SURVEY BASE MAP LEGEND AND NOTES:

SYMBOL LEGEND

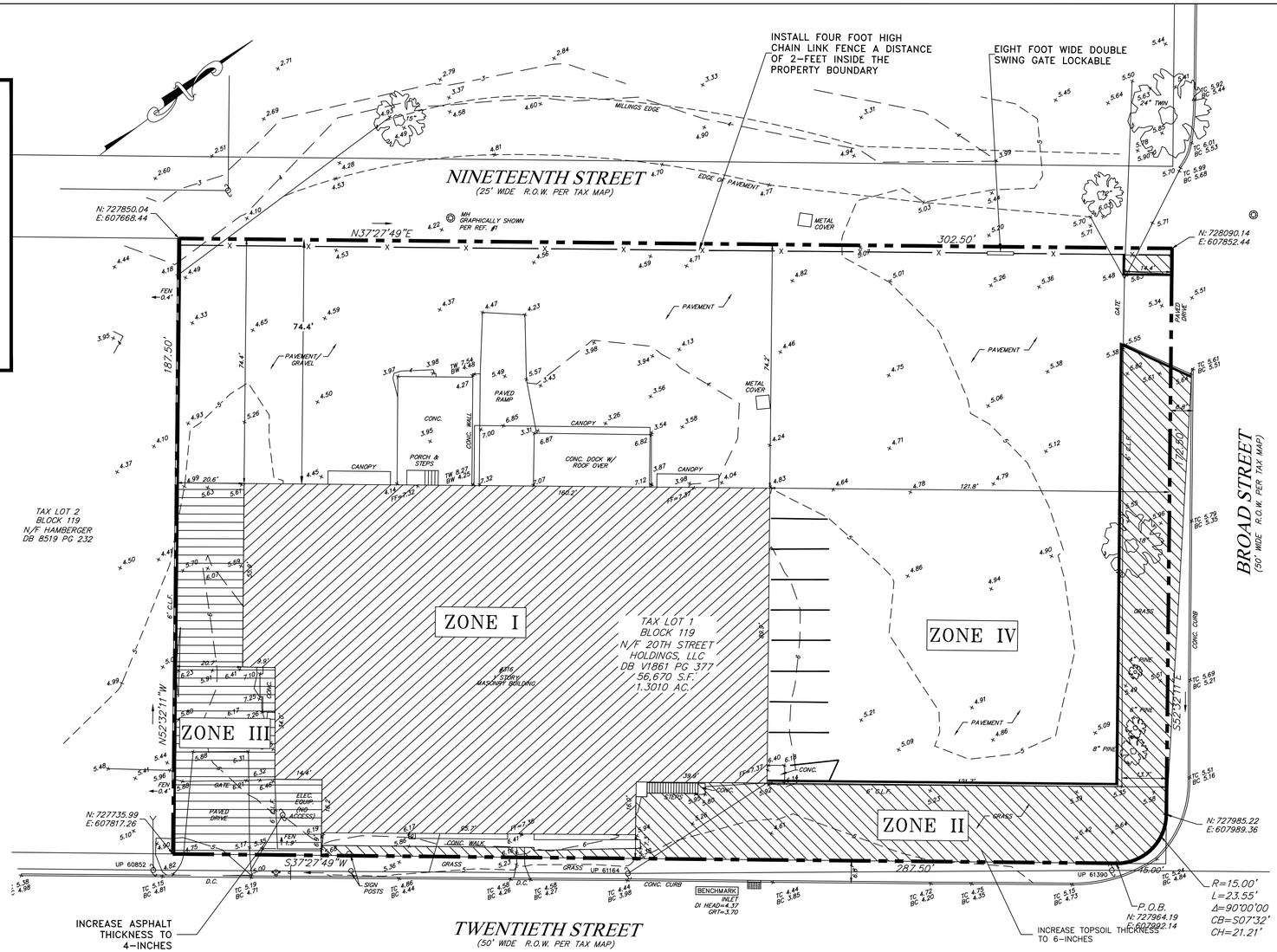
	CONC. MONUMENT FND		MAIL BOX
	I.P. / I.B. FND		CABLE TV BOX
	TACK / STAKE FND		TELEPHONE BOX
	WETLAND FLAG		A/C UNIT
x 103.55	SPOT ELEVATIONS		TRANSFORMER
	TRAFFIC SIGNAL POLE		ELECTRIC METER
	UTILITY POLE		GAS METER
	GUY WIRE		WATER METER
	UTILITY POLE W/LIGHT		WATER VALVE
	LIGHT POLE		GAS VALVE
	SIGN	CO	CLEAN OUT
	FIRE HYDRANT	SP	SPRINKLER HEAD
	BOLLARD		GAS
	MONITORING WELL		WATER
	WELL		ELECTRIC
	MANHOLE		TELEPHONE
	"A"–INLET		CABLE TV
	"B"–INLET		TREE
	"E"–INLET		SHRUB
	YARD INLET	D.C.	DEPRESSED CURB
	FLARED END SECTION	L.S.A.	LANDSCAPED AREA

GENERAL NOTES:

1. THIS SURVEY IS PREPARED IN ACCORDANCE WITH DOCUMENTS SUPPLIED BY THE CLIENT AND THOSE OBTAINED THROUGH SUPPLEMENTAL RESEARCH BY DPK. THE DOCUMENTS UTILIZED MAY OR MAY NOT REPRESENT ALL THE TITLE DOCUMENTS RELEVANT TO THE SUBJECT PROPERTY. IT IS STRONGLY SUGGESTED THAT A COMPLETE TITLE SEARCH BE SUPPLIED TO THE SURVEYOR FOR REVIEW PRIOR TO THE PLACEMENT OF OR ALTERATION TO IMPROVEMENTS ON THE PROPERTY.
2. THIS SURVEY IS SUBJECT TO ANY EASEMENTS OF RECORD AND ANY OTHER PERTINENT FACTS THAT A COMPLETE TITLE SEARCH MIGHT DISCLOSE.
3. THIS SURVEY REPRESENTS FIELD CONDITIONS AS OF SEPTEMBER 24, 2015.
4. THE UTILITIES SHOWN HAVE BEEN LOCATED FROM EVIDENCE OBSERVED ON THE SURFACE ONLY OR HAVE BEEN SHOWN GRAPHICALLY PER SUPPLIED MATERIALS. DPK CONSULTING MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN–SERVICE OR ABANDONED. DPK CONSULTING FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. DPK CONSULTING HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
5. PREMISES ARE COMMONLY KNOWN AS 316 TWENTIETH STREET, CARLSTADT, NEW JERSEY.
6. ALSO KNOWN AS LOT 1 IN BLOCK 119 AS SHOWN ON THE OFFICIAL TAX MAPS OF THE BOROUGH OF CARLSTADT, BERGEN COUNTY, NEW JERSEY.
7. A WRITTEN WAIVER AND DIRECTION NOT TO SET CORNER MARKERS HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO P.L. 2003, C.14 (C45:8–36.3) AND N.J.A.C. 13:40–5.1(D).
8. THE PROJECT VERTICAL DATUM IS BASED UPON NAVD 88 DERIVED USING LEICA GX1230 GPS RECEIVERS AND NEW JERSEY SMARTNET NETWORK.
9. IF THIS DOCUMENT DOES NOT CONTAIN A RAISED SEAL OF THE UNDERSIGNED PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT.

MAP REFERENCES:

1. MAP ENTITLED "SURVEY FOR THE PROPERTY LOCATED AT 312 20TH STREET, BOROUGH OF CARLSTADT, BERGEN COUNTY, NJ," PREPARED BY BEHAR SURVEYING ASSOCIATES, P.C., DATED MAY 30, 2014.



GENERAL NOTES:

1. THIS DRAWING HAS BEEN PREPARED WITH USE OF A SURVEY BASE MAP THAT WAS PROVIDED BY DPK CONSULTING. THE BASE MAP IS DATED OCTOBER 8, 2015, AND IS TITLED "SURVEY OF PROPERTY WITH TOPOGRAPHY, TAX LOT 1 BLOCK 119, 316 TWENTIETH STREET, BOROUGH OF CARLSTADT, BERGEN COUNTY, NEW JERSEY".
2. THIS DRAWING HAS BEEN DEVELOPED TO PROVIDE A GENERIC CAPPING APPROACH THAT WILL GENERALLY FULFILL THE SITE ENVIRONMENTAL CAPPING REQUIREMENT. IT DOES NOT PROVIDE DETAILS THAT PERTAIN TO RECONSTRUCTION OF THE EXISTING BUILDING AND AREAS DIRECTLY ADJACENT TO THE BUILDING, BECAUSE THE BUILDING RECONSTRUCTION PLAN IS NOT YET FINALIZED FOR CAPPING REFERENCE AND EVALUATION.
3. PERMITTING ISSUES HAVE BEEN ADDRESSED WITH THE NEW JERSEY MEADOWLANDS REGULATORY AGENCY, WITH THE BOROUGH OF CARLSTADT, WITH THE SOIL EROSION SEDIMENT CONTROL REGULATORY AGENCY, AND WITH THE NJDEP. THE MEADOWLANDS REGULATORY AGENCY HAS INFORMED EWMA THAT THEY WILL NOT REGULATE THE CAPPING WORK FOR THIS SITE, BECAUSE THAT WORK IS ALREADY REGULATED BY THE NJDEP SRP PROGRAM, WITH LSRP OVERSIGHT AND WITH NJPE OVERSIGHT. THE BOROUGH OF CARLSTADT HAS INFORMED EWMA THAT THEY WILL NOT REGULATE THE CAPPING WORK FOR THE SAME REASON GIVEN BY THE MEADOWLANDS REGULATORY AGENCY. THE SOIL EROSION SEDIMENT CONTROL AGENCY WILL NOT REGULATE THE CAPPING WORK BECAUSE THE DESIGNED AREA OF DISTURBANCE IS LESS THAN THEIR JURISDICTIONAL MINIMUM. THE SITE IS ALREADY REGULATED BY NJDEP.

ZONE CAPPING NOTES:

ZONE I

1. ZONE I IS COMPRISED OF THE BUILDING ROOF AND INTERIOR AREA AND ALSO EXTERIOR LOCATIONS THAT ARE DIRECTLY ADJACENT TO THE BUILDING.
2. TO FULFILL THE CAPPING PLAN REQUIREMENTS WITHIN ZONE I, ALL STORMWATER DRAINAGE FROM THE BUILDING SHALL BE ROUTED TO THE ADJACENT EXTERIOR ASPHALT SURFACES, AND THERE SHALL BE NO STORMWATER DISCHARGES OF ANY KIND TO GROUNDWATER THROUGH CAP OPENINGS OR THROUGH UTILITIES OR BY ANY OTHER MEANS.
3. BECAUSE THIS CAPPING PLAN IS GENERIC, DETAILS FOR CAPPING AND STORMWATER MANAGEMENT ARE NOT PROVIDED FOR EXTERIOR AREAS DIRECTLY ADJACENT TO THE BUILDING BECAUSE THE RE-DEVELOPMENT PLAN FOR THESE AREAS IS NOT CURRENTLY KNOWN.

ZONE II

1. ZONE II IS COMPRISED OF GRASSED AREAS THAT RESIDE ALONG TWO SIDES OF THE PROPERTY.
2. TO FULFILL THE CAPPING PLAN REQUIREMENTS WITHIN ZONE II, THE TOPSOIL THICKNESS IN THIS AREA IS TO BE INCREASED TO A TOTAL OF 6-INCHES BY IMPORTING CERTIFIED CLEAN TOPSOIL TO THE PROPERTY. WHEN THE TOPSOIL IS IMPORTED, THE ENTIRE ZONE II AREA IS TO BE SMOOTH GRADED, PLANTED WITH SEED, MULCHED, FERTILIZED AND WATERED IN ACCORDANCE WITH GOOD LAWN PLANTING PRACTICES THAT HAVE PROVEN SUCCESSFUL IN THE CARLSTADT, NEW JERSEY LOCALE. PRIOR TO THIS ACTIVITY, THE CONTRACTOR SHALL PROVIDE A SIMPLE LAWN PLANTING PLAN TO EWMA FOR REVIEW AND ACCEPTANCE..
3. IN TANDEM WITH THE INCREASE IN TOPSOIL THICKNESS, MINOR WALKWAYS AND STEPS AND SUCH SHALL BE ADJUSTED AND RECONSTRUCTED TO FIELD FIT THE CHANGE IN TOPSOIL GRADE AND TO REMAIN USEFUL AND IN SAFE AND EFFECTIVE SERVICE FOR THE BUILDING.

ZONE III:

1. ZONE III IS COMPRISED PRIMARILY OF AREAS THAT ARE THINLY PAVED WITH ASPHALT OR ARE CURRENTLY PAVED WITH CONCRETE FOR SPECIAL USE.
2. TO FULFILL THE CAPPING PLAN REQUIREMENTS FOR ZONE III, THE SURFACE AREA IN THIS ZONE SHALL BE CLEARED OF BRUSH AND VEGETATION, TACK COATED WITH BITUMINOUS MATERIAL AS SPECIFIED IN THE ASPHALT PAVING NOTES, AND PAVED WITH A 2 ½-INCH THICKNESS OF MABC ASPHALT AS SPECIFIED IN THE ASPHALT PAVING NOTES.
3. THE COMPLETED TACK COATED AND PAVED AREA IN THIS ZONE SHALL BE EXTENDED TO ABUT CONCRETE PAVED LOCATIONS AND BUILDING WALLS. IN ADDITION, A 6-INCH ASPHALT CURB SHALL BE INSTALLED ALONG THE SOUTHWEST EDGE OF THE NEWLY PAVED AREA, ADJACENT TO THE PROPERTY LINE ON THAT SIDE OF THE SITE.

ZONE IV:

1. ZONE IV IS COMPRISED PRIMARILY OF A TRUCKING SERVICE AREA THAT IS FILLED WITH ASPHALT MILLINGS WITH MINOR POTHOLES DUE TO HISTORIC TRUCKING IMPACTS.
2. TO FULFILL THE CAPPING PLAN REQUIREMENTS FOR ZONE IV, THE SURFACE AREA IN THIS ZONE SHALL RE-GRADED TO PROVIDE A 1-PERCENT DRAINAGE SLOPE FROM FRONT TO BACK OF THE FACILITY AND COMPACTED, THEN IT SHALL BE TACK COATED WITH BITUMINOUS MATERIAL AS SPECIFIED IN THE ASPHALT PAVING NOTES, AND PAVED WITH A 4-INCH THICKNESS OF MABC ASPHALT AS SPECIFIED IN THE ASPHALT PAVING NOTES.
3. THE COMPLETED TACK COATED AND PAVED AREA IN THIS ZONE SHALL BE EXTENDED TO ABUT CONCRETE PAVED LOCATIONS AND BUILDING WALLS. IN ADDITION, A 6-INCH ASPHALT CURB SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THIS DRAWING.
4. UPON COMPLETION OF THE REGRADING, COMPACTION, TACK COATING, AND PAVING WORK, A 4-FOOT HIGH CHAIN LINK FENCE SHALL BE INSTALLED ALONG THE NORTHWEST BOUNDARY OF THE SITE. THE FENCE SHALL INCLUDE AN 8-FOOT WIDE DOUBLE SWING GATE THAT IS LOCKABLE, AT THE LOCATION SHOWN ON THE DRAWING.
5. DURING THE WORK IN THIS ZONE, IT IS IMPORTANT TO IDENTIFY AND PROTECT ENVIRONMENTAL WELL LOCATIONS SO THAT THESE WELLS CAN BE EITHER ABANDONED IN ACCORDANCE WITH THE REGULATIONS, OR PROTECTED FOR FUTURE USE BY EXTENSION UP THROUGH THE CAP WITH MEANS ACCEPTABLE TO EWMA.

GENERIC PLAN – NOT FOR CONSTRUCTION

ASPHALT CAP INSTALLATION NOTES:

1.1 GENERAL INFORMATION

A. Objective - The cap to be installed is an engineering control required by NJDEP to address the presence of soil and groundwater contaminants at the site. It is intended to prevent people from coming into direct contact with contaminated soil and/or groundwater, and is intended to mitigate further adverse contributions to and migration of groundwater quality at the site. It is also intended to reduce other multi-media controlled contaminant migration effects and impacts associated with the soil and groundwater conditions at the site.

B. Specification - The entire generic specification consists of these and other notes and information provided on this Figure CAP-1 entitled "Environmental Capping Plan" dated May 12, 2016. CAP-1 displays key existing site conditions, the cap installation locations, and site property boundary information. .

C. Permit Notifications - EWMA will provide as-needed environmental related permit notifications prior to initiation of the capping work.

D. Construction Permitting - Construction permitting associated with site re-development or building re-construction are out of EWMA's environmental scope and are to be provided by others as is necessary.

E. Site Preparation - The cap installation Contractor shall provide all labor, equipment, and materials necessary to remove trees and brush, smooth grade and adjust heights of areas where trees and brush is removed, and to adjust heights of surface utility completions or heights of surfaces adjacent to surface utilities to match paving grades.

F. Subgrade Preparation - The cap installation Contractor shall provide all labor, equipment, and materials necessary to adjust subgrade elevations, provide stone on subgrade where needed, and compact and proof roll the subgrade. The subgrade consists primarily but not entirely of asphalt millings that have been in place at the site for many years.

G. Health and Safety - EWMA will monitor the site conditions during the work, and will provide hazardous waste operations personnel and equipment if needed to manage hazardous materials if encountered in accordance with a site specific health and safety plan. The Paving Contractor's scope of work does not include management of hazardous materials and shall require basic 10-hour construction safety training only.

H. Maintenance - EWMA will monitor and maintain the cap through interaction with the property Contractor. Annual monitoring will be performed to identify cracks or other damage that may potentially affect the integrity and protectiveness of the cap. Maintenance and repair will be performed as necessary to provide cap integrity and protectiveness.

1.2 CAPPING INSTALLATION CONTRACTOR'S RESPONSIBILITIES

A. Experience Requirements - The Contractor shall be experienced with and knowledgeable of and experienced with the installation of the capping materials that are required under this capping plan.

B. Safety Requirements - The Contractor shall staff the project with 10-hour construction safety trained personnel who shall perform in accordance with industry standard construction safety work rules.

C. Protection Requirements - The Contractor shall protect existing utilities and facilities including environmental wells from damage during the performance of the work.

D. Personnel Requirements - The Contractor shall provide qualified personnel and shall perform the work using means and methods that are in compliance with good construction practices and applicable Federal, State and Local rules, regulations, codes and ordinances.

E. Equipment Requirements - The Contractor shall provide effective equipment in good condition and in conformance with the above-referenced NJDOT 2007 specifications as follows or equal as acceptable to EWMA:
1. 1003.03 HMA Paver, or equal, as acceptable to the Owner and EWMA for installing the asphalt paving materials;
2. 1003.05 HMA Compactor, or 1003.06 Vibratory Drum Compactor, or equal, as acceptable to EWMA, for compacting the asphalt paving materials;
3. 1003.07 Bituminous Material Distributor, or equal, as acceptable to EWMA, for installing a tack coat on existing pavement surfaces.
4. 1003.08 Sealer Application System, or equal, as acceptable to EWMA for sealing joints or cracks or tack coating adjacent vertical surfaces.

F. Documentation Requirements - The Contractor shall provide EWMA with copies of asphalt quantity tickets, design mix documentation, certified clean topsoil tickets and documentation, and a list of personnel and equipment used at the project site.

G. Confirmation Testing Requirements - The Paving Contractor shall perform confirmatory testing and provide EWMA with the testing results as follows:
1. Incoming temperatures of asphalt loads;
2. Four cores through the completed asphalt portion of the cap at locations identified by EWMA to demonstrate the required minimum finished cap thickness.

PART 2 - PRODUCTS

A. I-4 Medium Aggregate Bituminous Concrete (MABC) - The Contractor shall provide NJDOT I-4 MABC hot mix asphalt in quantities sufficient to install a 6-inch thick asphalt cap across the entire cap area as displayed on Figure CAP-1.

B. Bituminous Material - The Contractor shall provide bituminous material compatible with I-4 MABC and suitable for tack coating and for sealing joints and cracks.

PART 3 - EXECUTION

The Contractor shall perform the specified asphalt cap installation tasks that are described below at the locations presented on the engineering drawing CAP-1.

A. Surface Utility Management (Piece Work) - The Contractor shall perform "piece work" paving around surface utilities so that top of finished asphalt cap grades shall match the tops of surface utilities upon completion of the work. Surface utilities shall not be covered by the cap, left in depressions surrounded by cap material, or left above top of finished cap.

B. Existing Adjacent Pavement (Piece Work) - At locations where new cap is adjacent to existing pavement, the Paving Contractor shall perform "piece work" to place the new cap over the existing adjacent pavement after tack coating, and tapered out across the existing pavement over a 5-foot width and at a grade of 10% until the edge matches top of existing pavement surface. This is necessary to maintain relatively smooth grade changes from top of cap to top of existing pavements.

C. Tack Coat Installation - Where surface utilities are raised to meet finished asphalt grade, and at all locations where existing pavements are to be thickened, the vertical surfaces of the utility risers shall be tack coated prior to adjacent asphalt placement. Also, where new asphalt cap is to be installed over existing pavements, the existing pavement shall tack coated. The tack coating shall be performed with bituminous materials using either a 1003.07 Bituminous Material Distributor or a 1003.08 Sealer Application System, or equal, as acceptable to EWMA.

D. Asphalt Placement - The Contractor shall perform the work so that asphalt mix temperature prior to placement shall not be less than 175 degrees F. and the subgrade surface temperature prior to placement shall not be less than 40 degrees F. The Contractor shall place the asphalt in no more than two smooth surfaced, compacted asphalt lifts, with air voids ranging within 2 to 8%, at a consistent thickness that shall be confirmed to EWMA prior to lift placement. The total asphalt placed shall provide a completed cap with a minimum thickness of 6-inches. The placement shall be planned and performed in tandem with incoming asphalt loads to maintain standard placement temperatures and workability. The asphalt shall be placed using a 1003.03 HMA Paver, or equal, as acceptable to the Owner and EWMA. The asphalt shall be compacted using 1003.05 HMA Compactor, or 1003.06 Vibratory Drum Compactor, or equal, as acceptable to EWMA for compacting the asphalt paving materials.

E. Finished Surfaces - The Paving Contractor shall complete asphalt cap surfaces to be smooth graded at the slopes shown on Drawing CAP-1, without areas of insufficient binder, and without bird-bath depressions that may gather water and create future traffic hazards. The finished cap materials shall be placed directly against the sidewalls of surface utilities, and finished cap grades shall match evenly with the finished tops of surface utilities.

F. Corrections - Corrections will be required if the tops of surface utilities do not match evenly with adjacent finished cap grades, or the finished cap is not at a minimum thickness of 6-inches, or if finished cap surfaces display insufficient binder or bird bath depressions. Corrections may be performed by replacement, re-surfacing, or other measures as acceptable to EWMA.

PRELIMINARY – NOT FOR CONSTRUCTION

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

EWMA CERTIFICATE OF AUTHORIZATION #: GA 277867

ENGINEER'S NAME	REVISIONS No./ID	DATE	Environmental Consulting & Remediation	SCALE: AS SHOWN	PROJECT#
			100 Misty Lane P.O. Box 5430 Parsippany, NJ 07054	DATE: 5/12/16	208972
				DRAWN BY: RR CHECKED BY: RA	
				FILE: s:\drawings\208000\208972\208972f2.dwg	
			ENVIRONMENTAL CAPPING PLAN BLOCK 119, LOT 1 316 TWENTIETH STREET CARLSTADT, NEW JERSEY		FIGURE# 2
N.J. PROFESSIONAL ENGINEER No.					