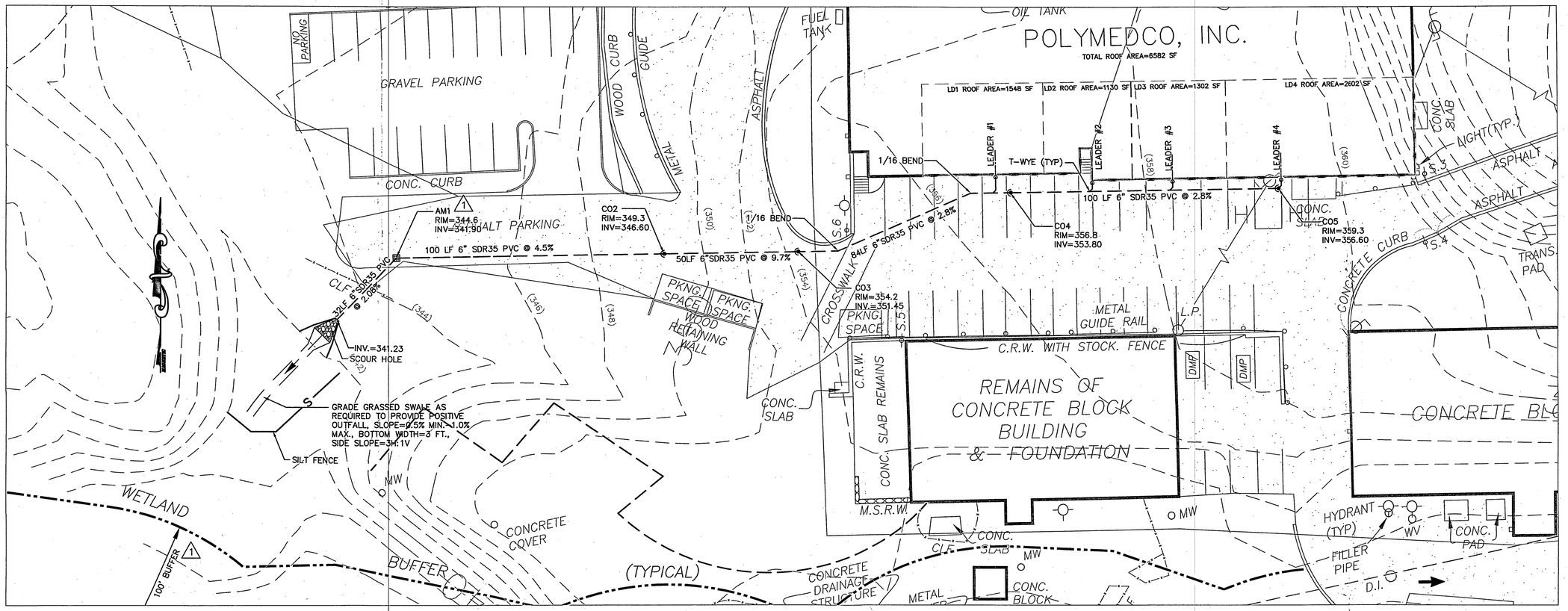
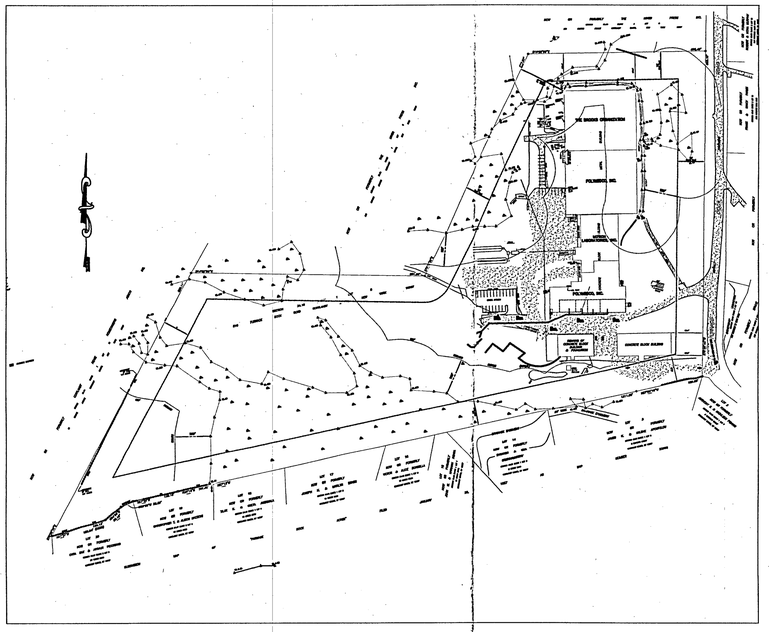


DETAILED PLAN

SCALE 1"=20'

1. GENERAL
   A. EXISTING PLANIMETRIC INFORMATION DATA TAKEN FROM A SURVEY PREPARED BY DEROSA LAND SURVEYING AND SUPPLEMENTAL INFORMATION OBTAINED FROM THE WESTCHESTER COUNTY GIS DATABASE.
   B. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF INDUSTRIAL CODE RULE 753 REGULATIONS. EXCAVATORS AND CONTRACTORS MUST CONTACT DIG SAFELY NEW YORK (STAKEOUT REQUESTS: 1-800-962-7962 OR 811) AT LEAST 48 HOURS IN ADVANCE OF ANY MECHANIZED DIGGING OR EXCAVATION WORK TO ENSURE UNDERGROUND UTILITY LINES ARE MARKED.
   C. CONTRACTOR SHALL RETAIN THE SERVICES OF AN UNDERGROUND UTILITY LOCATING SERVICE TO LOCATE AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF WORK.
   D. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS, BOTH ABOVE AND BELOW GRADE, PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S FIELD REPRESENTATIVE AND/OR ENGINEER PRIOR TO COMMENCING WORK.
   E. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS GOVERNING THE WORK.
   F. THE CONTRACTOR SHALL SUPPLY SANITARY AND HAND WASHING FACILITIES IN ACCORDANCE WITH 29 CFR 1926.62 AND THE PLUMBING CODE OF NEW YORK.
   G. THE PROVISIONS OF THE FIRE CODE OF NEW YORK STATE SHALL BE STRICTLY OBSERVED TO SAFEGUARD AGAINST ALL FIRE HAZARDS. ACCESS TO THE SITE SHALL BE PROVIDED TO THE FIRE DEPARTMENT AT ALL TIMES.
   H. SMOKING SHALL BE PROHIBITED EXCEPT IN APPROVED AREAS AS DEMARCATED BY SIGNS. IN APPROVED AREAS WHERE SMOKING IS PERMITTED, APPROVED ASHTRAYS SHALL BE PROVIDED BY THE CONTRACTOR.
   I. THE CONTRACTOR SHALL REMOVE, MANAGE AND DISPOSE OF ANY REGULATED MATERIALS THAT MAY BE PRESENT.
2. PRODUCTS
   A. PIPE SHALL BE BELL AND SPIGOT SDR35 PVC PIPE AND FITTINGS CONFORMING TO ASTM D3034 STANDARD SPECIFICATION FOR TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, (SDR35); AND ASTM D 3212 JOINTS FOR DRAIN AND SEWER PLASTIC PIPES USING FLEXIBLE ELASTOMERIC SEALS.
   B. BUILDING SERVICE CONNECTIONS SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE AND FITTINGS CONFORMING TO THE REQUIREMENTS OF CISPI STANDARD 301, ASTM A888 OR ASTM SPECIFICATION A74, LATEST EDITION. JOINTS FOR HUB AND SPIGOT PIPE SHALL BE INSTALLED WITH COMPRESSION GASKETS CONFORMING TO THE REQUIREMENTS OF ASTM SPECIFICATIONS C564, LATEST EDITION.
   C. CLEANOUTS SHALL HAVE A CAST IRON HUB WITH A BRASS SCREW PLUG ANDPVC BODY DESIGNED FOR CONNECTING TO THE PIPE MATERIAL SPECIFIED ON THE DRAWINGS AND HEREIN. ALL CAST IRON PARTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A48, CLASS 25. PVC PARTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM D3034 (SDR 35) OR ASTM D2665 (SCH 40). CLEANOUTS THAT ARE INSTALLED IN TRAFFIC AREAS SHALL BE INSTALLED WITHIN A CAST IRON FRAME AND COVER AS SHOWN ON THE DRAWINGS.
   D. PIPE BEDDING AND INITIAL BACKFILL MATERIAL SHALL BE COMPACTED SCREENED GRAVEL WELL GRADED IN SIZE FROM 3/8 INCH TO 3/4 INCH OR SUCH OTHER SIZED AS MAY BE APPROVED. THE GRAVEL SHALL CONSIST OF CLEAN, HARD, AND DURABLE PARTICLES OR FRAGMENTS, FREE FROM DIRT, VEGETATION, OR OTHER OBJECTIONABLE MATTER AND FREE FROM AN EXCESS OF SOFT, THIN ELONGATED, LAMINATED OR DISINTEGRATED PIECES.
   E. NON-SHRINK MORTAR GROUT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 1107 AND SHALL BE A CEMENT-BASED, FLOWABLE, NON-SHRINK GROUT THAT DEVELOPS EXTREMELY HIGH COMPRESSIVE STRENGTH IN A SHORT PERIOD OF TIME.
   F. FLEXIBLE SHEAR RING COUPLINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM D5926 STANDARD SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) GASKETS FOR DRAIN, WASTE, AND VENT (DWV), SEWER, SANITARY, AND STORM PLUMBING SYSTEMS.
   G. CAST IN PLACE CONCRETE SHALL BE AIR-ENTRAINED READY-MIXED CONCRETE AND SHALL HAVE A MINIMUM 3,500 PSI TWENTY-EIGHT (28) DAY COMPRESSIVE STRENGTH, OR AS DESIGNATED ON THE DRAWINGS, AND SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C94.
   1 H. FRAMES AND COVERS SHALL BE H20 RATED.
3. INSTALLATION
   A. PIPE SHALL BE SUPPORTED ON A MINIMUM OF FOUR (4) INCHES OF COMPACTED SCREENED GRAVEL SPREAD IN LAYERS OF UNIFORM THICKNESS. NO PIPE OR FITTING SHALL BE PERMANENTLY SUPPORTED ON SADDLES, BLOCKING, OR STONES. PIPE BEDDING AND INITIAL BACKFILL MATERIAL SHALL BE INSTALLED IN LAYERS NOT EXCEEDING 6 INCHES IN DEPTH. INITIAL BACKFILL MATERIAL WITHIN FOUR (4) INCHES ABOVE THE CROWN OF THE PIPE SHALL BE PLACED BY HAND AND REQUIRES HAND COMPACTION. EACH LAYER OF GRAVEL SHALL BE COMPACTED TO A MINIMUM DENSITY OF NINETY-FIVE (95) PERCENT OF MAXIMUM DENSITY OF THE SOIL AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO DESIGNATION T-99.
   B. STANDARD BACKFILL SHALL BE PLACED AND COMPACTED IN MAXIMUM ONE (1) FOOT LAYERS. EACH LAYER SHALL BE COMPACTED BY APPROVED MECHANICAL TAMPING MACHINES TO A DENSITY EQUAL TO THAT OF ADJACENT ORIGINAL MATERIAL, BUT NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D-1557, LATEST ISSUE FOR THAT SOIL.
4. SOIL MANAGEMENT
   A. THE CONTRACTOR SHALL REMOVE, MANAGE AND DISPOSE OF REGULATED SOIL MATERIALS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS. CLIENT WILL PROVIDE THE CONTRACTOR WITH A COPY OF THE REMEDIAL INVESTIGATION REPORT DEVELOPED BY OTHERS FOR REFERENCE USE BY THE CONTRACTOIN PREPARING ITS BID. THE CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH THE MANAGEMENT OF CONTAMINATED MATERIALS IN THEIR PROPOSAL. R.
   B. ALL WORK INVOLVING DISTURBANCE/ MOVEMENT OF SUBSURFACE MATERIALS SHALL BE COMPLETED BY WORKERS WITH OSHA 40-HOUR HAZWOPER AND 8-HOUR ANNUAL REFRESHER TRAINING.
   C. SPOILS SUITABLE EXCAVATED MATERIAL (AS DEEMED BY THE ENGINEER) SHALL BE RETURNED TO THE EXCAVATION AS BACKFILL IN THE GENERAL LOCATION FROM WHICH THEY AREIT WAS REMOVED.
   D. EXCESS OR UNSUITABLE EXCAVATED SPOIL MATERIALS (AS DEEMED BY THE ENGINEER) SHALL BE STOCKPILED, STORED, AND SAMPLED CHARACTERIZED (REPRESENTATIVELY SAMPLED AND LABORATORY TESTED), FOR OFF-SITE AND TRANSPORTED AND DISPOSALED OFF-SITE. IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
   E. EROSION CONTROL MEASURES SHALL BE INSTALLED AROUND THE STOCKPILE AND THE SSTOCKPILED MATERIALS SHALL BE PLACED ON AND COVERED BY MINIMUM 10-MIL THICK POLYPROPYLENE PLASTIC (AND REMAIN COVERED UNTIL DISPOSAL) AND SURROUNDED BY EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INCLUDE THE COST OF SPOIL ANALYSIS FOR DISPOSAL IN THEIR PROPOSAL.



OVERALL PLAN

SCALE 1"=80'

NO.	REVISION	DATE
1	TOWN COMMENTS	11/18/15

LIST OF DRAWINGS

C-101 DRAINAGE MAINTENANCE PLAN
C-102 DETAILS & NOTES

Owner/Developer:
Baker Capital, L.P.
One West Red Oak Lane
White Plains, NY 10604
Tel: (914) 461-9000
Fax: (914) 747-4987

TRC Results you can rely on
TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532
Tel: (914) 592-4040
Fax: (914) 592-5046
www.trcsolutions.com

© TRC Engineers, Inc.

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THIS LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

510-534 Furnace Dock Road Drainage Maintenance Cortlandt Manor, NY

TITLE:

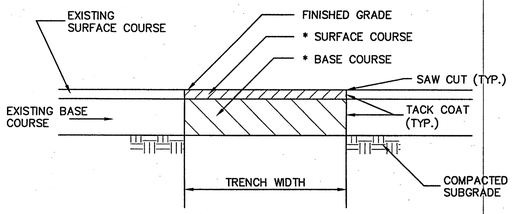
Drainage Maintenance Plan

STATE OF NEW YORK · RALPH P. PERRONE · No. 064262 · LICENSED PROFESSIONAL ENGINEER

SCALE:	AS SHOWN
DATE:	10/21/15
DRAWN BY:	RPP
CHECKED BY:	RPP
PROJECT:	238212
DRAWING NO.:	C-101

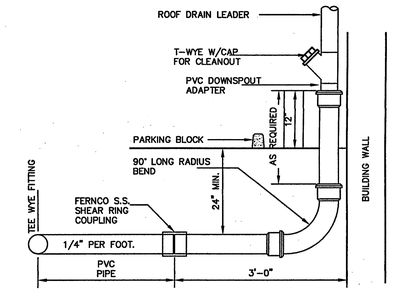
Q:\PROJECTS2001\238212-Baker\AutoCAD\DrainagePlan\C-101 DrainagePlan.dwg

BCLP00019

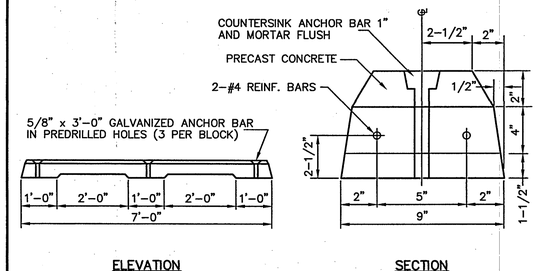


* SURFACE AND BASE COURSES SHALL BE REPLACED IN KIND AND TO THE EXISTING THICKNESS.

BITUMINOUS PAVEMENT REPLACEMENT
NOT TO SCALE — 1

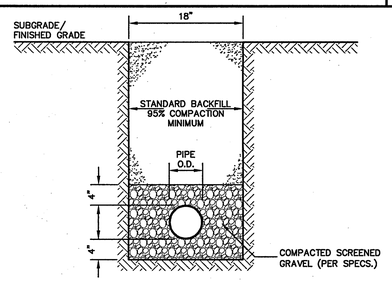


LEADER DRAIN CONNECTION
NOT TO SCALE — 4



NOTE: CONCRETE SHALL BE 4,000 PSI MINIMUM

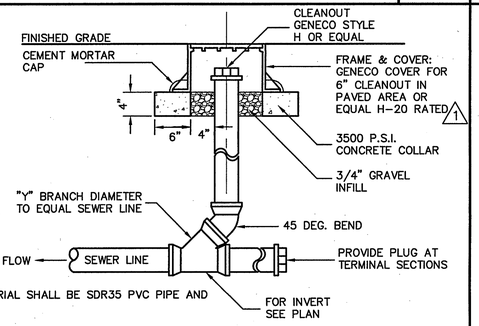
PRECAST CONCRETE PARKING BLOCK
NOT TO SCALE — 7



NOTES:

1. SCREENED GRAVEL SHALL BE WELL GRADED IN SIZE FROM 3/8 INCH TO 3/4 INCH.
2. SCREENED GRAVEL SHALL BE COMPACTED TO 85% OF THE MAXIMUM DENSITY.

PVC PIPE TRENCH DETAIL
NOT TO SCALE — 2



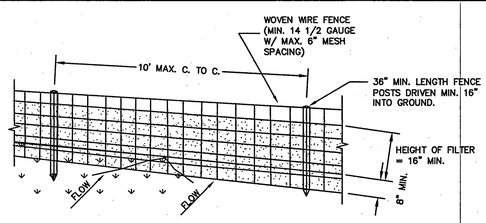
PIPE MATERIAL SHALL BE SDR35 PVC PIPE AND FITTINGS.

CLEANOUT
NOT TO SCALE — 5

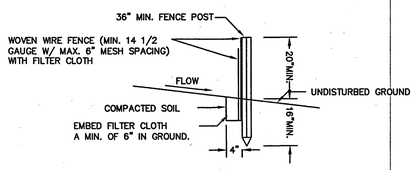
NEW YORK SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, LATEST REVISION.
2. ANY DISTURBED AREAS THAT ARE LEFT EXPOSED MORE THAN 14 DAYS, AND ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL. THE SEEDING WILL BE DONE IN ACCORDANCE WITH STANDARDS, AS FOLLOWS:
   A. FERTILIZER: FERTILIZER SHALL BE APPLIED AT THE RATE OF 14-LBS/1000 S.F. OR 600 LBS./ACRE, USING 5-10-10 OR EQUIVALENT.
   B. SEED: ANNUAL RYEGRASS APPLIED AT THE RATE OF 30 LBS./ACRE, OR OTHER SELECT MIXTURE DESCRIBED IN THE STANDARDS.
   C. MULCH: SMALL GRAIN STRAW MULCH APPLIED AT A RATE OF 90-LBS/1000 S.F. OR 2 TONS/ACRE, TO BE APPLIED AND ANCHORED ACCORDING TO THE STANDARDS.
3. ANY GRADED AREAS NOT SUBJECT TO FURTHER DISTURBANCE OR CONSTRUCTION TRAFFIC SHALL, WITHIN 10 DAYS OF FINAL GRADING, RECEIVE PERMANENT VEGETATIVE COVER IN COMBINATION WITH SUITABLE MULCH AS FOLLOWS:
   A. FERTILIZER: FERTILIZER APPLIED AT THE RATE OF 20-LBS/1000 S.F. USING 5-10-10 OR EQUIVALENT. SELECT MIXTURE DESCRIBED IN THE STANDARDS.
   B. SEED MIXTURE: TO BE PLANTED BETWEEN APRIL 1 AND MAY 15, OR BETWEEN AUGUST 15 AND OCTOBER 15.
   C. MULCH: SMALL GRAIN STRAW MULCH APPLIED AT A RATE OF 90-LBS/1000 S.F. OR 2 TONS/ACRE, TO BE APPLIED AND ANCHORED ACCORDING THE STANDARDS.
4. PAVED ROADWAYS SHALL BE KEPT CLEAN AT ALL TIMES.
5. ALL STORM DRAINAGE OUTLETS SHALL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
6. CONSTRUCTION FENCING SHALL BE USED TO PROTECT EXISTING TREES TO REMAIN, WETLANDS AND OTHER SENSITIVE AREAS.
7. IF FOR ANY REASON THE CONSTRUCTION IS HALTED FOR PROTRACTED PERIODS, THE CONTRACTOR SHALL STABILIZE THE SELECT MATERIAL BY HYDRO-SEED OR OTHER MEANS, TO THE SATISFACTION OF THE ENGINEER FOR ALL AREAS DENUDE OF VEGETATION.
8. STORM WATER FROM DISTURBED AREAS MUST BE PASSED THROUGH A EROSION CONTROL DEVICE BEFORE BEING DISCHARGE BEYOND DISTURBED AREAS OR DISCHARGED INTO INLETS OR OTHER DRAINAGE SYSTEMS.
9. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL ACCEPTANCE OF THE SITE WORK BY THE OWNER. UPON CERTIFICATION OF FINAL ACCEPTANCE, THE OWNER WILL ASSUME RESPONSIBILITY FOR THE CONTINUED MAINTENANCE OF PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.
10. THE OWNER, NYSDEC OR THE SITE ENGINEER MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE THE POTENTIAL FOR ONSITE OR OFFSITE EROSION PROBLEMS THAT MAY OCCUR DURING CONSTRUCTION.

NO.	REVISION	DATE
1	TOWN COMMENTS	11/18/15



PERSPECTIVE VIEW

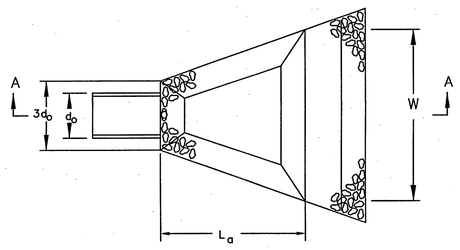


SECTION VIEW

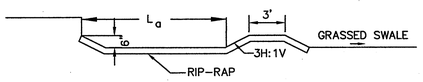
CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE
NOT TO SCALE — 3



PLAN



SECTION A-A

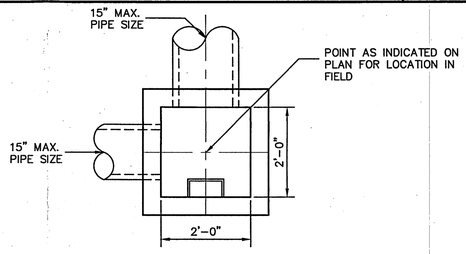
NOTES:

1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, OR CONCRETE.
2. La IS THE LENGTH OF THE RIPRAP APRON.
3. W IS THE WIDTH OF THE RIP-RAP APRON.
4. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6 INCHES.

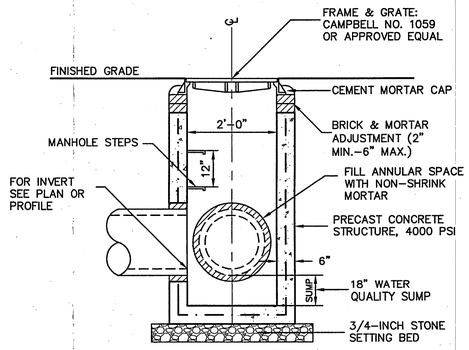
TABLE OF RIPRAP OUTLET PROTECTION

Outlet No.	Pipe Diam., do (in.)	Apron Length, La (ft.)	Apron Width, W (ft.)	Stone Size, d50 (in.)	Max. Stone Size (in.)	Apron Depth, d (in.)
1	6	8	8.5	2	3	4.5

SCOUR HOLE DETAIL
NOT TO SCALE — 6



PLAN BELOW GRATE



SECTION

NOTES:

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF EACH INLET FOR THE ENGINEERS APPROVAL PRIOR TO FABRICATION.
2. PRECAST INLETS SHALL BE CERTIFIED AS CONFORMING TO ASTM C913, LATEST REVISION.
3. PRECAST INLETS SHALL BE DESIGNED FOR HS-20 LOADING.
4. MANHOLE STEPS ARE NOT REQUIRED FOR INLET DEPTHS LESS THAN 4 FEET.
5. "KNOCKOUT" TYPE INLET STRUCTURES SHALL NOT BE PERMITTED.

AREA MANHOLE
NOT TO SCALE — 7 (1)

Owner/Developer:
Baker Capital, L.P.
One West Red Oak Lane
White Plains, NY 10604
Tel: (914) 461-9000
Fax: (914) 747-4987

TRC Results you can rely on
TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532
Tel: (914) 592-4040
Fax: (914) 592-5046
www.trcsolutions.com

© TRC Engineers, Inc.
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THIS LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

510-534 Furnace Dock Road Drainage Maintenance Cortlandt Manor, NY

TITLE:

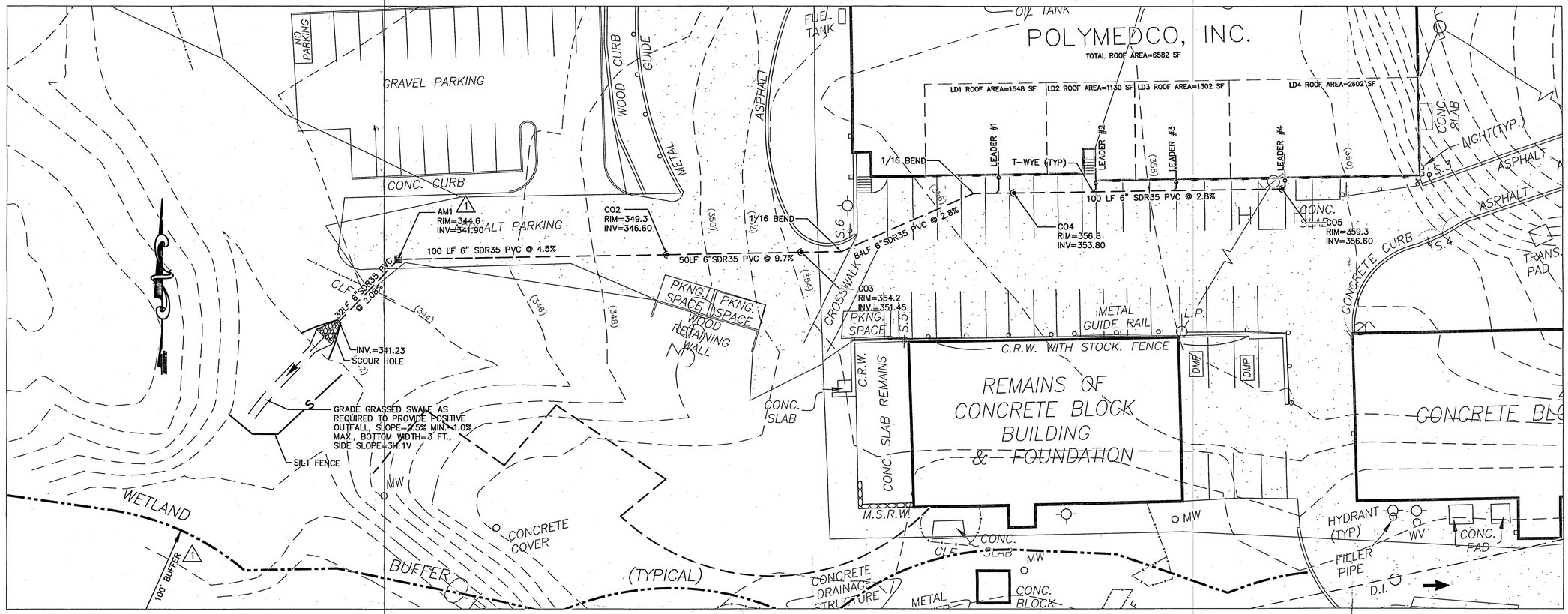
DETAILS & NOTES

STATE OF NEW YORK — RALPH P. PERAGINE — No. 064292 — LICENSED PROFESSIONAL ENGINEER

SCALE:	NTS
DATE:	10/21/2015
DRAWN BY:	RPP
CHECKED BY:	RPP
PROJECT:	238212
DRAWING NO.:	C-102

Q:\PROJECTS\2001\238212-Baker\AutoCAD\Drainage\Plan\C-102 Details&Notes.dwg

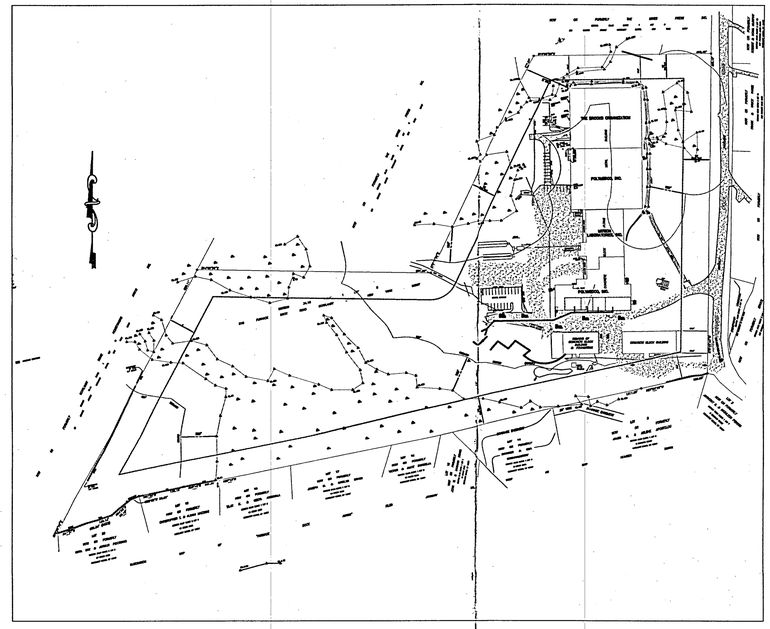
BCLP00020



DETAILED PLAN

SCALE 1"=20'

1. GENERAL
   A. EXISTING PLANIMETRIC INFORMATION DATA TAKEN FROM A SURVEY PREPARED BY DEROSA LAND SURVEYING AND SUPPLEMENTAL INFORMATION OBTAINED FROM THE WESTCHESTER COUNTY GIS DATABASE.
   B. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF INDUSTRIAL CODE RULE 753 REGULATIONS. EXCAVATORS AND CONTRACTORS MUST CONTACT DIG SAFELY NEW YORK (STAKEOUT REQUESTS: 1-800-962-7962 OR 811) AT LEAST 48 HOURS IN ADVANCE OF ANY MECHANIZED DIGGING OR EXCAVATION WORK TO ENSURE UNDERGROUND UTILITY LINES ARE MARKED.
   C. CONTRACTOR SHALL RETAIN THE SERVICES OF AN UNDERGROUND UTILITY LOCATING SERVICE TO LOCATE AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF WORK.
   D. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS, BOTH ABOVE AND BELOW GRADE, PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S FIELD REPRESENTATIVE AND/OR ENGINEER PRIOR TO COMMENCING WORK.
   E. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS GOVERNING THE WORK.
   F. THE CONTRACTOR SHALL SUPPLY SANITARY AND HAND WASHING FACILITIES IN ACCORDANCE WITH 29 CFR 1926.62 AND THE PLUMBING CODE OF NEW YORK.
   G. THE PROVISIONS OF THE FIRE CODE OF NEW YORK STATE SHALL BE STRICTLY OBSERVED TO SAFEGUARD AGAINST ALL FIRE HAZARDS. ACCESS TO THE SITE SHALL BE PROVIDED TO THE FIRE DEPARTMENT AT ALL TIMES.
   H. SMOKING SHALL BE PROHIBITED EXCEPT IN APPROVED AREAS AS DEMARCATED BY SIGNS. IN APPROVED AREAS WHERE SMOKING IS PERMITTED, APPROVED ASHTRAYS SHALL BE PROVIDED BY THE CONTRACTOR.
   I. THE CONTRACTOR SHALL REMOVE, MANAGE AND DISPOSE OF ANY REGULATED MATERIALS THAT MAY BE PRESENT.
2. PRODUCTS
   A. PIPE SHALL BE BELL AND SPIGOT SDR35 PVC PIPE AND FITTINGS CONFORMING TO ASTM D3034 STANDARD SPECIFICATION FOR TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, (SDR35); AND ASTM D 3212 JOINTS FOR DRAIN AND SEWER PLASTIC PIPES USING FLEXIBLE ELASTOMERIC SEALS.
   B. BUILDING SERVICE CONNECTIONS SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE AND FITTINGS CONFORMING TO THE REQUIREMENTS OF CISPI STANDARD 301, ASTM A888 OR ASTM SPECIFICATION A74, LATEST EDITION. JOINTS FOR HUB AND SPIGOT PIPE SHALL BE INSTALLED WITH COMPRESSION GASKETS CONFORMING TO THE REQUIREMENTS OF ASTM SPECIFICATIONS C564, LATEST EDITION.
   C. CLEANOUTS SHALL HAVE A CAST IRON HUB WITH A BRASS SCREW PLUG ANDPVC BODY DESIGNED FOR CONNECTING TO THE PIPE MATERIAL SPECIFIED ON THE DRAWINGS AND HEREIN. ALL CAST IRON PARTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A48, CLASS 25. PVC PARTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM D3034 (SDR 35) OR ASTM D2665 (SCH 40). CLEANOUTS THAT ARE INSTALLED IN TRAFFIC AREAS SHALL BE INSTALLED WITHIN A CAST IRON FRAME AND COVER AS SHOWN ON THE DRAWINGS.
   D. PIPE BEDDING AND INITIAL BACKFILL MATERIAL SHALL BE COMPACTED SCREENED GRAVEL WELL GRADED IN SIZE FROM 3/8 INCH TO 3/4 INCH OR SUCH OTHER SIZED AS MAY BE APPROVED. THE GRAVEL SHALL CONSIST OF CLEAN, HARD, AND DURABLE PARTICLES OR FRAGMENTS, FREE FROM DIRT, VEGETATION, OR OTHER OBJECTIONABLE MATTER AND FREE FROM AN EXCESS OF SOFT, THIN ELONGATED, LAMINATED OR DISINTEGRATED PIECES.
   E. NON-SHRINK MORTAR GROUT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 1107 AND SHALL BE A CEMENT-BASED, FLOWABLE, NON-SHRINK GROUT THAT DEVELOPS EXTREMELY HIGH COMPRESSIVE STRENGTH IN A SHORT PERIOD OF TIME.
   F. FLEXIBLE SHEAR RING COUPLINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM D5926 STANDARD SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) GASKETS FOR DRAIN, WASTE, AND VENT (DWV), SEWER, SANITARY, AND STORM PLUMBING SYSTEMS.
   G. CAST IN PLACE CONCRETE SHALL BE AIR-ENTRAINED READY-MIXED CONCRETE AND SHALL HAVE A MINIMUM 3,500 PSI TWENTY-EIGHT (28) DAY COMPRESSIVE STRENGTH, OR AS DESIGNATED ON THE DRAWINGS, AND SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C94.
   1 H. FRAMES AND COVERS SHALL BE H20 RATED.
3. INSTALLATION
   A. PIPE SHALL BE SUPPORTED ON A MINIMUM OF FOUR (4) INCHES OF COMPACTED SCREENED GRAVEL SPREAD IN LAYERS OF UNIFORM THICKNESS. NO PIPE OR FITTING SHALL BE PERMANENTLY SUPPORTED ON SADDLES, BLOCKING, OR STONES. PIPE BEDDING AND INITIAL BACKFILL MATERIAL SHALL BE INSTALLED IN LAYERS NOT EXCEEDING 6 INCHES IN DEPTH. INITIAL BACKFILL MATERIAL WITHIN FOUR (4) INCHES ABOVE THE CROWN OF THE PIPE SHALL BE PLACED BY HAND AND REQUIRES HAND COMPACTION. EACH LAYER OF GRAVEL SHALL BE COMPACTED TO A MINIMUM DENSITY OF NINETY-FIVE (95) PERCENT OF MAXIMUM DENSITY OF THE SOIL AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO DESIGNATION T-99.
   B. STANDARD BACKFILL SHALL BE PLACED AND COMPACTED IN MAXIMUM ONE (1) FOOT LAYERS. EACH LAYER SHALL BE COMPACTED BY APPROVED MECHANICAL TAMPING MACHINES TO A DENSITY EQUAL TO THAT OF ADJACENT ORIGINAL MATERIAL, BUT NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D-1557, LATEST ISSUE FOR THAT SOIL.
4. SOIL MANAGEMENT
   A. THE CONTRACTOR SHALL REMOVE, MANAGE AND DISPOSE OF REGULATED SOIL MATERIALS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS. CLIENT WILL PROVIDE THE CONTRACTOR WITH A COPY OF THE REMEDIAL INVESTIGATION REPORT DEVELOPED BY OTHERS FOR REFERENCE USE BY THE CONTRACTOIN PREPARING ITS BID. THE CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH THE MANAGEMENT OF CONTAMINATED MATERIALS IN THEIR PROPOSAL. R.
   B. ALL WORK INVOLVING DISTURBANCE/ MOVEMENT OF SUBSURFACE MATERIALS SHALL BE COMPLETED BY WORKERS WITH OSHA 40-HOUR HAZWOPER AND 8-HOUR ANNUAL REFRESHER TRAINING.
   C. SPOILS SUITABLE EXCAVATED MATERIAL (AS DEEMED BY THE ENGINEER) SHALL BE RETURNED TO THE EXCAVATION AS BACKFILL IN THE GENERAL LOCATION FROM WHICH THEY AREIT WAS REMOVED.
   D. EXCESS OR UNSUITABLE EXCAVATED SPOIL MATERIALS (AS DEEMED BY THE ENGINEER) SHALL BE STOCKPILED, STORED, AND SAMPLED CHARACTERIZED (REPRESENTATIVELY SAMPLED AND LABORATORY TESTED), FOR OFF-SITE AND TRANSPORTED AND DISPOSALED OFF-SITE. IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
   E. EROSION CONTROL MEASURES SHALL BE INSTALLED AROUND THE STOCKPILE AND THE SSTOCKPILED MATERIALS SHALL BE PLACED ON AND COVERED BY MINIMUM 10-MIL THICK POLYPROPYLENE PLASTIC (AND REMAIN COVERED UNTIL DISPOSAL) AND SURROUNDED BY EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INCLUDE THE COST OF SPOIL ANALYSIS FOR DISPOSAL IN THEIR PROPOSAL.



OVERALL PLAN

SCALE 1"=80'

NO.	REVISION	DATE
1	TOWN COMMENTS	11/18/15

LIST OF DRAWINGS

C-101 DRAINAGE MAINTENANCE PLAN
C-102 DETAILS & NOTES

Owner/Developer:
Baker Capital, L.P.
One West Red Oak Lane
White Plains, NY 10604
Tel: (914) 461-9000
Fax: (914) 747-4987

TRC Results you can rely on
TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532
Tel: (914) 592-4040
Fax: (914) 592-5046
www.trcsolutions.com

© TRC Engineers, Inc.
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THIS LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

510-534 Furnace Dock Road Drainage Maintenance Cortlandt Manor, NY

TITLE:

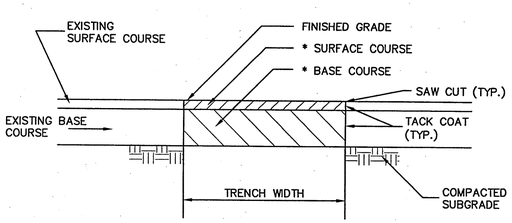
Drainage Maintenance Plan

STATE OF NEW YORK · RALPH P. PERAGINE · No. 084262 · LICENSED PROFESSIONAL ENGINEER

SCALE:	AS SHOWN
DATE:	10/21/15
DRAWN BY:	RPP
CHECKED BY:	RPP
PROJECT:	238212
DRAWING NO.:	C-101

BCLP00021

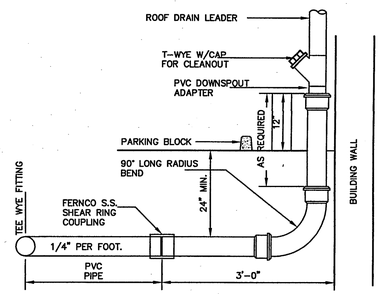
Q:\PROJECTS2001\238212-Baker\AutoCAD\DrainagePlan\C-101 DrainagePlan.dwg



* SURFACE AND BASE COURSES SHALL BE REPLACED IN KIND AND TO THE EXISTING THICKNESS.

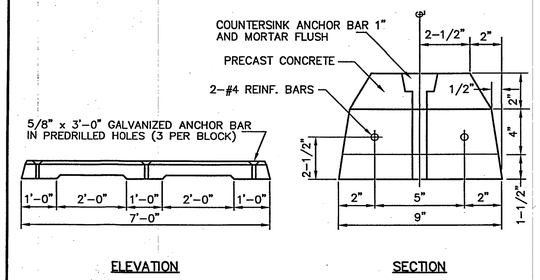
BITUMINOUS PAVEMENT REPLACEMENT
NOT TO SCALE

1



LEADER DRAIN CONNECTION
NOT TO SCALE

4



NOTE: CONCRETE SHALL BE 4,000 PSI MINIMUM

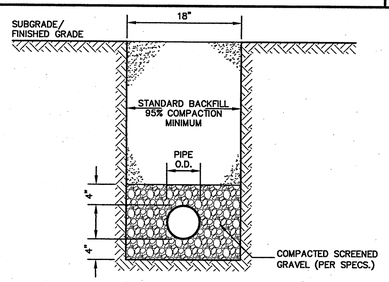
PRECAST CONCRETE PARKING BLOCK
NOT TO SCALE

7

NEW YORK SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, LATEST REVISION.
2. ANY DISTURBED AREAS THAT ARE LEFT EXPOSED MORE THAN 14 DAYS, AND ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL. THE SEEDING WILL BE DONE IN ACCORDANCE WITH STANDARDS, AS FOLLOWS:
   A. FERTILIZER: FERTILIZER SHALL BE APPLIED AT THE RATE OF 14-LBS/1000 S.F. OR 600 LBS./ACRE, USING 5-10-10 OR EQUIVALENT.
   B. SEED: ANNUAL RYEGRASS APPLIED AT THE RATE OF 30 LBS./ACRE, OR OTHER SELECT MIXTURE DESCRIBED IN THE STANDARDS.
   C. MULCH: SMALL GRAIN STRAW MULCH APPLIED AT A RATE OF 90-LBS/1000 S.F. OR 2 TONS/ACRE, TO BE APPLIED AND ANCHORED ACCORDING TO THE STANDARDS.
3. ANY GRADED AREAS NOT SUBJECT TO FURTHER DISTURBANCE OR CONSTRUCTION TRAFFIC SHALL, WITHIN 10 DAYS OF FINAL GRADING, RECEIVE PERMANENT VEGETATIVE COVER IN COMBINATION WITH SUITABLE MULCH AS FOLLOWS:
   A. FERTILIZER: FERTILIZER APPLIED AT THE RATE OF 20-LBS/1000 S.F. USING 5-10-10 OR EQUIVALENT. SELECT MIXTURE DESCRIBED IN THE STANDARDS.
   B. SEED MIXTURE: TO BE PLANTED BETWEEN APRIL 1 AND MAY 15, OR BETWEEN AUGUST 15 AND OCTOBER 15.
   C. MULCH: SMALL GRAIN STRAW MULCH APPLIED AT A RATE OF 90-LBS/1000 S.F. OR 2 TONS/ACRE, TO BE APPLIED AND ANCHORED ACCORDING THE STANDARDS.
4. PAVED ROADWAYS SHALL BE KEPT CLEAN AT ALL TIMES.
5. ALL STORM DRAINAGE OUTLETS SHALL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
6. CONSTRUCTION FENCING SHALL BE USED TO PROTECT EXISTING TREES TO REMAIN, WETLANDS AND OTHER SENSITIVE AREAS.
7. IF FOR ANY REASON THE CONSTRUCTION IS HALTED FOR PROTRACTED PERIODS, THE CONTRACTOR SHALL STABILIZE THE SELECT MATERIAL BY HYDRO-SEED OR OTHER MEANS, TO THE SATISFACTION OF THE ENGINEER FOR ALL AREAS DENUDE OF VEGETATION.
8. STORM WATER FROM DISTURBED AREAS MUST BE PASSED THROUGH A EROSION CONTROL DEVICE BEFORE BEING DISCHARGE BEYOND DISTURBED AREAS OR DISCHARGED INTO INLETS OR OTHER DRAINAGE SYSTEMS.
9. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL ACCEPTANCE OF THE SITE WORK BY THE OWNER. UPON CERTIFICATION OF FINAL ACCEPTANCE, THE OWNER WILL ASSUME RESPONSIBILITY FOR THE CONTINUED MAINTENANCE OF PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.
10. THE OWNER, NYSDEC OR THE SITE ENGINEER MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE THE POTENTIAL FOR ONSITE OR OFFSITE EROSION PROBLEMS THAT MAY OCCUR DURING CONSTRUCTION.

NO.	REVISION	DATE
1	TOWN COMMENTS	11/18/15

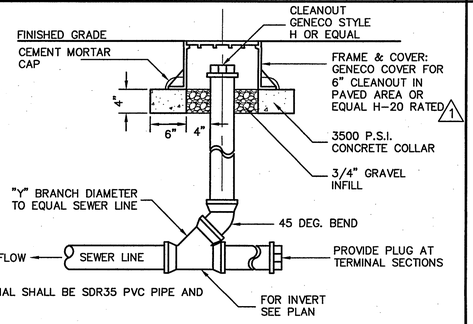


NOTES:

1. SCREENED GRAVEL SHALL BE WELL GRADED IN SIZE FROM 3/8 INCH TO 3/4 INCH.
2. SCREENED GRAVEL SHALL BE COMPACTED TO 85% OF THE MAXIMUM DENSITY.

PVC PIPE TRENCH DETAIL
NOT TO SCALE

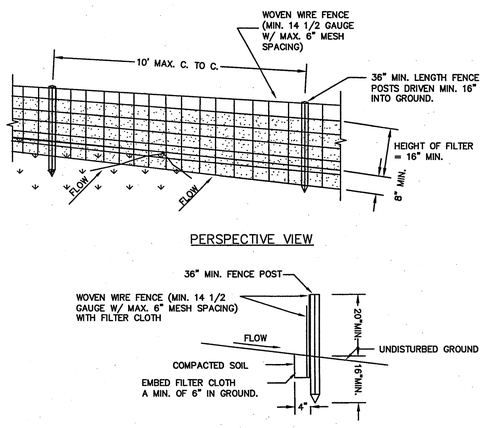
2



PIPE MATERIAL SHALL BE SDR35 PVC PIPE AND FITTINGS.

CLEANOUT
NOT TO SCALE

5

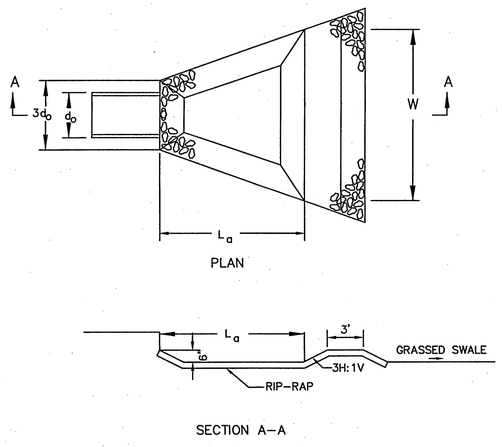


CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE
NOT TO SCALE

3



NOTES:

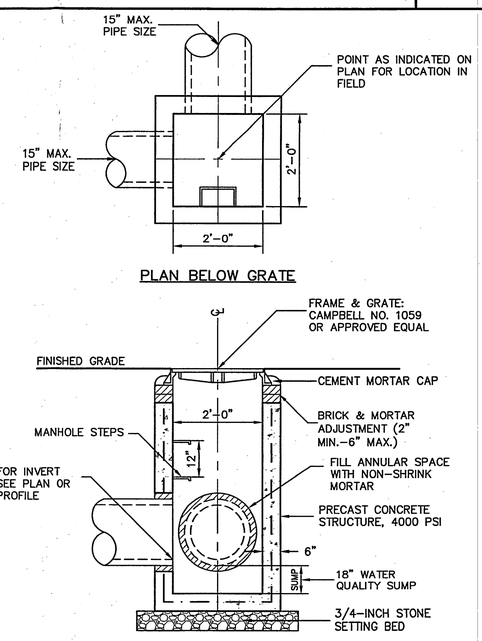
1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, OR CONCRETE.
2. La IS THE LENGTH OF THE RIPRAP APRON.
3. W IS THE WIDTH OF THE RIP-RAP APRON.
4. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6 INCHES.

TABLE OF RIPRAP OUTLET PROTECTION

Outlet No.	Pipe Diam., do (in.)	Apron Length, La (ft.)	Apron Width, W (ft.)	Stone Size, d50 (in.)	Max. Stone Size (in.)	Apron Depth, d (in.)
1	6	8	8.5	2	3	4.5

SCOUR HOLE DETAIL
NOT TO SCALE

6



NOTES:

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF EACH INLET FOR THE ENGINEERS APPROVAL PRIOR TO FABRICATION.
2. PRECAST INLETS SHALL BE CERTIFIED AS CONFORMING TO ASTM C913, LATEST REVISION.
3. PRECAST INLETS SHALL BE DESIGNED FOR HS-20 LOADING.
4. MANHOLE STEPS ARE NOT REQUIRED FOR INLET DEPTHS LESS THAN 4 FEET.
5. "KNOCKOUT" TYPE INLET STRUCTURES SHALL NOT BE PERMITTED.

AREA MANHOLE
NOT TO SCALE

7 1

Owner/Developer:
Baker Capital, L.P.
One West Red Oak Lane
White Plains, NY 10604
Tel: (914) 461-9000
Fax: (914) 747-4987

TRC Results you can rely on
TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532
Tel: (914) 592-4040
Fax: (914) 592-5046
www.trcsolutions.com

© TRC Engineers, Inc.
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THIS LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

510-534 Furnace Dock Road Drainage Maintenance Cortlandt Manor, NY

TITLE:

DETAILS & NOTES

STATE OF NEW YORK · RALPH P. PERAGINE · No. 064262 · LICENSED PROFESSIONAL ENGINEER

SCALE:	NTS
DATE:	10/21/2015
DRAWN BY:	RPP
CHECKED BY:	RPP
PROJECT:	238212
DRAWING NO.:	C-102

Q:\PROJECTS200\238212-Baker\AutoCAD\Drainage\Plan\C-102 Details&Notes.dwg

BCLP00022