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CONSULTING ENGINEERS D.P.C.

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Principal Emeritus:
RICHARD D. McGOEY, P.E. (NY & PA)
WILLIAM J. HAUSER, P.E. (NY, NJ & PA)

**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT: MAVIS /MIXED USE (RHINEBECK REALTY LLC)
PROJECT NO.: 15-03
PROJECT LOCATION: SECTION 60, BLOCK 3, LOT 40.2
REVIEW DATE: 29 NOVEMBER 2016
MEETING DATE: 1 DECEMBER 2016
REPRESENTATIVE: BOHLER ENGINEERING

1. The Applicants are before the Board for amended site plan based on revised utility layouts and modification of the transformer and dumpster locations to the south of the proposed Mavis structure. The utility company has requested the transformer be located in such a position that modifications to the site plan are required.
2. The parking spot numbers adjacent to the modified area are reduced however they do depict the original 9 & 8 parking spots.
3. The change relocates the dumpster location, a light pole and modifies traffic circulation to the west of the Mavis facility.
4. Will a stop bar continued to be required where depicted at the previous location as parking layout has terminated the pass through traffic?
5. It appears that approximately 9 of the previously identified landscape plantings in the island have been eliminated and not depicted on the new plan. Applicant should consider additional landscaping around the transformer and relocated dumpster enclosure.

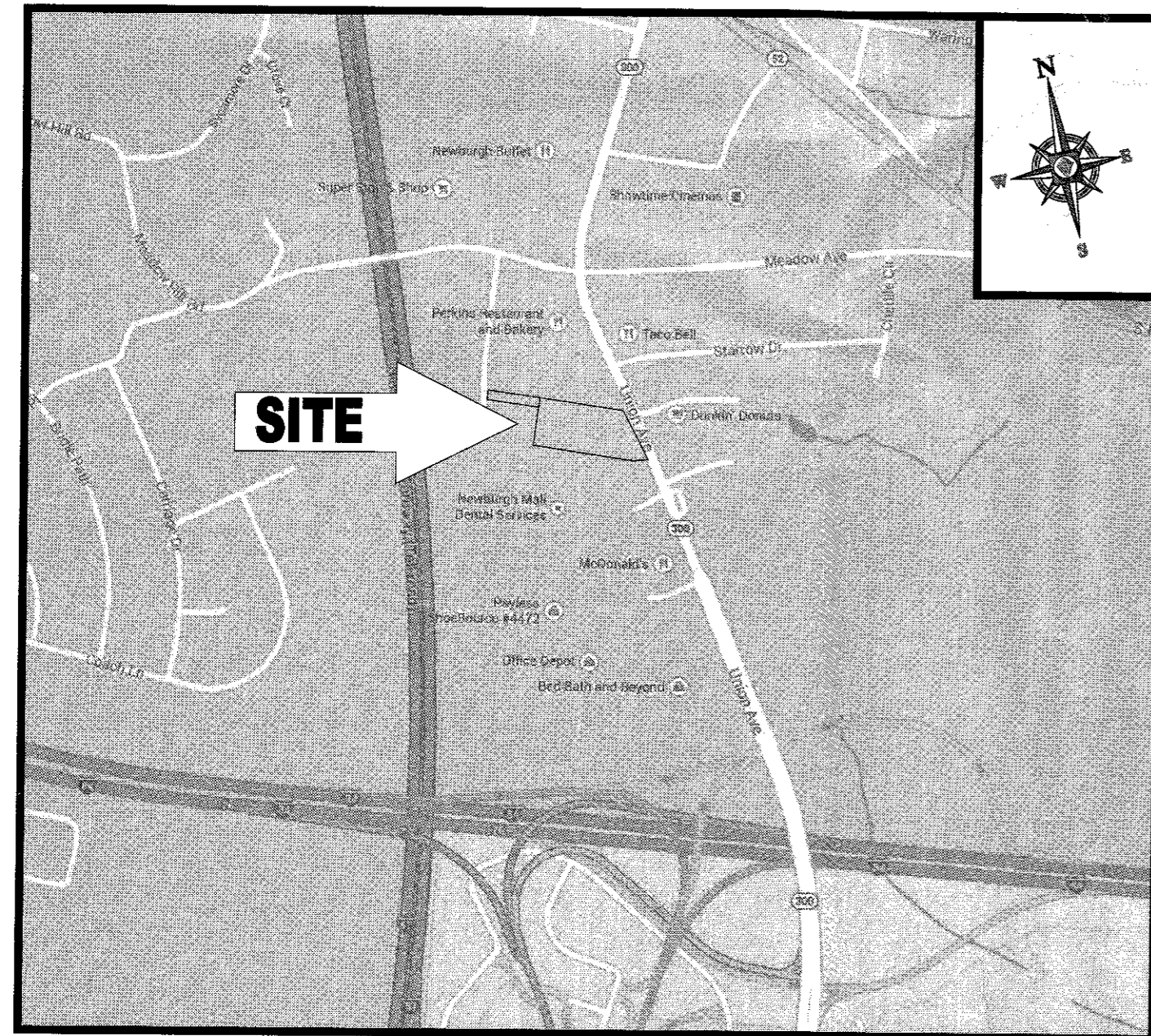
McGoey, Hauser & Edsall
Consulting Engineers, D.P.C.

Patrick J. Hines
Principal

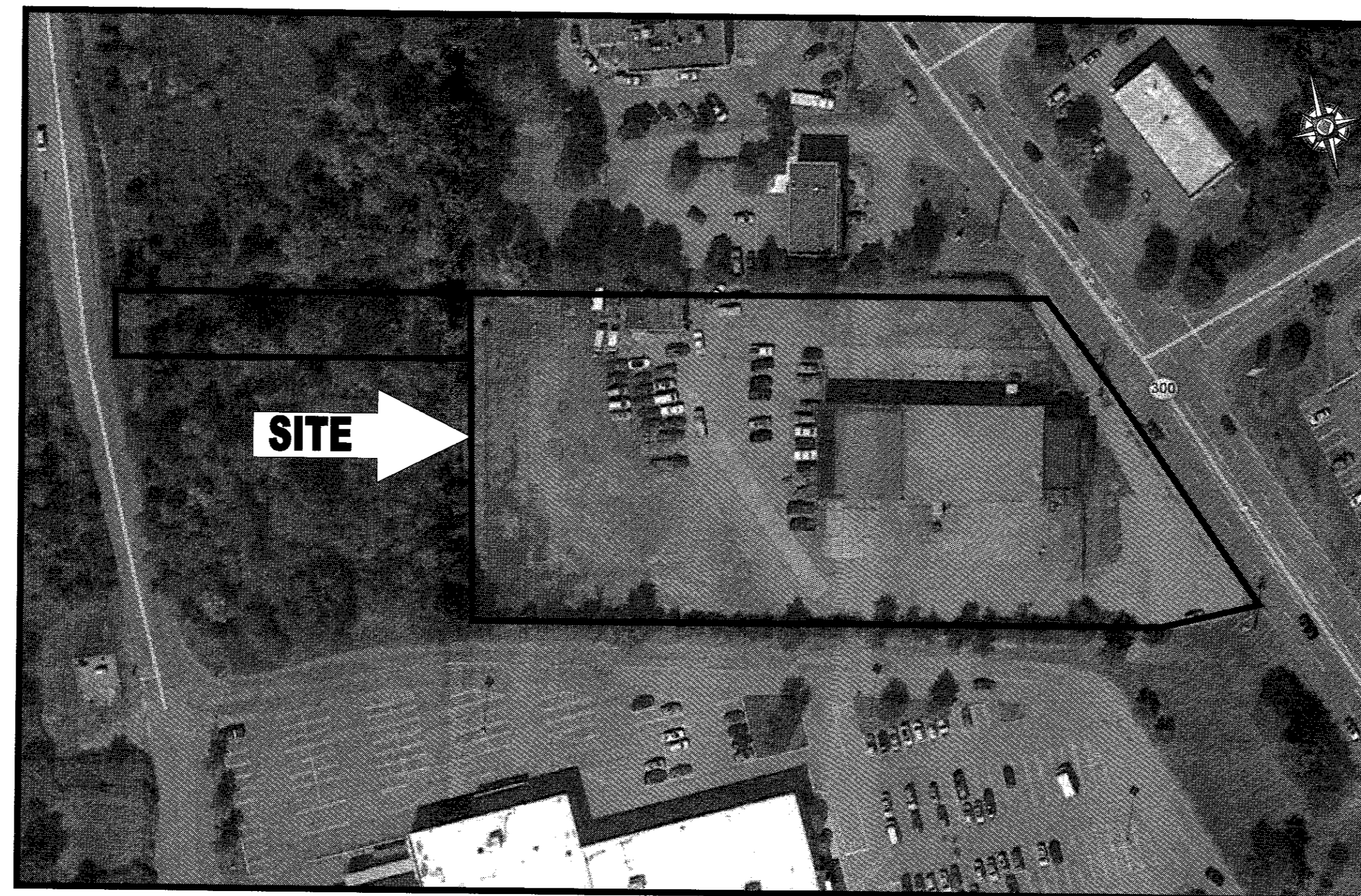
PJH/kbw

SITE DEVELOPMENT PLANS
 FOR:
 RHINEBECK REALTY, LLC
 PROPOSED
 REDEVELOPMENT PROJECT

LOCATION OF SITE:
 1413 UNION AVE (NYS ROUTE 300),
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK
 MAP 60, BLOCK 3, LOT 40.2



LOCATION MAP
 N.T.S.



AREA PLAN
 N.T.S.

SHEET TITLE	SHEET NUMBER
COVER SHEET	1 OF 17
GENERAL NOTES SHEET	2 OF 17
DEMOLITION PLAN	3 OF 17
SITE PLAN	4 OF 17
GRADING & DRAINAGE PLAN	5 OF 17
GRADING PLAN 1	6 OF 17
GRADING PLAN 2	7 OF 17
CONSTRUCTION SEQUENCE GRADING & DRAINAGE PLAN	8 OF 17
UTILITY PLAN	9 OF 17
SOIL EROSION & SEDIMENT CONTROL PLAN	10 OF 17
SOIL EROSION CONTROL NOTES & DETAILS SHEET	11 OF 17
LANDSCAPE PLAN	12 OF 17
LANDSCAPE NOTES & DETAILS SHEET	13 OF 17
LIGHTING PLAN	14 OF 17
CONSTRUCTION DETAIL SHEET	15 OF 17
CONSTRUCTION DETAIL SHEET	16 OF 17
CONSTRUCTION DETAIL SHEET	17 OF 17
WATER MAIN EXTENSION PLAN	1 OF 1
ALTA / ACSM LAND TITLE SURVEY (BY OTHERS)	1 OF 1 (NOT INCLUDE IN SET)
SANITARY SEWER PUMP CHAMBER DESIGN (BY OTHERS)	1 OF 1 (NOT INCLUDE IN SET)

SHEET INDEX

OWNER INFO:

JR & Ray LLC
 5020 RTE 9W
 NEWBURGH, NY 12550

APPLICANT INFO:

RHINEBECK REALTY, LLC
 358 SAW MILL ROAD
 MILLWOOD, NY 10546

PREPARED BY
BOHLER
 ENGINEERING

BOHLER ENGINEERING
 CIVIL & CONSULTING ENGINEERS
 SURVEYORS
 PROJECT MANAGERS
 ENVIRONMENTAL CONSULTANTS
 LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
 WARREN, NJ

OFFICES:
 SOLEBROOK, NY
 CENTER VALLEY, PA
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 STERLING, VA
 WARRINGTON, VA
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REVISIONS			
REV	DATE	COMMENT	BY
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2	05/28/15	PER TOWN COMMENTS	TCF
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14	10/21/16	PER TOWN COMMENTS	TCF
15	11/01/16	REV UTILITY LAYOUT	ABJ

PRELIMINARY

PROJECT No.: B140197
 DRAWN BY: TCF
 CHECKED BY: RWO
 DATE: 01/27/2015
 SCALE: AS NOTED
 CAD I.D.: B140197SS30

PROJECT: **SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC**

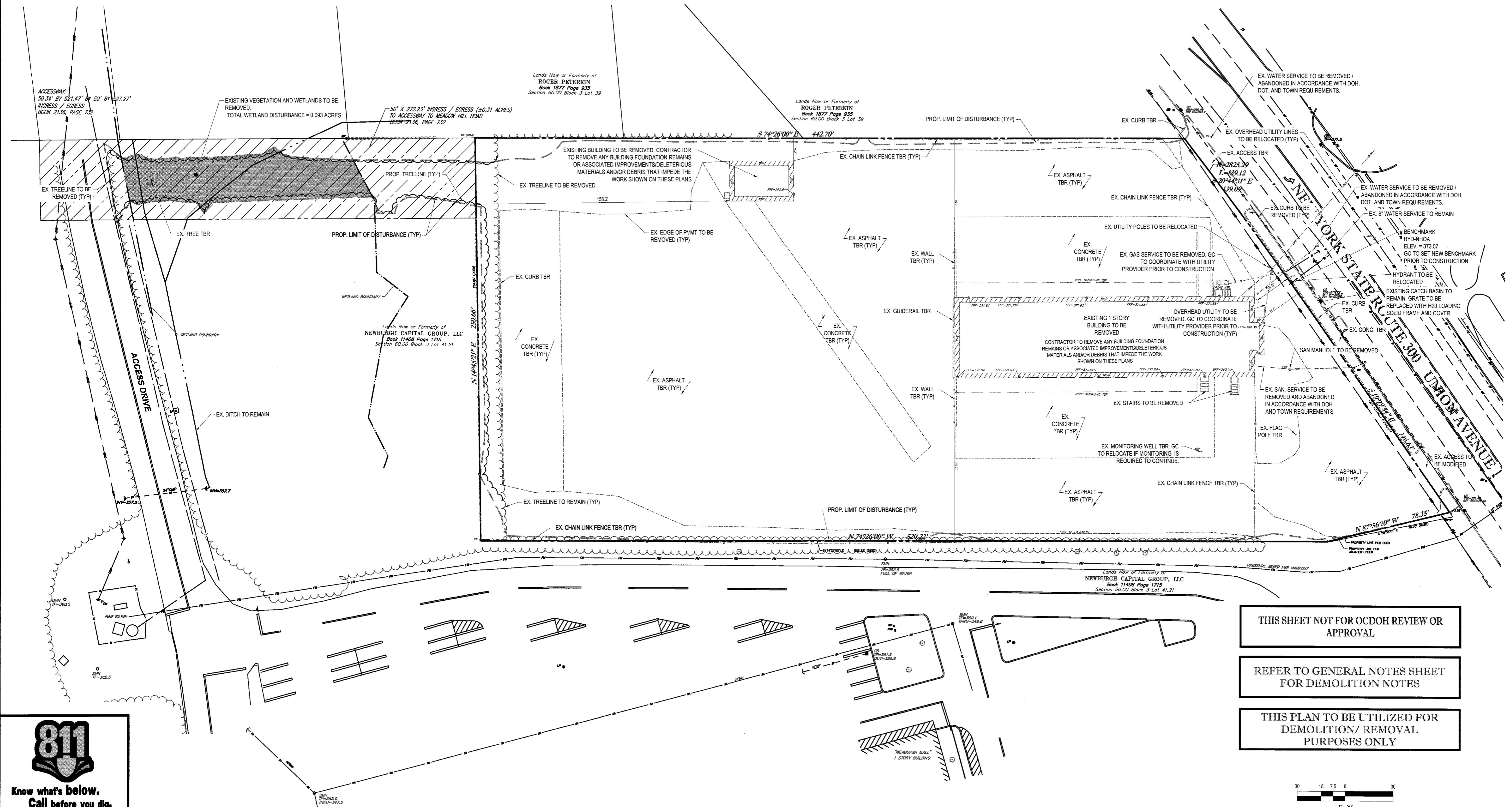
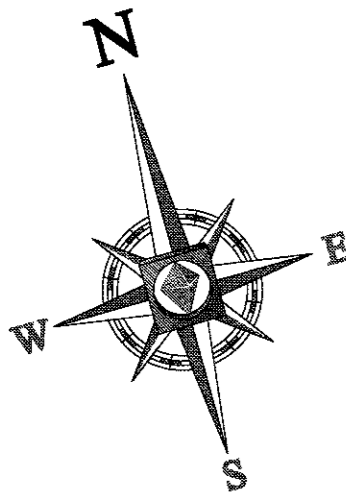
LOCATION OF SITE
 1413 UNION AVENUE
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING
 17 COMPUTER DRIVE WEST
 ALBANY, NY 12205
 Phone: (518) 438-9900
 Fax: (518) 438-0900
www.BohlerEngineering.com

R.W. OSTERHOUDT
 PROFESSIONAL ENGINEER
 NEW YORK LICENSE No. 076930

SHEET TITLE
COVER SHEET

SHEET NUMBER
1
 OF 17



ACCESSWAY: 50.34' BY 521.47' BY 50' BY 27.27' INGRESS / EGRESS BOOK 2136, PAGE 732

EXISTING VEGETATION AND WETLANDS TO BE REMOVED. TOTAL WETLAND DISTURBANCE = 0.093 ACRES

50' X 272.23' INGRESS / EGRESS (20.31 ACRES) TO ACCESSWAY TO MEADOW HILL ROAD BOOK 2136, PAGE 732

Lands Now or Formerly of ROGER PETERKIN Book 1877 Page 935 Section 60.00 Block 3 Lot 39

Lands Now or Formerly of ROGER PETERKIN Book 1877 Page 935 Section 60.00 Block 3 Lot 39

Lands Now or Formerly of NEWBURGH CAPITAL GROUP, LLC Book 11408 Page 1715 Section 60.00 Block 3 Lot 41.21

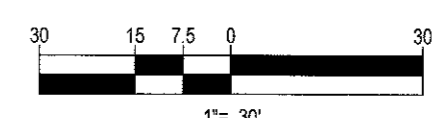
Lands Now or Formerly of NEWBURGH CAPITAL GROUP, LLC Book 11408 Page 1715 Section 60.00 Block 3 Lot 41.21



THIS SHEET NOT FOR OCDOH REVIEW OR APPROVAL

REFER TO GENERAL NOTES SHEET FOR DEMOLITION NOTES

THIS PLAN TO BE UTILIZED FOR DEMOLITION/ REMOVAL PURPOSES ONLY



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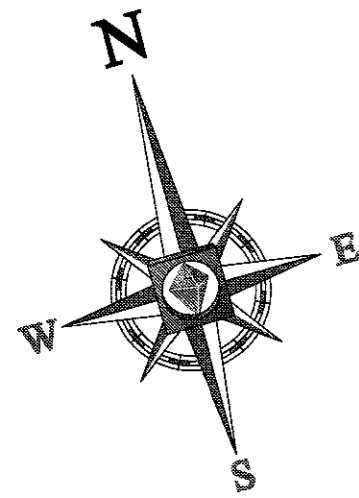
R.W. OSTERHOUDT

PROFESSIONAL ENGINEER
NEW YORK LICENSE NO. 076920

SHEET TITLE:
DEMOLITION PLAN

SHEET NUMBER:
3
OF 17

REV 15 - 11/01/2016



ZONING ANALYSIS TABLE

ZONING DISTRICT	1B - INTERCHANGE BUSINESS DISTRICT		
	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	40,000 SF	3.04 AC (132,424 SF)	NO CHANGE
MINIMUM LOT WIDTH	150'	250.6'	NO CHANGE
MINIMUM LOT DEPTH	150'	442.7'	NO CHANGE
MAX. BUILDING COVERAGE	40% RETAIL/RESTAURANT USE 20% SERVICE STATION USE	7.9%	13.3% (TOTAL)
MIN. FRONT SETBACK	80'	23.5'	80.1'
MIN. SIDE SETBACK	30' @ SERVICE STATION, OFFICE AND RESTAURANT USES	14.2'	30.1'
MIN. REAR SETBACK	80'	158.2'	139.0'
MAX. BUILDING HEIGHT	40' SERVICE STATION, OFFICE AND RESTAURANT USES	1 STORY	+3'
MAX. LOT COVERAGE	80%	± 87%	± 75%
PARKING SPACES	121 SPACES	± 5 SPACES	188 SPACES
PARKING CRITERIA (9X18)	GASOLINE STATION, PARKING GARAGE, OR REPAIR STATION REQUIRES SUFFICIENT PARKING FOR ALL VEHICLES STORED OR SERVICED AT 1 TIME PLUS 5 ADDITIONAL SPACES (8 SERVICE BAYS x 1 SPACE/BAY + 5 ADDITIONAL SPACES = 13 SPACES REQUIRED) OFFICE USE REQUIRES 1 SPACE PER 200 SF FLOOR AREA (6,500 SF RETAIL AREA x 200 SF/SPACE = 18 SPACES REQUIRED) RESTAURANT USE REQUIRES 1 SPACE PER 4 SEATS OR 1 SPACE PER 40 SF OF SEATING AREA, OR AS REQUIRED BY THE PLANNING BOARD FOR RESTAURANTS DEMONSTRATING GREATER PARKING SPACE NEEDS IN JUDGMENT OF THE PLANNING BOARD. (300 SEATS / 4 SPACES PER SEAT = 90 SPACES REQUIRED) TOTAL SPACES REQUIRED = 13 SPACES (SERVICE STATION) + 18 SPACES (OFFICE) + 90 SPACES (RESTAURANT) = 121 SPACES		

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LANDSCAPE ARCHITECTS

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OFFICES:
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BOONE, MD
ALBANY, NY
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PHILADELPHIA, PA
WASHINGTON, D.C.

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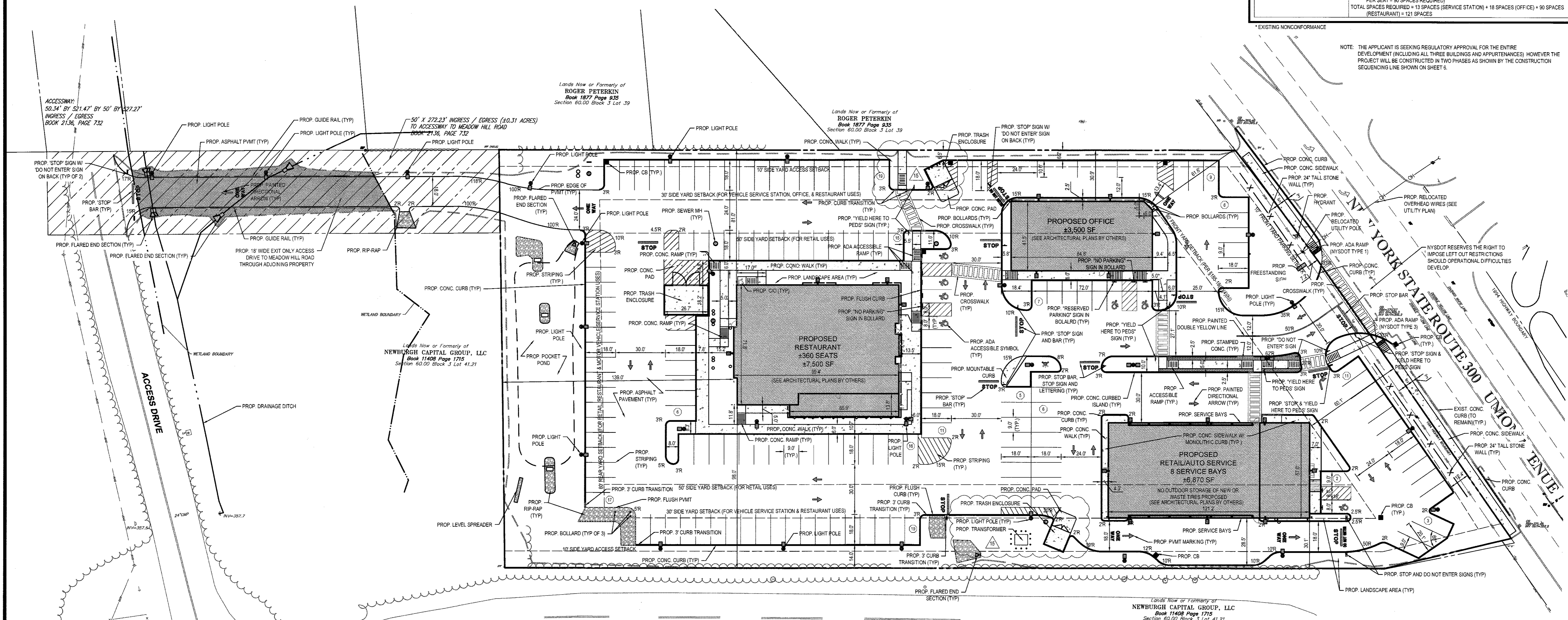
R.W. OSTERHOUDT

PROFESSIONAL ENGINEER
NEW YORK LICENSE NO. 076930

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
4
OF 17

REV 15 - 11/01/2016



NOTE: THE APPLICANT IS SEEKING REGULATORY APPROVAL FOR THE ENTIRE DEVELOPMENT (INCLUDING ALL THREE BUILDINGS AND APPURTENANCES) HOWEVER THE PROJECT WILL BE CONSTRUCTED IN TWO PHASES AS SHOWN BY THE CONSTRUCTION SEQUENCING LINE SHOWN ON SHEETS.

* EXISTING NONCONFORMANCE

MAINTENANCE OF A CLEAR SIGHT LINE IS THE RESPONSIBILITY OF THE PROPERTY OWNER

A PROPOSED PLOT PLAN SHALL BE PROVIDED TO THE BUILDING DEPARTMENT PRIOR TO ISSUANCE OF A BUILDING PERMIT

THIS SHEET NOT FOR OCDOH REVIEW OR APPROVAL

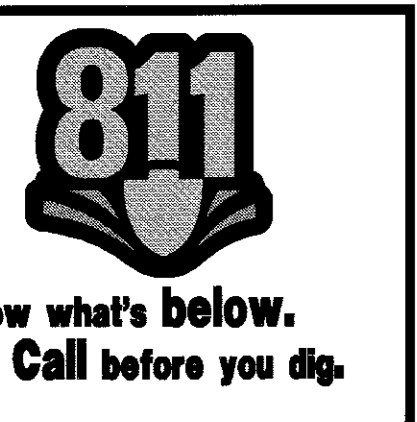
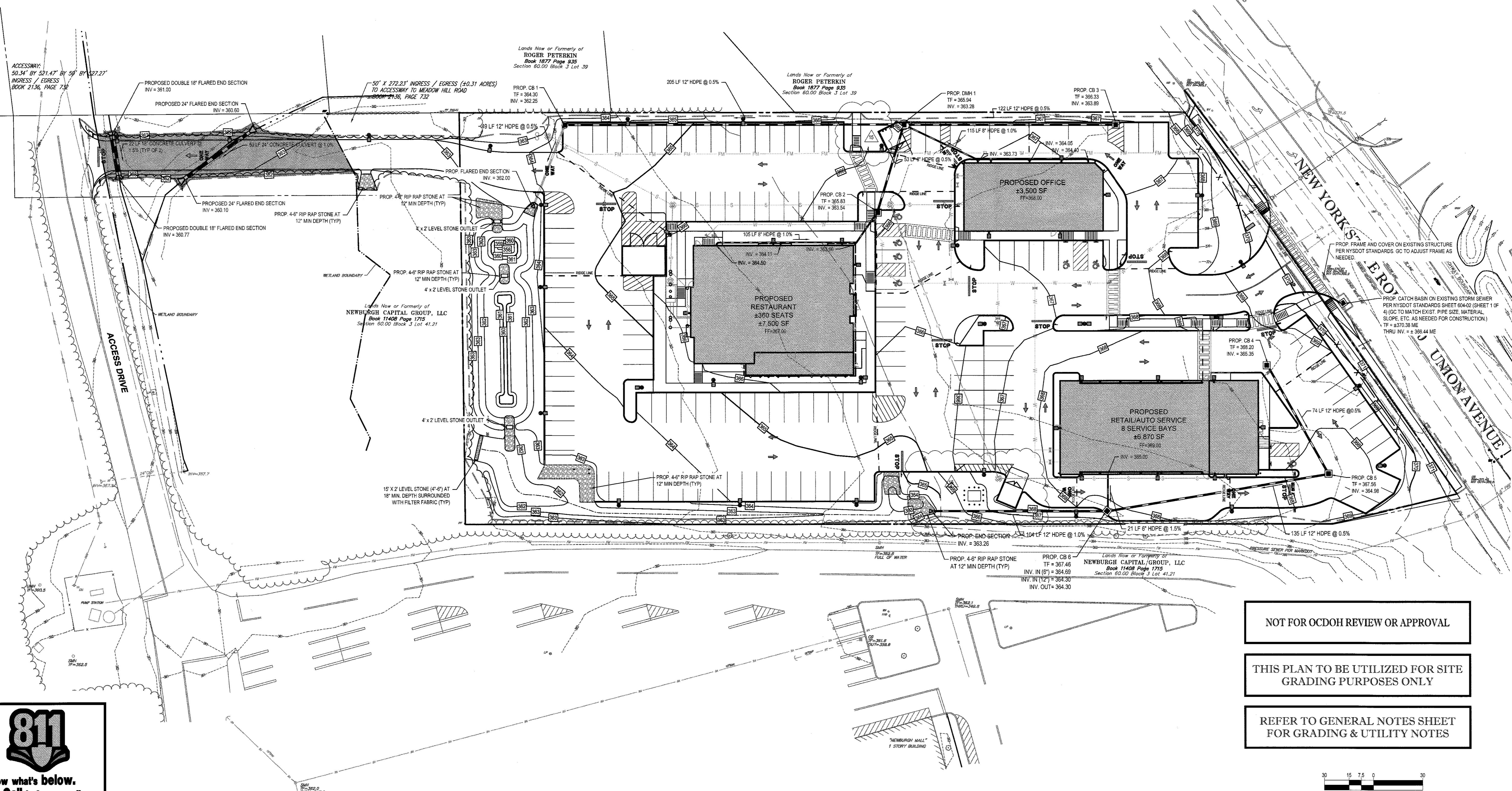
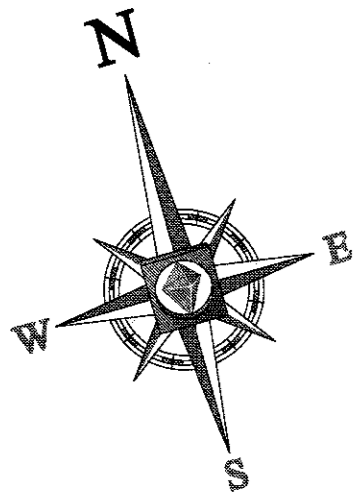
REFER TO GENERAL NOTES SHEET FOR NOTES

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY



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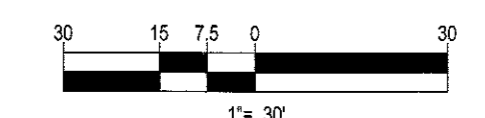
Know what's below.
Call before you dig.



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REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES



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FOR
RHINEBECK REALTY, LLC

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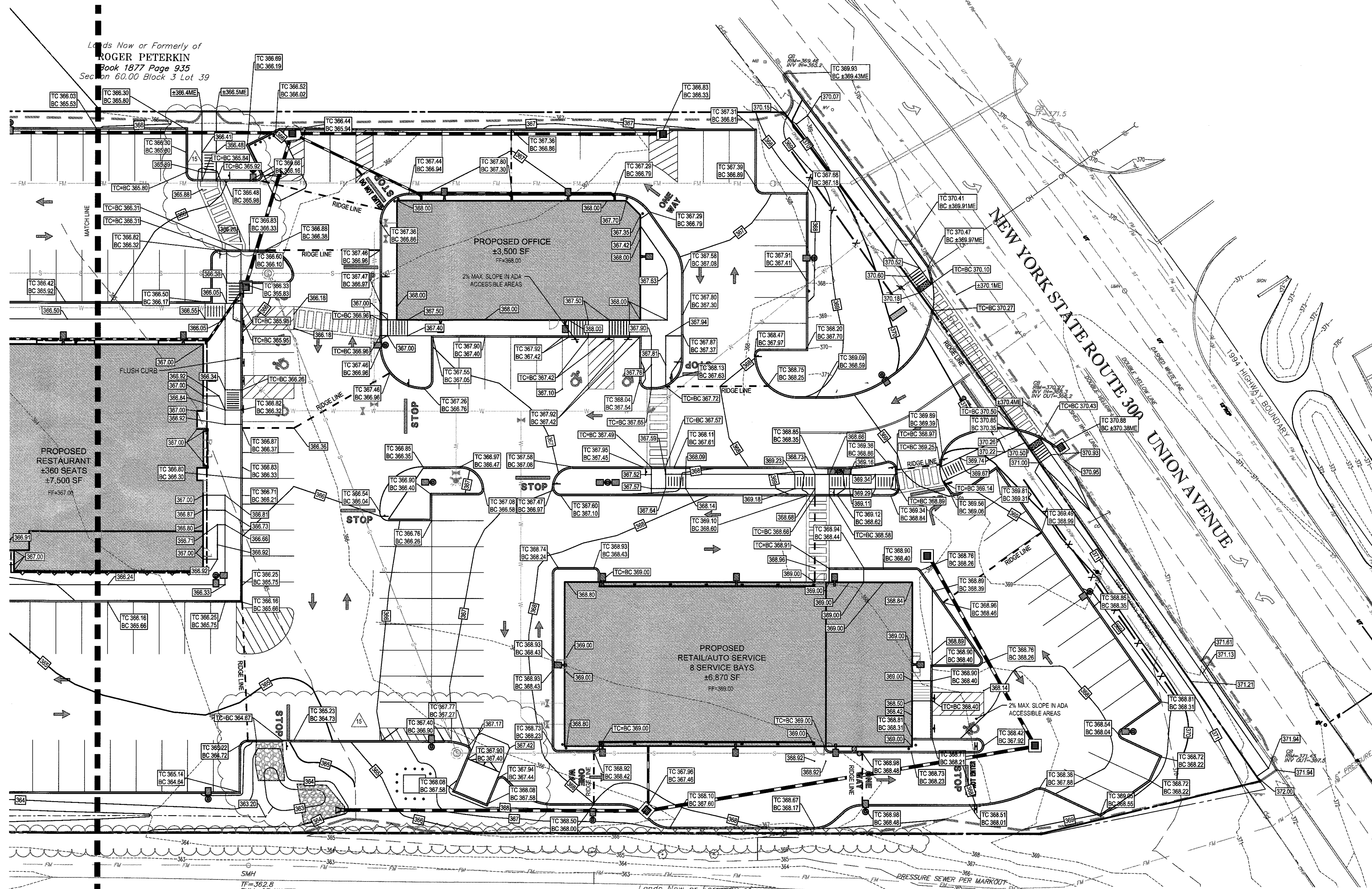
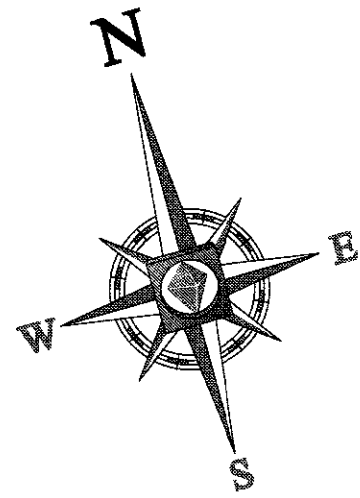
R.W. OSTERHOUDT

PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

SHEET TITLE:
DRAINAGE PLAN

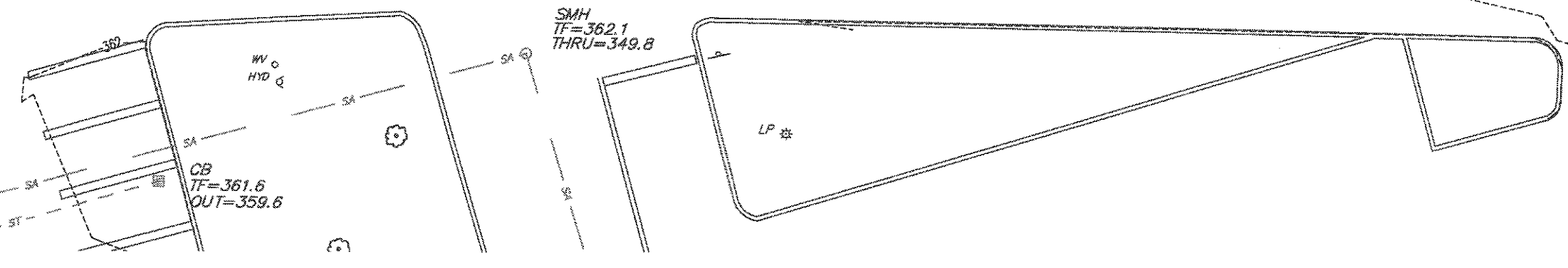
SHEET NUMBER:
5
OF 17

REV 15 - 11/01/2016



Lands Now or Formerly of
ROGER PETERKIN
 Book 1877 Page 935
 Section 60.00 Block 3 Lot 39

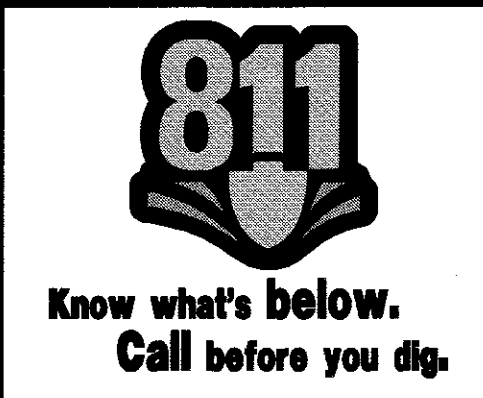
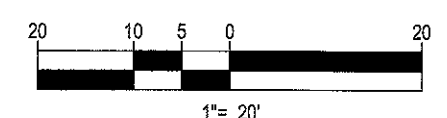
Lands Now or Formerly of
NEWBURGH CAPITAL GROUP, LLC
 Book 11408 Page 1715
 Section 60.00 Block 3 Lot 41.21



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REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES



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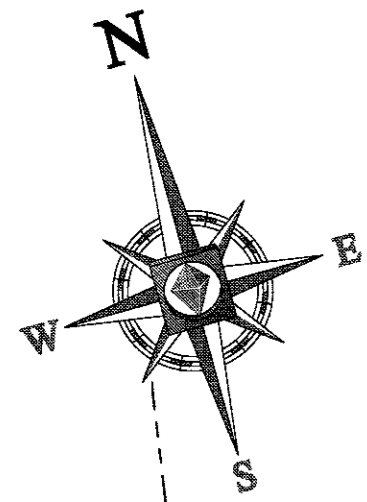
R.W. OSTERHOUDT

PROFESSIONAL ENGINEER
 NEW YORK LICENSE NO. 076930

SHEET TITLE:
GRADING PLAN 1

SHEET NUMBER:
6
 OF 17

REV 15 - 11/01/2016



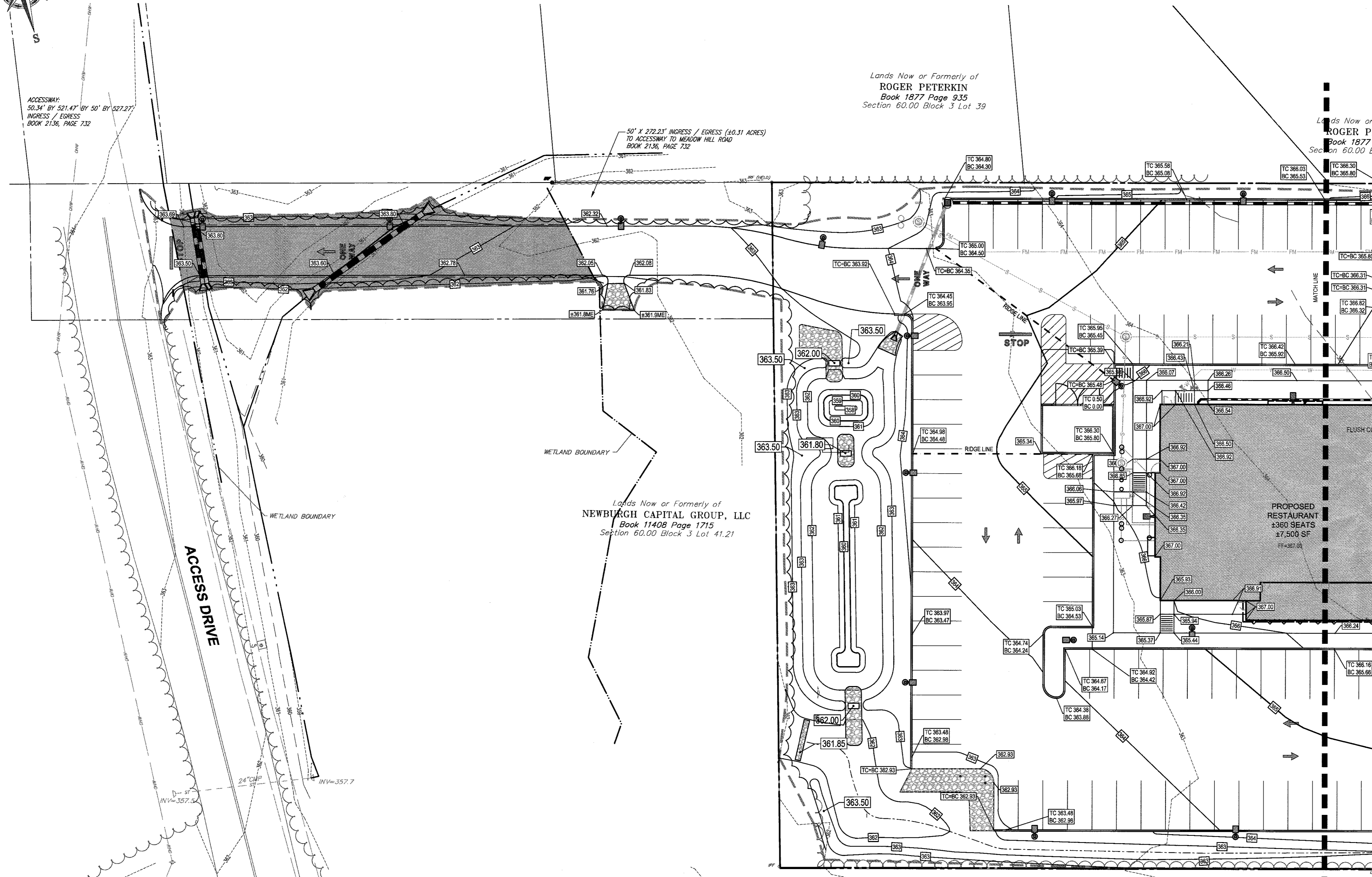
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BOOK 2136, PAGE 732

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BOOK 2136, PAGE 732

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Lands Now or
Formerly of
ROGER PE
Book 1877 F
Section 60.00 Bl

Lands Now or Formerly of
NEWBURGH CAPITAL GROUP, LLC
Book 11408 Page 1715
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 • CHALFONT, PA
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RHINEBECK REALTY, LLC

LOCATION OF SITE
 1413 UNION AVENUE
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING

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R.W. OSTERHOUDT

PROFESSIONAL ENGINEER
 NEW YORK LICENSE No. 076930

SHEET TITLE:
GRADING PLAN 2

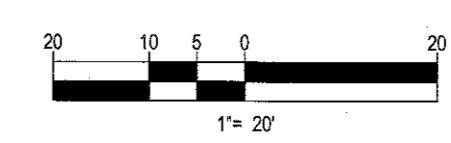
SHEET NUMBER:
7
 OF 17

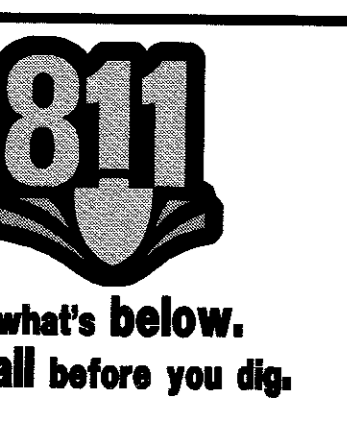
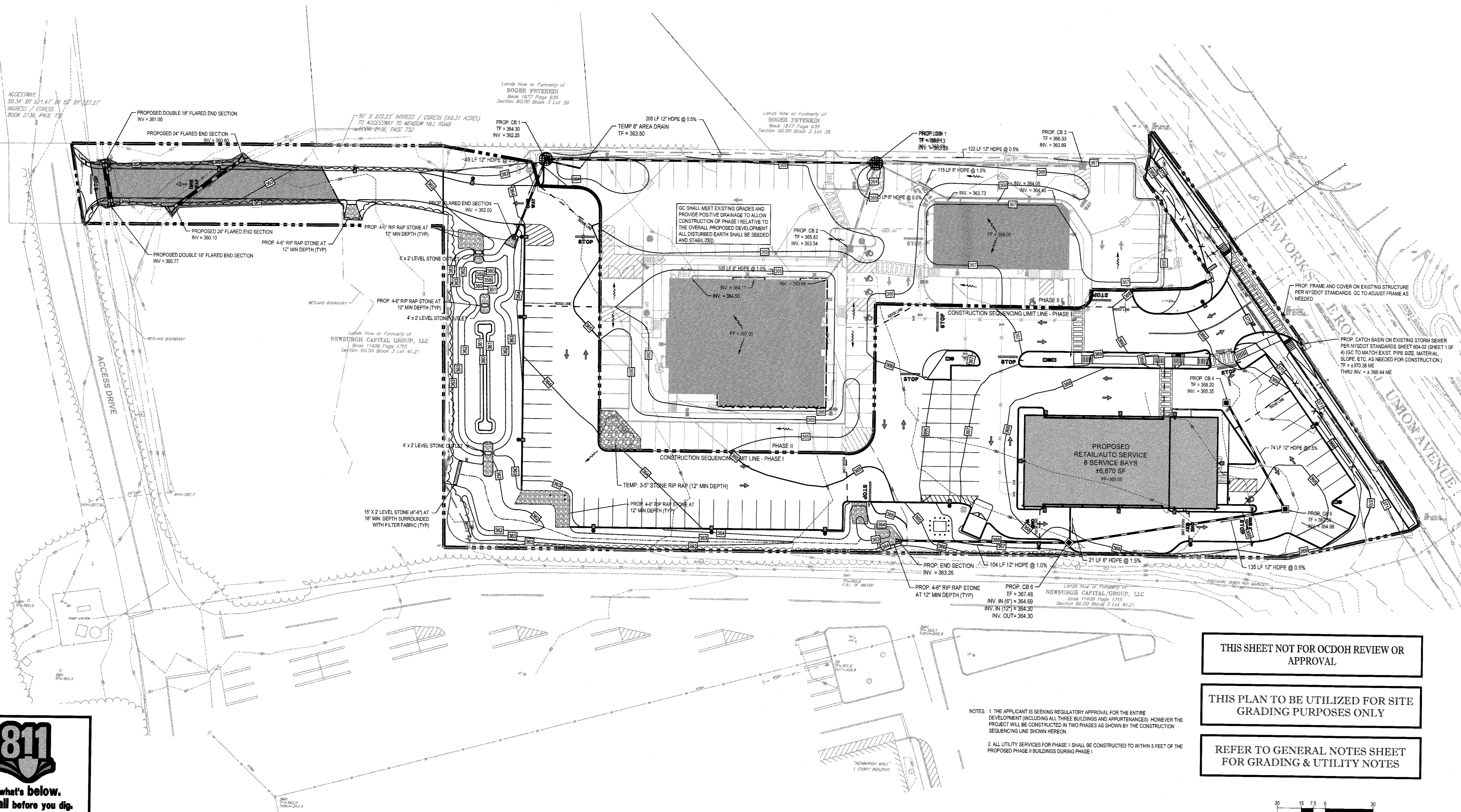
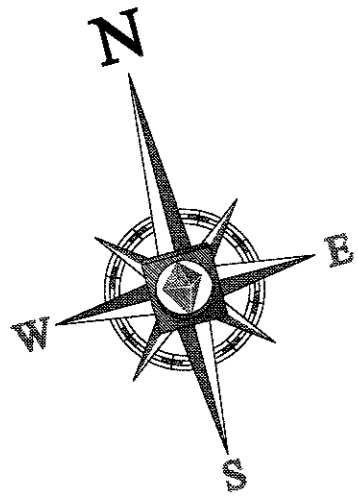
REV 15 - 11/01/2016

THIS SHEET NOT FOR OCDOH REVIEW OR APPROVAL

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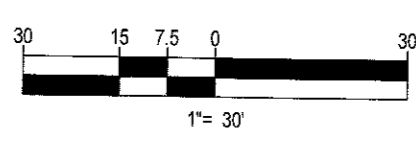
REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES





NOTES: 1. THE APPLICANT IS SEEKING REGULATORY APPROVAL FOR THE ENTIRE DEVELOPMENT (INCLUDING ALL THREE BUILDINGS AND APPURTENANCES) HOWEVER THE PROJECT WILL BE CONSTRUCTED IN TWO PHASES AS SHOWN BY THE CONSTRUCTION SEQUENCING LINE SHOWN HEREON.
 2. ALL UTILITY SERVICES FOR PHASE II SHALL BE CONSTRUCTED TO WITHIN 5 FEET OF THE PROPOSED PHASE II BUILDINGS DURING PHASE I.

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REVISIONS

REV	DATE	COMMENT	BY
1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
3	07/09/15	PHASING PLANS	TCF
4	08/27/15	OFFICE FULL DESIGN	TCF
5	12/01/15	PER NYSDOT COMMENTS	TCF
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10	08/11/16	PER TRAFFIC COMMENTS	NCN
11	09/19/16	PER DOH COMMENTS	ABJ
12	09/28/16	REVISED UTILITIES	ABJ
13	10/14/16	PER TOWN COMMENTS	ABJ
14	10/21/16	PER TOWN COMMENTS	TCF
15	11/01/16	REV UTILITY LAYOUT	ABJ

PRELIMINARY

PROJECT No: B140107
 DRAWN BY: TCF
 CHECKED BY: RWO
 DATE: 01/27/2015
 SCALE: AS NOTED
 CAD I.D.: B140107SS00

PROJECT: **SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC**

LOCATION OF SITE
 1413 UNION AVENUE
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK

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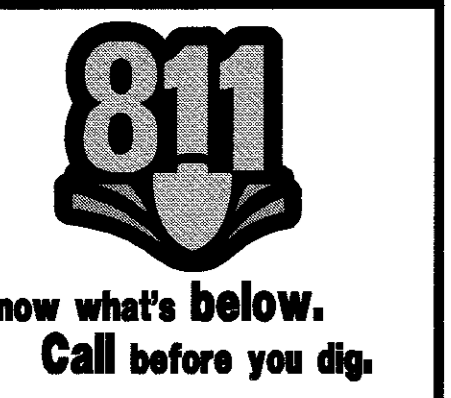
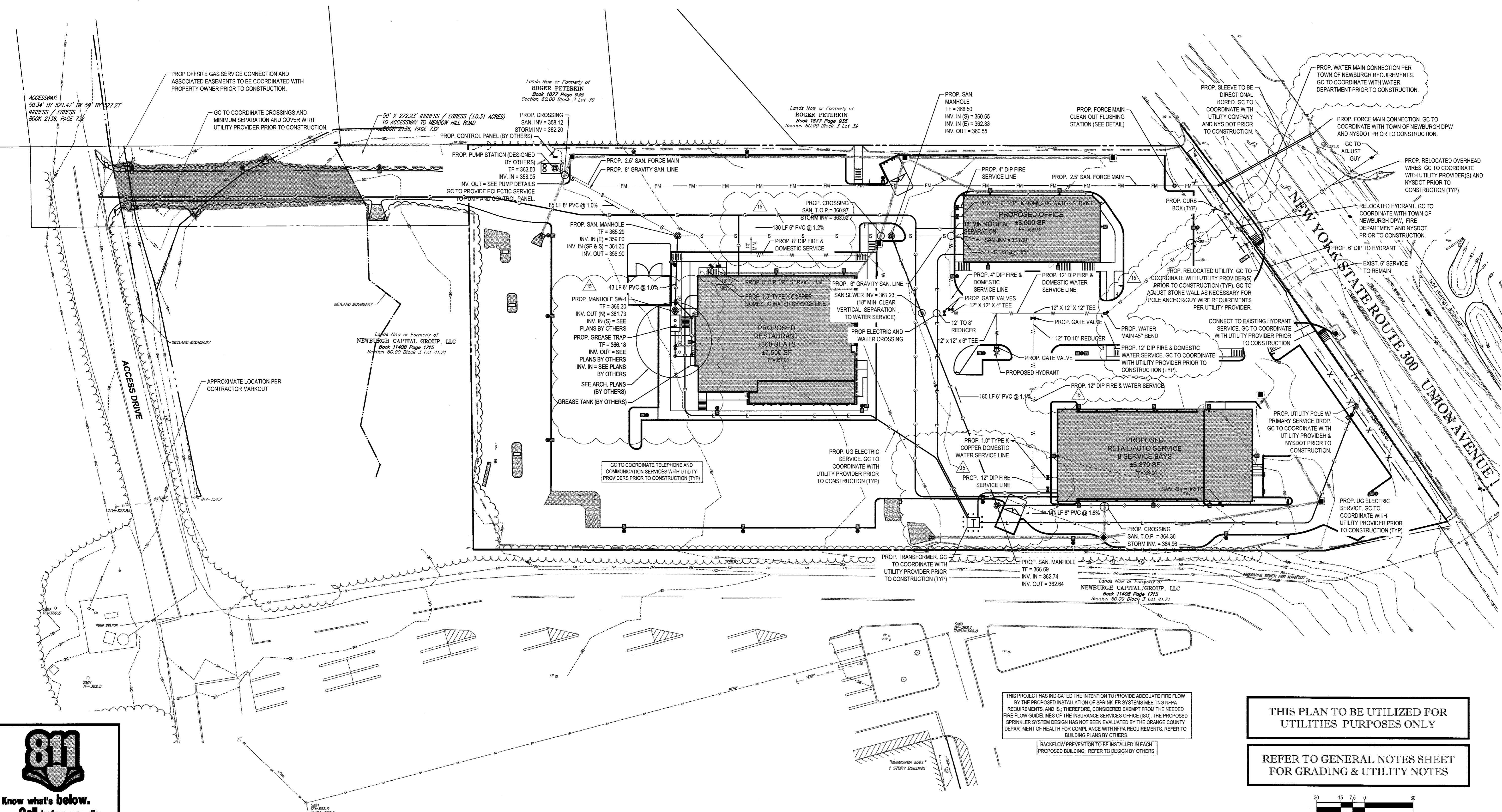
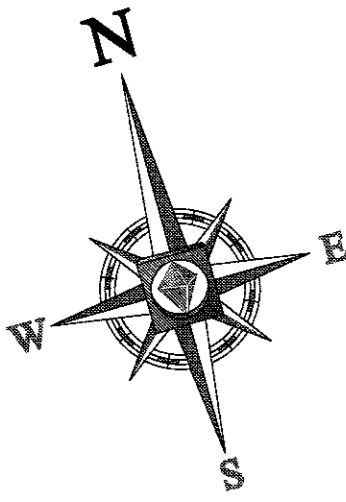
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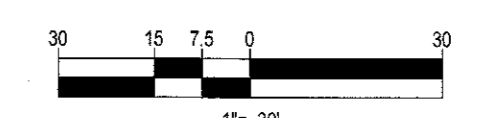
SHEET TITLE:
CONSTRUCTION SEQUENCE GRADING & DRAINAGE PLAN

SHEET NUMBER:
8
 OF 17



THIS PROJECT HAS INDICATED THE INTENTION TO PROVIDE ADEQUATE FIRE FLOW BY THE PROPOSED INSTALLATION OF SPRINKLER SYSTEMS MEETING NFPA REQUIREMENTS, AND IS, THEREFORE, CONSIDERED EXEMPT FROM THE NEEDED FIRE FLOW GUIDELINES OF THE INSURANCE SERVICES OFFICE (ISO). THE PROPOSED SPRINKLER SYSTEM DESIGN HAS NOT BEEN EVALUATED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH FOR COMPLIANCE WITH NFPA REQUIREMENTS. REFER TO BUILDING PLANS BY OTHERS.

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY
REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITIES NOTES



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15	11/01/16	REV. UTILITY LAYOUT	ABJ

PRELIMINARY

PROJECT No.: B140197
DRAWN BY: TCF
CHECKED BY: RWD
DATE: 01/27/2015
SCALE: AS NOTED
CAD ID: B140197SS30

PROJECT: **SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC**

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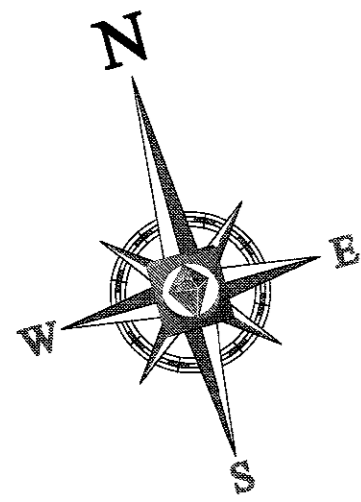
R.W. OSTERHOUDT

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SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
9
OF 17

REV 15 - 11/01/2015



SOIL RESTORATION REQUIREMENTS

TYPE OF DISTURBANCE	SOIL RESTORATION REQUIREMENT
NO SOIL DISTURBANCE	RESTORATION NOT PERMITTED
MINIMAL SOIL DISTURBANCE	RESTORATION NOT REQUIRED
AREAS WHERE TOPSOIL IS STRIPPED ONLY - NO CHANGE IN GRADE	AERATE AND APPLY 6" OF TOPSOIL
AREAS OF CUT OR FILL	APPLY FULL SOIL RESTORATION (SEE NOTES ON SHEET 8)
HEAVY TRAFFIC AREAS ON SITE (ESPECIALLY IN A ZONE 5-25 FEET AROUND BUILDINGS BUT NOT WITHIN 5 FOOT PERIMETER AROUND FOUNDATION WALLS)	APPLY FULL SOIL RESTORATION (DE-COMPACTION AND COMPOST ENHANCEMENT)
AREAS WHERE INFILTRATION PRACTICES ARE APPLIED	RESTORATION NOT REQUIRED, BUT MAY BE APPLIED TO ENHANCE THE REDUCTION SPECIFIED FOR APPROPRIATE PRACTICES

OPERATION / MAINTENANCE NOTES

- MAINTENANCE OF ALL PARKING LOTS AND ON-SITE DRAINAGE SYSTEMS ON THE PROPERTIES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE IMPLEMENTATION OF THE FOLLOWING MAINTENANCE PROGRAM IS INTENDED TO ADEQUATELY MANAGE SEDIMENT INFILTRATION TO THE STORM WATER DRAINAGE SYSTEM.
- ALL PARKING LOTS SHALL BE SWEEPED TWO (2) TIMES PER YEAR, BETWEEN THE DATES OF OCTOBER 1 AND JUNE 1 OF EACH YEAR AND ALL SAND AND DEBRIS SHALL BE PROPERLY DISPOSED.
- THE ON-SITE DRAINAGE SYSTEM INCLUDING GATCH BASINS, DIVERSION MANHOLE STRUCTURES, PIPES, END SECTIONS, OUTLET CONTROL STRUCTURES, INLET PROTECTION, INFILTRATION BASINS AND DETENTION BASINS SHALL BE INSPECTED PER GUIDELINES SET FORTH IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). CLEANING OF STRUCTURES SHALL INCLUDE THE REMOVAL, AND PROPER DISPOSAL OF ALL SAND AND DEBRIS FROM ANY AND ALL COMPONENTS OF THE SYSTEM AND REPAIR AND OR REPLACEMENT OF ANY DAMAGED STRUCTURES, STONE OUTLET PROTECTION, SLOPES OR ANY COMPONENT OF THE SYSTEM THAT IS IN NEED OF REPAIR TO RESTORE TO ITS ORIGINALLY DESIGNED AND CONSTRUCTED CONDITION.
- PROPERTY OWNER SHALL MAINTAIN A MAINTENANCE LOG DOCUMENTING THE INSPECTION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM. A COPY OF THE CONSTRUCTION INSPECTION, OPERATIONS AND MAINTENANCE CHECK LISTS AND DOWNSIDE DEFENDER OPERATIONS AND MAINTENANCE MANUAL ARE INCLUDED IN THE SWPPP AND SHALL BE COMPLETED AS NOTED AND KEPT IN THE LOG FOR REVIEW AND REFERENCE.

SOIL RESTORATION NOTES:

- SOIL RESTORATION PROCEDURE:**
- DURING PERIODS OF RELATIVELY LOW TO MODERATE SUBSOIL MOISTURE, THE DISTURBED SUBSOILS ARE RETURNED TO ROUGH GRADE AND THE FOLLOWING SOIL RESTORATION STEPS APPLIED:
- APPLY 3 INCHES OF COMPOST OVER SUBSOIL
 - TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC, OR TILLER, MIXING AND CIRCULATING AIR AND COMPOST INTO SUBSOILS
 - ROCK-PICK UNTIL UPLIFTED STONEROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE
 - APPLY TOPSOIL TO A DEPTH OF 6 INCHES
 - VEGETATE AS REQUIRED BY APPROVED PLAN
- AT THE END OF THE PROJECT AN INSPECTOR SHOULD BE ABLE TO PUSH A 3/8" METAL BAR 12 INCHES INTO THE SOIL JUST WITH BODY WEIGHT. FIGURES 5.18 AND 5.17 SHOW TWO ATTACHMENTS USED FOR SOIL DECOMPACTION. TILLING (STEP 2 ABOVE) SHOULD NOT BE PERFORMED WITHIN THE DRIP LINE OF ANY EXISTING TREES OR OVER UTILITY INSTALLATIONS THAT ARE WITHIN 24 INCHES OF THE SURFACE.

COMPOST SPECIFICATIONS:

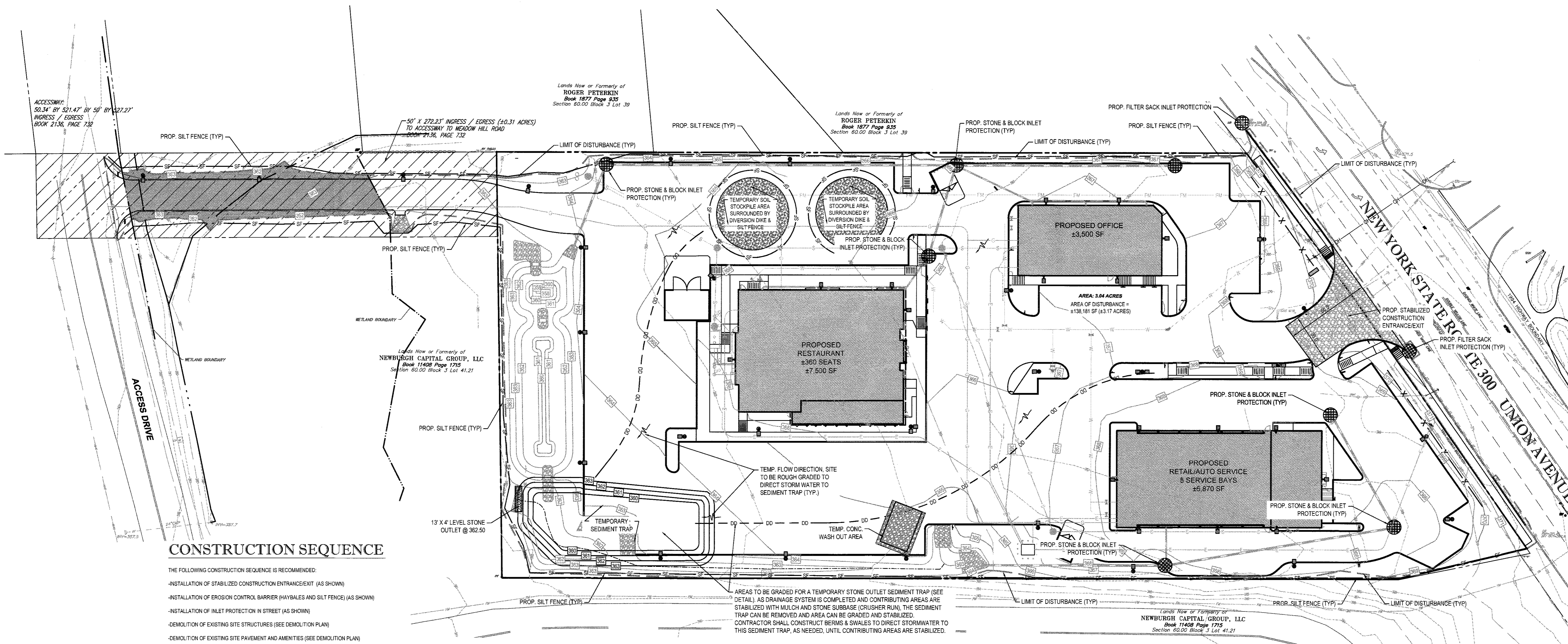
COMPOST SHALL BE AGED, FROM PLANT DERIVED MATERIALS, FREE OF VIABLE WEED SEEDS, HAVE NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING, PASS THROUGH A HALF INCH SCREEN AND HAVE A PH SUITABLE TO GROW DESIRED PLANTS.

MAINTENANCE

- A SIMPLE MAINTENANCE AGREEMENT SHOULD IDENTIFY WHERE SOIL RESTORATION IS APPLIED, WHERE NEWLY RESTORED AREAS ARE/CANNOT BE CLEARED, WHO THE RESPONSIBLE PARTIES ARE TO ENSURE THAT ROUTE VEGETATION IMPROVEMENTS ARE MADE (I.E. THINNING, INVASIVE PLANT REMOVAL, ETC.), SOIL COMPOST AMENDMENTS WITHIN A FILTER STRIP OR GRASS CHANNEL, SHOULD BE LOCATED IN PUBLIC RIGHT OF WAY, OR WITHIN A DEDICATED STORMWATER OR DRAINAGE EASEMENT
- FIRST YEAR MAINTENANCE OPERATIONS INCLUDES:**
- INITIAL INSPECTIONS FOR THE FIRST SIX MONTHS (ONCE AFTER EACH STORM GREATER THAN HALF-INCH)
 - RESEEDING TO REPAIR BARE OR ERODING AREAS TO ASSURE GRASS STABILIZATION
 - WATER ONCE EVERY THREE DAYS FOR FIRST MONTH, AND THEN PROVIDE A HALF INCH OF WATER PER WEEK DURING FIRST YEAR. IRRIGATION PLAN MAY BE ADJUSTED ACCORDING TO THE RAIN EVENT.
 - FERTILIZATION MAY BE NEEDED IN THE FALL AFTER THE FIRST GROWING SEASON TO INCREASE PLANT VIGOR.

ONGOING MAINTENANCE:

- TWO POINTS HELP ENSURE LASTING RESULTS OF DECOMPACTION:
- PLANTING THE APPROPRIATE GROUND COVER WITH DEEP ROOTS TO MAINTAIN SOIL STRUCTURE
 - KEEPING THE SITE FREE OF VEHICULAR AND FOOT TRAFFIC OR OTHER WEIGHT LOADS. CONSIDER PEDESTRIAN FOOTPATHS. (SOMETIMES IT MAY BE NECESSARY TO DE-TATCH THE TURF EVERY FEW YEARS)



CONSTRUCTION SEQUENCE

- THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:
- INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)
 - INSTALLATION OF EROSION CONTROL BARRIER (HAYBALES AND SILT FENCE) (AS SHOWN)
 - INSTALLATION OF INLET PROTECTION IN STREET (AS SHOWN)
 - DEMOLITION OF EXISTING SITE STRUCTURES (SEE DEMOLITION PLAN)
 - DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)
 - CLEARING AND GRUBBING
 - INSTALLATION OF TEMPORARY SWALES AND SEDIMENT TRAP
 - EARTHWORK AND EXCAVATION/FILLING AS NECESSARY
 - CONSTRUCTION OF ON-SITE STORMWATER FACILITIES
 - CONSTRUCTION OF UTILITIES
 - STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING
 - INSTALLATION OF INLET PROTECTION ON-SITE UTILITIES (AS SHOWN)
 - CONSTRUCTION OF BUILDINGS
 - CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS
 - SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH
 - FINAL GRADING OF ALL SLOPED AREAS
 - PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED REQUIRED.
 - REMOVAL OF THE TEMPORARY SEDIMENT TRAP
 - PAVE PARKING LOT
 - LANDSCAPING PER LANDSCAPING PLAN
 - REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER.

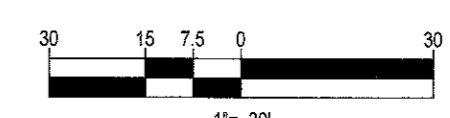
SEDIMENT TRAP - CALCULATIONS

SEDIMENT TRAP
 CONTRIBUTING AREA= 3.04± ACRES
 REQUIRED LENGTH OF OUTLET= 4(DRAINAGE AREA)
 = 4 x 3.04 = 12.16'
 MINIMUM WIDTH= 4'
 PROVIDED: 4'x13' OUTLET
 REQUIRED STORAGE= 3,600 CF PER ACRE OF CONTRIBUTING DRAINAGE AREA=
 3.04' * (3,600)= 10,944 CF
 PROVIDED: ±12,204 CF
 REQUIRED: 10,944 CF
 SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO 1/2 THE ORIGINAL DESIGN CAPACITY
 DESIGN CAPACITY= 12,204 CF x 0.5= 6102 CF
 SEDIMENT TRAP WILL REACH 1/2 DESIGN CAPACITY AT ELEVATION 361.75
 ORIGINAL ELEVATION TO BE MARKED AND TRAP TO BE RESTORED TO ORIGINAL DIMENSIONS WHEN 1.67' OF SEDIMENT HAS ACCUMULATED

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THIS PLAN TO BE UTILIZED FOR SITE SOIL AND EROSION CONTROL PURPOSES ONLY

REFER TO SOIL EROSION CONTROL NOTES & DETAIL SHEET FOR EROSION NOTES AND DETAILS



BOHLER ENGINEERING

CORPORATE OFFICE: WARREN, NJ

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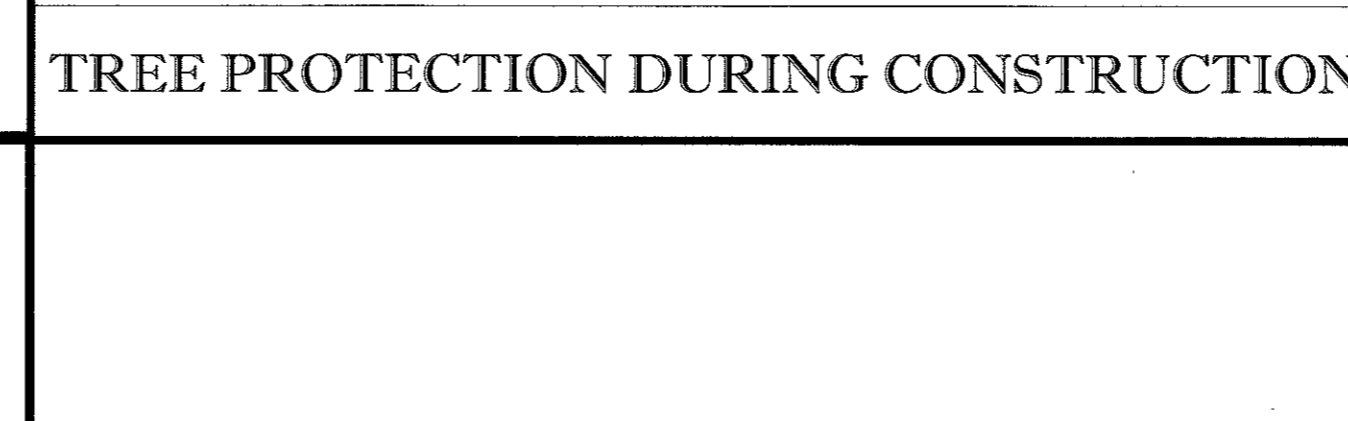
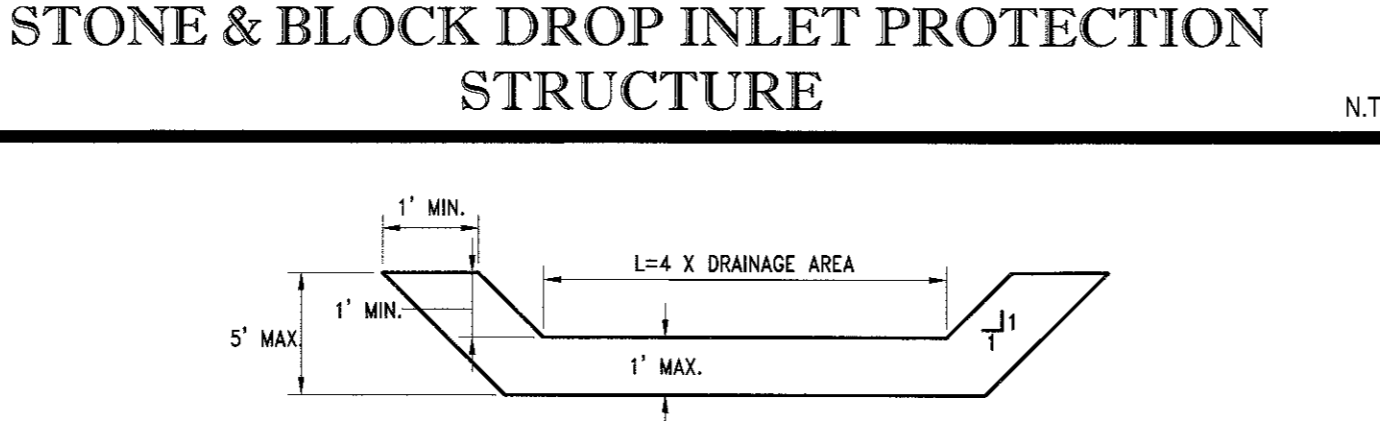
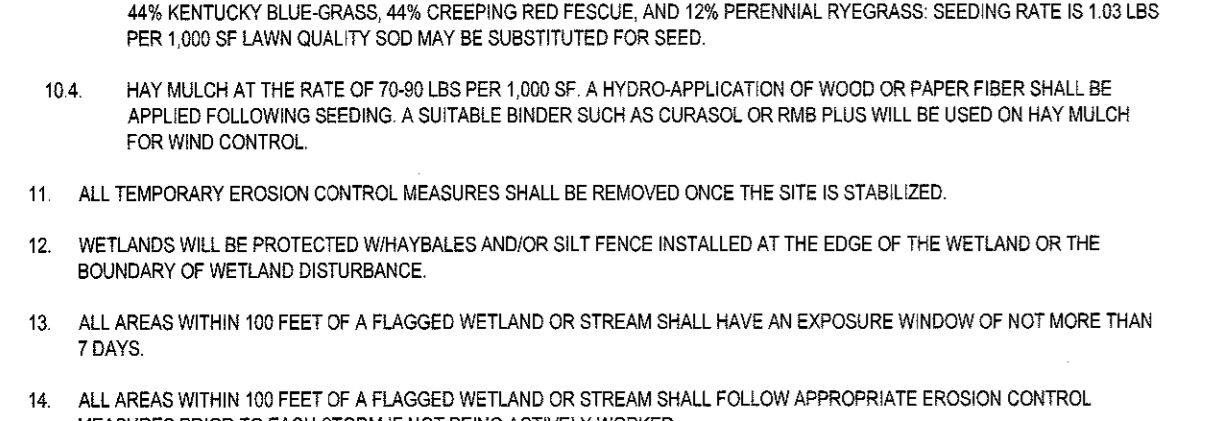
SHEET TITLE: **SOIL EROSION & SEDIMENT CONTROL PLAN**

SHEET NUMBER: **10**
 OF 17

REV 15 - 11/01/2016

EROSION & SEDIMENT CONTROL NOTES

- 1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
- 2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
- 3. SEDIMENT BARRIERS (SILT FENCE, HAY BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- 4. INSTALL SILT FENCE AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILT FENCE DETAIL FOR PROPER INSTALLATION. SILT FENCE WILL REMAIN IN PLACE PER NOTES.
- 5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
- 6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).
- 7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- 8. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
- 9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.
- 10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
 - 10.1. SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
 - 10.2. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18 LB PER 1,000 SF USING 10% TO 20% GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SF).
 - 10.3. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REEDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUE GRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN QUALITY SOIL MAY BE SUBSTITUTED FOR SEED.
 - 10.4. HAY MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURACOL OR RMB PLUS WILL BE USED ON HAY MULCH FOR WIND CONTROL.
- 11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
- 12. WETLANDS WILL BE PROTECTED BY HAY BALES AND/OR SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- 13. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
- 14. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED.



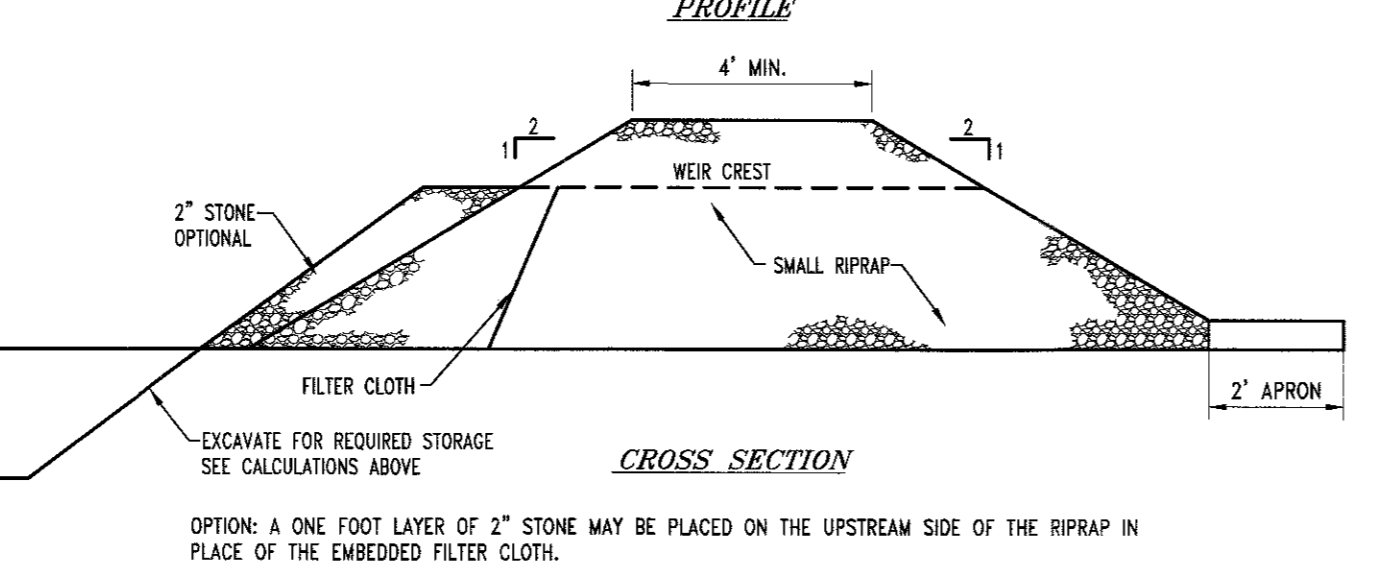
MULCH

LOCATION	MULCH	RATE (1000 SF)
PROTECT AREA	STRAW OR HAY	100 POUNDS
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS STRAW OR HAY (ANCHORED)	185-275 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED

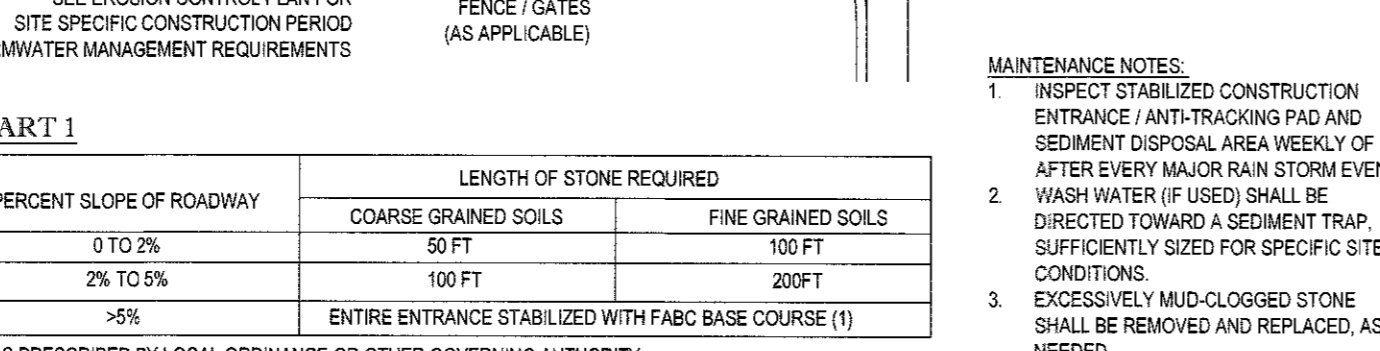
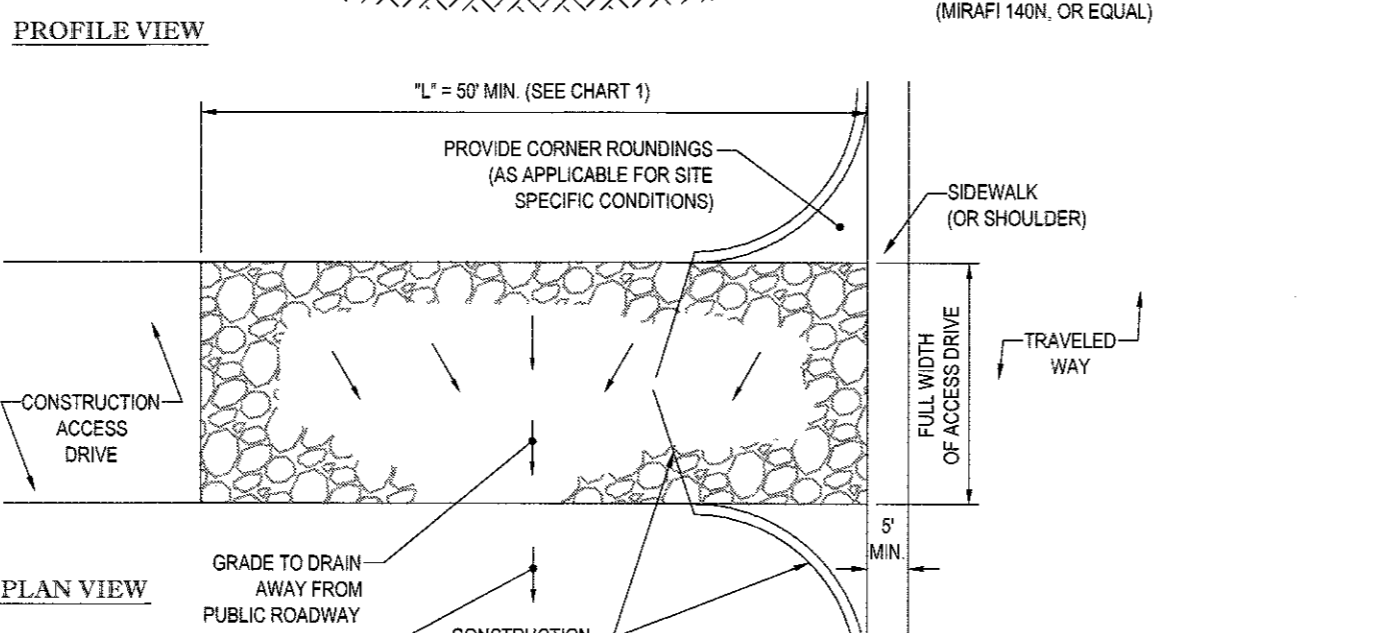
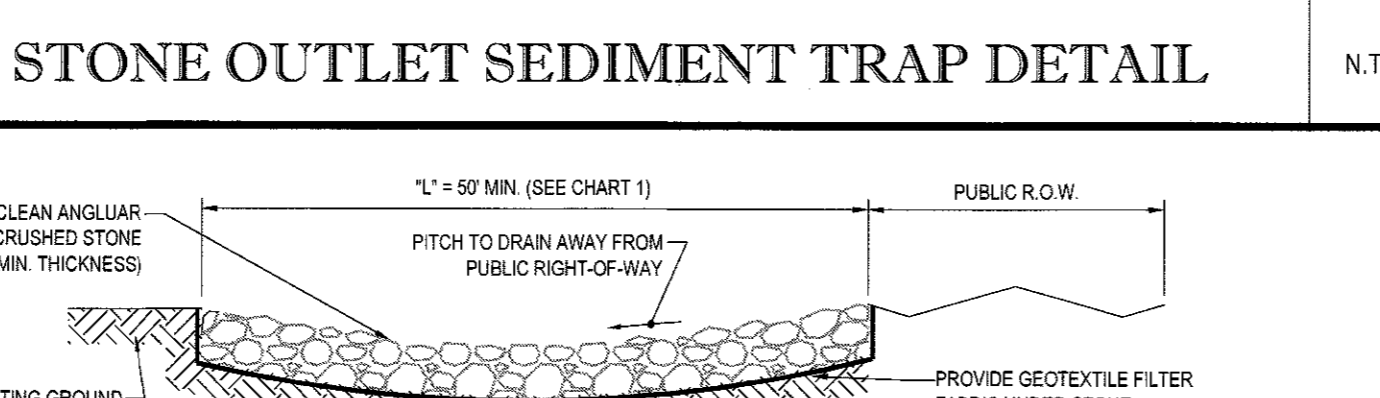
*A HYDRO APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURACOL OR RMB PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL.

EROSION CONTROL NOTES DURING WINTER CONSTRUCTION

- 1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
- 2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- 3. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
- 4. CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
- 5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 100 LB PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDING, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
- 6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200 - 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACES TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
- 7. MULCHING REQUIREMENTS:
 - 7.1. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER.
 - 7.2. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
 - 7.3. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- 8. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
- 9. DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
- 10. STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.
- 11. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.



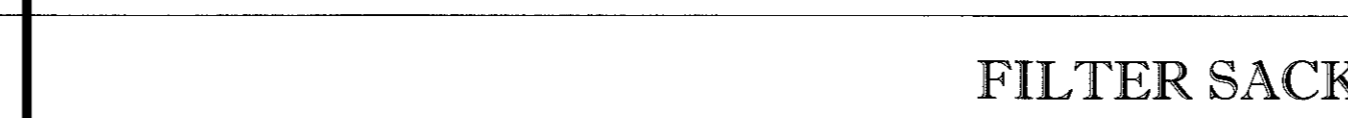
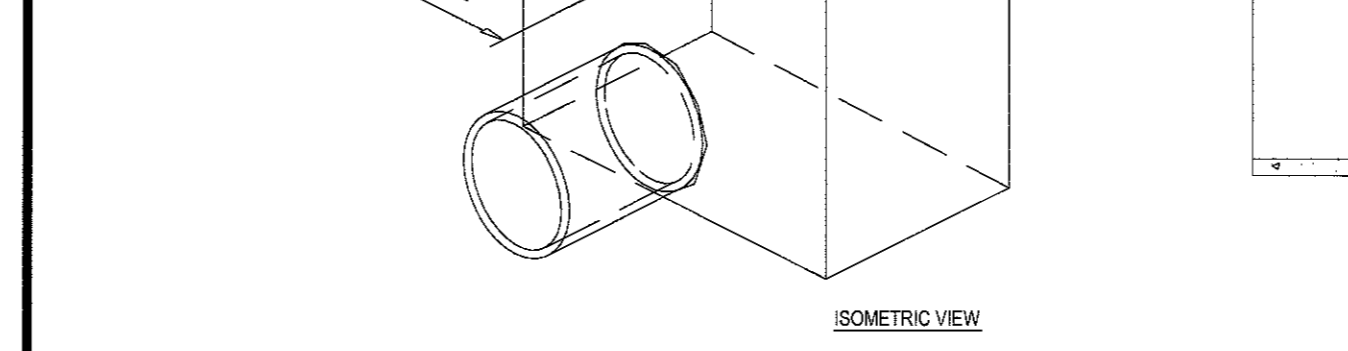
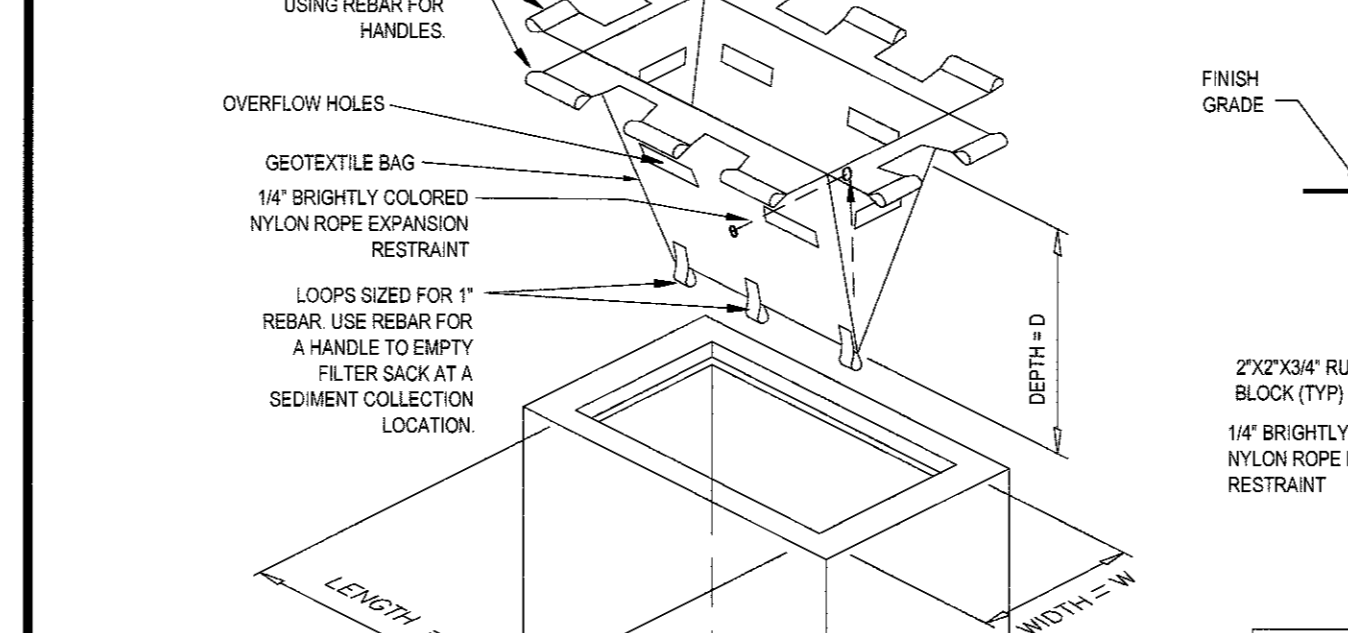
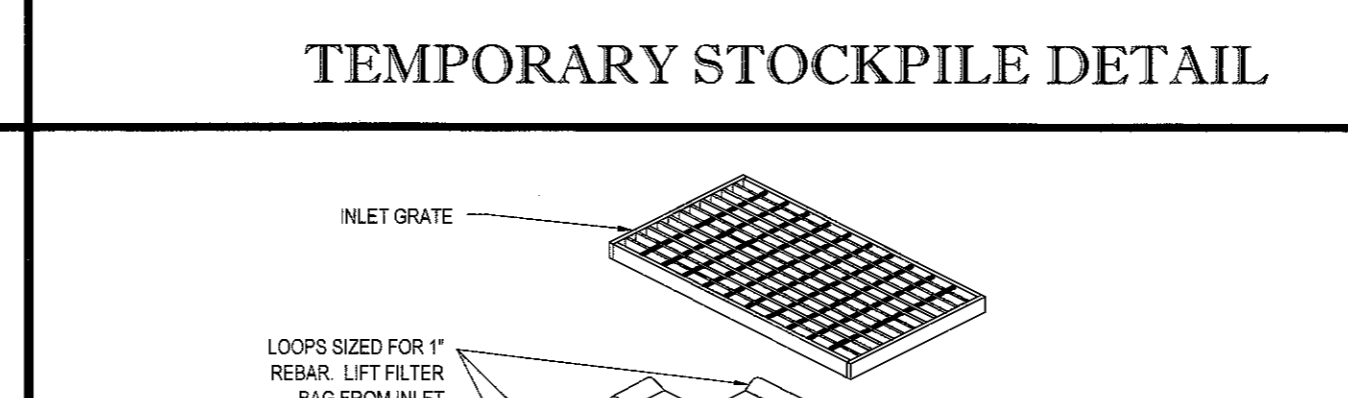
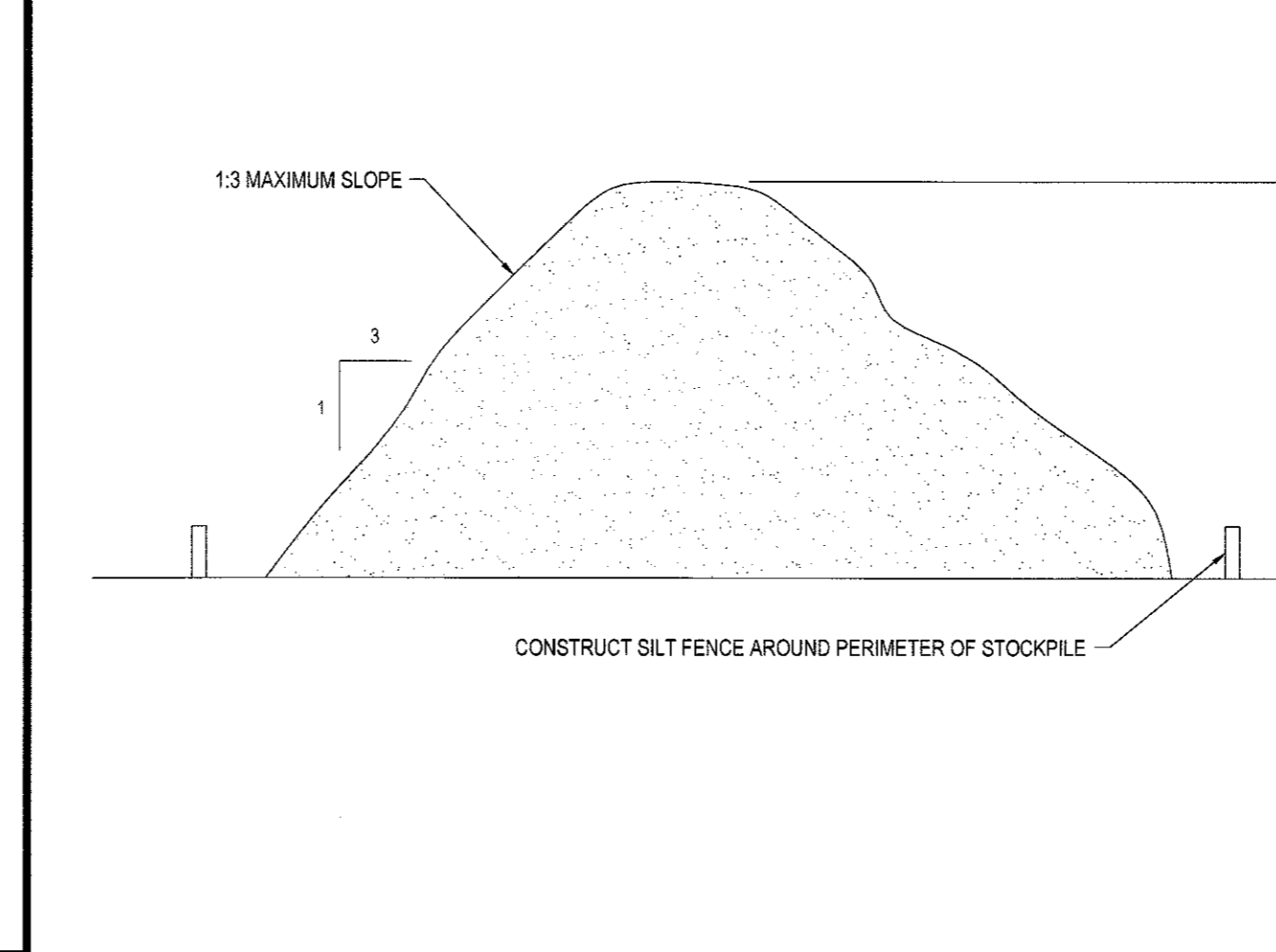
- NOTES:
- 1. AREA UNDER EMBANKMENT SHALL BE CLEARED, SCRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
 - 2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACT BY TRAVELING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
 - 3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
 - 4. THE STONE USED IN THE OULET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1" THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE OF THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
 - 5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH TO THE TRAP.
 - 6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
 - 7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



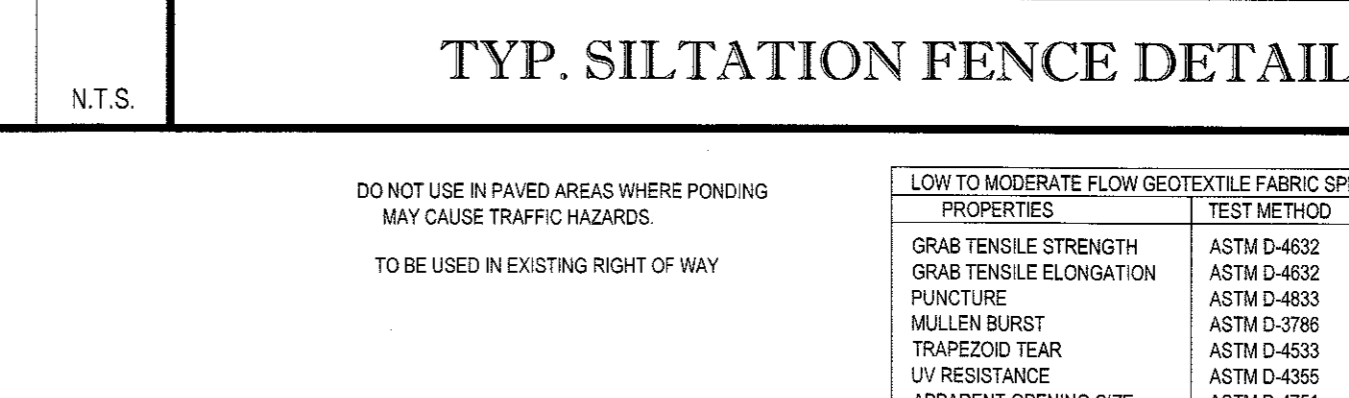
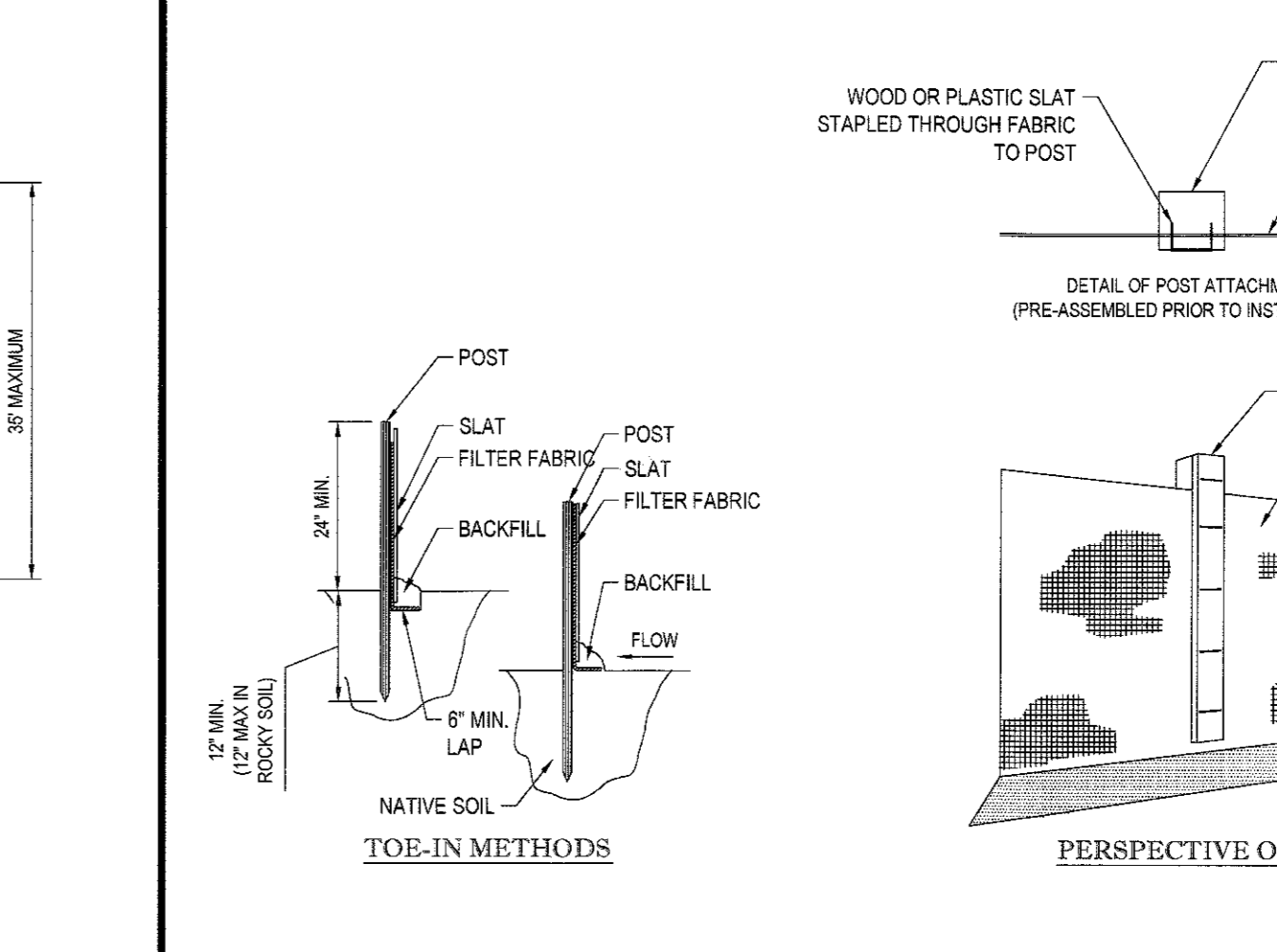
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2% TO 5%	100 FT	200 FT
5%	ENTIRE ENTRANCE STABILIZED WITH FABC BASE COURSE (1)	

(1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

STABILIZED CONSTRUCTION ENTRANCE/EXIT



TEMPORARY STOCKPILE DETAIL



LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-2786	800 PSI
TRAPEZOID TEAR	ASTM D-4833	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4481	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4481	0.5 SEC-1

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	250 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	130 LBS
MULLEN BURST	ASTM D-2786	420 PSI
TRAPEZOID TEAR	ASTM D-4833	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4481	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4481	1.5 SEC-1

THIS SHEET NOT FOR OCDOH REVIEW OR APPROVAL

CONCRETE WASHOUT AREA DETAIL

BOHLER ENGINEERING

CORPORATE OFFICE: WARREN, NJ

OFFICES: CHATEAUXVILLE, PA; CHANTON, PA; CHERRYVILLE, PA; CHERRYVILLE, PA; HARRISBURG, PA; HARRISBURG, PA; PHILADELPHIA, PA; WASHINGTON, D.C.

REV	DATE	COMMENT	BY
1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
3	07/19/15	PHASING PLANS	TCF
4	08/27/15	OFFICE FULL DESIGN	TCF
5	12/01/15	PER NYSDOT COMMENTS	TCF
6	01/20/16	PER CLIENT COMMENTS	TCF
7	04/14/16	MISC. COMMENTS	TCF
8	08/03/16	PER TOWN COMMENTS	TCF
9	07/21/16	MISC. COMMENTS	TCF
10	08/11/16	PER TRAFFIC COMMENTS	NCN
11	09/19/16	PER DOH COMMENTS	ABJ
12	09/28/16	REVISED UTILITIES	ABJ
13	10/14/16	PER TOWN COMMENTS	ABJ
14	10/21/16	PER TOWN COMMENTS	TCF
15	11/01/16	REV UTILITY LAYOUT	ABJ

PRELIMINARY

PROJECT No.: B140197

DRAWN BY: TCF

CHECKED BY: RWO

DATE: 01/27/2015

SCALE: AS NOTED

CAD ID: B140197S330

PROJECT: SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC

LOCATION OF SITE: 1413 UNION AVENUE, TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING

17 COMPUTER DRIVE WEST, ALBANY, NY 12205

Phone: (518) 438-8900

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R.W. OSTERHOUDT

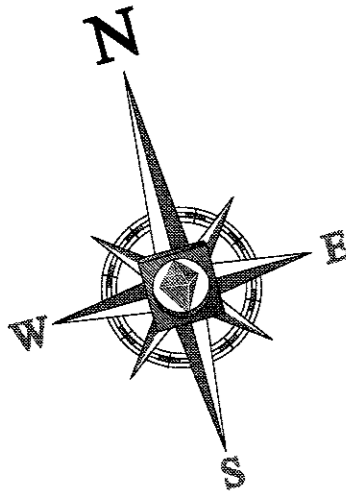
PROFESSIONAL ENGINEER

NEW YORK LICENSE NO. 076930

SHEET TITLE: SOIL EROSION CONTROL NOTES & DETAILS SHEET

SHEET NUMBER: 11 OF 17

REV 15-11/01/2016

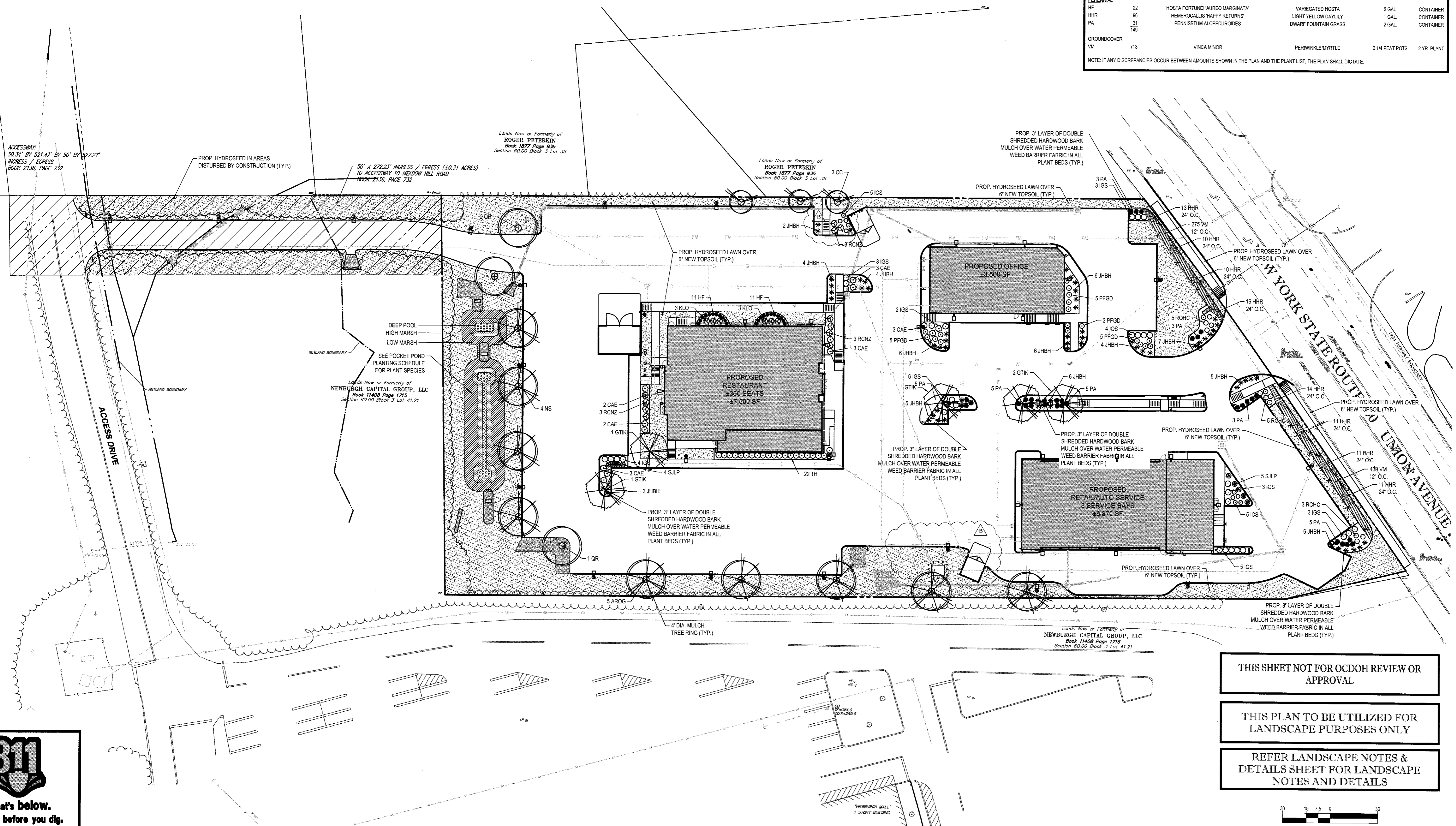


TOWN OF NEWBURGH LANDSCAPE REQUIREMENTS			
SECTION OF BY-LAW	DESCRIPTION	REQUIRED	PROPOSED
	ONE TREE PER 8 PARKING SPACES 153 SPACES / 8 = 19.1 TREES	19.1 TREES	20 TREES

POCKET POND PLANTING SCHEDULE							
KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SPACING	RATIO	SQ. FT.
LOW MARSH	68	PELTANDRA VIRGINICA	ARROW ARUM	2' PLUG	3' O.C.	35%	607
	68	PONTERERIA CORDATA	PICKERELWEED	2' PLUG	3' O.C.	35%	607
	58	SAGITTARIA LATIFOLIA	DUCK POTATO	2' PLUG	3' O.C.	30%	520
HIGH MARSH	25	ACORNUS AMERICANAS	SWEETFLAG	2' PLUG	3' O.C.	35%	220
	25	CALTHA PALUSTRIS	MARSH MARIGOLD	2' PLUG	3' O.C.	35%	220
	21	IRIS VERSICOLOR	BLUE FLAG IRIS	2' PLUG	3' O.C.	30%	188
DEEP POOL	15	NUPHAR LUTEA	YELLOW WATER LILY	TUBERS	3' O.C.	50%	135
	15	NYMPHAEA OORATA	WHITE WATER LILY	TUBERS	3' O.C.	50%	135

LANDSCAPE SCHEDULE					
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SHADE TREE					
AROG	5	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2 1/2-3" CAL	B+B
GTK	5	GLEDITSIA TRIACANTHOS VAR. INTERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEYLOCUST	2 1/2-3" CAL	B+B
NS	4	NYSSA SYLVATICA	TUPELO	2 1/2-3" CAL	B+B
QR	3	QUERCUS RUBRA	RED OAK	2 1/2-3" CAL	B+B
ORNAMENTAL TREE					
CC	3	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL	B+B
EVERGREEN SHRUB					
ICS	10	ILEX CRENATA 'STEEDS'	STEEDS JAPANESE HOLLY	30-38"	#3 CAN
JHS	34	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	24-30"	#5 CAN
JHSH	65	JUNIPERUS HORIZONTALIS 'BAR-HARBOR'	BAR HARBOR CREEPING JUNIPER	15-18" SPRD.	#3 CAN
KLO	6	KALMIA LATIFOLIA 'OLYMPIC FIRE'	OLYMPIC FIRE MOUNTAIN LAUREL	30-36"	B+B
RCNZ	9	RHODODENDRON CATAWBIENSE 'NOVA ZEMBLA'	NOVA ZEMBLA RHODODENDRON	30-36"	B+B
ROHC	13	RHODODENDRON X OBTUSUM 'HINO CRIMSON'	HINO CRIMSON AZALEA	18-24"	#3 CAN
TH	22	TAXUS MEDIA 'HICKSI'	HICKS YEW	24-30"	B+B
DECIDUOUS SHRUB					
CAE	14	CORNUS ALBA 'ELEGANTISSIMA'	VARIEGATED RED TWIG DOGWOOD	2-3'	B+B
PFGD	18	POTENTILLA FRUTICOSA 'GOLD DROP'	GOLD DROP CINQUEFOIL	15-18"	#3 CAN
SILP	5	SPIREA JAPONICA 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	15-18"	#3 CAN
PERENNIAL					
HF	22	HOSTA FORTUNEI 'AURORE MARGINATA'	VARIEGATED HOSTA	2 GAL	CONTAINER
HHR	96	HEMEROCALLIS 'HAPPY RETURNS'	LIGHT YELLOW DAYLILY	1 GAL	CONTAINER
PA	31	PENNISETUM ALOPECUROIDES	DWARF FOUNTAIN GRASS	2 GAL	CONTAINER
GROUND COVER					
VM	713	VINCA MINOR	PERWINKLE/MYRTLE	2 1/4 PEAT POTS	2 YR. PLANT

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICATE.



BOHLER ENGINEERING

CORPORATE OFFICE:
WARREN, NJ

REGIONAL OFFICES:
 • SOUTH BRIDGE, MA
 • BOWEN, MD
 • TOWSON, MD
 • CHARLOTTE, NC
 • STERLING, VA
 • PHILADELPHIA, PA
 • WASHINGTON, D.C.

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

REVISIONS			
REV	DATE	COMMENT	BY
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PRELIMINARY

PROJECT No.: B140197
 DRAWN BY: TCF
 CHECKED BY: RWO
 DATE: 01/27/2015
 SCALE: AS NOTED
 CAD I.D.: B140197SS30

SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC

LOCATION OF SITE
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R.W. OSTERHOUDT

PROFESSIONAL ENGINEER
 NEW YORK LICENSE No. 07630

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
12
OF 17

REV 15 - 11/01/2016

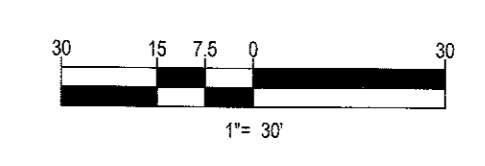
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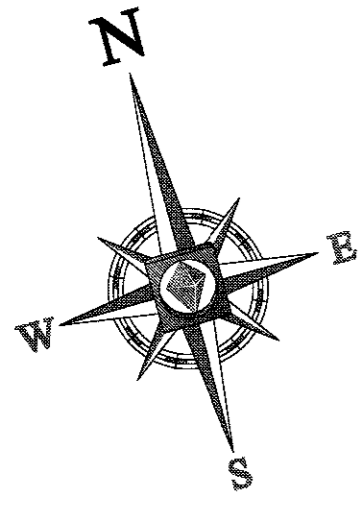
Know what's below.
Call before you dig.

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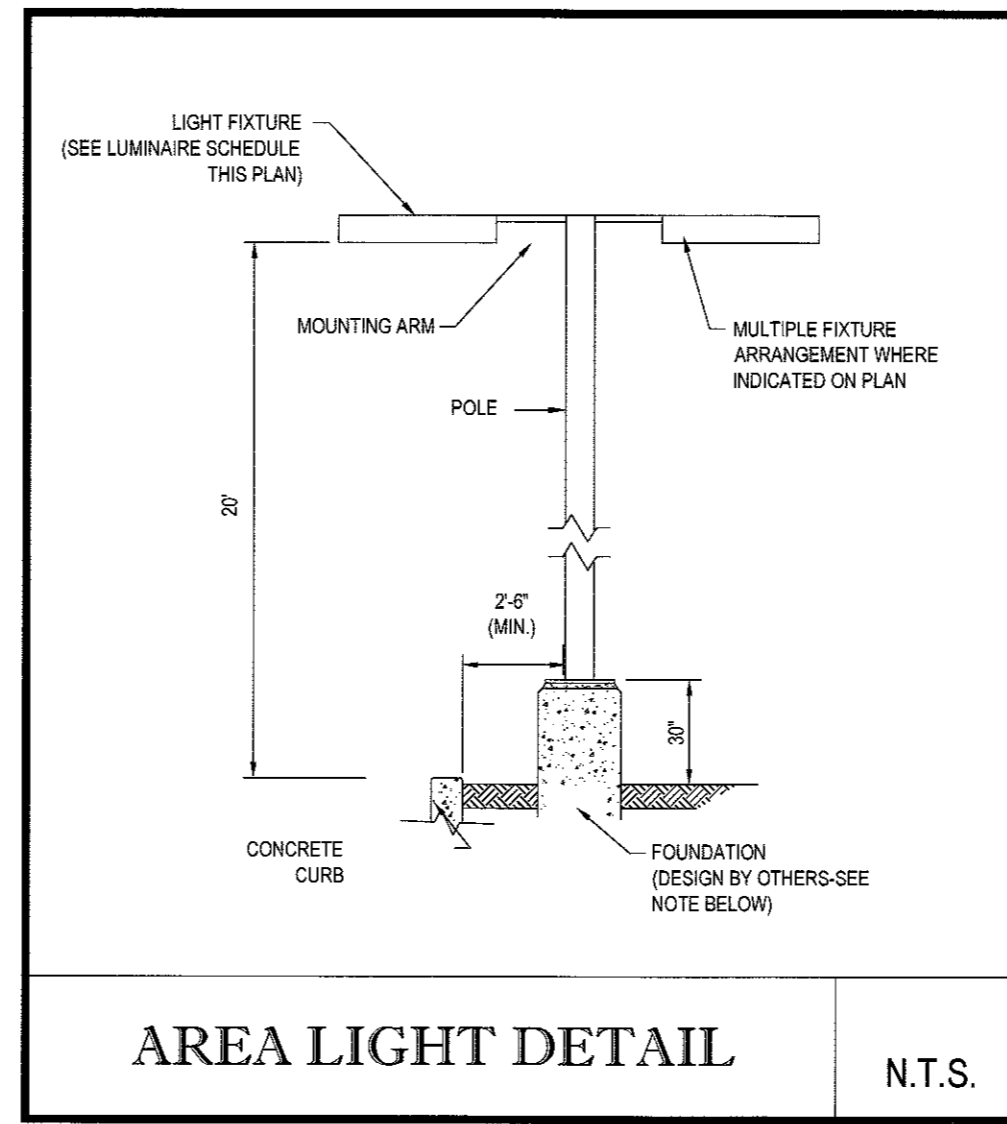
THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

REFER LANDSCAPE NOTES & DETAILS SHEET FOR LANDSCAPE NOTES AND DETAILS





LUMINAIRE SCHEDULE			
SYMBOL	QTY	ARRANGEMENT	DESCRIPTION
A	21	SINGLE	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-3-LED-128-HO-NW-UE (LSI INDUSTRIES)
B	1	SINGLE	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-FT-LED-128-HO-NW-UE (LSI INDUSTRIES)
C	2	DOUBLE @ 180	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-FT-LED-128-HO-NW-UE (LSI INDUSTRIES)
D	1	DOUBLE @ 90	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-3-LED-128-HO-NW-UE (LSI INDUSTRIES)
E	3	SINGLE	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-5-LED-128-HO-NW-UE (LSI INDUSTRIES)
F	9	SINGLE	89 WATT LED WALL LIGHTS - AEROMAX XAMU-S-3-LED-64-HO-NW (LSI INDUSTRIES)
G	8	SINGLE	37 WATT LED WALL LIGHTS - RAB LIGHTING SLMD1NW

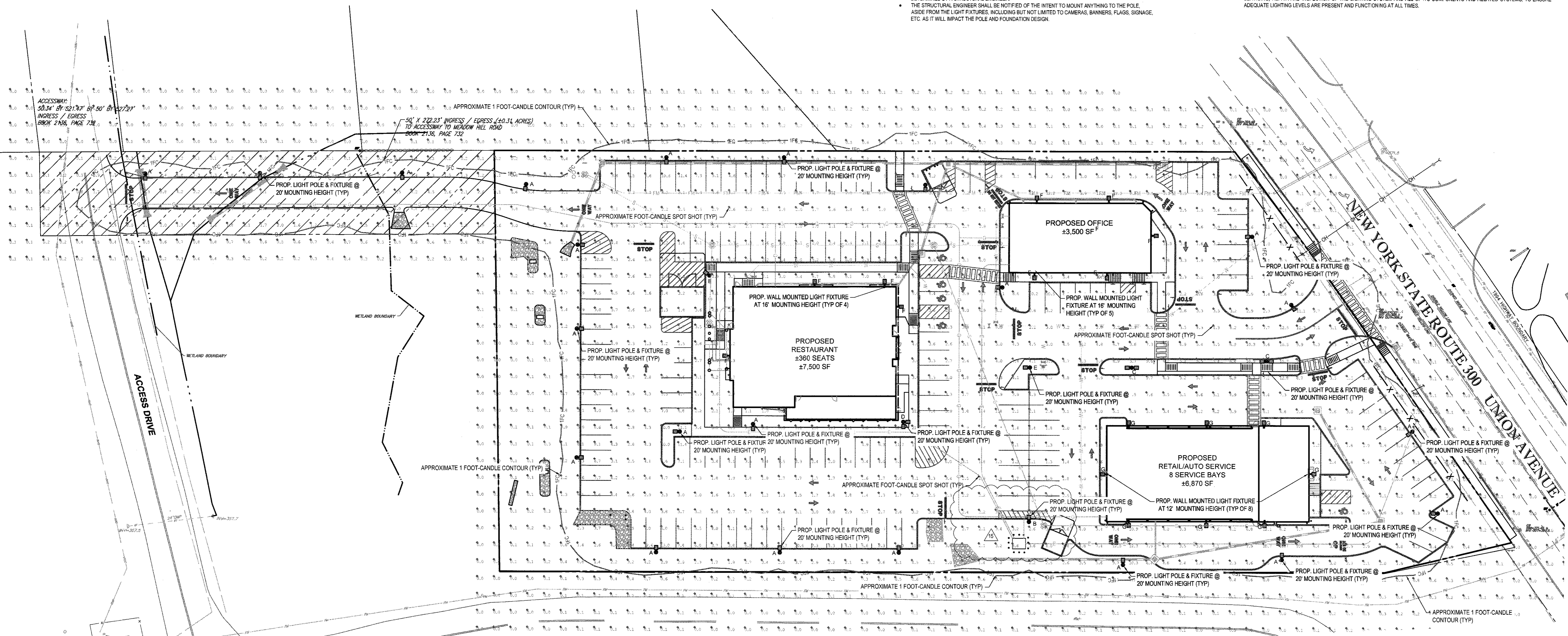


NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

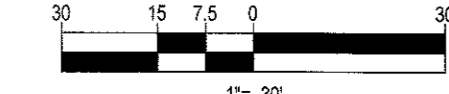
LIGHTING NOTES:

- THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.90 FOR ALL LED LUMINAIRES, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOT-CANDELS.
- THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
- WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES. UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC. ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
- THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
- CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
- IT IS LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
- THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
- THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
- WHEN A BANK ATM IS INCLUDED IN THE PLAN, THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY PUBLISHED STANDARDS.
- UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.



THIS SHEET NOT FOR OCDOH REVIEW OR APPROVAL

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY



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CORPORATE OFFICE:
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CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

REVISIONS			
REV	DATE	COMMENT	BY
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14	10/21/16	PER TOWN COMMENTS	TCF
15	11/01/16	REV UTILITY LAYOUT	ABJ

PRELIMINARY

PROJECT No.: B140197
DRAWN BY: TCF
CHECKED BY: RMC
DATE: 01/27/2016
SCALE: AS NOTED
CAD I.D.: 8140197SS30

SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC

LOCATION OF SITE
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ORANGE COUNTY, NEW YORK

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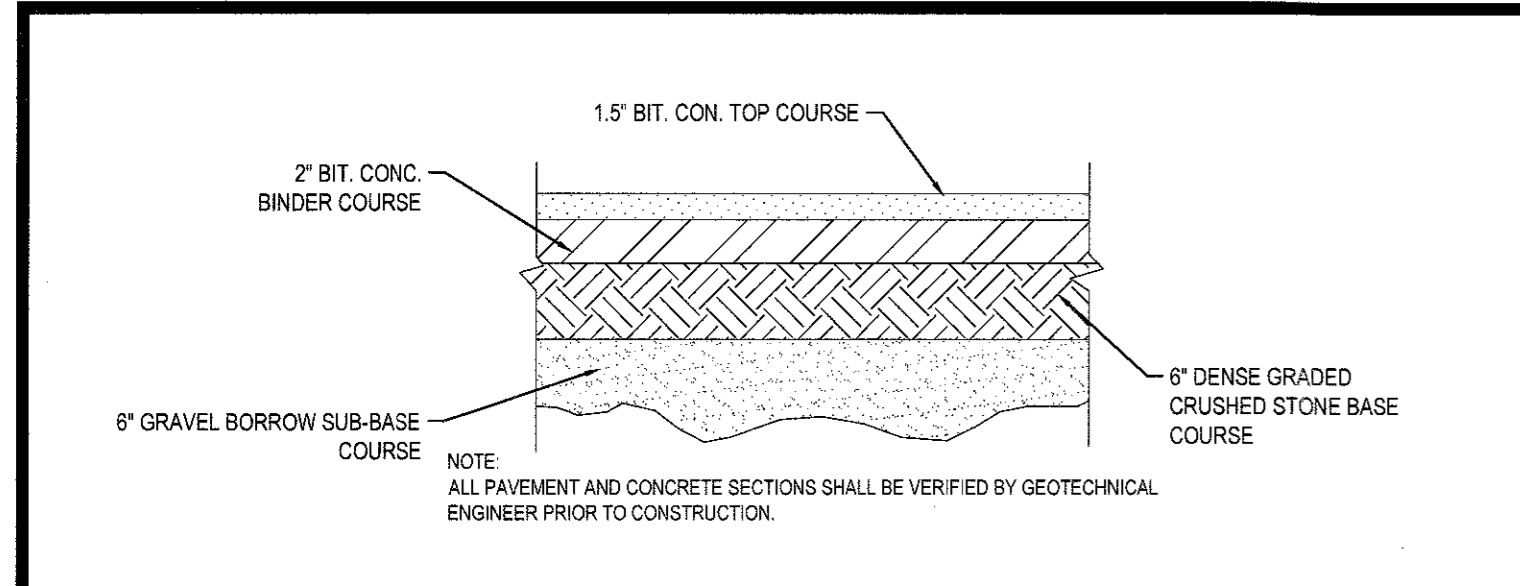
R.W. OSTERHOUDT

PROFESSIONAL ENGINEER
NEW YORK LICENSE NO. 076930

SHEET TITLE:
LIGHTING PLAN

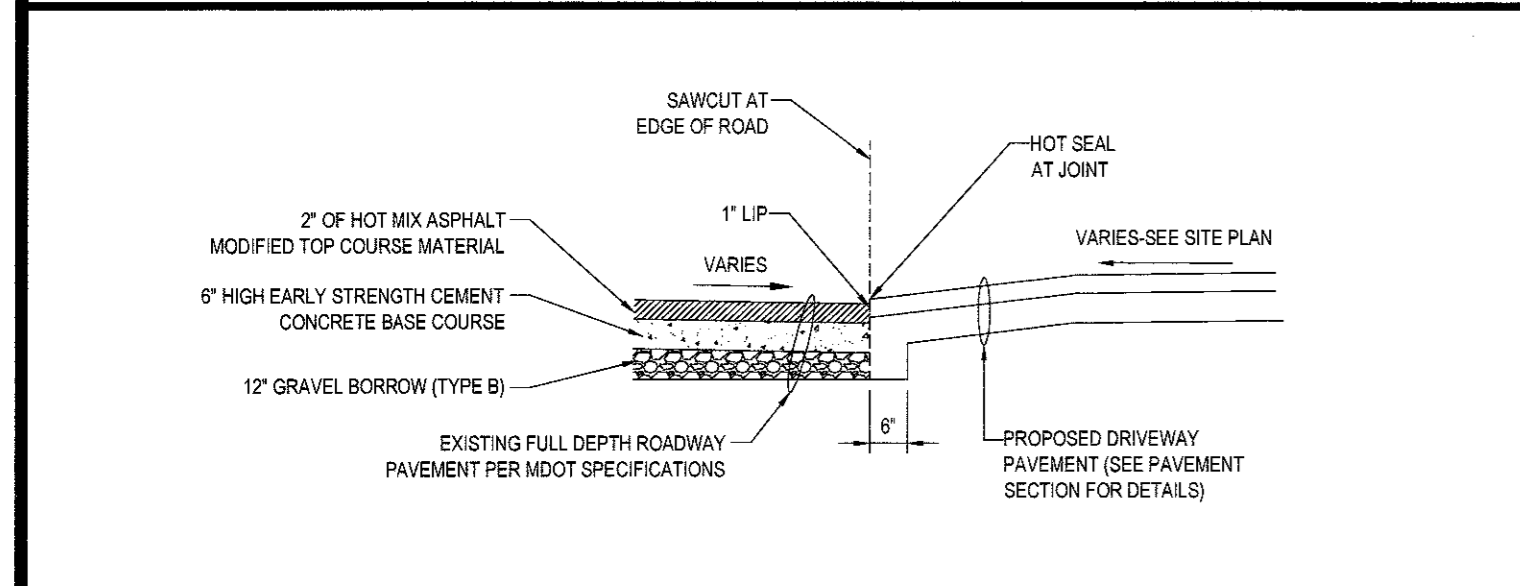
SHEET NUMBER:
14
OF 17

REV 15 - 11/01/2016



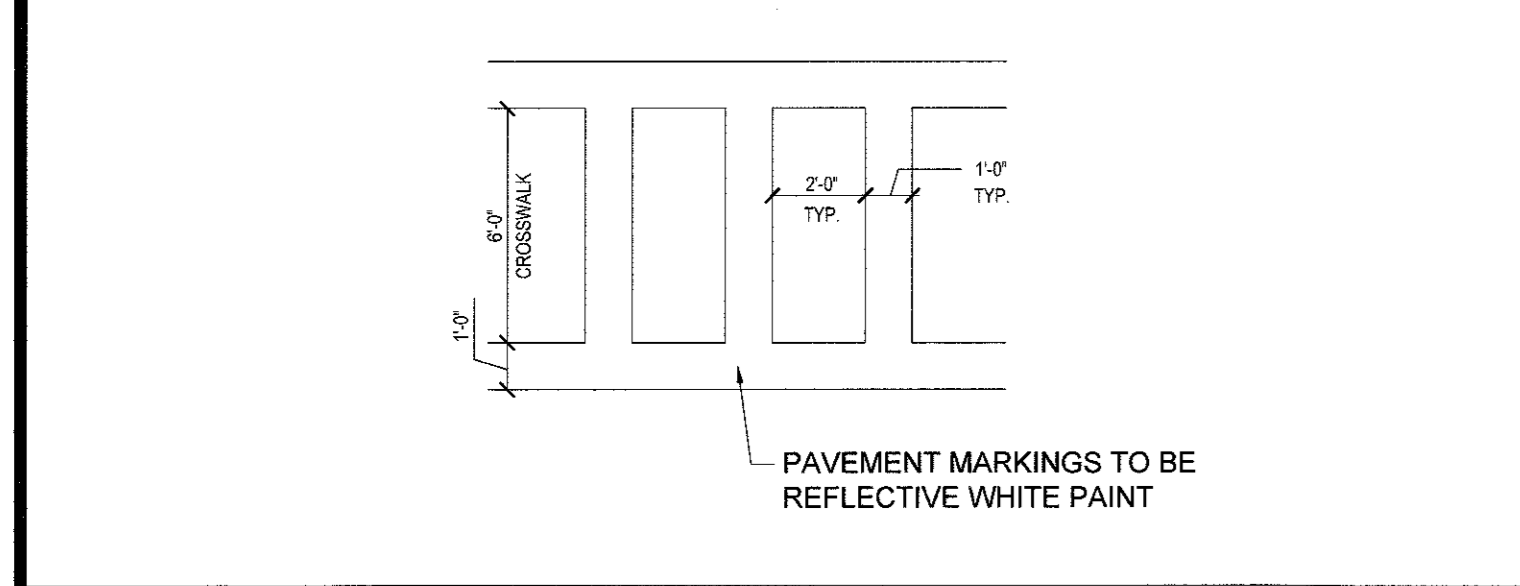
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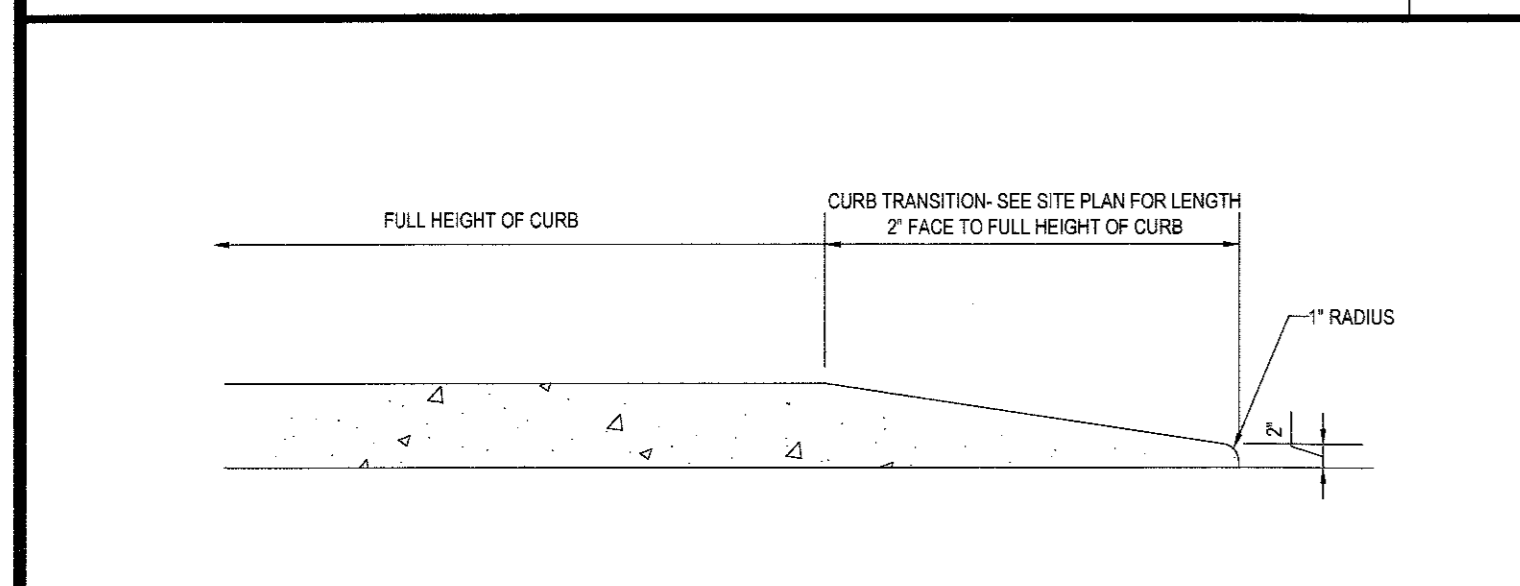
DRIVEWAY CONSTRUCTION DETAIL

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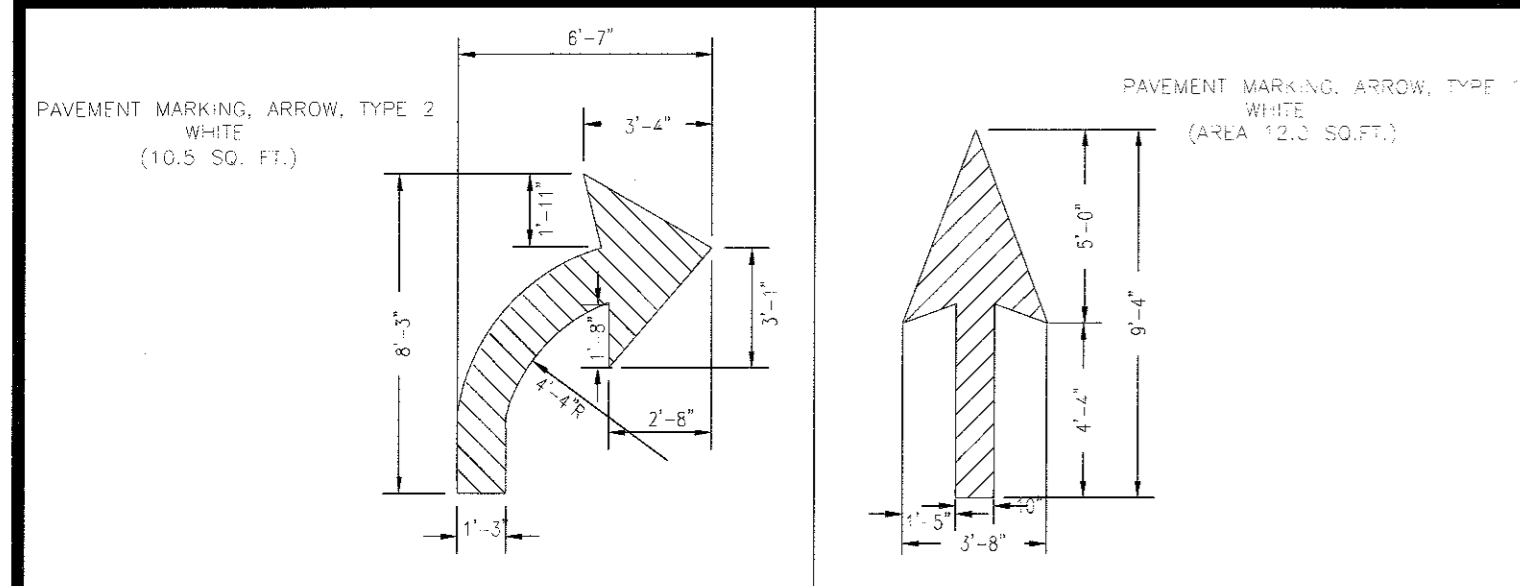
CROSSWALK DETAIL

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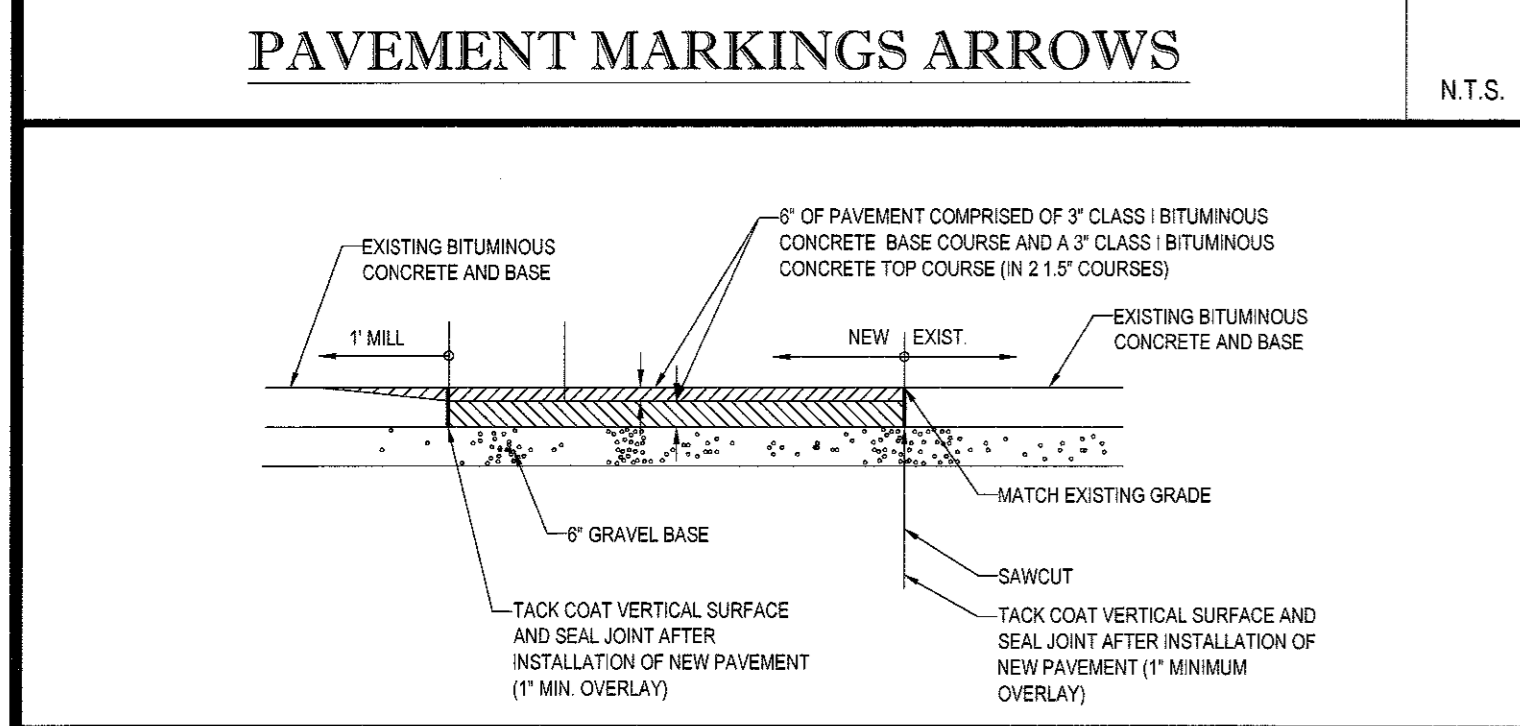
TRANSITION CURB DETAIL

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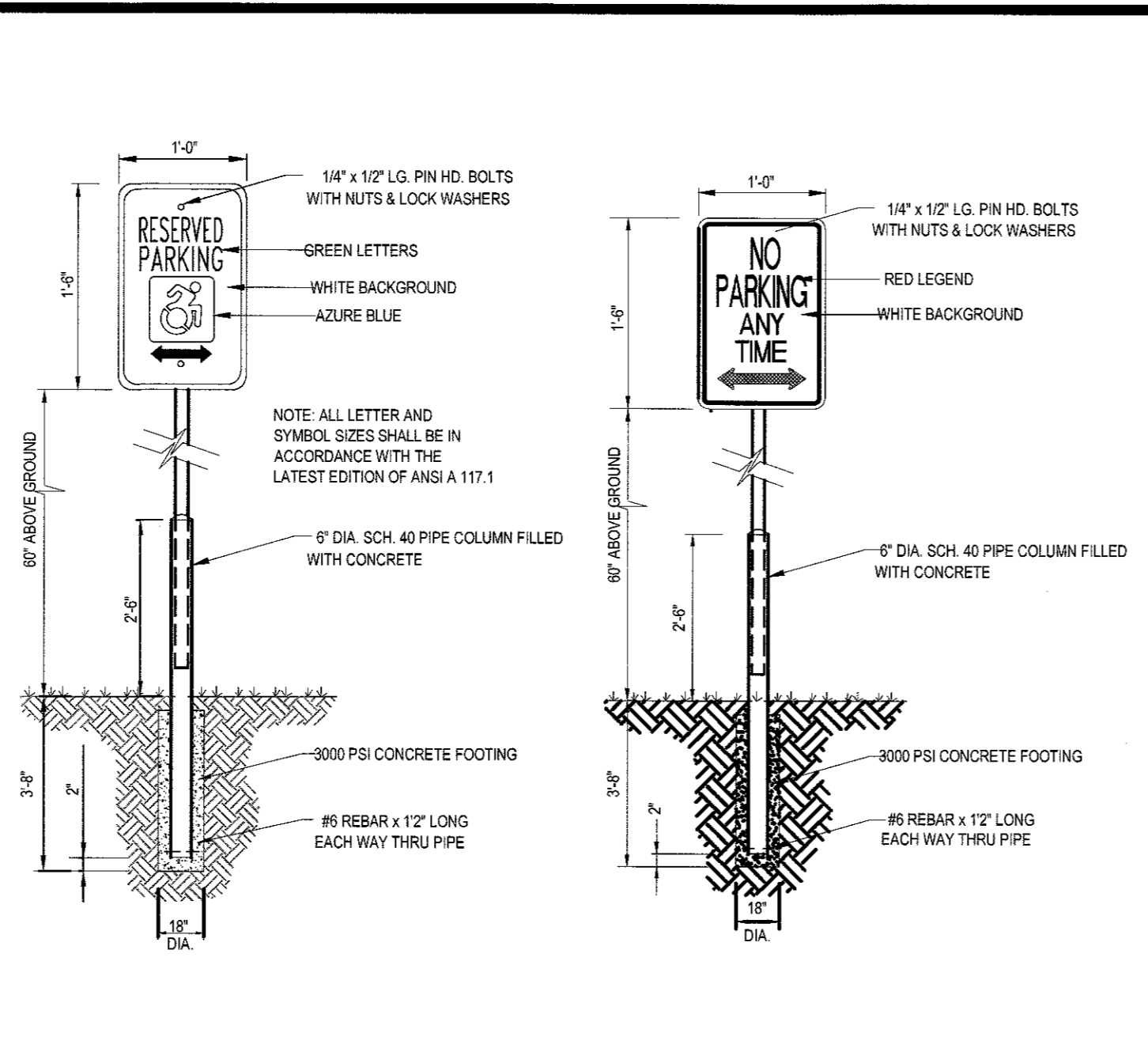
PAVEMENT MARKINGS ARROWS

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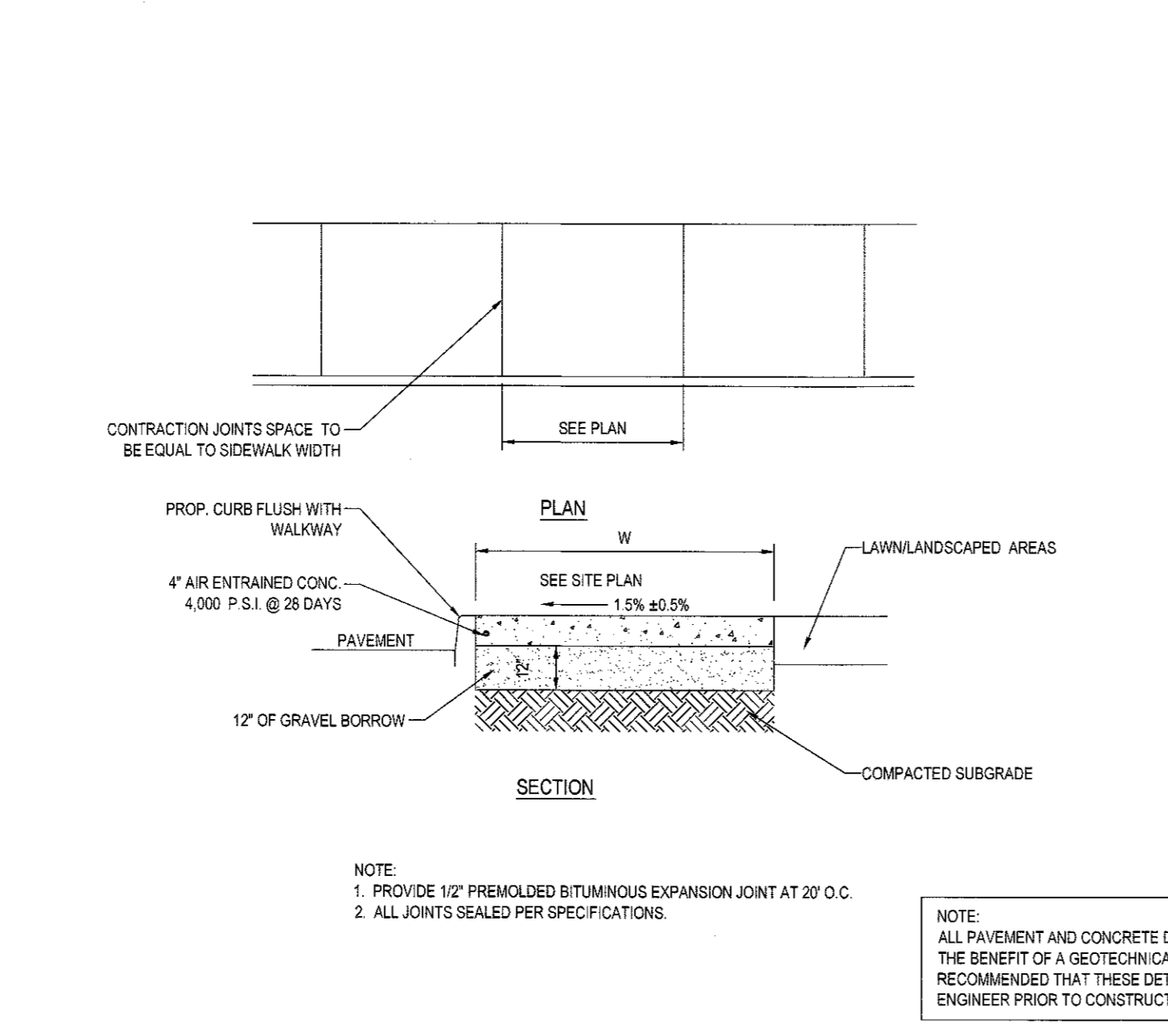
ROADWAY PATCHING DETAIL

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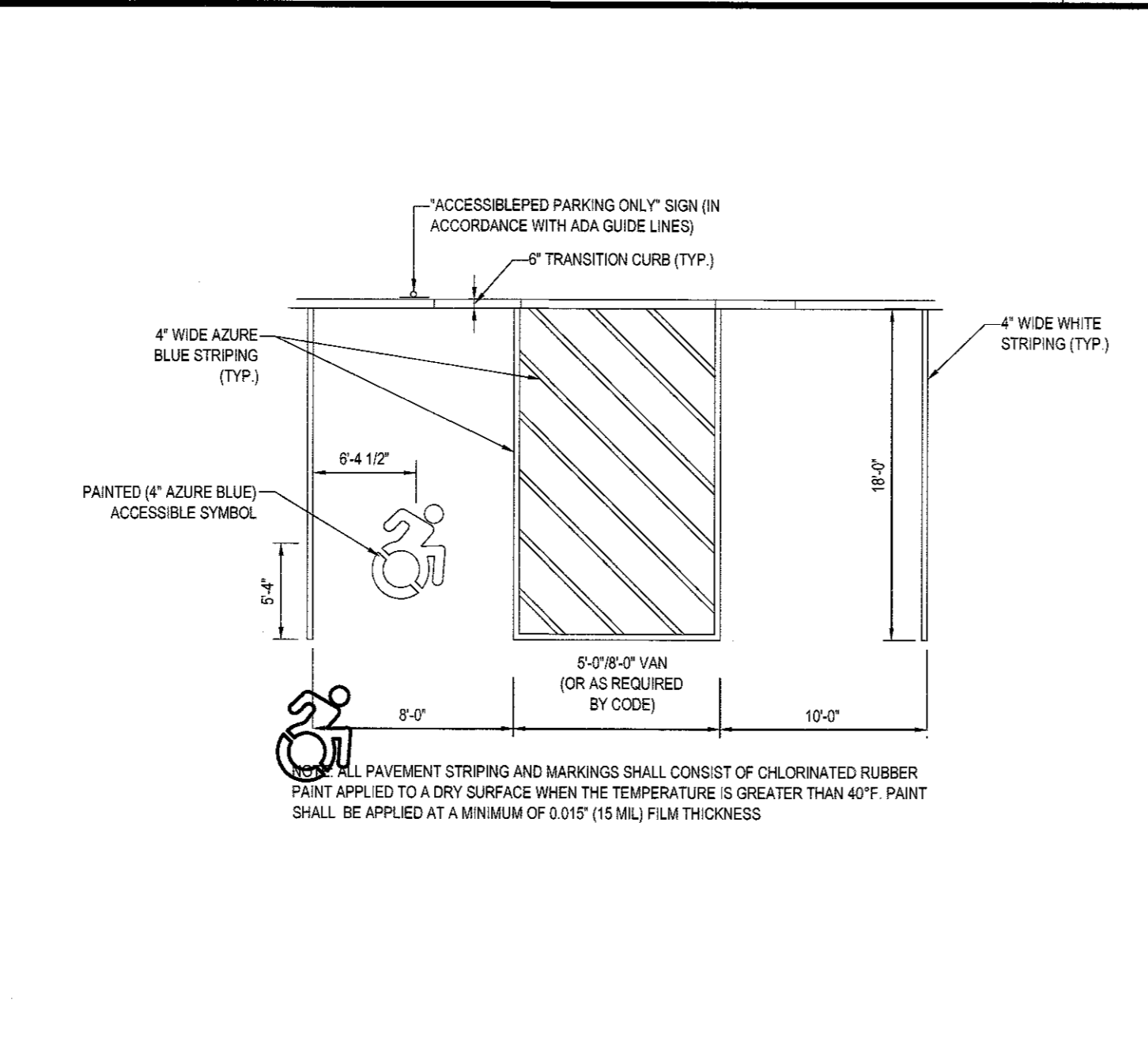
ACCESSIBLE / NO PARKING SIGN DETAILS

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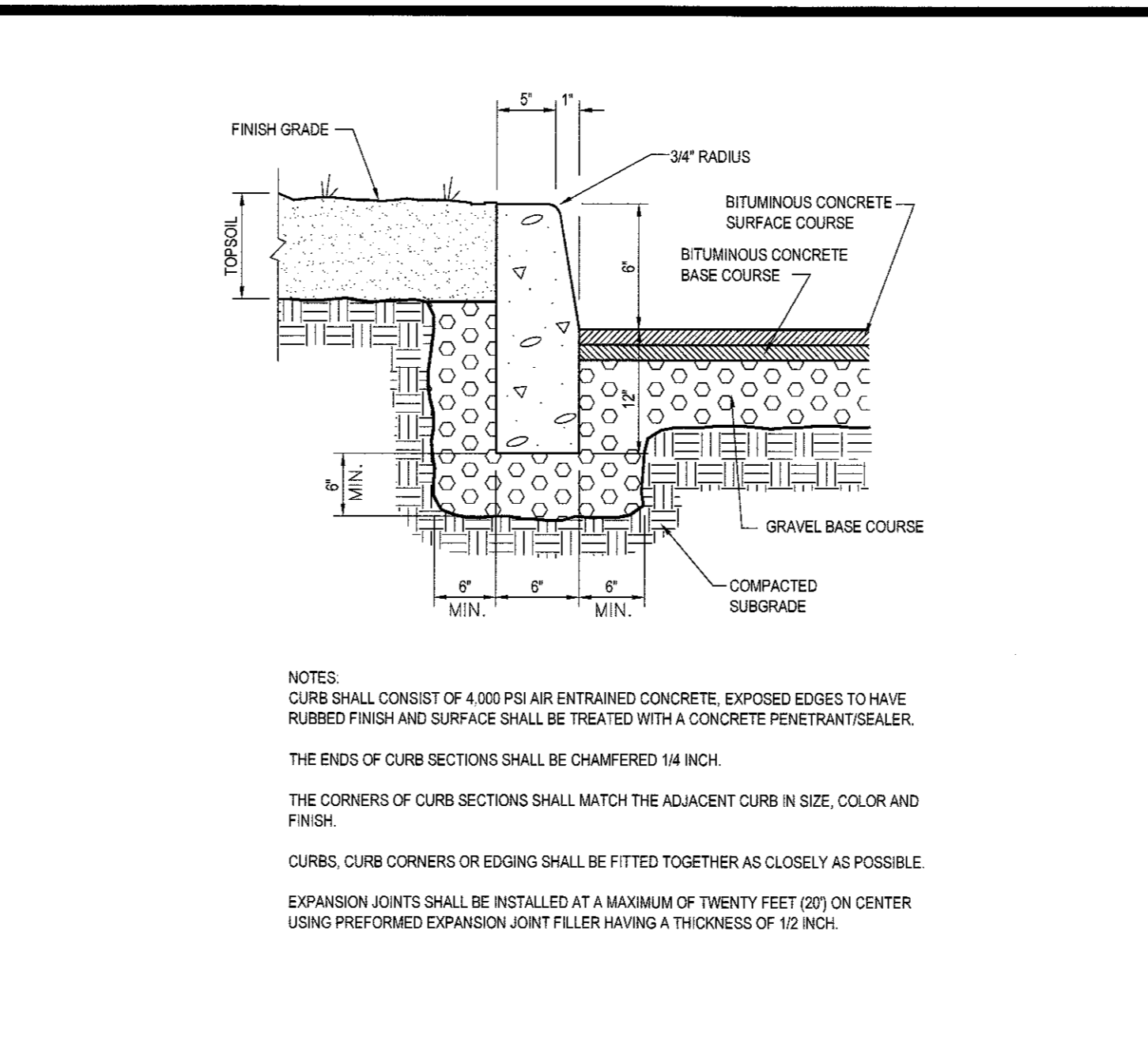
SIDEWALK DETAIL

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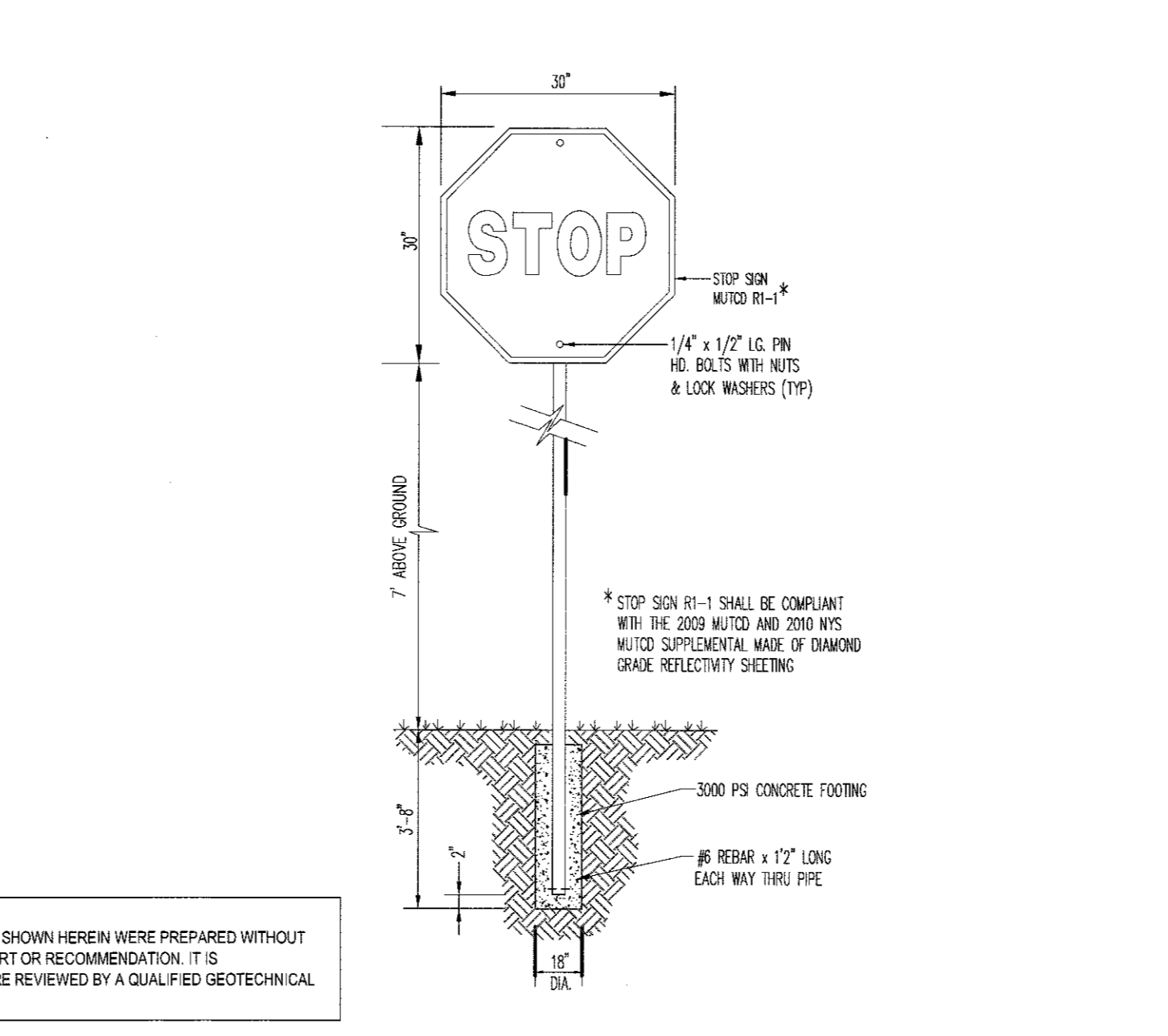
ACCESSIBLE STALL MARKINGS & PARKING LOT STRIPING DETAIL

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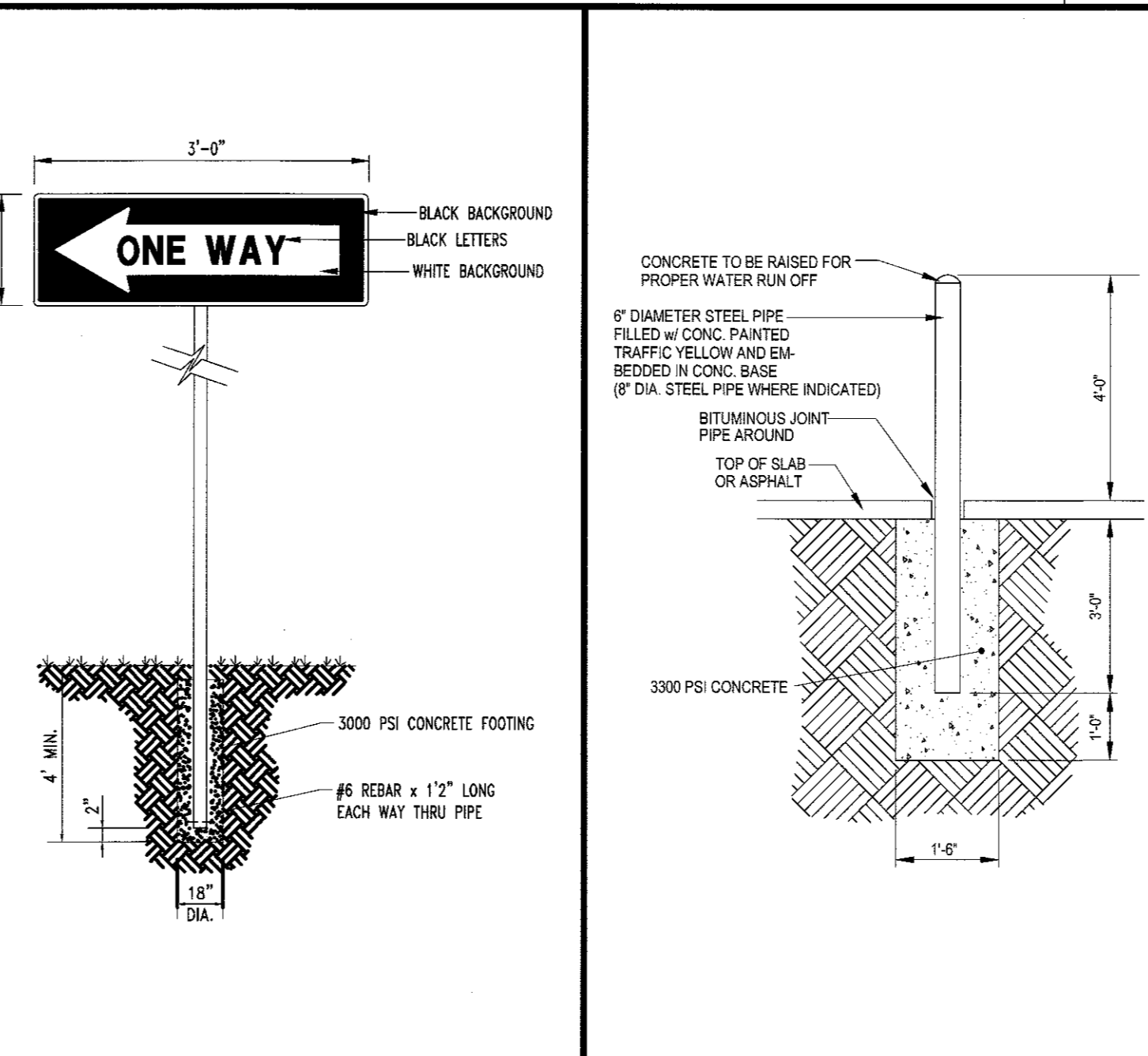
CONCRETE CURB DETAIL

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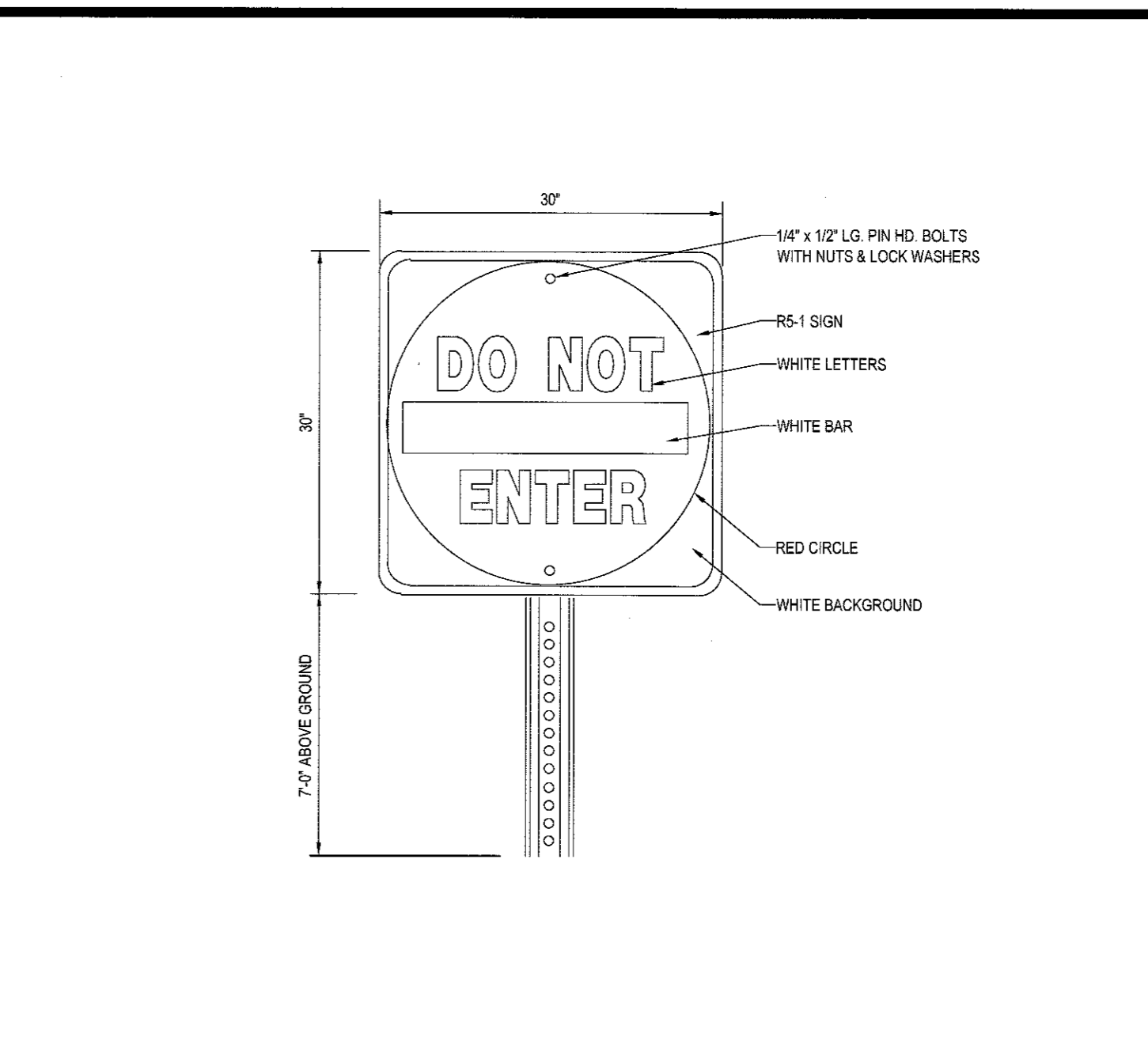
'STOP' SIGN

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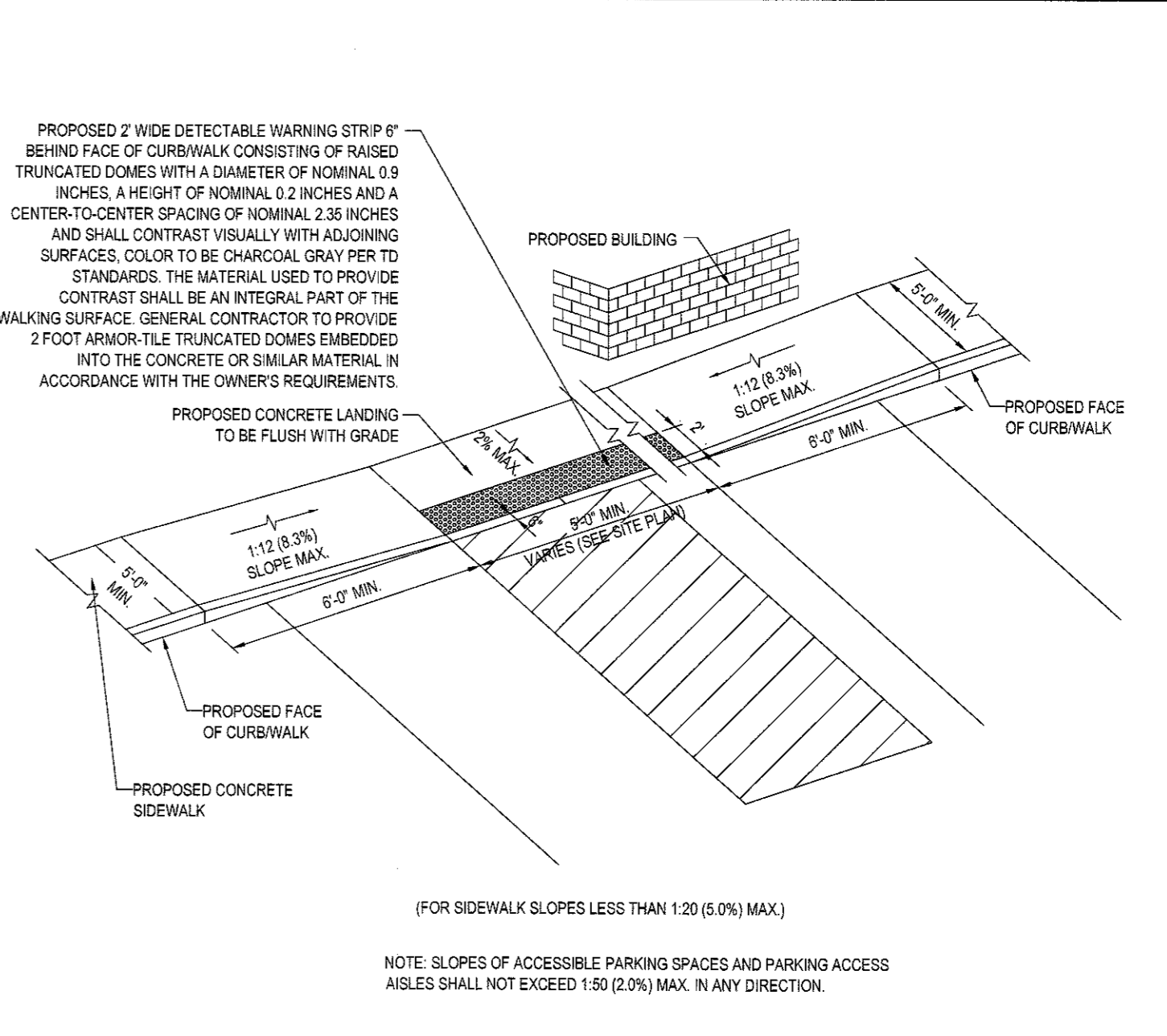
ONE WAY SIGN DETAIL

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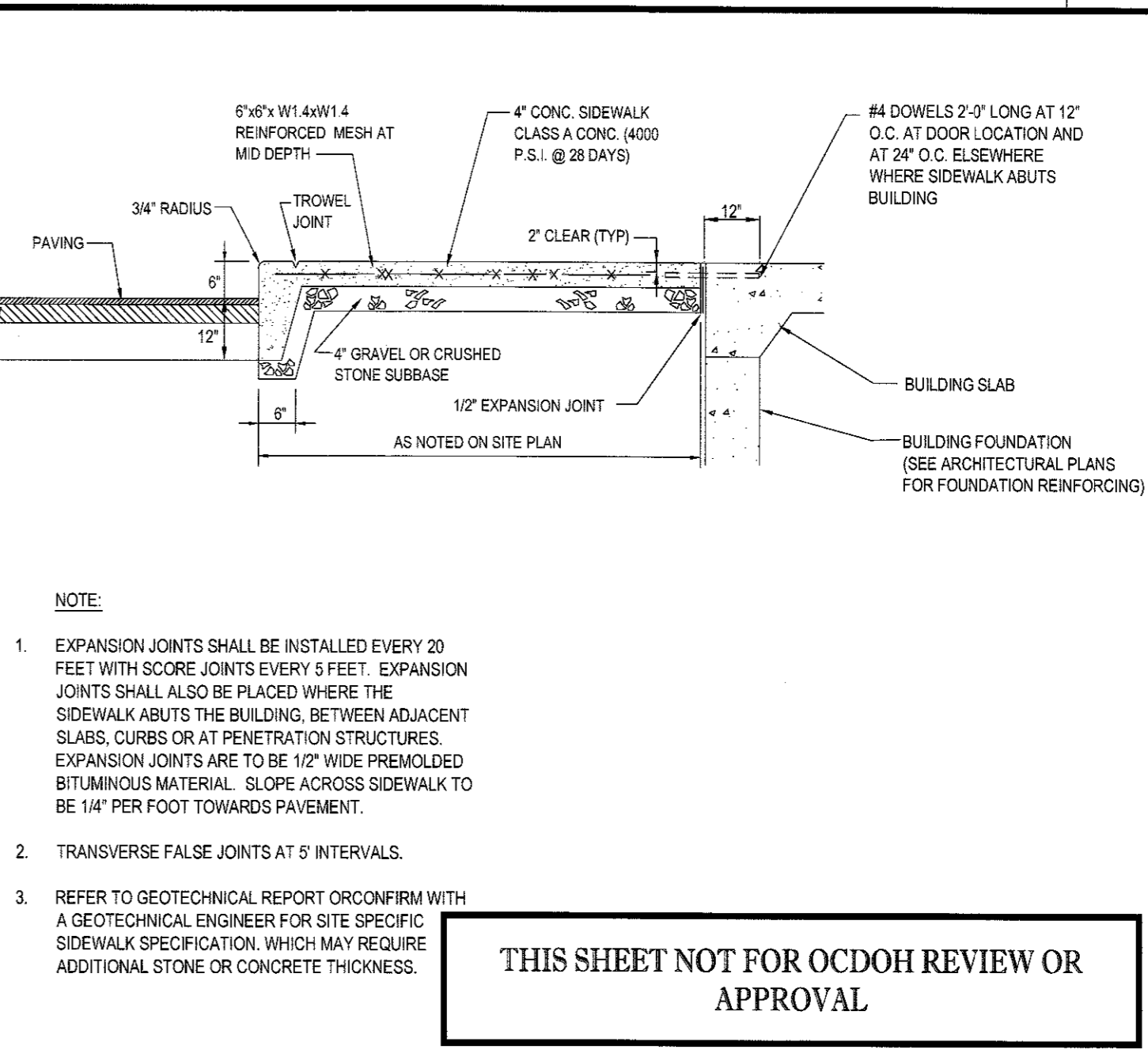
"DO NOT ENTER" SIGN

N.T.S.



SLOPED WALK DETAIL

N.T.S.



TYPICAL CURB AND SIDEWALK DETAIL

N.T.S.

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 LANDSCAPE ARCHITECTS

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14	10/21/16	PER TOWN COMMENTS	TCF
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PRELIMINARY

PROJECT No.: B140197
 DRAWN BY: TCF
 CHECKED BY: RWJ
 DATE: 01/27/2015
 SCALE: AS NOTED
 CAD I.D.: B140197SS03

PROJECT: **SITE DEVELOPMENT PLANS**
 FOR
RHINEBECK REALTY, LLC

LOCATION OF SITE
 1413 UNION AVENUE
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK

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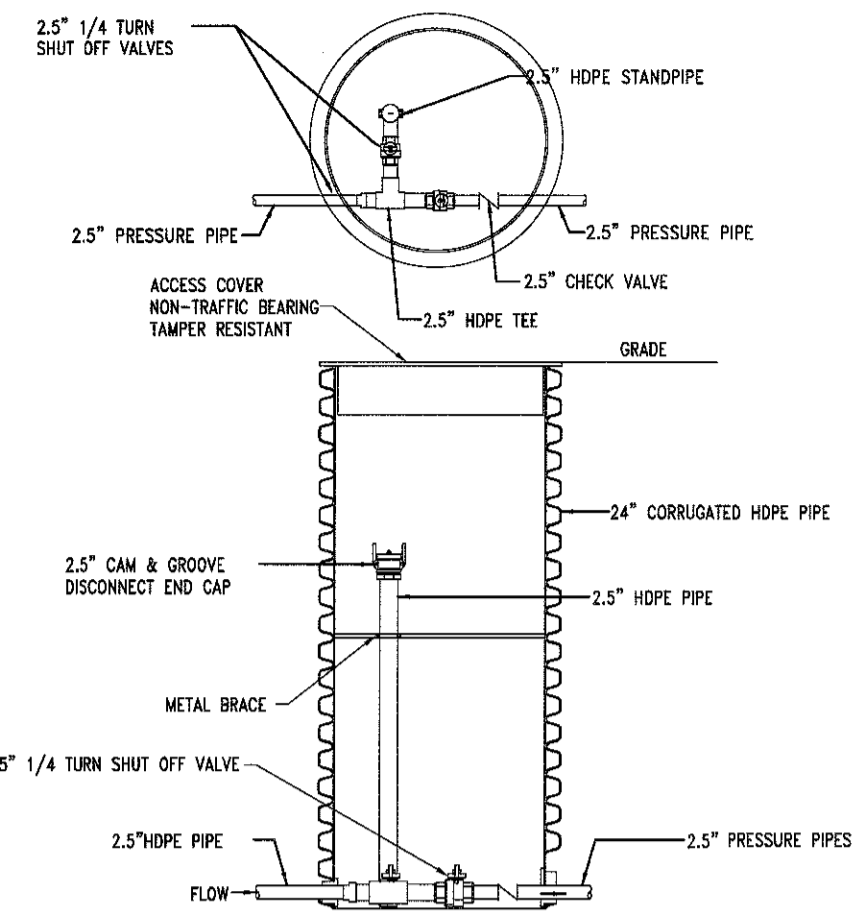
PROFESSIONAL ENGINEER
 NEW YORK LICENSE No. 076930

SHEET TITLE:
CONSTRUCTION DETAIL SHEET

SHEET NUMBER:
15
 OF 17

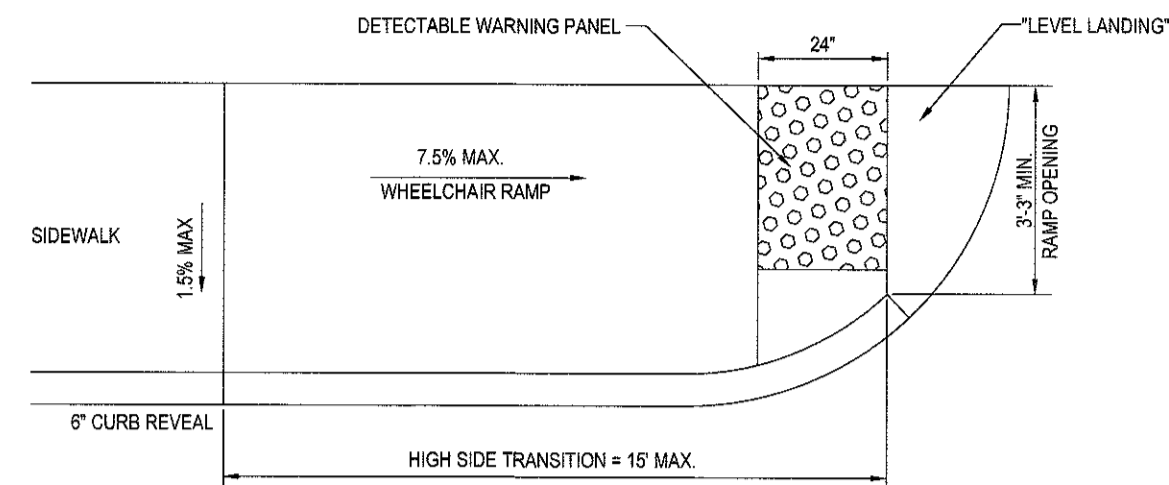
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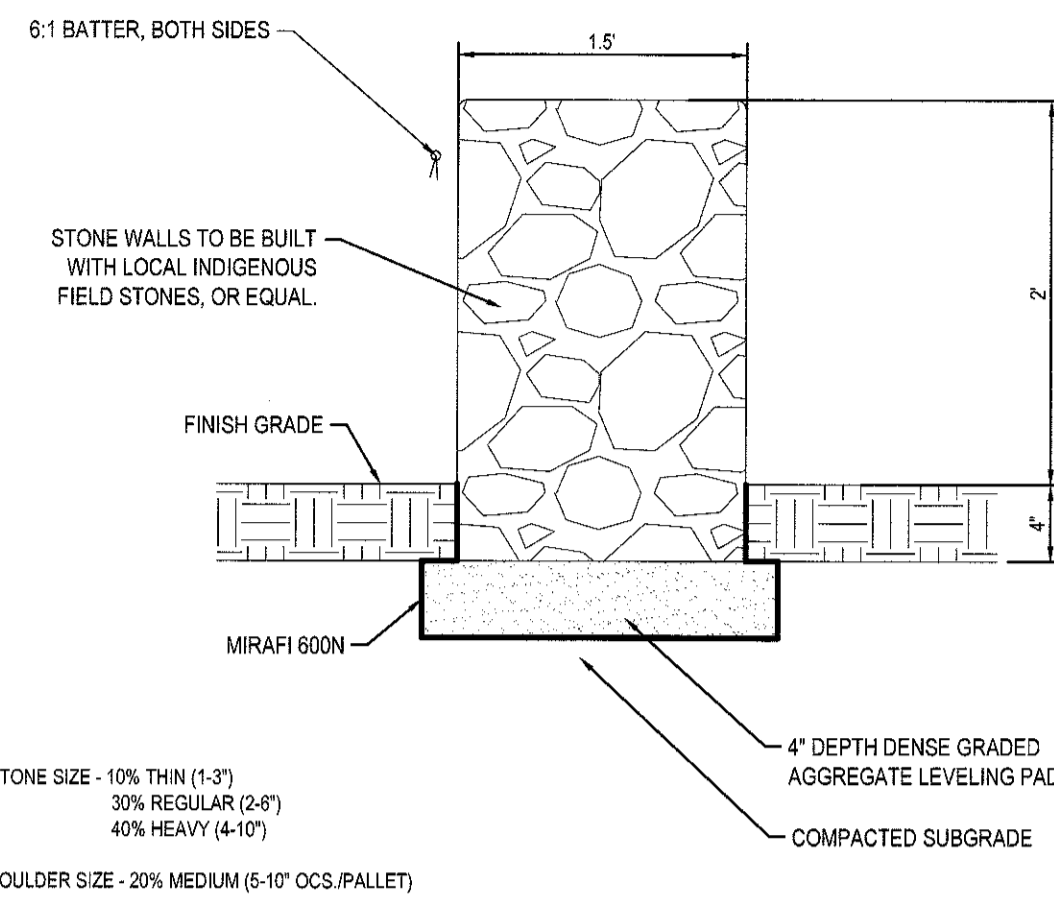
FORCE MAIN FLUSHING STATION DETAIL

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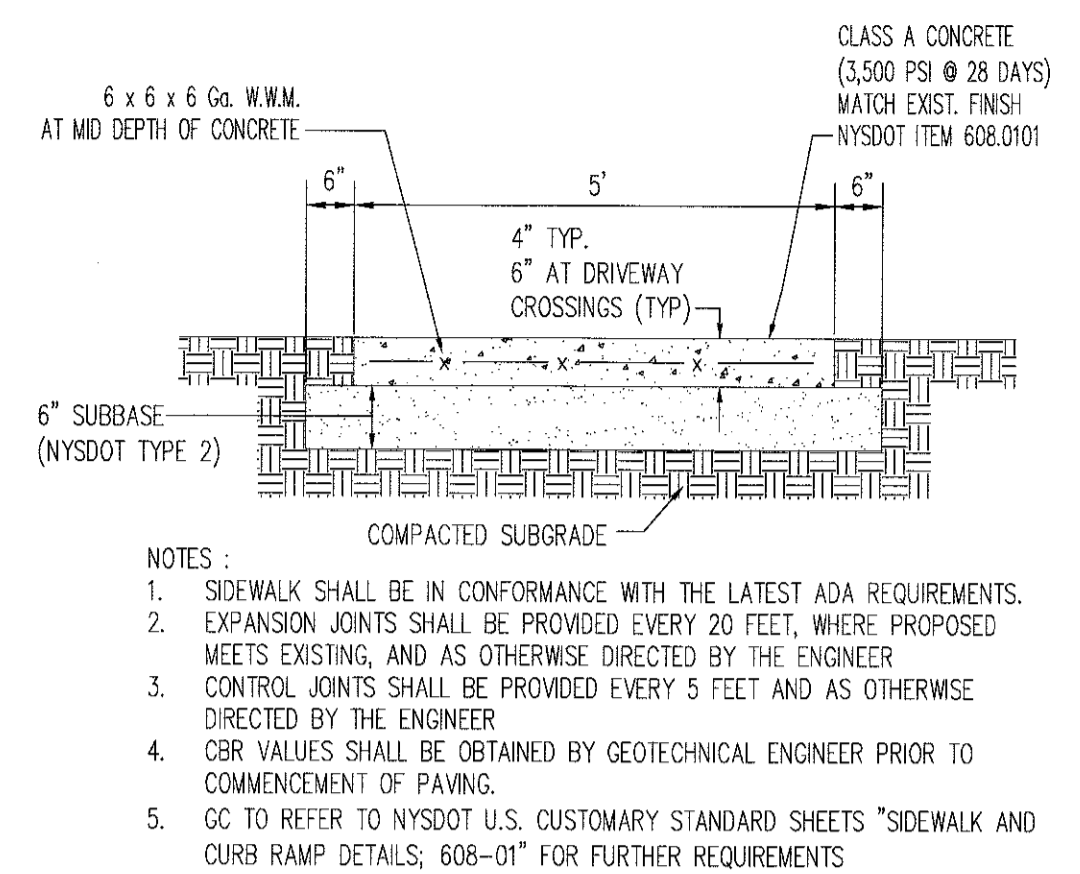
ADA ACCESSIBLE RAMP DETAIL

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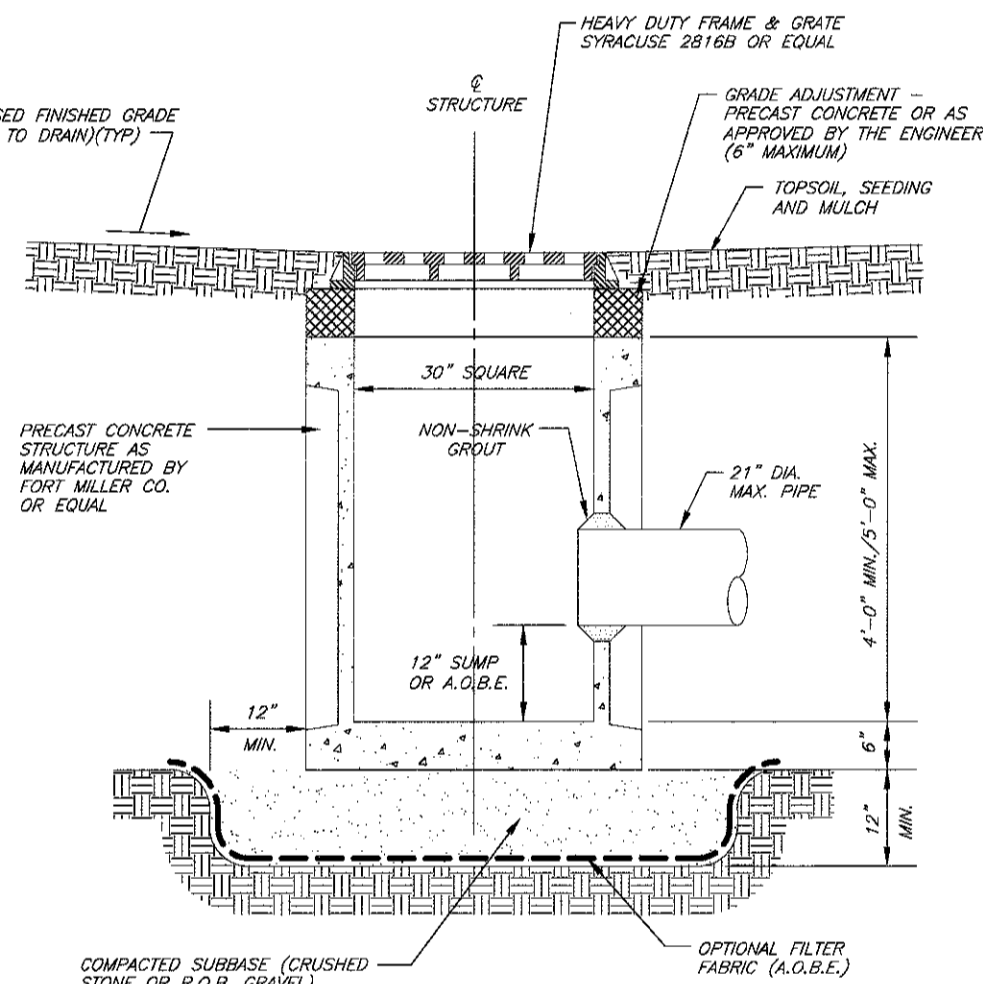
DRY LAID FIELD STONE WALL DETAIL

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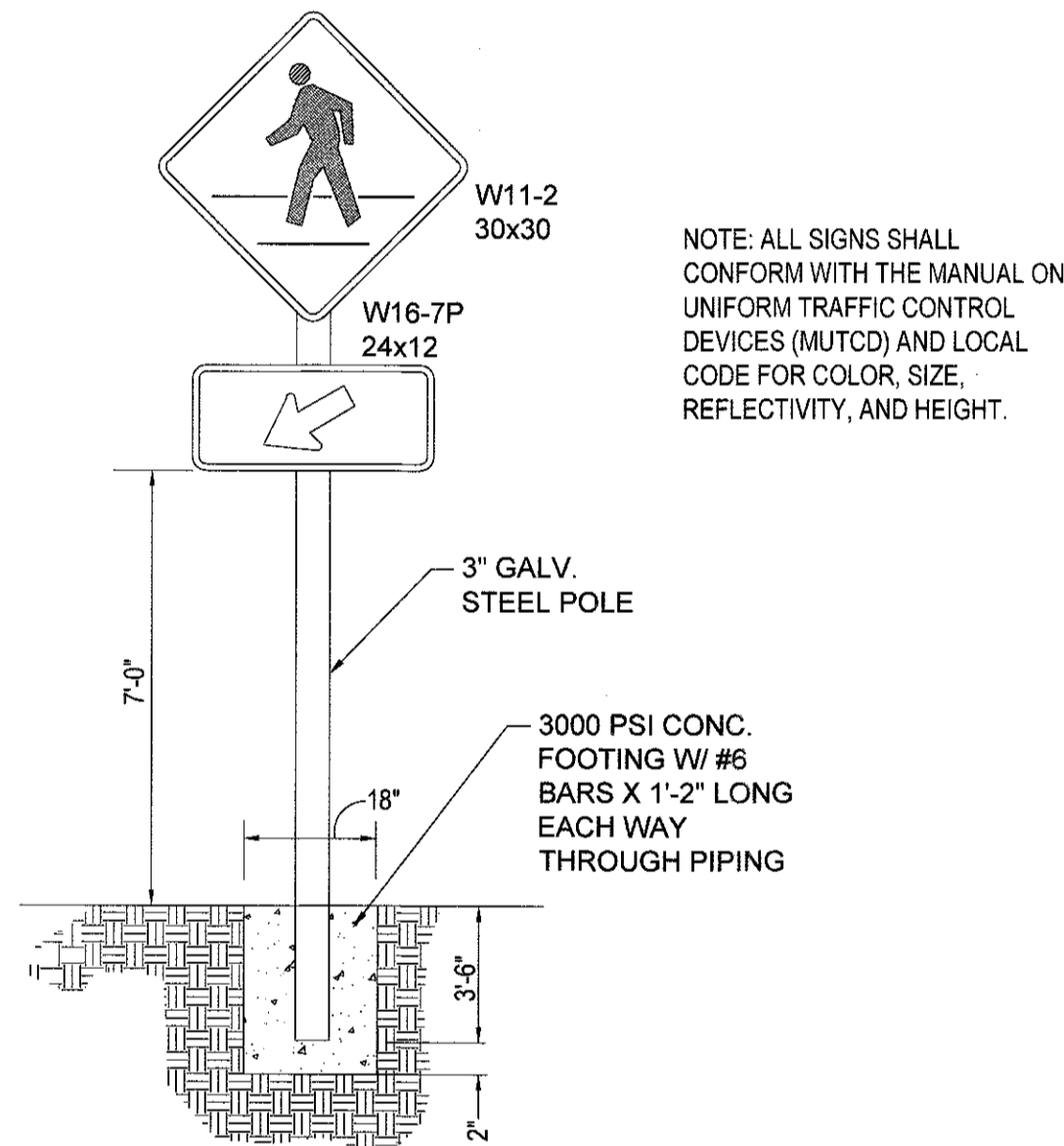
NYS DOT R.O.W. SIDEWALK DETAIL

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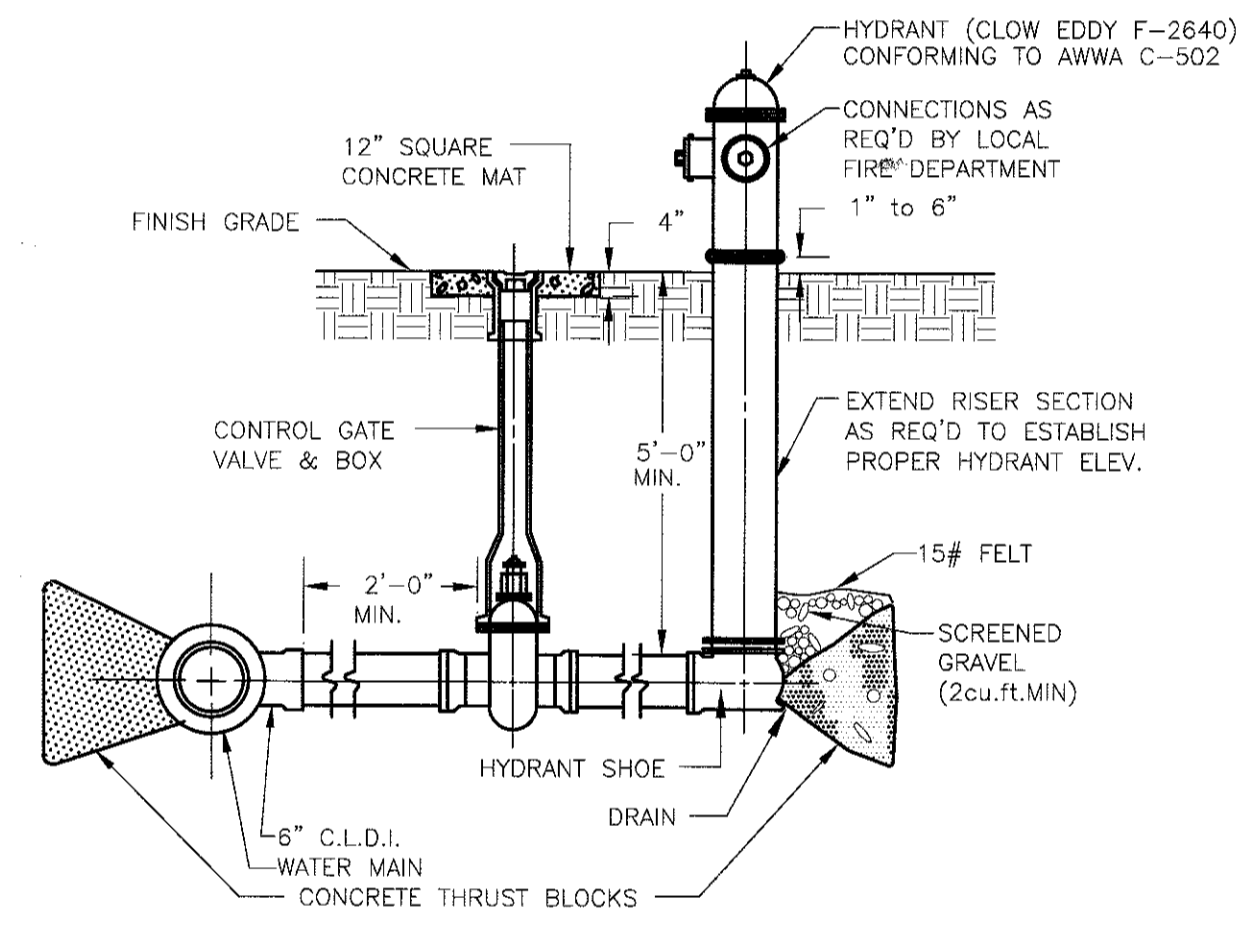
CATCH BASIN DETAIL

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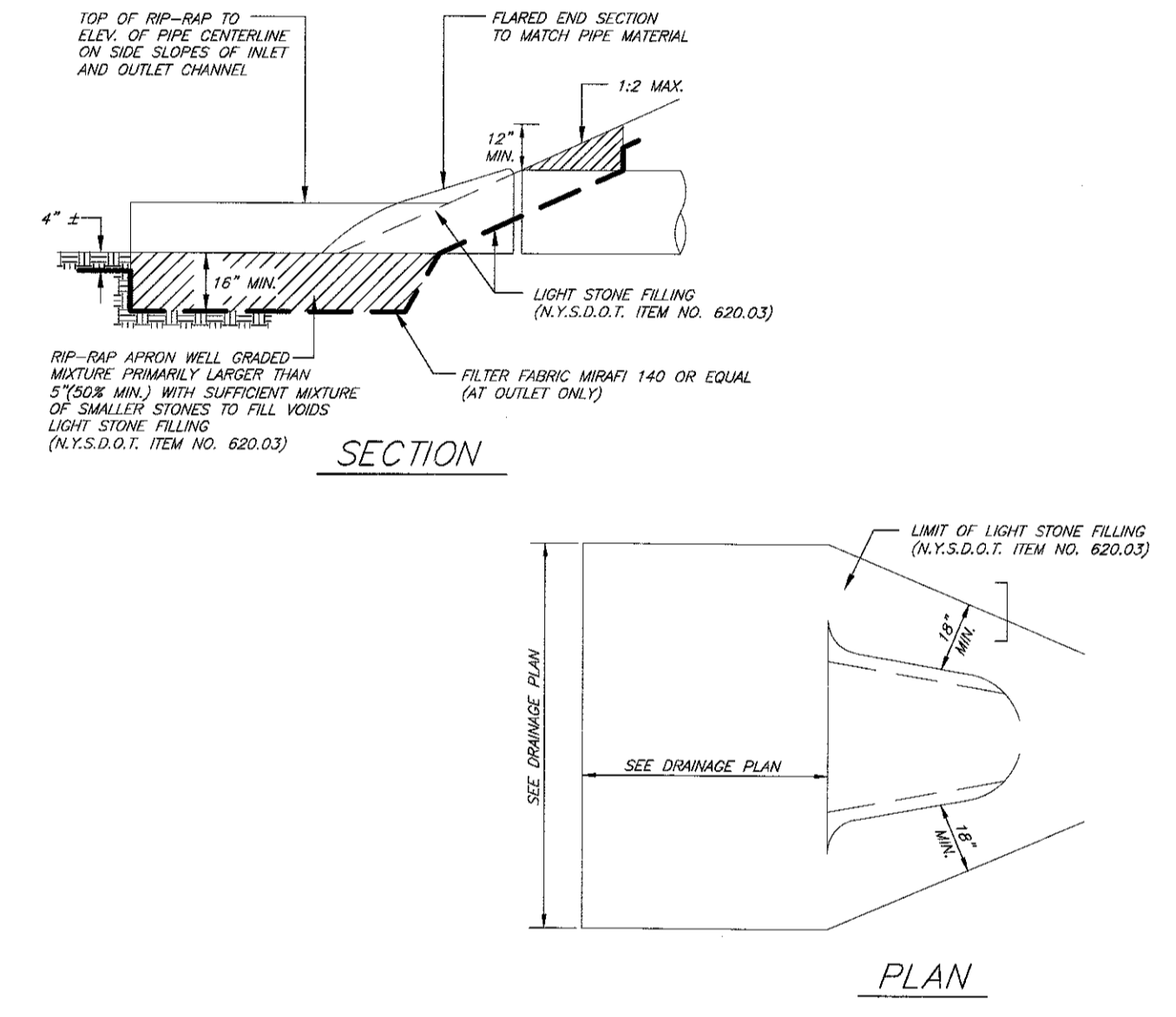
PEDESTRIAN CROSSING SIGNAGE

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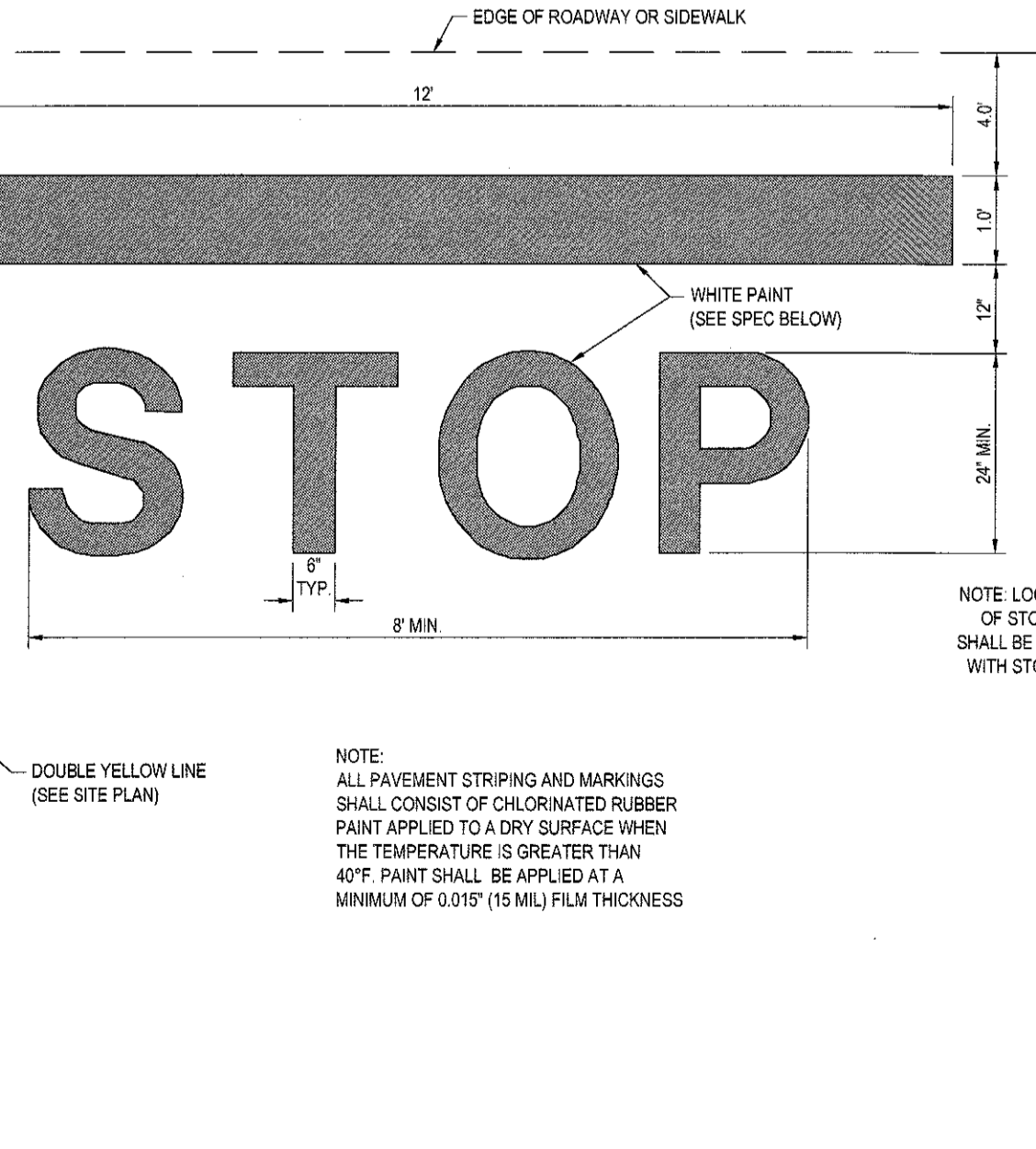
HYDRANT DETAIL

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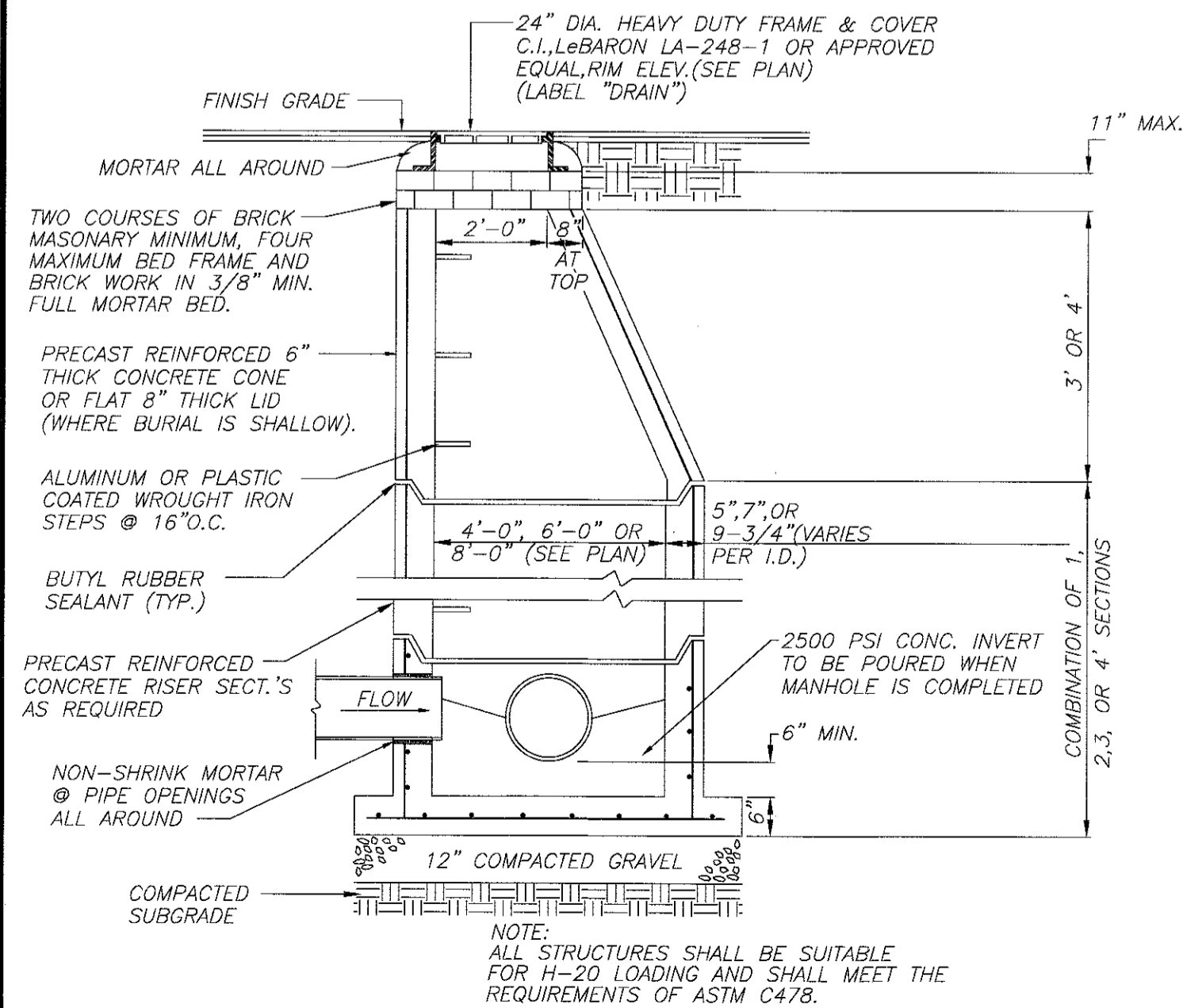
STORM SEWER END SECTION DETAILS

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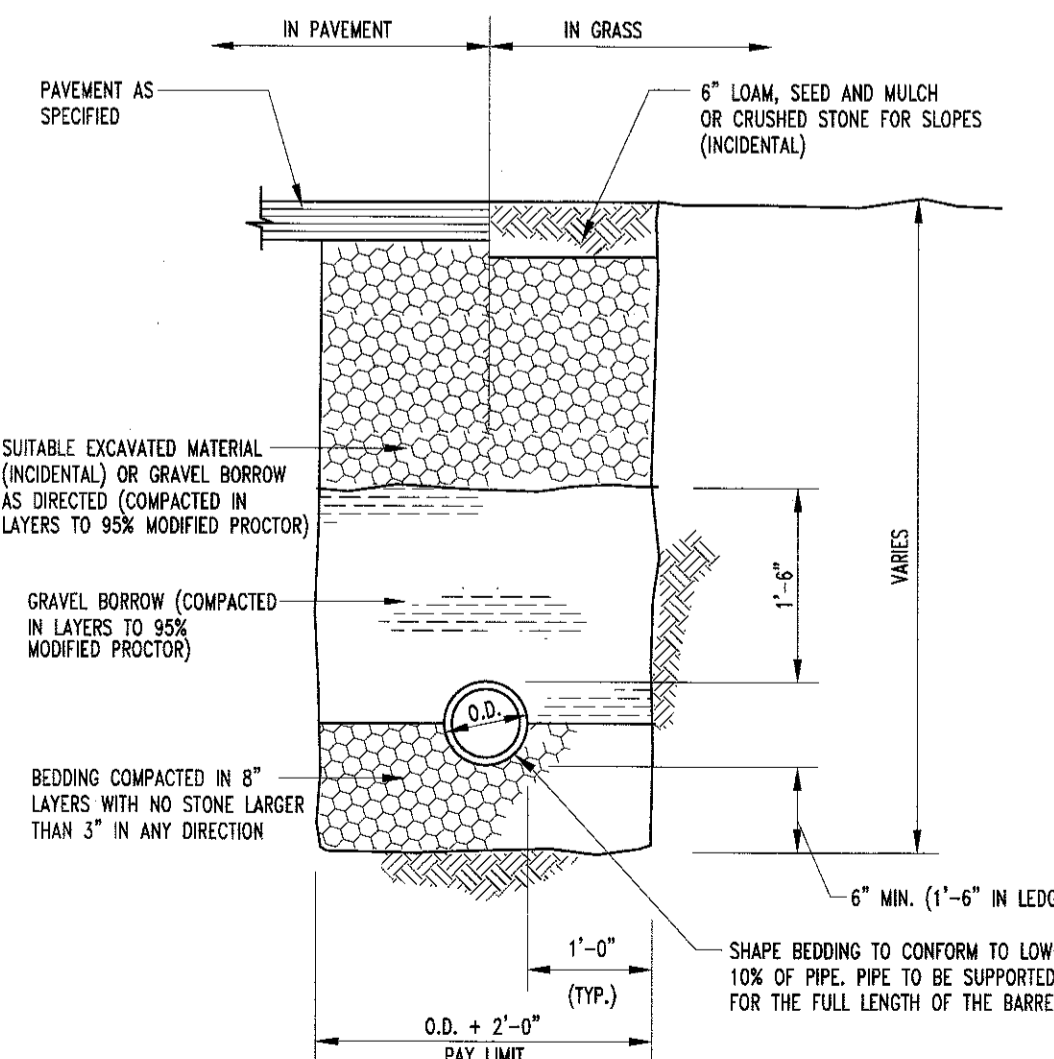
STOP BAR DETAIL

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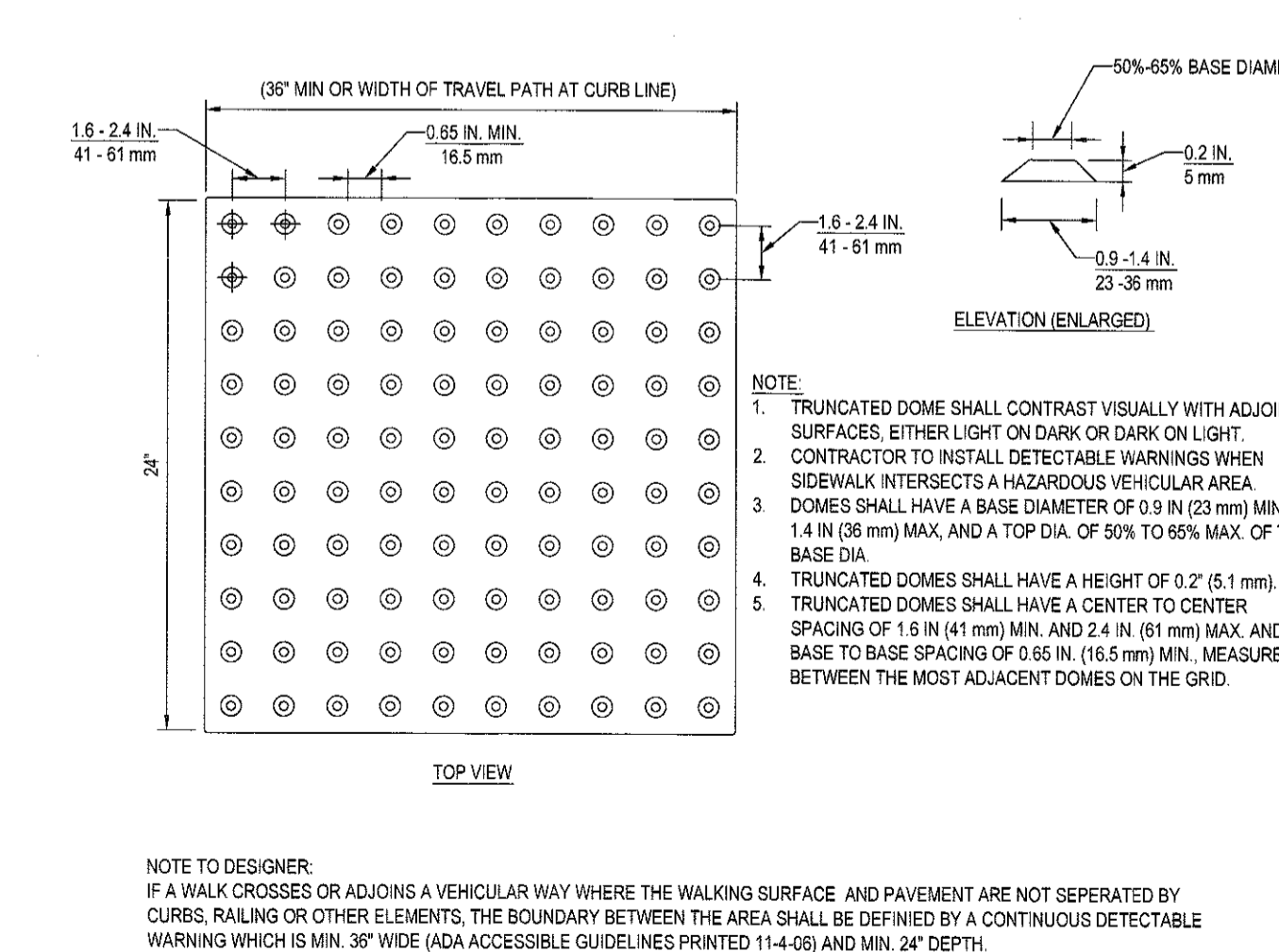
PRECAST CONCRETE STORM DRAINAGE MANHOLE

N.T.S.



STORM SEWER PIPE TRENCH DETAIL

N.T.S.



TRUNCATED DOME PATTERN

N.T.S.

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PRELIMINARY
PROJECT No: B140197
DRAWN BY: TCF
CHECKED BY: RWD
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SCALE: AS NOTED
CAD I.D.: B140197SS30

PROJECT: SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC
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