: **GBR**

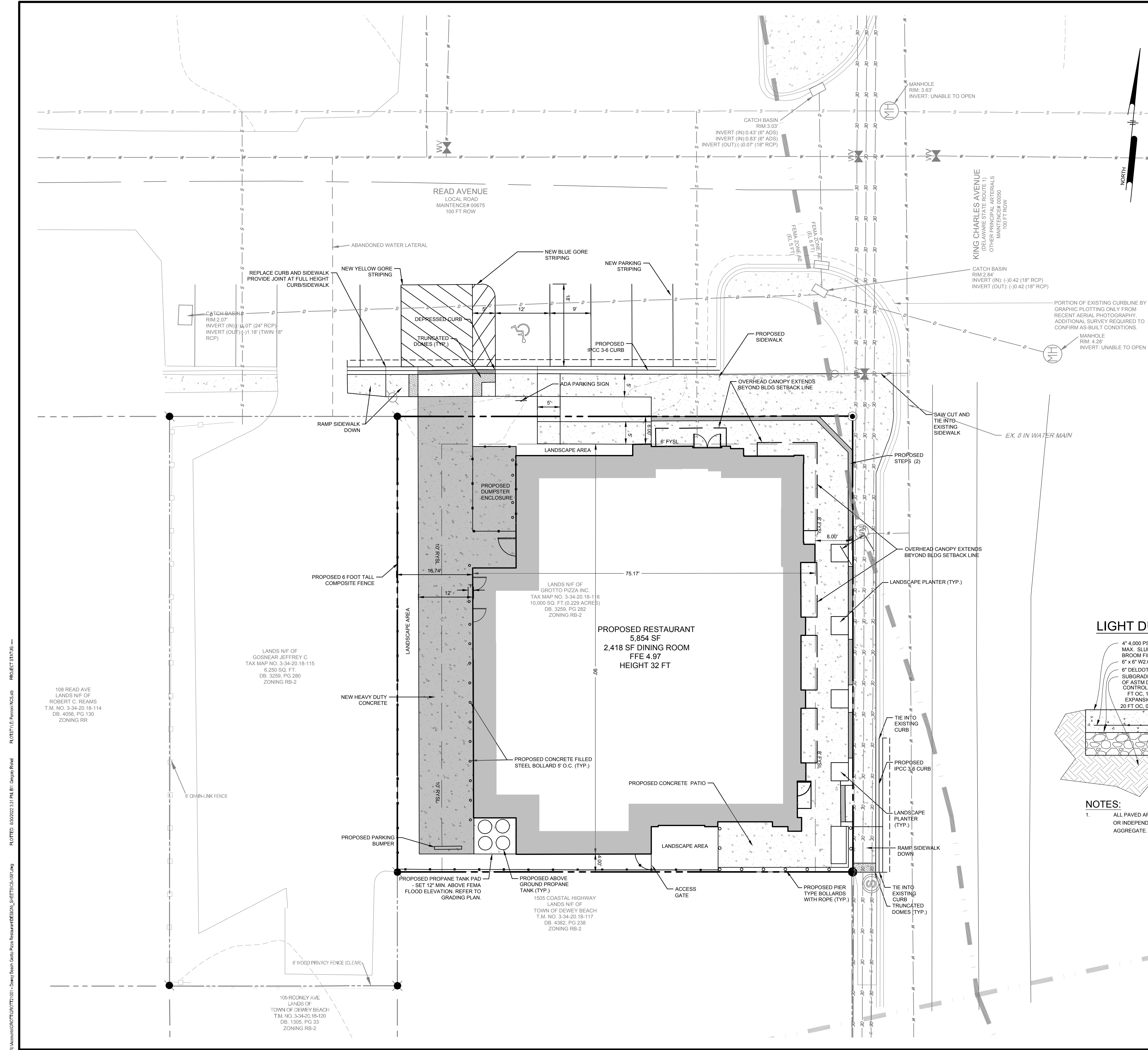
CS-0202
 SHEET **3** OF **11**



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Pennonni
PENNONI ASSOCIATES INC.
 Christina Executive Campus
 121 Continental Drive, Suite 207
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 T 302.655.4451 F 302.654.2885

U:\Admin\GROTT\GROTT21001 - Dewey Beach Grotto Pizza Restaurant\CS0202.dwg
 PLOTTED: 6/30/2022 2:10 PM BY: Andrew Shields
 PROJECT STATUS:



SITE DATA

EXISTING TAX PARCEL 334-20-18-116.00
 PROPERTY ADDRESS 1509 DELAWARE ROUTE 1, DEWEY BEACH, DE 19871
 PROPERTY OWNER GROTTO PIZZA DEWEY LLC
 PROPERTY OWNER ADDRESS 20376 COASTAL HIGHWAY, REHOBOTH BEACH, DELAWARE 19971
 GROSS LOT AREA 0.23 ACRES (10,000 SF)
 EXISTING ZONING RB-2 - RESORT BUSINESS
 EXISTING USE PROFESSIONAL OFFICE
 PROPOSED USE RESTAURANT (CONDITIONAL)
 WATER SERVICE SUSSEX COUNTY
 SEWER SERVICE SUSSEX COUNTY

ZONING DATA

	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT SIZE (SF)	5,000	10,000	10,000
MINIMUM FRONT YARD (FT)	6	6.2	6
MINIMUM FRONT YARD ABUTTING S.R. 1.8 (FT)		6.2	8
MINIMUM SIDE YARD (FT)	0	29.7	4
MINIMUM REAR YARD (FT)	10	53.5	16.74
MIN. ABUTTING RESIDENTIAL DISTRICT	10	N/A	N/A
FLOOR TO AREA RATIO(FAR)	1.2	0.25	0.59
MAX. BLDG HEIGHT ABOVE FFE (FT)	32 (3 STORIES)	20 (1 STORY)	32 (1 STORY)
MINIMUM PLANTING IN S.R 1 SETBACK	10% (80 SF)	48% (380 SF)	11% (88 SF)
BUILDING AREA (SF)		2,475	5,854
OTHER IMPERVIOUS AREA (SF)		6,698	3,084
PERVIOUS AREA (SF)		827	1,062

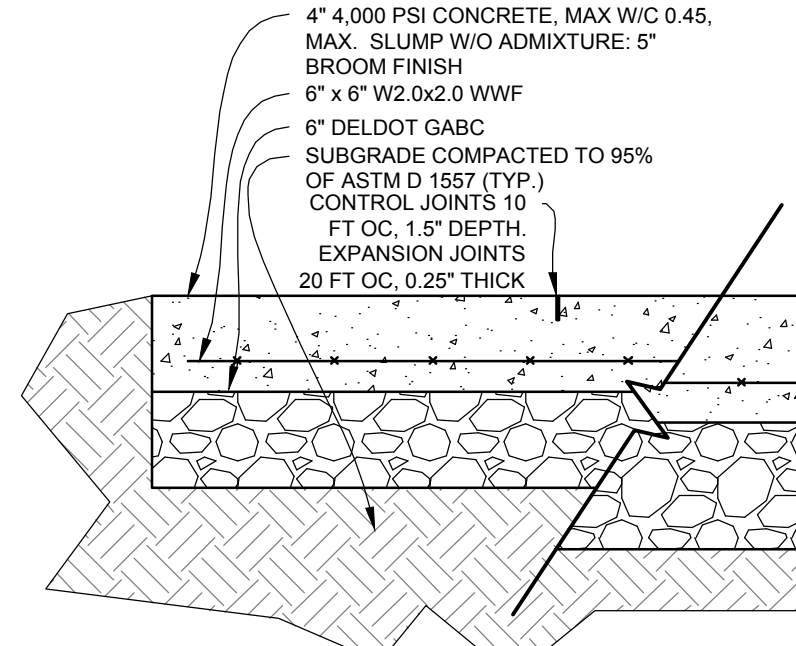
PARKING RATIONALE

OFF-STREET PARKING REQUIREMENT RESTAURANTS WITH <4,000 SF DINING ROOM OFF-STREET PARKING NOT REQUIRED
 PROPOSED OFF-STREET PARKING 0 SPACES
 PROPOSED OFF-STREET LOADING 1 SPACE

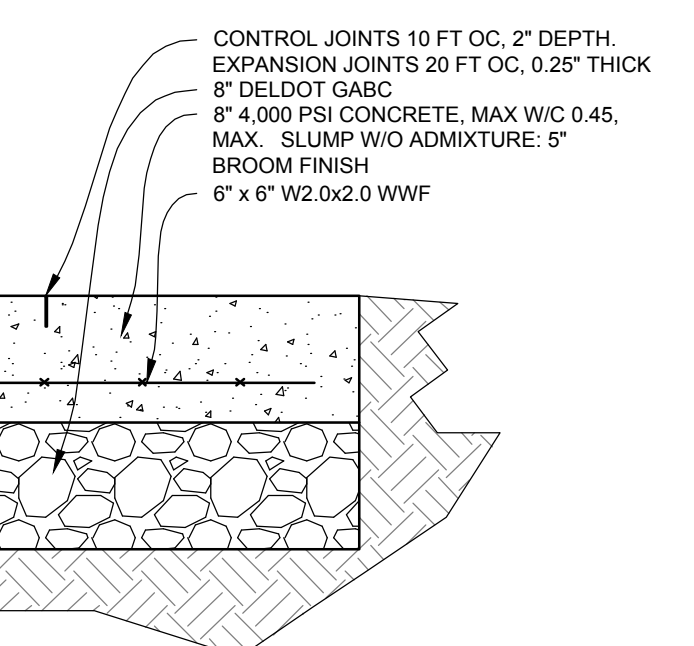
FLOOD DATA

FEMA MAP: 10005C0354K EFF. 3/16/2015
 FLOOD ZONING AE
 BASE FLOOD ELEVATION 5.0 (NAVD88)
 PROPOSED BUILDING CONSTRUCTION SHALL MEET THE REQUIREMENTS OUTLINED IN ARTICLE IV, SECTION 101.21 OF THE TOWN OF DEWEY BEACH CODE.
 4'- FOOT TALL FLOOD BARRIERS (MIN. 1 FOOT ABOVE BASE FLOOD ELEVATIONS) SHALL BE INSTALLED ALL DOOR OPENINGS. ALL WALL AND WINDOWS SHALL BE SEALED WATER TIGHT. BUILDINGS, WALK-IN UNITS, AND LIQUID FUEL TANKS SHALL BE ANCHORED TO PREVENT UPLIFT. ALL EQUIPMENT TO BE LOCATED A MINIMUM OF 1 FOOT ABOVE BASE FLOOD ELEVATION.

LIGHT DUTY



HEAVY DUTY



NOTES:

- ALL PAVED AREAS SHALL BE PROOF ROLLED IN THE PRESENCE OF SITE ENGINEER OR INDEPENDENT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF AGGREGATE.

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SITE PLAN

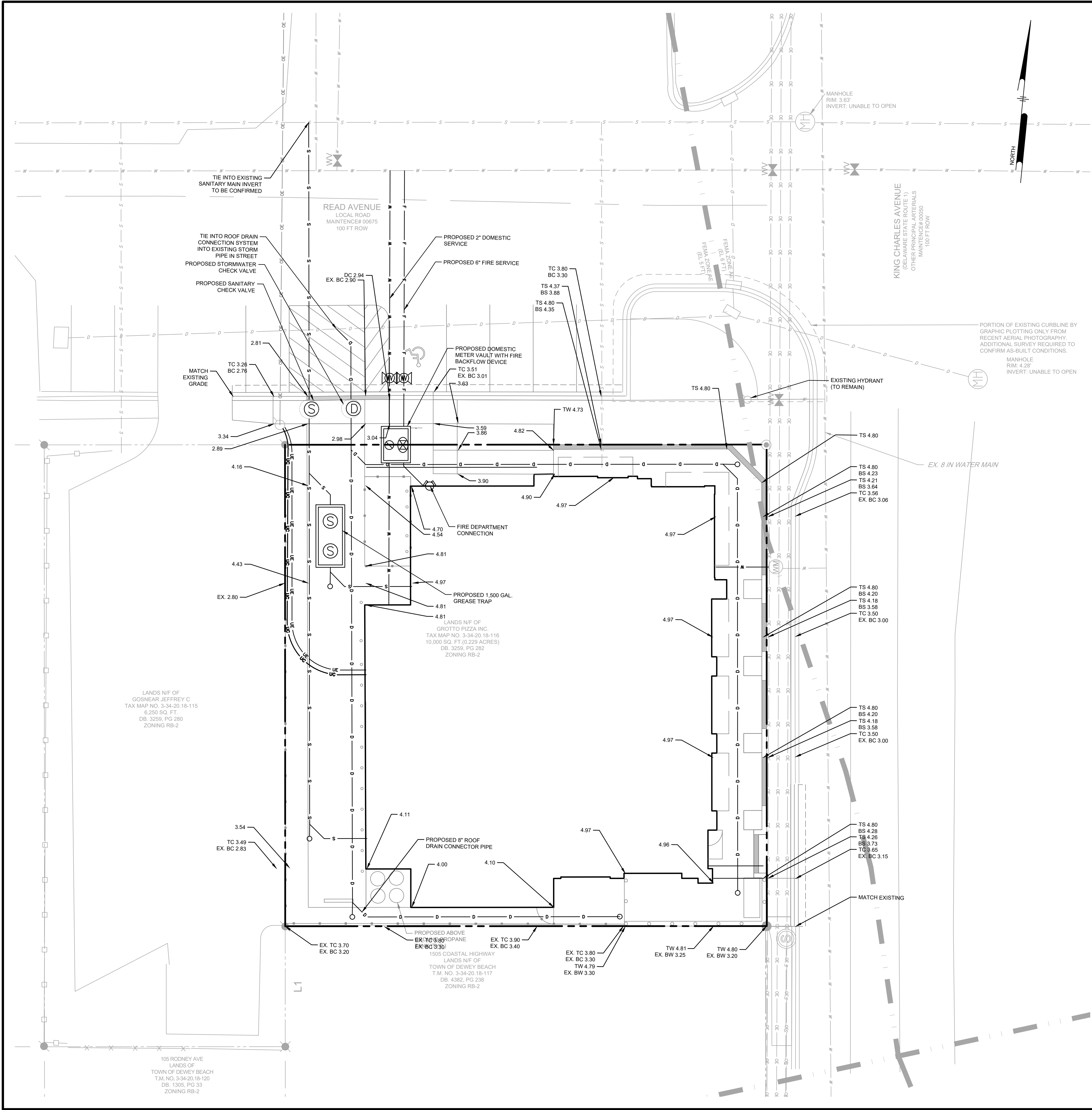
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NO.	DATE	REVISIONS	BY
1	6/30/22	PER TOWN COMMENTS (6/21/22)	JAB

PROJECT	GROTT21001
DATE	6/30/2022
DRAWING SCALE	1"=10'
DRAWN BY	ALS
APPROVED BY	GBR

NOT FOR CONSTRUCTION

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 PLOTTED: 6/30/2022 3:31 PM BY: Gregory Rieck
 FLOTTED: 6/30/2022 3:31 PM BY: Gregory Rieck



GRADING NOTES:

1. COMPACTION OF THE FILL SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). FILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN COMPACTED FILL THICKNESS. CORRECTION OF ANY SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. MATERIAL THAT CANNOT BE COMPACTED AS REQUIRED SHALL BE BROUGHT TO THE ATTENTION OF A GEOTECHNICAL ENGINEER, OVER EXCAVATED, AND THEN REPLACED WITH SUITABLE FILL.
2. THE CONTRACTOR WILL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.
3. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
4. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR, SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET BUILDING STANDARDS.
5. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AREA AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
6. MAXIMUM SIDEWALK CROSS SLOPE IS 2% AND MINIMUM SIDEWALK CROSS SLOPE IS 1%.
7. VERTICAL ELEVATIONS ARE BASED ON NAVD 88.
8. ALL SLOPES MAXIMUM 3:1 UNLESS OTHERWISE NOTED.

UTILITY NOTES:

1. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER.
2. UTILITIES ENTER THE PREMISES FROM PUBLIC STREETS OR RIGHTS OF WAY.
3. ALL NON-CONDUCTIVE UTILITIES SHALL BE INSTALLED WITH DETECTABLE WARNING TAPE OR TRACER WIRE.
4. ALL PIPE LENGTHS AND DISTANCES BETWEEN STRUCTURES ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE ALONG A HORIZONTAL PLANE.
5. ALL STORM DRAINAGE PIPE SHALL BE LAID ON SMOOTH CONTINUOUS GRADES WITH NO VISIBLE BENDS AT JOINTS.
6. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
7. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN COMPACTED FILL THICKNESS. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. CONTRACTOR MUST APPLY FOR ALL UTILITY CONNECTION APPLICATIONS.
9. CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONNECTION FEES.
10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS; HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
11. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE TO CURBING, PAVING, AND COMPACTED SUBGRADE.
12. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATION OF THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE AND PROTECT THEIR FACILITIES.
13. CONTRACTOR SHALL EXCAVATE ONLY AS MUCH TRENCH WHICH PIPE CAN BE INSTALLED AND TRENCH BACKFILLED BY THE END OF EACH WORK DAY.
14. ALL UNDERGROUND UTILITY TRENCHES SHALL BE BACKFILLED WITH SAFE CLEAN FILL.
15. ALL EXISTING CASTING AND INLET TOPS OR GRATES MUST BE ADJUSTED TO THE PROPOSED GRADE, UNLESS OTHERWISE INDICATED.
16. THE MINIMUM VERTICAL SEPARATION BETWEEN CROSSING UTILITIES SHALL BE 18 INCHES.
17. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND GRAVITY SEWERS SHALL BE 10 FT.

Pennoni
PENNONI ASSOCIATES INC.
 Christina Executive Campus
 121 Continental Drive, Suite 207
 Newark, DE 19713-4310
 T 302.655.4451 F 302.654.2895

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GROTTO PIZZA RESTAURANT
 1508 COASTAL HWY, DE-1
 DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

GRADING AND UTILITY PLAN

GROTTO PIZZA INC.
 20376 COASTAL HIGHWAY
 REHOBOTH BEACH, DELAWARE 19971

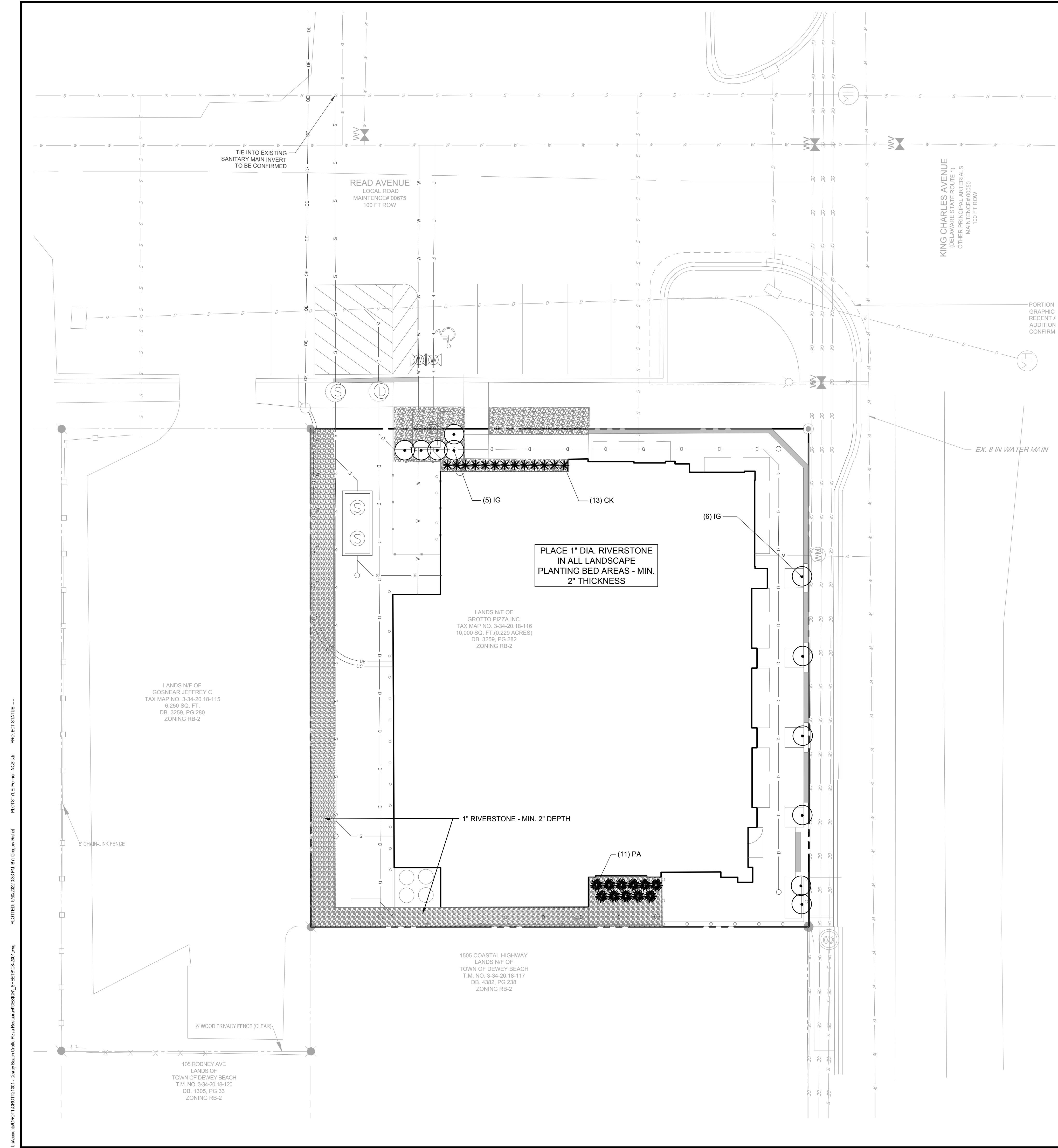
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PROJECT	GROTT21001
DATE	6/30/2022
DRAWING SCALE	1"=10'
DRAWN BY	ALS
APPROVED BY	GBR

NOT FOR CONSTRUCTION

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 PLOTTED: Pennoni MCD.spl



PLANTING NOTES AND SPECIFICATIONS

- ALL TOPSOIL SHALL BE A MINIMUM 4" IN ALL SOD AREAS, 6" IN SEEDED AREAS AND 8" IN TREE, SHRUB AND GROUND COVER BEDS, INCLUDING PARKING LOT ISLAND BEDS.
- PLANTING BEHIND PERPENDICULAR PARKING IS TO BE LOCATED A MINIMUM OF 5' BEHIND THE CURB LINE.
- ALL LANDSCAPE AND GRASS AREAS ARE TO BE HAND RAKED AND LEFT CLEAR OF ALL STONES, ROCK, CONSTRUCTION DEBRIS AND ANY UNSUITABLE MATERIALS.
- LANDSCAPE CONTRACTOR WILL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION AND PLANTING INSTALLATION.
- ALL PROPOSED LANDSCAPING TO BE NURSERY GROWN, TYPICAL OF THEIR SPECIES OR VARIETY. THEY ARE TO HAVE NORMAL VIGOROUS ROOT SYSTEMS, FREE FROM DEFECTS AND INFECTIONS AND IN ACCORDANCE WITH ANSI Z60.1
- ALL PROPOSED PLANTINGS SHOULD BE INSTALLED PER STANDARDS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, LATEST EDITION, AND STATE NURSERY/LANDSCAPE ASSOCIATIONS WITH REGARD TO PLANTING, PIT SIZE, BACKFILL MIXTURE, STAKING AND GUYING.
- ALL PLANTING CONTAINERS AND BASKETS SHALL BE REMOVED DURING PLANTING. ALL PLANTS SHALL BE SET PLUMB AND POSITIONED SO THAT THE TOP OF THE ROOT COLLAR MATCHES, OR IS NO MORE THAN TWO (2) INCHES ABOVE, FINISHED GRADE. REPLACE AMENDED BACKFILL IN 6-INCH LAYERS AND COMPACT BACKFILL TO ELIMINATE VOIDS. CONTRACTOR SHALL PROVIDE A FOUR-INCH HIGH EARTHEN WATERING SAUCER ALONG THE PERIMETER OF EACH PLANTING PIT. CONTRACTOR SHALL WATER NEWLY PLANTED VEGETATION PRIOR TO MULCHING PLANTING PIT. ALL VOIDS SHALL BE FILLED AND SETTLING MITIGATED AS REQUIRED.
- AFTER INITIAL WATERING AND PRIOR TO MULCHING, CONTRACTOR SHALL APPLY HERBICIDES AND PRE-EMERGENT HERBICIDES AS REQUIRED TO ELIMINATE ANY WEED SEEDS OR PLANTS PRESENT ON ROOT BALL.
- ALL PLANTING BEDS AND PITS SHALL BE MULCHED WITH DOUBLE GROUND HARDWOOD MULCH AT A MINIMUM DEPTH OF 3".
- SEEDBED PREPARATION:
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS OR FERTILIZER MAY BE APPLIED AT THE RATE OF 260 POUNDS PER ACRE OR 6 POUNDS PER 1000 SQUARE FEET USING 10-20-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS 4-1-2 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED IN LIEU OF TOP DRESSING.
 - WORK LIME AND FERTILIZER INTO THE SOIL AS PRACTICAL TO A DEPTH OF 4-INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD PARALLEL TO THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
 - INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS NOTED ABOVE FOR SEEDED AREAS.
 - IN AREAS DESIGNATED AS SOD, FESCUE SOD IS TO BE INSTALLED ON MINIMUM 4" TOPSOIL. AREAS TO BE SODDED ARE TO BE PREPARED AS NOTED ABOVE FOR SEEDED AREAS.
- TOPSOIL WITH A QUALITY ORGANIC SOIL AMENDMENT SHALL BE USED FOR ALL PLANTING AND SEEDING OPERATIONS.
- NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO EXCAVATING PLANT PITS. PLANT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID INTERFERENCE WITH UNDERGROUND UTILITIES.
- SHOULD ANY DISCREPANCY ARISE BETWEEN THE PLANTING PLAN AND THE PLANTING SCHEDULE, THE PLAN SHALL GOVERN AS TO THE QUANTITY OF PLANT MATERIAL.
- ALL SHADE TREES TO BE PRUNED OF SIDE BRANCHES TO A HEIGHT OF 6' ABOVE GRADE EXCEPT WHERE NOTED IN PLANT SCHEDULE.
- ALL PLANT MATERIAL SHALL BE APPROVED UPON ARRIVAL TO THE SITE, UNLESS OTHERWISE NOTIFIED.
- PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED BY SIMILAR PLANTS PRIOR TO INSTALLATION, SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT AND NEW CASTLE COUNTY.
- DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO WORK AREA CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND SEEDING ALL DISTURBED AREAS.
- ALL PLANTS SPACED 7" O.C. OR CLOSER SHALL BE IN CONTINUOUS MULCHED BEDS.
- SEED ALL DISTURBED AREAS WITH GRASS SEED MIX SPECIFIED IN SEDIMENT CONTROL REQUIREMENTS.
- ALL PLANT MATERIAL SHALL BE WARRANTED AGAINST DEATH AND UNSATISFACTORY GROWTH FOR A MINIMUM PERIOD OF ONE YEAR AFTER THE DATE OF WRITTEN FINAL ACCEPTANCE BY THE MUNICIPALITY. ANY PLANT MATERIAL THAT DIES OR PERFORMS POORLY DURING THE WARRANTY PERIOD SHALL BE PROMPTLY REMOVED AND REPLACED IN KIND.

PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT CONT.	HEIGHT	REMARKS
IG	11	ILEX CRENATA 'GREEN LUSTRE'	GREEN LUSTER JAPANESE HOLLY	#5	CONT.	30" - 36"	MIN. 3 STEMS
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT CONT.	HEIGHT	REMARKS
CK	13	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	3 GAL	CONT.		
PA	11	PENNISETUM ALUPECUROIDES 'HAMEL'	HAMEL FOUNTAIN GRASS	3 GAL	CONT.		

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 Christina Executive Campus
 121 Continental Drive, Suite 207
 Newark, DE 19713-4310
 T 302.655.4451 F 302.654.2885

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GROTTO PIZZA RESTAURANT
 1509 COASTAL HWY., DE-1
 DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

LANDSCAPING PLAN

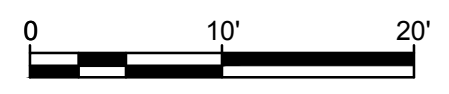
GROTTO PIZZA INC.
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 REHOBOTH BEACH, DELAWARE 19871

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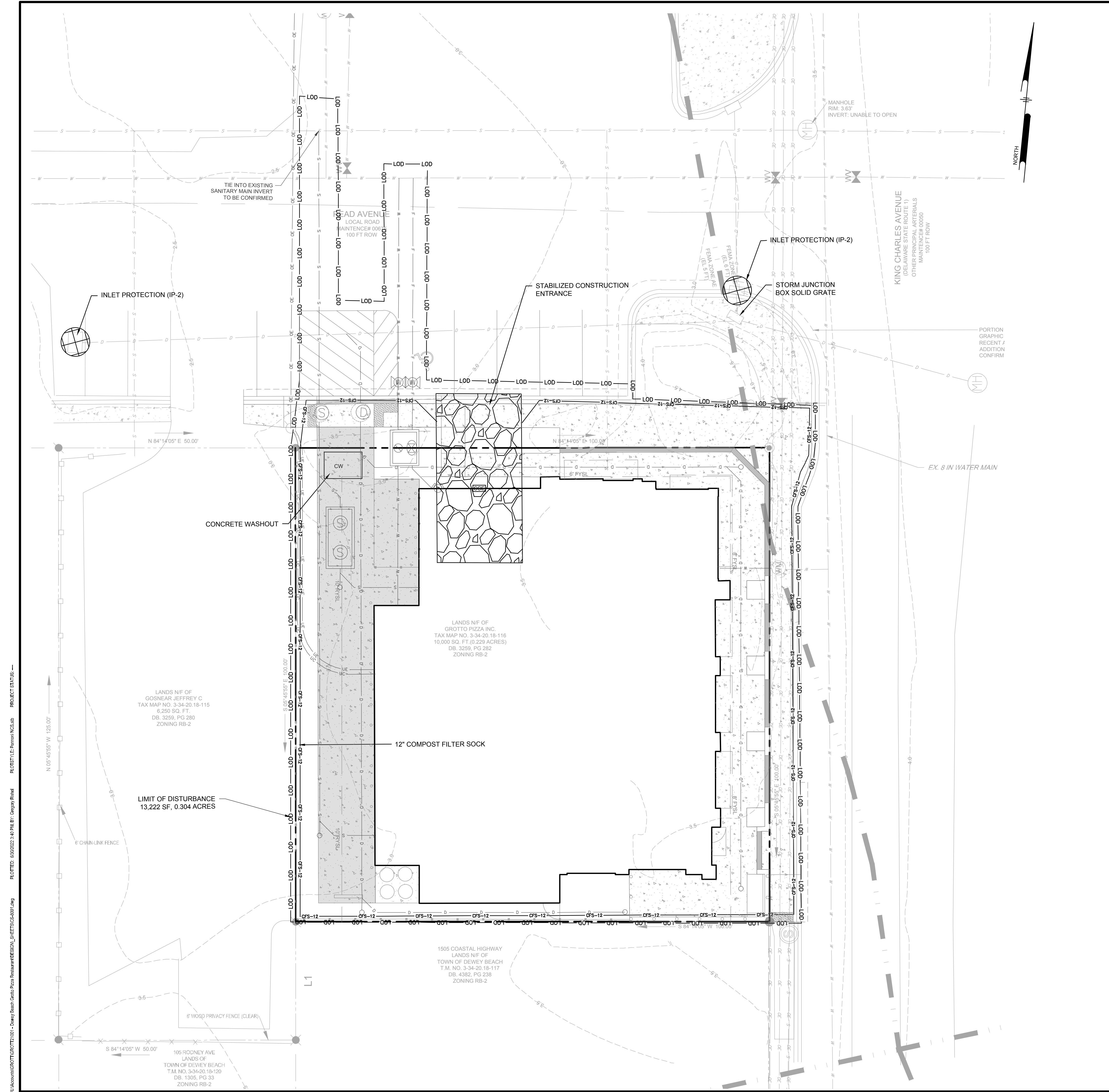
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PROJECT	GROTT21001
DATE	6/24/2022
DRAWING SCALE	1"=10'
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APPROVED BY	GBR

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 PROJECT: GROTTO



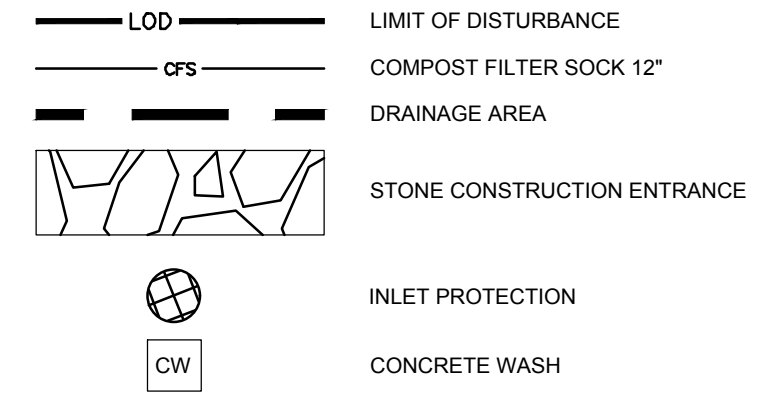
GENERAL NOTES:

1. THE DNREC, SEDIMENT AND STORMWATER PROGRAM (OR DELEGATED AGENCY) MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCING WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2. REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC OR THE DELEGATED AGENCY.
4. FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FOR ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REGULATIONS APPLY.
5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
6. AT ANYTIME A DEWATERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE, AND A DEWATERING PERMIT SHALL BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.
7. APPROVAL OF A SEDIMENT AND STORMWATER MANAGEMENT PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORMWATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS.
8. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.
9. BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGE IN ACCORDANCE WITH REQUIREMENTS OF 7, DE.C. Ch 60, REGULATIONS GOVERNING THE CONTROL OF WATER POLLUTION, SECTION 9.1.02, KNOWN AS SPECIAL CONDITIONS FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES, AND DEPARTMENT POLICIES, PROCEDURES, AND GUIDANCE.

SEQUENCE OF CONSTRUCTION:

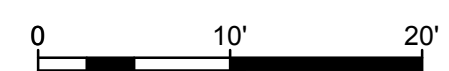
1. NOTIFY THE SUSSEX CONSERVATION DISTRICT SEDIMENT AND STORMWATER PROGRAM IN WRITING AT LEAST FIVE (5) DAYS PRIOR TO START OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN. PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE SCHEDULED AND CONDUCTED WITH THE AGENCY CONSTRUCTION SITE REVIEWER, THE LANDOWNER / DEVELOPER, CONTRACTOR, AND CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND.
2. BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHALL CALL MISS UTILITY AT 811 OR 1.800.282.8555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
3. ESTABLISH PERIMETER CONTROL IN PREPARATION OF AGENCY CONSTRUCTION SITE REVIEWER REVIEW / APPROVAL.
4. ALL PERIMETER CONTROLS ARE TO BE REVIEWED BY THE AGENCY CONSTRUCTION SITE REVIEWER AND APPROVED PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION.
5. NOTIFY THE SCD INSPECTOR AT LEAST THREE (3) DAYS PRIOR TO THE START OF THE STORMWATER SYSTEM CONSTRUCTION; STORMWATER FACILITIES MUST BE REVIEWED THROUGHOUT THEIR CONSTRUCTION.
6. ESTABLISH STABILIZED CONSTRUCTION ENTRANCE AND SOIL STOCKPILE AREA (IF NECESSARY) REFER TO STANDARD DETAIL.
7. START DEMOLITION, THEN WORK ON ASPHALT REMOVAL AND REGRADING.
8. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF, OR WIND, FROM LEAVING THE SITE. PERIMETER CONTROLS SHOULD BE CHECKED DAILY AND ADJUSTED AND/OR REPLACED TO FULLY COVER THE DISTURBED AREA. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR REPAIR MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.
8. PERMANENTLY SEED ALL DISTURBED AREAS PER THE SEEDING NOTES PROVIDED ON THE EROSION AND SEDIMENT CONTROL DETAILS.
9. UPON COMPLETION OF THE PROJECT, AND APPROVAL FROM AGENCIES, REMOVE ANY REMAINING EROSION CONTROL MEASURES.
10. THE TERMINATION OF THE CONSTRUCTION GENERAL PERMIT WILL REQUIRE SUBMISSION AND ACCEPTANCE OF THE POST-CONSTRUCTION VERIFICATION DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE. ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN.

LEGEND



OWNER INFORMATION

GROTTO PIZZA INC.
20376 COASTAL HIGHWAY
REHOBOTH BEACH, DE 19971
PHONE: (302) 227-3567
EMAIL: JGOSNEAR@GROTTOPIZZA.COM



NOT FOR CONSTRUCTION

OWNER CERTIFICATION

I, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED STANDARD PLAN AND THAT RESPONSIBLE PERSONNEL (I.E. BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT, AT A DENREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, I GRANT THE DENREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ON SITE REVIEWS.

GROTTO PIZZA INC. DATE

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PENNONI ASSOCIATES INC.
Christiana Executive Campus
121 Continental Drive, Suite 207
Newark, DE 19713-4310
T 302.655.4451 F 302.654.2895

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GROTTO PIZZA RESTAURANT
1509 COASTAL HWY, DE-1
DEWEY BEACH, LEWES & REHOBOTH HUNDRED, DELAWARE

EROSION AND SEDIMENT CONTROL PLAN

NO.	DATE	REVISIONS	BY
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PROJECT: GROTTO21001
DATE: 2022-06-24
DRAWING SCALE: 1"=10'
DRAWN BY: ALS
APPROVED BY: GBR

CS-8001
SHEET 7 OF 11

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PROJECT: GROTTO21001

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 PLOTTED: 6/30/2022 2:11 PM BY: Andrew Shields
 PROJECT: ESCOM

Standard Detail & Specifications

Stabilized Construct. Entrance

Plan

Profile

Section A-A (Std.)

Source: Adapted from VA ESC Handbook
 Symbol: SCE
 Detail No. DE-ESC-3.4.7 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Stabilized Construct. Entrance

Section A-A (Opt.)

Construction Notes:

- Stone size - Use DE #3 stone.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
- Thickness - Not less than size (6) inches.
- Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
- Geotextile - Type GS-1 placed over the entire area prior to placing of stone.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to top sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- Washing - Vehicle wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
- Inspection - Periodic inspection and needed maintenance shall be provided after each rain.

Source: Adapted from VA ESC Handbook
 Symbol: SCE
 Detail No. DE-ESC-3.4.7 Sheet 2 of 2 Effective FEB 2019

Standard Detail & Specifications

Soil Stockpile

Plan

Section A-A

Construction Notes:

- Locate stockpiles so that they are 50 feet from any storm drain inlet, open channel, wetland or waterbody. Redirect any concentrated flow around the stockpile using an approved erosion and sediment control measure.
- Secure the perimeter of the stockpile with an approved erosion and sediment control perimeter device.
- If stockpile is to remain inactive for more than 14 calendar days, the stockpile must be vegetated. Follow the temporary vegetation specifications. The vegetation chosen shall last the duration of the stockpile; the stockpile shall be restabilized if the temporary vegetation dies or erosion results.

Source: Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3
 Symbol: SP
 Detail No. DE-ESC-3.7.3 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Soil Stockpile

Construction Notes:

- Locate stockpiles so that they are 50 feet from any storm drain inlet, open channel, wetland or waterbody. Redirect any concentrated flow around the stockpile using an approved erosion and sediment control measure.
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Source: Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3
 Symbol: SP
 Detail No. DE-ESC-3.7.3 Sheet 2 of 2 Effective FEB 2019

Standard Detail & Specifications

Dust Control

Temporary Methods:

- Mulches - See DE-ESC-3.4.5, Standard Detail and Specifications for Mulching.
- Vegetative cover - See DE-ESC-3.4.3, Std. Detail and Specifications for Vegetative Stabilization.
- Adhesives - Use on mineral soils only (not effective on muck soils). Keep traffic off these areas. The following table may be used for general guidance.

Type of Emulsion	Water Dilution	Type of Nozzle	Apply Gal./Ac.
Latex emulsion	12.5:1	Fine spray	235
Resin-in-water emulsion	4:1	Fine spray	300
Acrylic emulsion (iron-traffic)	7:1	Coarse spray	450
Acrylic emulsion (traffic)	3.5:1	Coarse spray	350

Permanent Methods:

- Vegetative cover - See DE-ESC-3.4.3, Std. Detail and Specifications for Vegetative Stabilization.
- Stone - Apply layer of crushed stone or coarse gravel to protect soil surface.

Source: Adapted from VA ESC Handbook
 Symbol: SCE
 Detail No. DE-ESC-3.4.8 Sheet 1 of 1 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Section A-A

Source: Delaware ESC Handbook
 Symbol: SCE
 Detail No. DE-ESC-3.6.1 Sheet 1 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Pollution Prevention - Spill Prevention

- Fueling should only take place in signed designated areas, away from downstream drainage facilities and watercourses.
- Fueling must be with nozzles equipped with automatic shut-off to control drips. Do not top off.
- Protect the areas where equipment or vehicles are being repaired, maintained, fueled or parked from storm water run-on and runoff.
- Use barriers such as berms to prevent storm water run-on and runoff, and to contain spills.
- Place a "Fueling Area" sign next to each fueling area.
- Store hazardous materials such as fuel, solvents, oil and chemicals in secondary containment.
- Inspect vehicles and equipment for leaks on each day of use. Repair fluid and oil leaks immediately.
- Absorbent spill clean-up materials and spill kits must be available in fueling areas and on fuel trucks.
- If fueling is to take place at night, make sure the fueling area is sufficiently illuminated.
- Properly dispose of used oil, fluids, lubricants and spill clean-up materials.

CLEAN UP SPILLS

- If it is safe to do so, immediately contain and clean up any chemical and/or hazardous material spills.
- Properly dispose of used oil, fluids, lubricants and spill clean-up materials.
- Do not bury spills or wash them down with water.

LEAKS AND DRIPS

- Use drip pans or absorbent pads at all times. Place under and around leaky equipment.
- Do not allow oil, grease, fuel or chemicals to drip onto the ground.
- Have spill kits and clean up material on-site.
- Repair leaky equipment promptly or remove problem vehicles and equipment from the site. Clean up contaminated soil immediately.
- Store contaminated waste in sealed containers constructed of suitable material. Label these containers properly.
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Source: Delaware ESC Handbook
 Symbol: SCE
 Detail No. DE-ESC-3.6.1 Sheet 2 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Notes:

The Construction Site Pollution Prevention Plan should include the following elements:

- Material Inventory**

Document the storage and use of the following materials:

 - Concrete
 - Detergents
 - Paints (enamel and latex)
 - Cleaning solvents
 - Pesticides
 - Wood scraps
 - Fertilizers
 - Petroleum based products
- Good housekeeping practices**
 - Store only enough product required to do the job.
 - All materials shall be stored in a neat, orderly manner in their original labeled containers and covered.
 - Substances shall not be mixed.
 - When possible, all of a product shall be used up prior to disposal of the container.
 - Manufacturers' instructions for disposal shall be strictly adhered to.
 - The site foreman shall designate someone to inspect all BMPs daily.
- Waste management practices**
 - All waste materials shall be collected and stored in securely lidded dumpsters in a location that does not drain to a waterbody.
 - Waste materials shall be salvaged and/or recycled whenever possible.
 - The dumpsters shall be emptied a minimum of twice per week, or more if necessary. The licensed trash hauler is responsible for cleaning out dumpsters.

Source: Adapted from USEPA Pub. 840-B-92-002
 Symbol: SCE
 Detail No. DE-ESC-3.6.1 Sheet 3 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Notes (cont.)

- Trash shall be disposed of in accordance with all applicable Delaware laws.
- Trash cans shall be placed at all lunch spots and littering is strictly prohibited. Recycle bins shall be placed near the construction trailer.
- If fertilizer bags can not be stored in a weather-proof location, they shall be kept on a pallet and covered with plastic sheeting which is overlapped and anchored.

- Equipment maintenance practices**
 - If possible, equipment should be taken to off-site commercial facilities for washing and maintenance.
 - If performed on-site, vehicles shall be washed with high-pressure water spray without detergents in an area contained by an impervious berm.
 - Drip pans shall be used for all equipment maintenance.
 - Equipment shall be inspected for leaks on a daily basis.
 - Washout from concrete trucks shall be disposed of in a temporary pit for hardening and proper disposal.
 - Fuel nozzles shall be equipped with automatic shut-off valves.
 - All used products such as oil, antifreeze, solvents and tires shall be disposed of in accordance with manufacturers' recommendations and local, state and federal laws and regulations.
 - Preventive maintenance shall be performed on all tanks, valves, pumps, pipes and other equipment as necessary.
 - Low or non-toxic substances shall be prioritized for use.

CONTACT INFORMATION

DNREC 24-Hour Toll Free Number: 800-662-8802
 DNREC Solid & Hazardous Waste Management Section: 302-739-9403

Source: Adapted from USEPA Pub. 840-B-92-002
 Symbol: SCE
 Detail No. DE-ESC-3.6.1 Sheet 4 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Notes (cont.)

- Contact information for reporting spills through the DNREC 24-Hour Toll Free Number shall be prominently posted.

- Education**
 - Best management practices for construction site pollution control shall be a part of regular progress meetings.
 - Information regarding waste management, equipment maintenance and spill prevention shall be prominently posted in the construction trailer.

Source: Adapted from USEPA Pub. 840-B-92-002
 Symbol: SCE
 Detail No. DE-ESC-3.6.1 Sheet 5 of 5 Effective FEB 2019

Standard Detail & Specifications

Silt Fence

Section

Plan

Source: Adapted from MD Stds. & Specs. for ESC
 Symbol: SF
 Detail No. DE-ESC-3.1.2.1 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Reinforced Silt Fence

Construction Notes:

- Welded wire fabric to be fastened securely to the fence posts with wire ties or staples.
- Filter cloth to be fastened securely to woven wire fence with ties spaced every 24 inches at top and mid-section.
- When two sections of fabric adjoin each other, they shall be overlapped by six inches and folded.
- Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

Materials:

- Posts: Steel either T or U or 2" x 2" hardwood
- Geotextile Fabric: Type GD-1
- Backing: Woven welded wire, 14 Ga., 2" X 4" mesh opening

Source: Adapted from Transco, Inc.
 Symbol: RSF
 Detail No. DE-ESC-3.1.2.2 Sheet 2 of 2 Effective FEB 2019

PENNONI ASSOCIATES INC.
 Christina Executive Campus
 121 Centennial Drive, Suite 207
 Newark, DE 19713-4310
 T 302.655.4451 F 302.654.2885

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 DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

GROTTO PIZZA INC.
 20376 COASTAL-HIGHWAY
 REHOBOTH BEACH, DELAWARE 19871

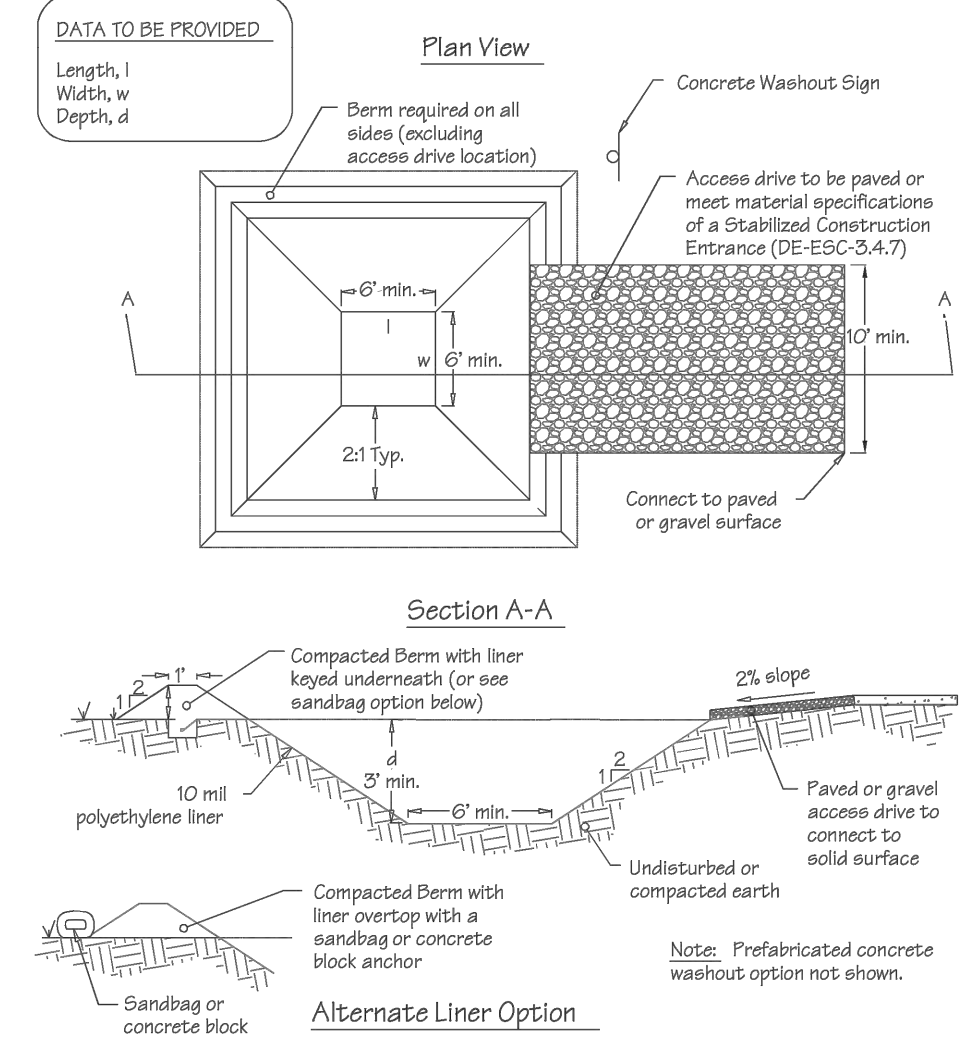
NO.	DATE	REVISIONS	BY
1	6/30	PER TOWN COMMENTS (6/21/22)	JAB

PROJECT: GROTT21001
 DATE: 2022-06-24
 DRAWING SCALE: AS NOTED
 DRAWN BY: ALS
 APPROVED BY: GBR

CS-8501

SHEET 8 OF 11

Standard Detail & Specifications
Concrete Washout



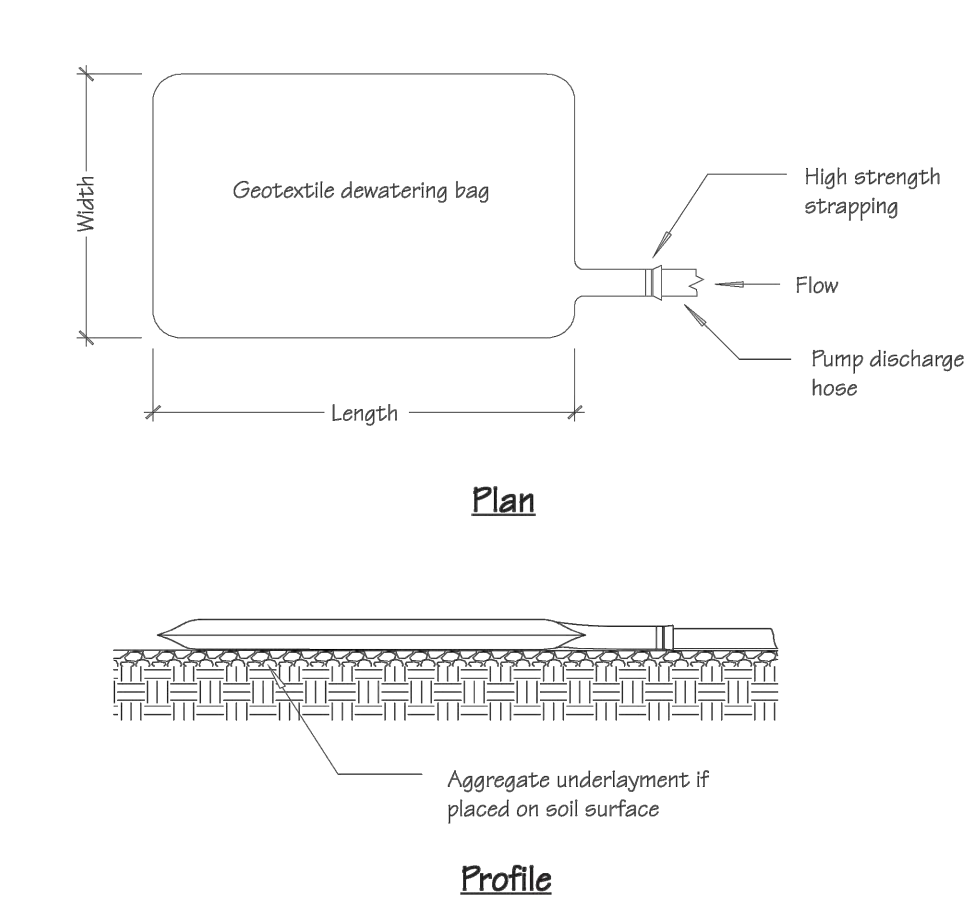
Source: Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3
Symbol: **CW**
Detail No. **DE-ESC-3.6.2**
Sheet 1 of 2
Effective FEB 2019

Standard Detail & Specifications
Concrete Washout

- Construction Notes:**
1. Locate washout area a minimum of 50 feet from open channels, stormdrain inlets, wetlands or waterbodies.
 2. Locate washout area so that it is accessible to concrete equipment service with a minimum 10 foot wide gravel accessway, but so it is not in a highly active construction area causing additional damage.
 3. Minimum dimensions for prefabricated units are 4 feet by 4 feet by 1 foot deep with a minimum 4mil polyethylene plastic liner. Minimum dimensions for constructed concrete washout areas are 6 feet by 6 feet by 3 feet deep, with a minimum 10mil polyethylene liner, 2:1 side slopes, and a 1 foot high by 1 foot wide compacted fill berm.
 4. The liner must be free of tears or holes and placed over smooth surfaces to prevent puncturing. For excavated washouts, anchor the liner underneath the berm or overlap with sandbags or concrete blocks to hold in place.
 5. Provide a sign designating the washout area, and for large construction sites, provide signs throughout directing traffic to its location.
 6. Allow washed out concrete mixture to harden through evaporation of the wastewater. Once the facility has reached 75 percent of its capacity, remove the hardened concrete by reusing the broken aggregate onsite, recycling, or disposing of offsite. The hardened material can be buried on site with minimum of 1 foot of clean, compacted fill.
 7. Apply a new liner before reusing the station for additional washouts after maintenance has occurred.

Source: Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3
Symbol: **CW**
Detail No. **DE-ESC-3.6.2**
Sheet 2 of 2
Effective FEB 2019

Standard Detail & Specifications
Geotextile Dewatering Bag



NOTE: Pre-manufactured products installed in accordance with manufacturer's recommendations may be used as an equivalent substitute with Departmental approval.

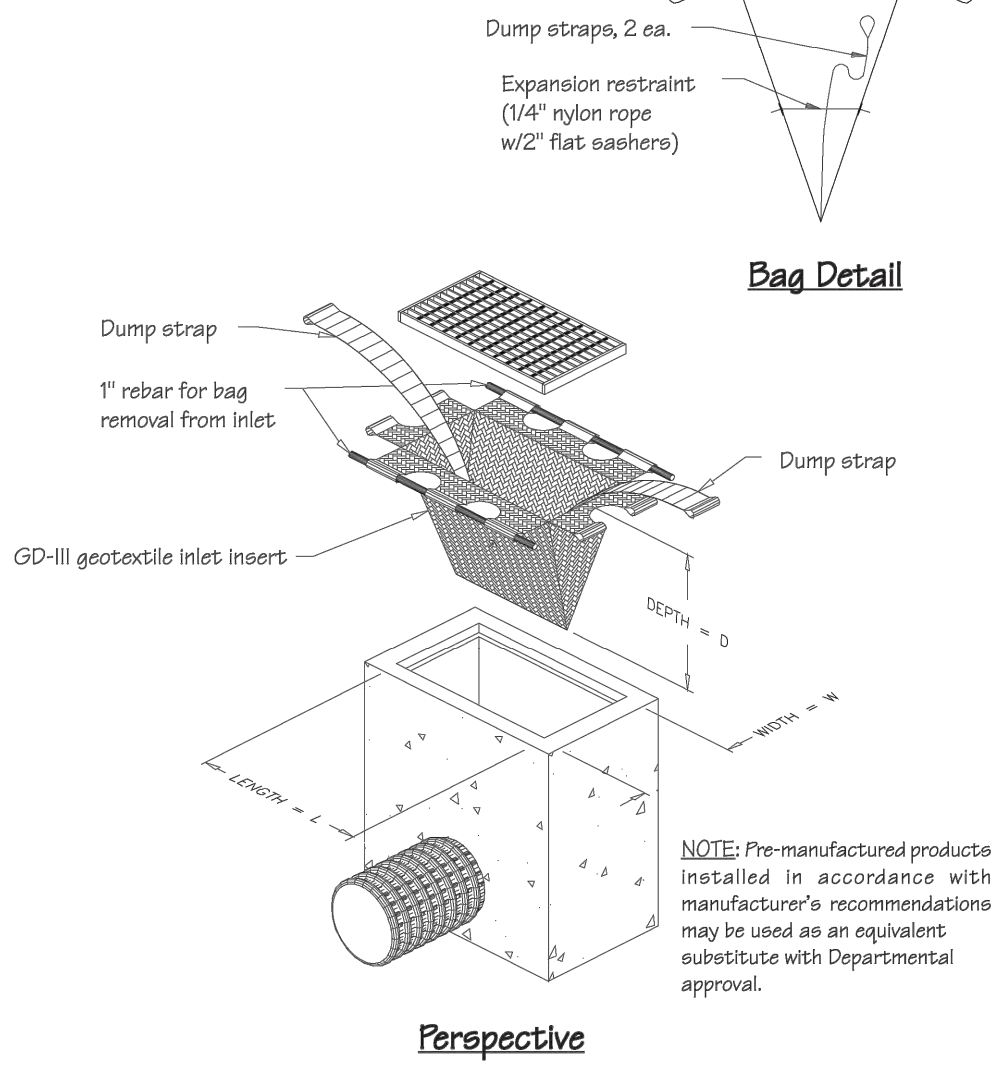
Source: Adapted from ACF Products, Inc.
Symbol: **GB**
Detail No. **DE-ESC-3.2.1.2**
Sheet 1 of 2
Effective FEB 2019

Standard Detail & Specifications
Geotextile Dewatering Bag

- Construction Notes:**
1. The dewatering bag should be placed so the incoming water flows into and through the bag, and then flow off the site without creating more erosion. The neck should be tied off tightly to stop the water from flowing out of the bag without going through the walls. The dewatering bag should be placed on a gravel bed to allow water to flow in all directions.
 2. The dewatering bag is considered full and should be disposed when it is impractical for the bag to filter the sediment out at a reasonable flow rate. At this point, it should be replaced with a new bag.
 3. Disposal may be accomplished as directed by the construction reviewer. If the site allows, the bag may be buried on site and seeded, visible fabric removed and seeded or removed from site to a proper disposal area.
- Materials:**
1. The geotextile fabric shall be a Type GD-IV.
 2. The dewatering bag shall be sewn with a double needle machine using high strength thread. All structural seams will be sewn with high strength, double stitched "I" type. Seam strength test will have the following minimum average roll values.
 3. The dewatering bag shall have an opening large enough to accommodate a four (4) inch discharge hose with attached strap to tie off the hose to prevent the pumped water from escaping from the bag without being filtered.

Source: Adapted from ACF Products, Inc.
Symbol: **GB**
Detail No. **DE-ESC-3.2.1.2**
Sheet 2 of 2
Effective FEB 2019

Standard Detail & Specifications
Inlet Protection - Type 2



Source: Adapted from ACF Products, Inc.
Symbol: **IP-2**
Detail No. **DE-ESC-3.1.5.2**
Sheet 1 of 2
Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

Mix #	Species*	Seeding Rate	Optimum Seeding Dates †				Planting Depth‡
			Coastal Plain	Piedmont	All	All	
1	Barley	125 4	G	A	O	A	1-2 inches
2	Oats	125 4	G	A	O	A	1-2 inches
3	Rye	125 4	G	A	O	A	1-2 inches
4	Perennial Ryegrass	125 4	G	A	O	A	0.5 inches
5	Annual Ryegrass	125 4	G	A	O	A	1-2 inches
6	Winter Wheat	125 4	G	A	O	A	1-2 inches
7	Foxtail Millet	30 PLS 0.7	O				0.5 inches
8	Hard Millet	20 PLS 0.5	O				0.5 inches

1. Winter seeding requires 3 tons per acre of straw mulch for proper stabilization.
2. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
3. Applicable on slopes 3:1 or less.
4. Fifty pounds per acre of Annual Leuzopodia may be added to 1/2 the seeding rate of any of the above species.
5. Use varieties currently recommended for Delaware. Contact a County Extension Office for information.
6. Warm season grasses such as Millet or Weeping Lovegrass may be used between 5/1 and 9/1 if desired. Seed at 3-5 lbs. per acre. Good on low fertility and acid areas. Seed after frost through summer at a depth of 0.5".

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source: Delaware ESC Handbook
Symbol:
Detail No. **DE-ESC-3.4.3**
Sheet 1 of 4
Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

Mix No.	Certified Seed*	Seeding Rate†	Optimum Seeding Dates †												Remarks	
			Coastal Plain	Piedmont	All	All	All	All	All	All	All	All	All	All		
1	Well Drained Soils	100 3.3	A	O	A	A	O	A	A	O	A	A	O	A	A	Good erosion control mix. Tolerant of low fertility soils. Longevity very difficult to measure. Demonstration only in hot weather.
2	Stenotaphrum Secrop Fescue Common Leguminosa†	30 0.80	A	O	A	O	A	O	A	O	A	O	A	O	A	Good erosion control mix. Tolerant of low fertility soils. Good wildlife cover and food.
3	Tall Fescue (Turf-type) or Strong Creeping Red Fescue or Perennial Ryegrass	50 1.15	O	A	O	O	A	O	A	O	A	O	A	O	A	Good erosion control mix. Tall Fescue for droughty conditions. Creeping Red Fescue for heavy shade. Failure to irrigate severely impacts establishment.
4	Strong Creeping Red Fescue Kentucky Bluegrass or Perennial Ryegrass	100 3.3	O	A	O	O	A	O	A	O	A	O	A	O	A	Stable roadway mix. Kentucky Bluegrass more drought tolerant. Use Redgrass for increased drought tolerance.
5	Buckwheat* or Cowpea Perennial Ryegrass or Blue Bluestem	10 0.23	O													Narrow warm-season mixture. Tolerant of low fertility soils. Drought tolerant. Poor shade tolerance. Mixture discouraged - seeds not available.
6	Red Fescue (Turf-type) or Tall Fescue	100 3.3	O	A	O	O	A	O	A	O	A	O	A	O	A	Three cultivars of Kentucky Bluegrass. Tall Fescue.
7	Red Bluestem (Turf-type) or Perennial Ryegrass	20 0.60	O													All species are warm-season grasses and require irrigation during hot weather.
8	Blue Bluestem* or Annual Ryegrass	10 0.23	O													Creeping Red Fescue will provide erosion protection while the warm season grasses get established.

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source: Delaware ESC Handbook
Symbol:
Detail No. **DE-ESC-3.4.3**
Sheet 2 of 4
Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

Mix No.	Certified Seed*	Seeding Rate†	Optimum Seeding Dates †												Remarks	
			Coastal Plain	Piedmont	All	All	All	All	All	All	All	All	All			
9	Poorly Drained Soils	100 3.3	A	O	A	A	O	A	A	O	A	A	O	A	A	Quick stabilization of disturbed sites and waterways. Tolerant of low fertility soils. Good wildlife cover and food.
10	Red Clover*	10 0.23	A	O	A	O	A	O	A	O	A	O	A	O	A	Good erosion control, wildlife cover and wetland revegetation.
11	Tall Fescue Perennial Ryegrass Kentucky Bluegrass Blend	100 3.3	O	A	O	O	A	O	A	O	A	O	A	O	A	High value, high maintenance, high traffic, irrigation necessary. Well drained soils, full sun.
12	Tall Fescue Perennial Ryegrass Chewings Red Fescue Rough Ryegrass Kentucky Bluegrass	100 3.3	O	A	O	O	A	O	A	O	A	O	A	O	A	Moderate value, low maintenance, well drained soils, moderate maintenance.
13	Creeping Red Fescue Chewings Red Fescue Rough Ryegrass Kentucky Bluegrass	50 1.15	O	A	O	O	A	O	A	O	A	O	A	O	A	Shade tolerant, moderate maintenance.
14	Creeping Red Fescue Rough Ryegrass or Chewings Red Fescue	50 1.15	O	A	O	O	A	O	A	O	A	O	A	O	A	Shade tolerant, moderate maintenance.
15	Red Fescue	150 3.5	O	A	O	O	A	O	A	O	A	O	A	O	A	Monoculture, but performs well alone in lawns. Discouraged.

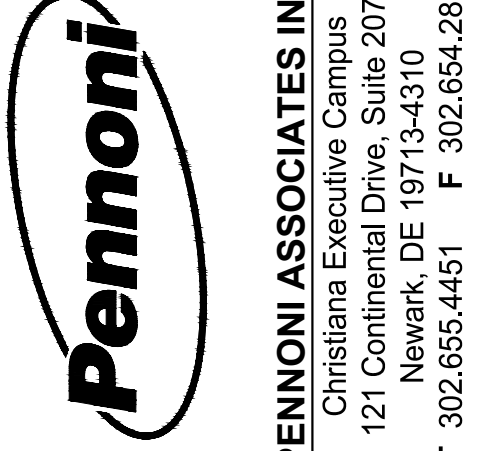
NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source: Delaware ESC Handbook
Symbol:
Detail No. **DE-ESC-3.4.3**
Sheet 3 of 4
Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

- Construction Notes:**
1. Site Preparation
 - a. Prior to seeding, install needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, and sediment basins.
 - b. Final grading and shaping is not necessary for temporary seedings.
 2. Seedbed Preparation
 - a. It is important to prepare a good seedbed to insure the success of establishing vegetation. The seedbed should be well prepared, loose, uniform, and free of large clods, rocks, and other objectionable material. The soil surface should not be compacted or crusted.
 3. Soil Amendments
 - a. Lime - Apply liming materials based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply dolomitic limestone at the rate of 1 to 2 tons per acre. Apply limestone uniformly and incorporate into the top 4 to 6 inches of soil.
 - b. Fertilizer - Apply fertilizer based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply a formulation of 10-10-10 at the rate of 600 pounds per acre. Apply fertilizer uniformly and incorporate into the top 4 to 6 inches of soil.
 4. Seeding
 - a. For **temporary stabilization**, select a mixture from **Sheet 1**. For a **permanent stabilization**, select a mixture from **Sheet 2** or **Sheet 3** depending on the conditions. Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.
 - b. Apply seed uniformly with a broadcast seeder, drill, cut/packer seeder or hydroseeder. All seed will be applied at the recommended rate and planting depth.
 - c. Seed that has been broadcast should be covered by raking or dragging and then lightly tamped into place using a roller or cut/packer. If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be done immediately and without interruption.
 5. Mulching
 - a. All mulching shall be done in accordance with detail **DE-ESC-3.4.5**.

Source: Delaware ESC Handbook
Symbol:
Detail No. **DE-ESC-3.4.3**
Sheet 4 of 4
Effective FEB 2019



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Christiana Executive Campus
121 Continental Drive, Suite 207
Newark, DE 19713-4310
T 302.655.4451 F 302.654.2895

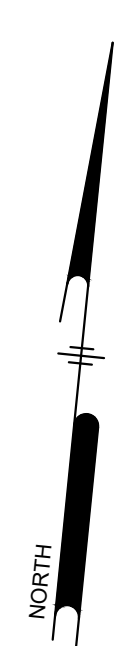
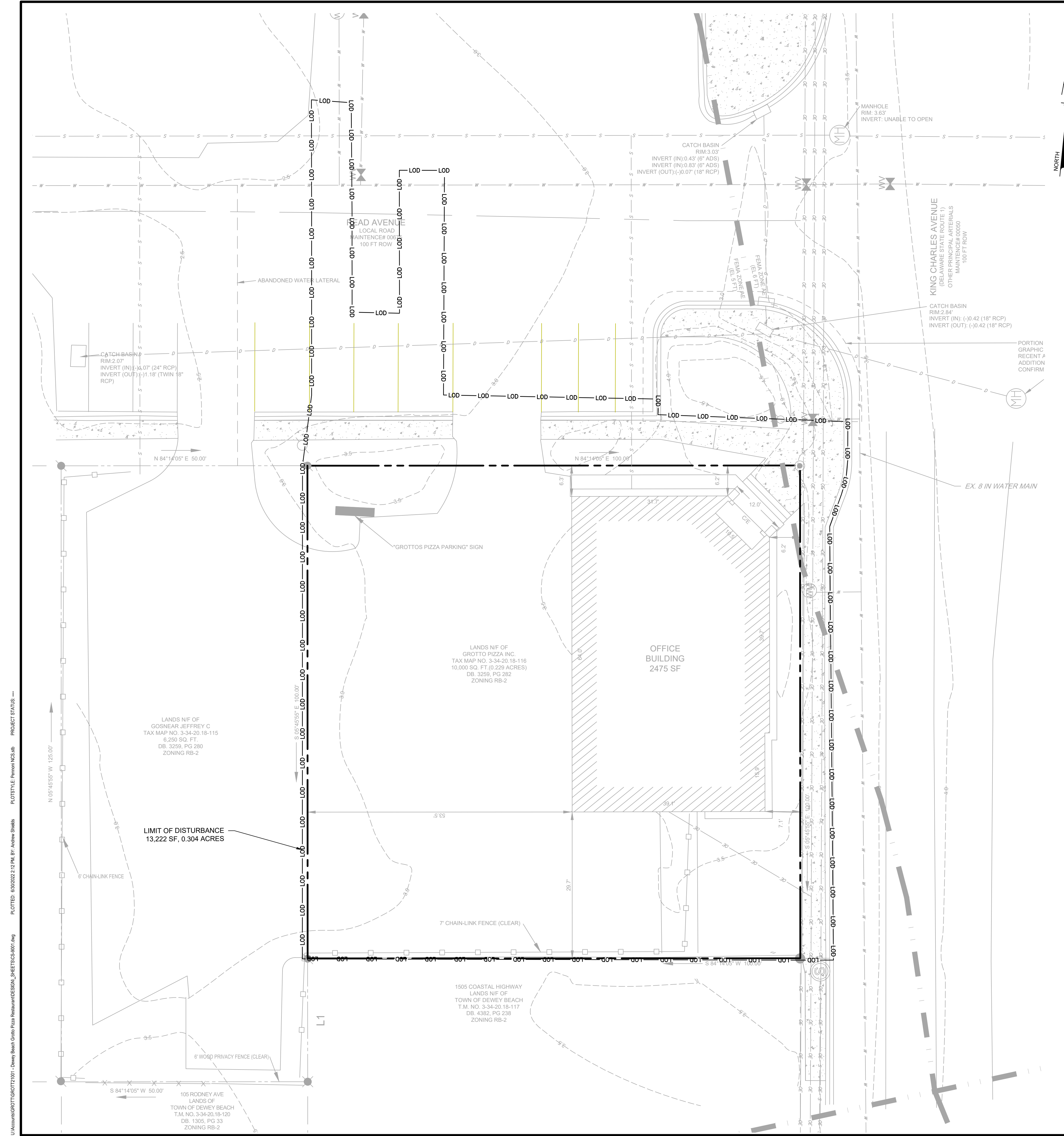
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1508 COASTAL HWY, DE-1
DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

GROTTO PIZZA INC.
20376 COASTAL HIGHWAY
REHOBOTH BEACH, DELAWARE 19871

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1	6/30	PER TOWN COMMENTS (02/02/22)	JAB

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PROJECT: **GROTTO21001**
DATE: **2022-06-24**
DRAWING SCALE: **AS NOTED**
DRAWN BY: **ALS**
APPROVED BY: **GBR**



EXISTING DRAINAGE AREA (SF)				
DRAINAGE AREA	IMPRV. (98)	LAWN (80)	CN	TOTAL AREA
EDA-1	9,173	827	96	10,000



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PENNONI ASSOCIATES INC.
 Christina Executive Campus
 121 Continental Drive, Suite 207
 Newark, DE 19713-4310
 T 302.655.4451 F 302.654.2885

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 1508 COASTAL HWY., DE-1
 DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

PRE-DEVELOPMENT DRAINAGE AREA PLAN

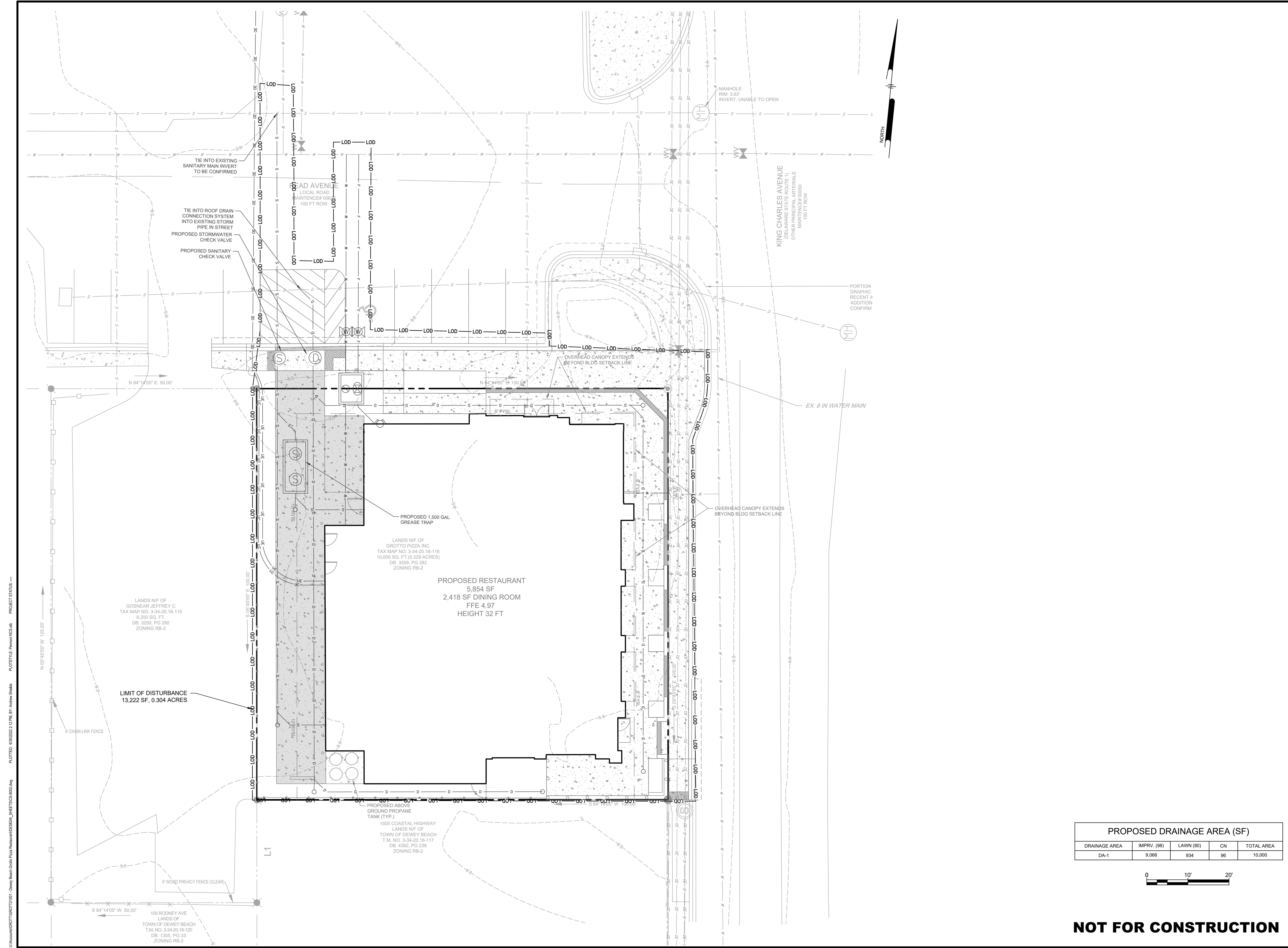
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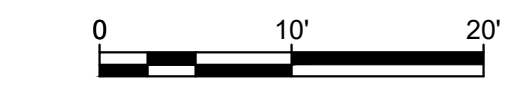
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DATE	2022-06-24
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DRAWN BY	ALS
APPROVED BY	GBR

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 PLOTTED: 6/30/22 2:12 PM BY: Andrew Shields PROJECT STATUS: —

PROPOSED DRAINAGE AREA (SF)				
DRAINAGE AREA	IMPRV. (88)	LAWN (80)	CN	TOTAL AREA
DA-1	9,066	934	96	10,000



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PENNONI ASSOCIATES INC.
 Christina Executive Campus
 121 Continental Drive, Suite 207
 Newark, DE 19713-4310
 T 302.655.4451 F 302.654.2885

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GROTTO PIZZA RESTAURANT
 1508 COASTAL HWY, DE-1
 DEWEY BEACH, LEWES & REHOBETH HUNDRED, DELAWARE

POST-DEVELOPMENT DRAINAGE AREA PLAN

GROTTO PIZZA INC.
 20376 COASTAL HIGHWAY
 REHOBOTH BEACH, DELAWARE 19871

DATE	NO.	REVISIONS	BY
6/30/22	1	PER TOWN COMMENTS (6/21/22)	JAB

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PROJECT: **GROTT21001**
 DATE: 2022-06-24
 DRAWING SCALE: 1"= 20'
 DRAWN BY: ALS
 APPROVED BY: GBR

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 SHEET 11 OF 11