WALLKILL SITE IMPROVEMENTS

ABBREVIATIONS

AC	ACRES
APPROX	APPROXIMATE
BC	BACK OF CURB
BEG	BEGINNING
BLDG	BUILDING
BM	BENCH MARK
BOT	BOTTOM
BO	BOTTOM OF
CB	CATCH BASIN
CI	CAST IRON or CURB INLET
C/L	CENTER LINE
CO	CLEANOUT
COMM	COMMUNICATIONS
CONC	CONCRETE
CONSTR	CONSTRUCT or CONSTRUCTION
CPE	CORRUGATED POLYETHYLENE PIPE
CTR	CENTER
CU YD or YD^3	CUBIC YARD
DEMO	DEMOLITION
DI	DUCTILE IRON
DIA OR f	DIAMETER
DOC	DEGREE OF CURVATURE
DWG	DRAWING
E	EAST or ELECTRIC
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
EP	EDGE OF PAVEMENT
ESCM	EROSION & SEDIMENT CONTROL MEASURES
EXIST or E	EXISTING
EXP	EXPANSION
FD	FLOOR DRAIN or FOOTING DRAIN
FDTN	FOUNDATION
FF	FINISHED FLOOR
FF EL	FINISH FLOOR ELEVATION
FP	FIRE PROTECTION
FL	FLOOR
FM	FORCED MAIN
FPS	FEET PER SECOND
FT	FEET
FTG	FOOTING
G	NATURAL GAS
GAL	GALLON
GND	GROUND
GR	GRADE
GAL	GALLON
GND	GROUND
GR	GRADE
HDPE	HIGH-DENSITY PLLYETHYLENE
H PT	HIGH POINT
HV	UNDERGROUND HIGH VOLTAGE ELECTRIC
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCH
INV	INVERT
IP	IRON PIN
JNT	JOINT
L	UNDERGROUND LIGHTING CONDUIT
LPG	LIQUID PROPANE GAS
LPT	LOW POINT
LV	UNDERGROUND LOW VOLTAGE ELECTRIC
MATL	MATERIAL
MATV	MASTER ANTENNA TELEVISION
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MV	UNDERGROUND MEDIUM VOLTAGE ELECTRIC
MW	MUNICIPAL WATER MAIN
N	NORTH
NE	NORTH EAST
NPW	NON POTABLE WATER
NW	NORTHWEST
OC	ON CENTER
OD	OUTSIDE DIAMETER
OVHD	OVERHEAD
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PG	PROFILE GRADE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
POC	POINT OF CURVE
POT	POINT OF TANGENT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PWR	POWER
R or RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCED or REINFORCING
RELOC	RELOCATED
RM	ROOM
S	SOUTH
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SE	SOUTHEAST
SED	SEDIMENT
SPEC	SPECIFICATION
SQ IN or IN^2	SQUARE INCH
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
SW	SOUTHWEST
SWK	SIDEWALK
T	TANGENT LENGTH OF CURVE
TC	TOP OF CURB
TD	TRENCH DRAIN
TER	TECHNICAL EQUIPMENT ROOM
TRANS	TRANSITION
TO	TOP OF
TYP	TYPICAL
UGND	UNDERGROUND
UTIL	UTILITIES
VC	VERTICAL CURVE
VERT	VERTICAL
VOL	VOLUME
W	WEST or WALL or DOMESTIC WATER
WWF	WELDED WIRE FABRIC

LEGEND

- PONDS, CREEKS, RIVERS, LAKES, WETLANDS
- MAJOR CONTOUR LINES
- MINOR CONTOUR LINES
- SWALES
- ROAD CENTER LINES
- UNPAVED OR GRAVEL ROAD
- BUILDING ROOF OUTLINES
- UNDERGROUND STRUCTURES
- SANITARY SEWER
- STORM SEWER
- DRAIN LINES-FOOTING, FDTN, & UNDER SLAB
- DRAIN LINES-ROOFS, BLDG LEADERS & YARDS
- FIRE PROTECTION LINES
- WATER LINES
- COMMUNICATION LINES
- ELECTRICAL PWR LINES-UGND HIGH VOLT
- ELECTRICAL PWR LINES-UGND LIGHTING
- ELECTRICAL PWR LINES-UGND LOW VOLT
- ELECTRICAL POWER LINES - OVERHEAD
- COMPRESSED AIR LINES
- GAS & FUEL OIL LINES
- SILT FENCE
- BENCHMARK
- PROPERTY LINE
- TIE-IN
- CATCH BASIN
- CURB INLET
- FLOW ARROW
- MANHOLE
- VALVE
- HYDRANT
- UTILITY POLE
- LIGHT BOLLARD
- 100.00 SPOT ELEVATION
- STONE & BLOCK INLET PROTECTION
- GL GRASSED WATERWAY
- STORM DRAIN INLET FILTER
- PS PERMANENT SEEDING
- CONSTRUCTION ENTRANCE
- ROCK OUTLET PROTECTION
- PIPE OUTLET SEDIMENT TRAP
- TO BE DEMOLISHED
- SEDIMENT BASIN
- A B EARTH DIKE
- FILTER FABRIC DROP INLET PROTECTION
- M MULCHING
- EXCAVATED DROP INLET PROTECTION
- SUMP PIT
- CURB INLET DROP PROTECTION
- TREE PROTECTION

KINGDOM SUPPORT SERVICES, INC. DRAWING INDEX

CIVIL

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C-005	HABITAT MAP & PROPOSED BUFFER RESTORATION
C-101	EXISTING CONDITION & SOIL SURVEY
C-102	EXISTING CONDITION WATERSHED
C-103	PROPOSED CONDITION WATERSHED
CD101	OVERALL CONSTRUCTION PHASING PLAN
CE101	EROSION & SEDIMENT CONTROL PLAN
CE102	EROSION & SEDIMENT CONTROL PLAN
CE103	EROSION & SEDIMENT CONTROL PLAN
CG101	GRADING & DRAINAGE PLAN
CG102	GRADING & DRAINAGE PLAN
CG103	GRADING & DRAINAGE PLAN
CG501	GRADING & DRAINAGE DETAILS
CG502	STORMWATER MANAGEMENT DETAILS
CG503	EROSION CONTROL DETAILS
CG504	EROSION CONTROL DETAILS
CG505	EROSION CONTROL NOTES & DETAILS
CP201	LOOP DRIVEWAY PROFILE
CP501	PAVING DETAILS
CS101	DIMENSION CONTROL PLAN
CS102	DIMENSION CONTROL PLAN
CS103	DIMENSION CONTROL PLAN
CU101	UTILITIES PLAN
CU102	UTILITIES PLAN
CU103	UTILITIES PLAN
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ELECTRICAL

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E-102	SITE LIGHTING PLAN
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LANDSCAPING

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L-101	LANDSCAPING PLAN
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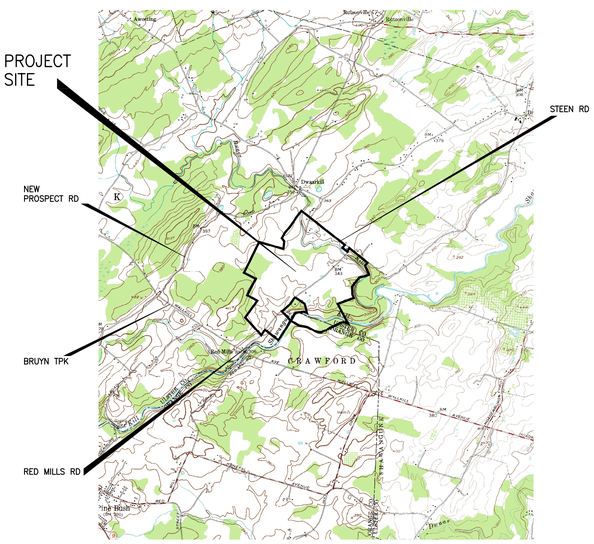
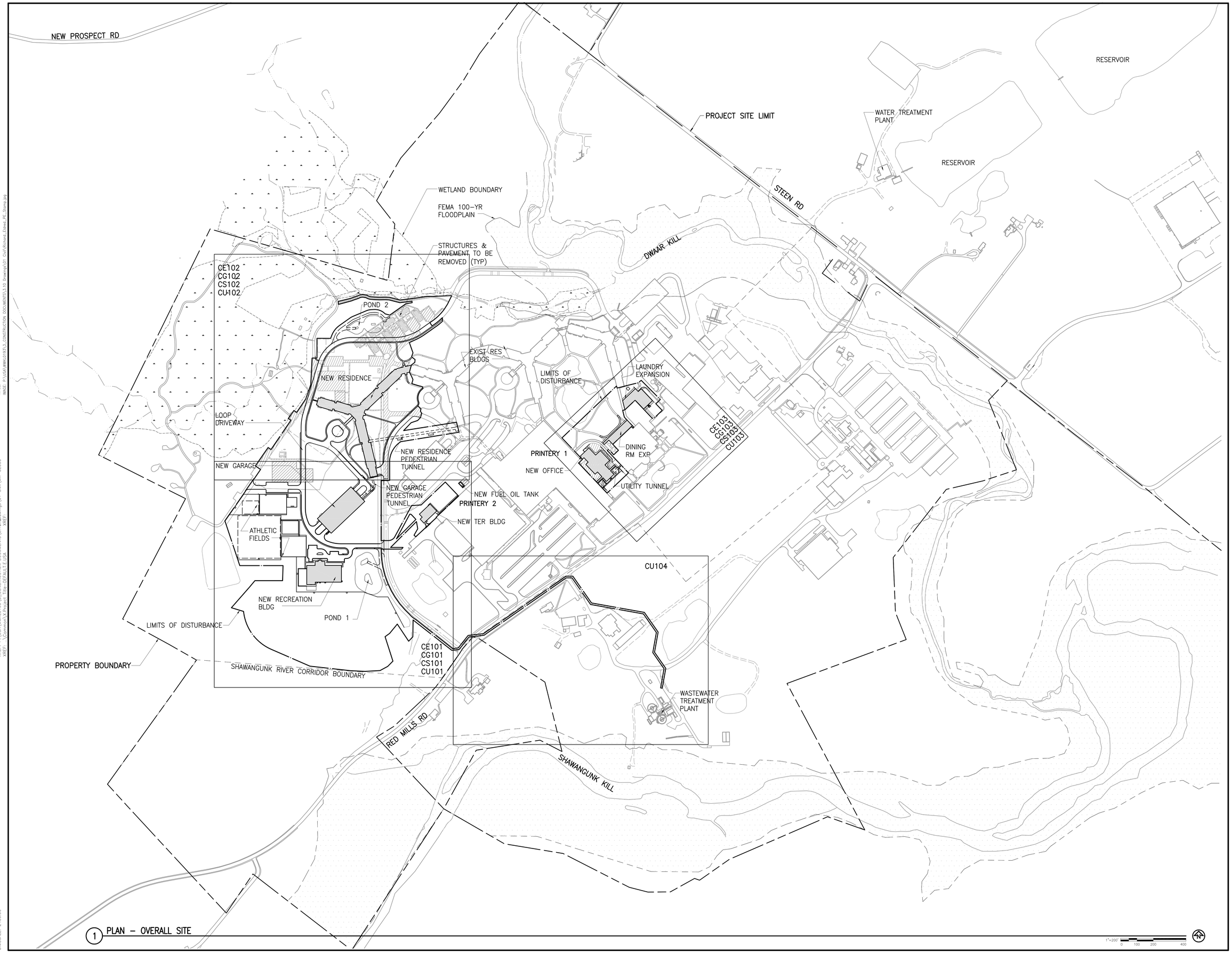
L-103	LANDSCAPING PLAN
L-501	LANDSCAPING DETAILS

WATCHTOWER BIBLE & TRACT SOCIETY (APPLICANT) DRAWING INDEX

C-102	WETLANDS, FLOODPLAIN, & RECREATIONAL RIVER CORRIDOR
C-103	WETLANDS & FLOODPLAIN MAP


PROJECT SITE
NEW PROSPECT RD
BRUYN TPK
RED MILLS RD
STEEN RD
CRAWFORD
Awosting
Bellayre Mt
Belleayre Mountain
Ski Center
Frost Valley
Bush Mills
Pine Bush
Ski Area
Ski Trail
Ski Lift
Trail
Lodge
Campground
Cemetery
Church
Golf Course
Overlook
Spring
Tower
Trailhead
Wilderness Area
Winnisook Lake
Winnisook Mt
Woodland
Wright Mt
Wright Mt Trail
Wurtemburg
Wurtemburg Mt
Wurtemburg Mt Trail
Wurtemburg Mt Trailhead
Wurtemburg Mt Trailhead Parking
Wurtemburg Mt Trailhead Parking Lot
Wurtemburg Mt Trailhead Parking Lot
Wurtemburg Mt Trailhead Parking Lot



1 PLAN – OVERALL SITE

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1	01 SEP 08	DEIS FILING REVISION
–	16 MAY 08	DEIS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

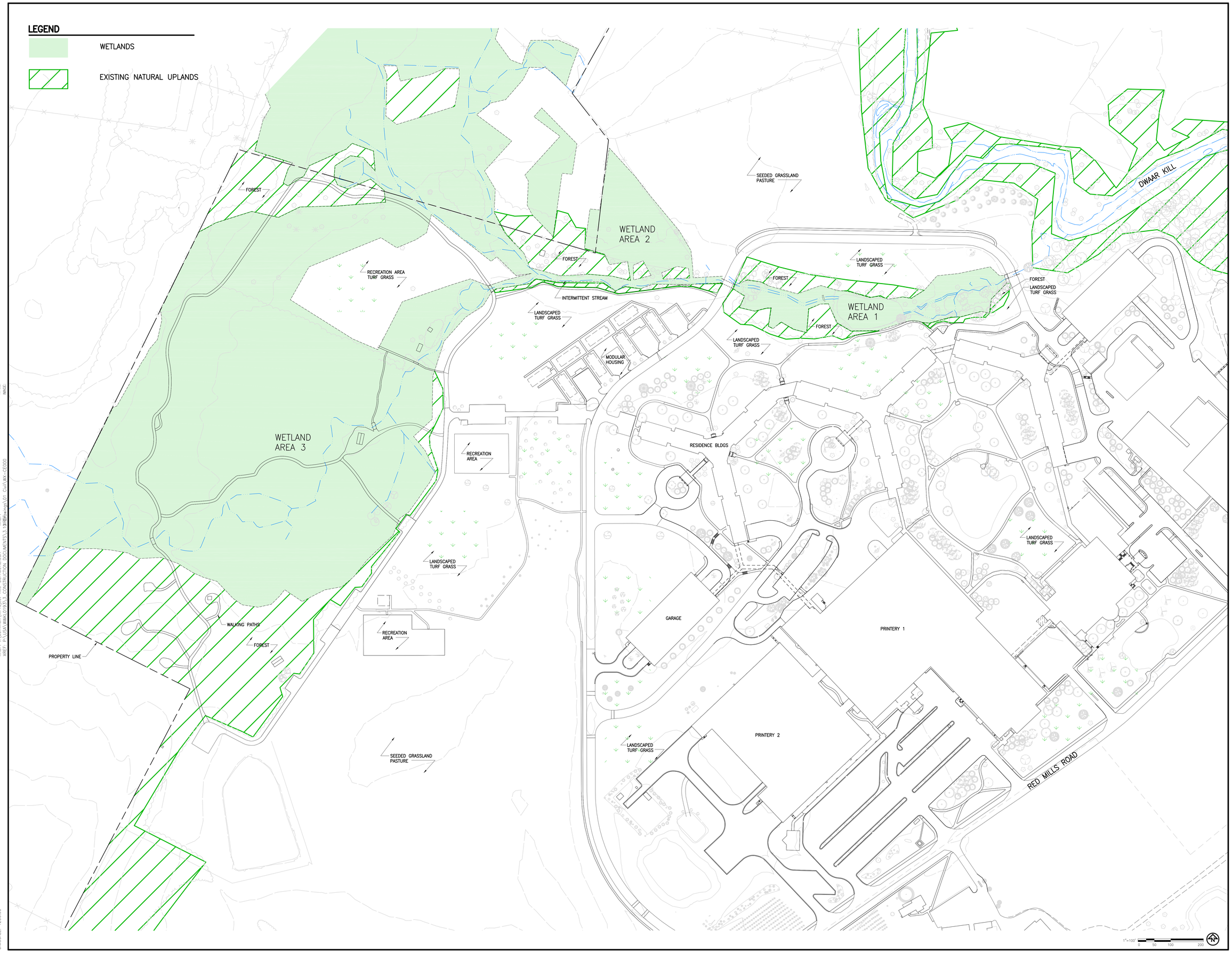
PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
OVERALL SITE PLAN

PROJECT No.
WWKL0193

SHEET No.
C-002

PLOT DATE: 10 Mar 09
DIMSCALE: 2400.00



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BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EXISTING NATURAL BUFFERS

PROJECT No.
WWKL0193

SHEET No.
C-003

XREF: ...\Common\X.Project Title-DEFAULT.E.USA
XREF: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.10 Drawings\01 Civil\WX-CE000
IMAGE:
PLOT DATE: 9 Mar 09
DIMSCALE: 1200.00

LEGEND

- WETLANDS
- MODIFIED MANAGEMENT
- RESEEDING, PLANTING, OR INTERSEEDING
- EXISTING NATURAL UPLANDS
- BUILDINGS OR PAVEMENT TO BE REMOVED
- NEW STRUCTURES

WETLAND AREA 2
WETLAND AREA 1
WETLAND AREA 3
SEEDED GRASSLAND PASTURE
DWAAR KILL
VEGETATED SWALE
RECREATION AREA TURF GRASS
INTERMITTENT STREAM
POND
VEGETATED SWALE
MODULAR HOUSING TO BE REMOVED
LANDSCAPED TURF GRASS
RESIDENCE BLDGS
LANDSCAPED TURF GRASS
RECREATION AREA TO BE REMOVED
NEW RESIDENCE
LANDSCAPED TURF GRASS
LAUNDRY EXP
LANDSCAPED TURF GRASS
DINING ROOM EXP
WETLAND BOUNDARY
AREA OF DISTURBANCE
GARAGE
PRINTERY 1
NEW OFFICE
WALKING PATHS
LANDSCAPED TURF GRASS
RECREATION AREA TO BE REMOVED
PROPERTY LINE
LANDSCAPED TURF GRASS
NEW GARAGE
NEW TER BLDG
ATHLETIC FIELDS
LANDSCAPED TURF GRASS
PRINTERY 2
LANDSCAPED TURF GRASS
RED MILLS ROAD
AREA OF DISTURBANCE
NEW RECREATION BLDG
POND
PASTURE

1"=100'
0 50 100 200

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BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
PROPOSED BUFFER RESTORATION

PROJECT No.
WWKL0193

SHEET No.
C-004

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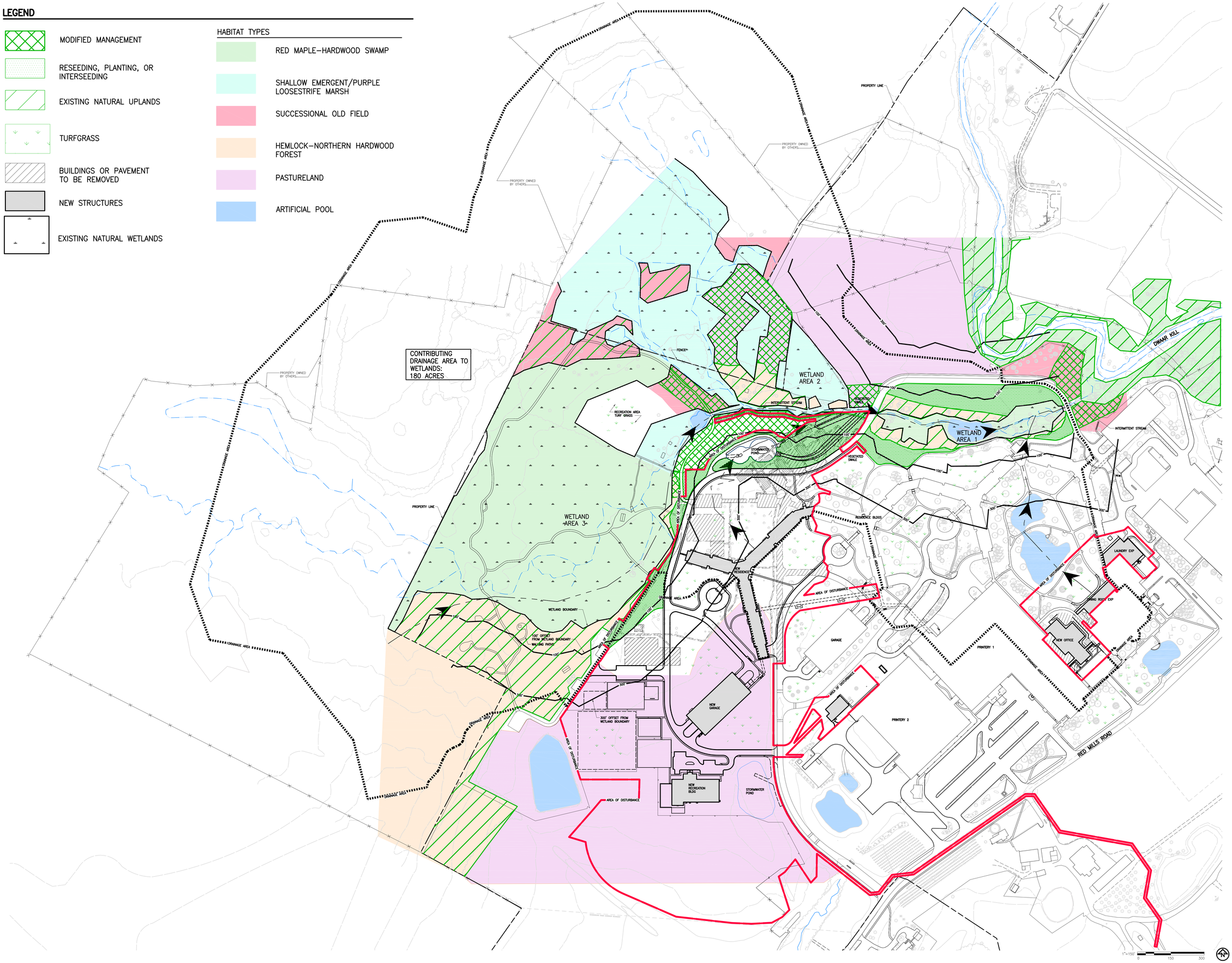
PLOT DATE: 9 Mar 09
DWGSCALE: 1:200.00

LEGEND

- MODIFIED MANAGEMENT
- RESEEDING, PLANTING, OR INTERSEEDING
- EXISTING NATURAL UPLANDS
- TURFGRASS
- BUILDINGS OR PAVEMENT TO BE REMOVED
- NEW STRUCTURES
- EXISTING NATURAL WETLANDS

HABITAT TYPES

- RED MAPLE–HARDWOOD SWAMP
- SHALLOW EMERGENT/PURPLE LOOSESTRIFE MARSH
- SUCCESSIONAL OLD FIELD
- HEMLOCK–NORTHERN HARDWOOD FOREST
- PASTURELAND
- ARTIFICIAL POOL



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BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:

WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:

HABITAT MAP & PROPOSED BUFFER RESTORATION

PROJECT No.
WWKL0193

SHEET No.
C–005

PLOT DATE: 9 Mar 09
DIMSCALE: 1:200.00

1 PLAN – EXISTING CONDITION & SOIL SURVEY

1"=200'-0" 0.00 100.00 200.00 400.00

SOILS LEGEND

HSG	SYMBOL	NAME
A	HgA	Hoosic Gravelly Loam 0–3% slopes
A	HgB	Hoosic Gravelly Loam 3–8% slopes
A	HgC	Hoosic Gravelly Loam rolling
B	CgA	Castile Gravelly Silt Loam 0–3% slopes
B	Te	Teel Silt Loam
C	Re	Red Hook Gravelly Silt Loam
C	BRC	Bath & Mardin very stony soils, sloping
C	CaB	Cambridge Gravelly Silt Loam 3–8%
C	CkB	Cayuga Silt Loam 3–8%
C	CkC	Cayuga Silt Loam 8–15%
C	VoA	Volusia Gravelly Silt Loam 0–3%
C	VoB	Volusia Gravelly Silt Loam 3–8%
C	VSB	Volusia very stony soils, gently sloping
D	CvA	Churchville Silt Loam 0–3%
D	CvB	Churchville Silt Loam 3–8%

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–	16 NOV 07	FILING
–	06 JUL 07	FILING
–	08 JUN 07	FILING

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

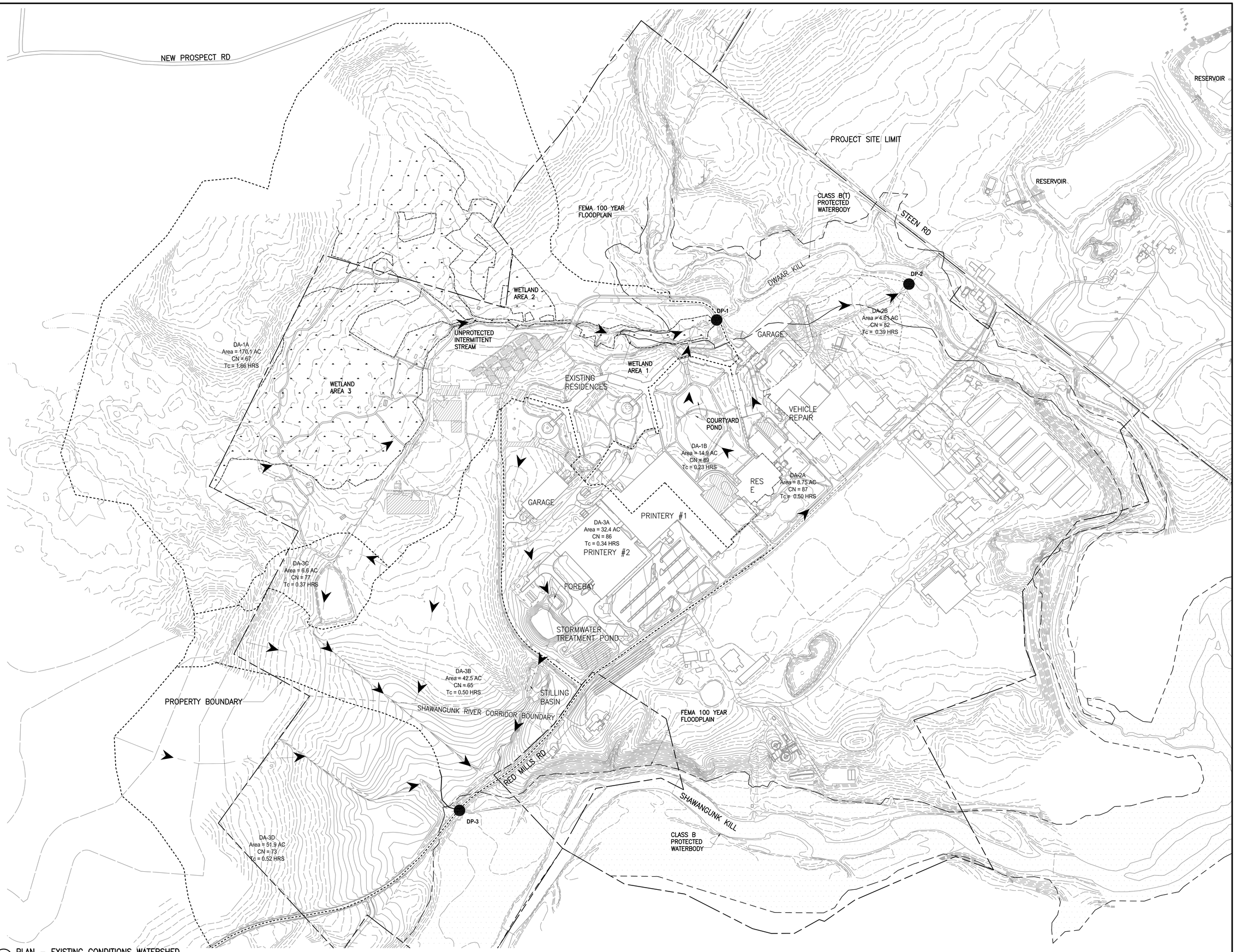
PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EXISTING CONDITION & SOIL SURVEY

PROJECT No.
WWKL0193

SHEET No.
C–101

PLOT DATE: 9 Mar 09
DIMSCALE: 2400.00



1 PLAN – EXISTING CONDITIONS WATERSHED

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

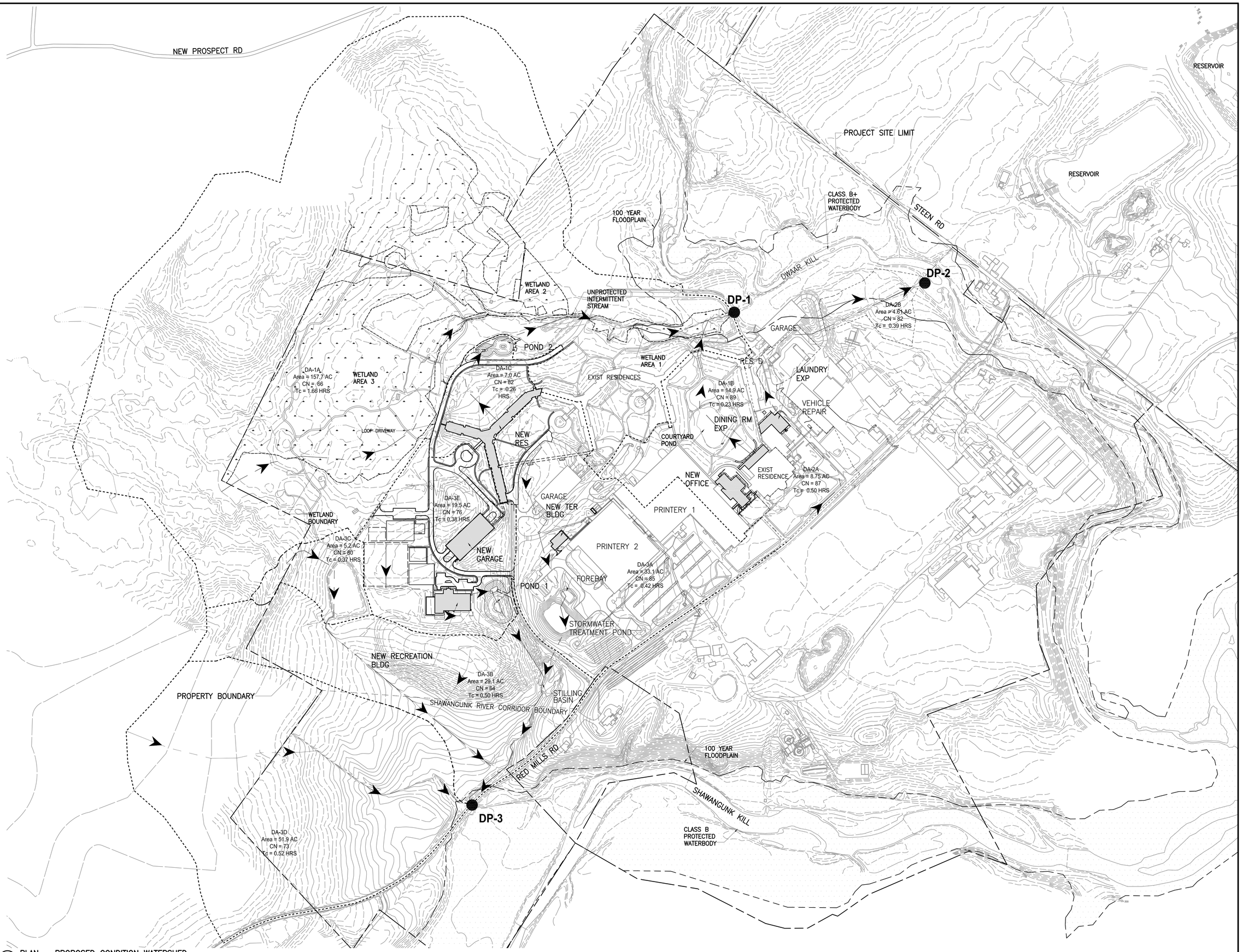
PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EXISTING CONDITION WATERSHED

PROJECT No.
WWKL0193

SHEET No.
C–102

PLOT DATE: 9 Mar 09
DIMSCALE: 2400.00



1 PLAN – PROPOSED CONDITION WATERSHED

1"=200'-0" 0.00 100.00 200.00 400.00

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–	08 JUN 07	FILING

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
PROPOSED CONDITION WATERSHED

PROJECT No.
WWKL0193

SHEET No.
C–103

PLOT DATE: 10 Mar 09

PHASE 15: 2.2 AC
POND 2, FILL SEDIMENT POND: 1.7 AC
STOCKPILE BERM "B": 0.5 AC

POND 2

SEDIMENT TRAP.
CREATE IN PHASE 2
FILL IN PHASE 15

PHASE 2: 4.3 AC
CENTRAL LOOP DRIVEWAY,
SEDIMENT TRAP, UTILITY
INFRASTRUCTURE, COMBINED
STAGING AND MATERIAL
HANDLING AREA: 3.8 AC
STOCKPILE: 0.5 AC

PHASE 14: 3.9 AC
NORTH LOOP DRIVEWAY,
MODULAR HOUSING DEMOLITION: 3.9 AC

PHASE 5: 5.0 AC
NEW RESIDENCE
FOUNDATION, RETAINING WALL: 3.0 AC
STOCKPILE BERM "B": 2.0 AC

EXIST RESIDENCE

PHASE 11: 0.9 AC:
LAUNDRY EXPANSION: 0.8 AC
STOCKPILE BERM "B": 0.1 AC

LAUNDRY EXP

PHASE 6: 4.8 AC
NEW RESIDENCE
SURROUNDING
AREA AND EXIST RESIDENCE
DRIVEWAY: 4.6 AC
STOCKPILE: 0.2 AC

NEW RESIDENCE

WETLAND BOUNDARY

INCLUDED IN
PHASE 6

INCLUDED IN
PHASE 1

PHASE 13: 5.0 AC
ATHLETIC FIELDS, CONVERT POND 1: 3.2 AC
STOCKPILE BERM "B": 0.3 AC

PHASE 9: 1.9 AC
DRIVEWAY, BERM "A": 1.7 AC
STOCKPILE BERM "B": 0.2 AC

PHASE 7: 3.5 AC:
OFFICE BLDG, DINING ROOM: 3.0 AC
STOCKPILE BERM "B": 0.5 AC

EXIST RESIDENCE

NEW OFFICE

STAGING &
MATERIALS
HANDLING AREA.
CREATE IN
PHASE 2 &
REMOVE IN
PHASE 13

PHASE 4: 3.4 AC
SOUTH LOOP DRIVEWAY: 1.8 AC
STOCKPILE BERM "B": 1.6 AC

BERM "A"

DRIVEWAY INLCUDED
IN PHASE 1

PRINTERY 1

PHASE 8: 4.3 AC
NEW GARAGE, TUNNEL
BERM "B": 2.6 AC
STOCKPILE
BERM "B": 1.7

UTIDY TUNNEL &
ELECTRICAL DUCT BANK
INCLUDED IN
PHASE 1

FUEL OIL TANK
INCLUDED IN PHASE 1

PRINTERY 2

PHASE 1: 2.5 AC
TER BLDG, PEDESTRIAN TUNNEL,
UTILITY TUNNEL AT OFFICE, STEAM
PLANT, FUEL OIL TANK, WWTP
ADJUSTMENTS: 2.0 AC
STOCKPILE BERM "B": 0.5 AC

GARAGE

PHASE 12: 4.4 AC
ATHLETIC FIELDS: 3.0 AC
STOCKPILE BERM "B": 1.4 AC

PHASE 10: 4.8 AC
RECREATION BLDG
& PARKING AREA, SANITARY
FORCE MAIN: 2.8 AC
STOCKPILE BERM "B": 2.0 AC

PHASE 16: 5.0 AC
GRADE &
LANDSCAPE BERM "B"
(LIMIT DISTURBANCE TO
5 AC AT A TIME)

RECREATION
BLDG

PHASE 3: 5.0 AC
POND 1 (SEDIMENT BASIN): 2.3 AC
STOCKPILE BERM "B": 2.7 AC

CONVERSION OF SEDIMENT BASIN
TO POND INCLUDED IN PHASE 13

RED MILLS ROAD

BERM "B"
STOCKPILE

SANITARY FORCE MAIN
INCLUDED IN PHASE 10

WWTP ADJUSTMENTS
INLCUDED IN PHASE 1

WWTP

1"=100'
0 50 100 200

1 PLAN – OVERALL CONSTRUCTION PHASING

CONSTRUCTION PHASING NOTES

PRECONSTRUCTION
BEFORE ANY GRADING BEGINS, COMPLETE THE FOLLOWING:
1. INSTALL TREE PROTECTION AT TREES TO BE PRESERVED.
2. INSTALL STORM DRAIN INLET PROTECTION AT EXISTING INLETS.
3. INSTALL CONSTRUCTION ENTRANCE FOR PHASE 1.
4. CONSTRUCT TEMP SWALES AND EARTH DIKES TO CONTROL RUNOFF AS NEEDED FOR PHASE 1.

PHASE 1 – TER, PEDESTRIAN TUNNEL AT RESIDENCE, UTILITY TUNNEL AT OFFICE & ELEC DUCT BANK AT OFFICE, FUEL OIL TANK, DRIVEWAY
1. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
2. INITIATE EXCAVATION FOR UTILITIES AND BUILDING PAD. DEWATERING, IF NEEDED SHALL USE A DEWATERING SUMP PIT.
3. INSTALL TEMP SILT FENCE AT BERM "B".
4. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
5. INSTALL UTILITIES AND STORMWATER INFRASTRUCTURE.
6. INSTALL WWTP ADJUSTMENTS.
7. INITIATE EXCAVATION FOR TUNNELS, FUEL TANK, AND ELEC DUCT BANK. DEWATERING, SHALL USE A DEWATERING SUMP PIT.
8. INSTALL STORM DRAIN INLET PROTECTION.
9. STABILIZE PAVEMENT AND BLDG SLAB SUBGRADE W/BASE COURSE.
10. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 2 – LOOP DR (CENTRAL), SEDIMENT TRAP, BERM "B", UTILITY INFRASTRUCTURE, & MATL HANDLING & STAGING AREA
1. INSTALL WETLAND/WILDLIFE BARRIER
2. INSTALL CONSTRUCTION ENTRANCE FOR PHASE 1.
3. CONSTRUCT TEMP SWALES AND EARTH DIKES.
4. CONSTRUCT CONCRETE WASHOUT.
5. CONSTRUCT STAGING & MATL HANDLING AREA.
6. INSTALL DUMPSTERS.
7. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
8. CONSTRUCT SEDIMENT TRAP.
9. INSTALL TEMP SILT FENCE AT BERM "B".
10. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
11. INSTALL UTILITIES AND STORMWATER INFRASTRUCTURE.
12. PREPARE LOOP DR PAVEMENT SUBGRADE.
13. INSTALL STORM DRAIN INLET PROTECTION AT LOOP DR.
14. STABILIZE PAVEMENT SUBGRADE WITH BASE COURSE.
15. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 3 – POND 1 & BERM "B"
1. CONSTRUCT TEMP SWALES AND EARTH DIKES.
2. INSTALL CONSTRUCTION ENTRANCE.
3. CONSTRUCT SEDIMENT BASIN.
4. INSTALL TEMP SILT FENCE AT BERM "B".
5. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
6. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 4 – LOOP DR (SOUTH) & BERM "B"
1. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
2. INSTALL UTILITIES AND STORMWATER INFRASTRUCTURE.
3. PREPARE LOOP DR PAVEMENT SUBGRADE.
4. INSTALL TEMP SILT FENCE AT BERM "B".
5. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
6. INSTALL STORM DRAIN INLET PROTECTION AT LOOP DR.
7. STABILIZE PAVEMENT SUBGRADE WITH BASE COURSE.
8. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 5 – RESIDENCE, UTILITIES, RETAINING WALL & BERM "B"
1. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
2. ROUGH GRADE FOR BLDG PAD. DEWATERING SHALL USE A DEWATERING SUMP PIT.
3. INSTALL UTILITIES AND STORMWATER INFRASTRUCTURE.
4. CONSTRUCT RETAINING WALL.
5. INSTALL TEMP SILT FENCE AT BERM "B".
6. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
7. STABILIZE BLDG PAD SUBGRADE WITH BASE COURSE.
8. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 6 – AREA SURROUNDING NEW RES & EXIST RES DR
1. CONSTRUCT TEMP SWALES AND EARTH DIKES.
2. INSTALL CONSTRUCTION ENTRANCE.
3. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
4. INSTALL UTILITIES AND STORMWATER INFRASTRUCTURE.
5. INSTALL STORM DRAIN INLET PROTECTION.
6. STABILIZE PAVEMENT SUBGRADE WITH BASE COURSE.
7. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 7 – OFFICE, DINING RM EXP, BERM "B"
1. INSTALL SILT FENCE.
2. INSTALL TEMP SEDIMENT TRAP.
3. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
4. ROUGH GRADE FOR BLDG PAD. DEWATERING SHALL USE A DEWATERING SUMP PIT.
5. INSTALL RETAINING WALL.
6. INSTALL TEMP SILT FENCE AT BERM "B".
7. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
8. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 8 – PARKING GARAGE, TUNNEL
1. ROUGH GRADE BLDG PAD.
2. EXCAVATE FOR TUNNEL AND UTILITIES. DEWATERING SHALL USE A DEWATERING SUMP PIT.
3. INSTALL TEMP SILT FENCE AT BERM "B".
4. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
5. INSTALL UTILITIES AND STORMWATER INFRASTRUCTURE.
6. STABILIZE BLDG PAD SUBGRADE WITH BASE COURSE.
7. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 9 – PARKING GARAGE DR, BERM "A", BERM "B"
1. PREPARE DRIVEWAY PAVEMENT SUBGRADE.
2. INSTALL TEMP SILT FENCE AT BERM "B".
3. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
4. INSTALL STORM DRAIN INLET PROTECTION.
5. STABILIZE PAVEMENT SUBGRADE WITH BASE COURSE.

PHASE 10 – RECREATION BLDG & ADJACENT PARKING AREA, SAN FM
1. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
2. INITIATE EXCAVATION FOR UTILITIES AND BUILDING PAD. DEWATERING, IF NEEDED SHALL USE A DEWATERING SUMP PIT.
3. INSTALL TEMP SILT FENCE AT BERM "B".
4. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
5. INSTALL UTILITIES AND STORMWATER INFRASTRUCTURE.
6. INSTALL STORM DRAIN INLET PROTECTION.
7. STABILIZE PAVEMENT AND BLDG SLAB SUBGRADE W/BASE COURSE.
8. INSTALL SANITARY FORCE MAIN.
9. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 11 – LAUNDRY AREA ADDITION, BERM "B"
1. INSTALL SILT FENCE.
2. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
3. ROUGH GRADE FOR BLDG PAD. DEWATERING SHALL USE A DEWATERING SUMP PIT.
4. INSTALL TEMP SILT FENCE AT BERM "B".
5. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
6. STABILIZE BLDG PAD &PAVEMENT SUBGRADE WITH BASE COURSE.
7. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 12 – RECREATION FACILITIES (ATHLETIC FIELDS & COURTS), BERM "B"
1. INSTALL SILT FENCE.
2. DEMO EXIST STRUCTURES, PAVEMENT, AND UTILITIES AS NEEDED.
3. ROUGH GRADE RECREATION AREAS.
4. INSTALL TEMP SILT FENCE AT BERM "B".
5. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
6. STABILIZE PAVEMENT SUBGRADE WITH BASE COURSE.
7. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 13 – ATHLETIC FIELDS & PARKING, BERM "B"
1. ROUGH GRADE RECREATION AREAS.
2. INSTALL TEMP SILT FENCE AT BERM "B".
3. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
4. STABILIZE PAVEMENT SUBGRADE WITH BASE COURSE.
5. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 14 – LOOP DR, DEMO OF MODULAR HOUSING
1. DEMO MODULAR HOUSING.
2. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
3. PAVE LOOP DR AND OTHER ACCESS DRIVEWAYS.
4. REMOVE ESCMS FROM STORM DRAIN INLETS AND FINALIZE PAVING.
5. REMOVE CONC WASHOUT AREAS.
6. REMOVE ALL TEMP ESCMS AND STABILIZE ANY AREAS DISTURBED BY REMOVAL OF ESCMS.
7. PREPARE FINAL SEEDING AND LANDSCAPING.
8. MONITOR STABILIZED AREAS UNTIL FINAL STABILIZATION IS REACHED.

PHASE 15 – POND 2, FILL SEDIMENT TRAP, BERM "B"
1. CONSTRUCT PERMANENT POND 2.
2. FILL IN TEMP SEDIMENT TRAP.
3. INSTALL TEMP SILT FENCE AT BERM "B".
4. STOCKPILE EXCESS CUT IN BERM "B". IF STOCKPILE OPERATIONS CEASE FOR MORE THAN 7 DAYS, STOCKPILE SHALL BE STABILIZED WITH HYDROMULCH.
5. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.

PHASE 16 – LANDSCAPE BERM "B"
1. SHAPE TOP OF BERM TO FINAL GRADE.
2. STABILIZE EXPOSED SOILS W/SEED & MULCH OR HYDROMULCH.
3. COMPLETE FINAL LANDSCAPING.

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NO. 070448
LICENSED PROFESSIONAL ENGINEER

MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FDIS FILING REVISION
–	15 JAN 09	FDIS FILING
1	01 SEP 08	DDIS FILING REVISION
–	16 MAY 08	DDIS FILING
–	04 APR 08	ADDED SHEET

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
OVERALL CONSTRUCTION PHASING PLAN

PROJECT No.
WWKL0193

SHEET No.
CD101

XREF: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.1\0 Drawings\01 Civil\Xrefs\Fence_Plan_Stormpipe
XREF: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.1\0 Drawings\01 Civil\WK-CS000
XREF: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.1\0 Drawings\01 Civil\WK-CG000
XREF: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.1\0 Drawings\Common\V-Project Title-DEFAULT.dDA
XREF: \WK-CE000
XREF: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.1\0 Drawings\Common\V-Project Title-DEFAULT.dDA
IMAGE: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.1\0 Drawings\01 Civil\Xrefs\Fence_Plan_Stormpipe
IMAGE:
IMAGE:
IMAGE:
IMAGE:
PLOT DATE: 10 Mar 09
DIMSCALE: 1200.00

CONTINUATION ON V CE102

LIMITS OF DISTURBANCE PHASE 13

STAGING & MATERIALS HANDLING AREA. CREATE IN PHASE 2 & REMOVE IN PHASE 13

LIMITS OF DISTURBANCE PHASE 2

DEMOLITION OF EXISTING PAVEMENT, UTILITIES AND STRUCTURES TO OCCUR WITH IN EACH PHASE ONLY (TYP)

CONSTRUCTION ENTRANCE PHASE 2

PHASE 9

BERM "A"

CONSTRUCTION ENTRANCE PHASE 5 & 6

SILT FENCE WILDLIFE BARRIER

PHASE 13

SAND VOLLEYBALL

HANDBALL

TENNIS

TEMPORARY SWALE/ GRASSED WATERWAY (TYP)

PHASE 8

NEW GARAGE
L PT @ ROOF 364.00
L PT @ 1ST FLR 354.50
L PT @ BASEMENT 345.00
L PT @ CELLAR 335.50

LIMITS OF DISTURBANCE PHASE 8

CONSTRUCTION ENTRANCE PHASE 1

TREE PROTECTION (TYP)

EARTH DIKE PHASE 4

PERMANENT SEEDING TYP

ATHLETIC FIELDS

SOCCER/ UTILITY FIELD

VOLLEYBALL

PHASE 4

SILT FENCE (TYP)

EARTH DIKE PHASE 1

TER BLDG 333.00

PRINTERY 2 FF EL 334.71

LIMITS OF DISTURBANCE PHASE 1

LIMITS OF DISTURBANCE PHASE 2

CONCRETE WASHOUT

EXCAVATED DROP INLET PROTECTION (TYP)

PHASE 2

PHASE 12

EARTH DIKE PHASE 4a REMOVE IN PHASE 11

SILT FENCE (TYP)

CURB INLET PROTECTION (TYP)

LIMITS OF DISTURBANCE PHASE 4

CONSTRUCTION ENTRANCE PHASE 3

EXCAVATED DROP INLET PROTECTION (TYP)

BASKETBALL

PHASE 3

REMOVE SEDIMENT FROM EXIST STORMWATER POND FOREBAY (PRECONSTRUCTION & AFTER FINAL STABILIZATION)

LPG TANKS

FOREBAY

SEDIMENT BASIN, TEMPORARY.
CMAX DRAINAGE AREA = 14.5 AC
NORMAL POOL EL 338.00
REQUIRED SURFACE AREA = 0.56 AC
PROVIDED SURFACE AREA = 0.57 AC
REQUIRED VOLUME = 52,461 CU FT
PROVIDED VOLUME = 56,187 CU FT
CREATE IN PHASE 3
CONVERT TO PERMANENT POND IN PHASE 13

LIMITS OF DISTURBANCE PHASE 12

LIMITS OF DISTURBANCE PHASE 10

PHASE 10

RECREATION BLDG
FF EL 343.00

POND 1

18" RISER
IE 326.00

EMERGENCY SPILLWAY EL 332.00

LIMITS OF DISTURBANCE PHASE 3

STORMWATER TREATMENT POND

TEMPORARY SWALE/ GRASS LINED CHANNEL

SILT FENCE WILDLIFE BARRIER

BERM "B"

LIMITS OF DISTURBANCE PHASE 10

EXIST STILLING BASIN

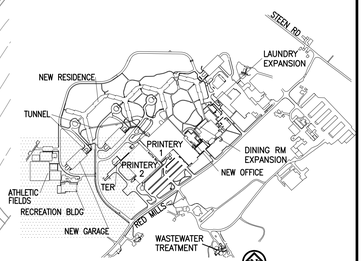
RED MILLS RD

PLACE SILT FENCE ACCORDING TO STOCKPILE LOCATION FOR EACH PHASE. ADJUST LOCATIONS AS NECESSARY FOR STOCKPILING OPERATIONS.

STABILIZE LOWER SLOPES BEFORE CONTINUING STOCKPILE OPERATIONS. DIVERT RUNOFF AWAY FROM SLOPES USING EARTH DIKES UNTIL THE AREA IS STABILIZED.

1"=50'
0 25 50 100

KEY PLAN



EROSION CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED PRIOR TO THE FIRST STEP IN CLEARING AND GRADING OF ANY PORTION OF THE PROJECT.
2. REMOVE SEDIMENT FROM FOREBAY OF EXISTING STORMWATER TREATMENT POND AT THE PRINTERY PRIOR TO THE FIRST STEP IN CLEARING AND GRADING OF ANY PORTION OF THE PROJECT. SEDIMENT SHALL BE SPREAD ON SITE AT THE LOCATION OF BERM "B" AND STABILIZED WITH SEED AND MULCH.
3. CONSTRUCTION ACTIVITIES SHALL BE PHASED SUCH THAT THE OVERALL LAND DISTURBANCE IS LIMITED TO FIVE ACRES AT ONE TIME. STAKEOUT LIMITS OF PHASE DISTURBANCE AND INSTALL CONSTRUCTION FENCING AT BOUNDARY. ALL DISTURBED AREAS SHALL BE STABILIZED, AS SPECIFIED IN NOTE 4, BEFORE ADDITIONAL AREAS ARE EXPOSED.
4. WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES, AREAS TO BE VEGETATED SHALL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST DISTURBANCE. WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES, AREAS AREAS TO BE PAVED SHALL BE STABILIZED WITH CRUSHED STONE WITHIN 7 DAYS OF LAST DISTURBANCE.
5. SEE CG505 FOR SEEDING AND MULCHING NOTES AND SPECIFICATIONS.
6. EXISTING VEGETATION THAT IS TO REMAIN SHALL BE SURROUNDED WITH TEMPORARY ORANGE-COLORED PLASTIC MESH FENCE.
7. STOCKPILES SHALL BE ROUGHENED BY EQUIPMENT TRACKING AND SHALL NOT EXCEED 2:1. INSTALL SILT FENCE AT TOE OF EACH PILE. STABILIZE SLOPES ON LOWER END OF BERM "B" BEFORE CONTINUING WITH STOCKPILE OPERATIONS.
8. DUST SHALL BE CONTROLLED BY USING A MOBILE WATER TRUCK TO APPLY WATER TO DISTURBED AREAS THAT ARE DRY AND SUSCEPTIBLE TO CREATING DUST.
9. THE WATER TABLE MAY BE ENCOUNTERED DURING CONSTRUCTION OF BUILDING FOUNDATIONS. DEWATERING MEASURES MAY NEED TO BE PROVIDED TO PROVIDE A DRY BASE FOR CONSTRUCTION.
10. ONCE CONSTRUCTION PERMANENTLY CEASES IN AN AREA, THE AREA SHALL BE STABILIZED WITH PERMANENT MEASURES.
11. SEDIMENT BASIN SHALL BE CLEANED OUT AT 50% CAPACITY AND THE SEDIMENT SHALL BE SPREAD ON THE SITE. SEDIMENT SHALL NOT BE DEPOSITED DOWNSTREAM OF BASIN, ADJACENT TO STREAMS, WETLANDS OR WITHIN FLOODPLAIN.
12. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
13. ENSURE THAT ALL DRAINAGE STRUCTURES AND PIPES ARE CLEANED OUT AND WORKING PROPERLY AT COMPLETION OF PROJECT.
14. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ACCORDING TO THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".
15. SEE THE STORMWATER POLLUTION PREVENTION PLAN FOR INSPECTION AND MAINTENANCE REQUIREMENTS FOR EROSION AND SEDIMENT CONTROLS AND STORMWATER TREATMENT PRACTICES.

1 PLAN – EROSION & SEDIMENT CONTROL

KINGDOM SUPPORT SERVICES, INC.
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CONSULTANT:

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LICENSED PROFESSIONAL ENGINEER
No. 070545

MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FDIS FILING REVISION
–	15 JAN 09	FDIS FILING
1	01 SEP 08	DDIS FILING REVISION
–	16 MAY 08	DDIS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EROSION & SEDIMENT CONTROL PLAN

PROJECT No.
WWKLO193

SHEET No.
CE101

IMAGE: P:\USA\WWKLO193\3_CONSTRUCTION DOCUMENTS\3.10 Drawings\01 Civil\Plans\Erosion_PE_Stamp.jpg
IMAGE:
IMAGE:
IMAGE:
IMAGE:
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XREF:
PLOT DATE: 9 Mar 09
DIMSCALE: 600.00

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SILT FENCE TO BE RELOCATED TO EDGE OF STREAM IN PHASE 14

LIMITS OF CONSTRUCTION PHASE 14

LIMITS OF DISTURBANCE PHASE 15

DEMOLITION OF EXISTING PAVEMENT, UTILITIES AND STRUCTURES TO OCCUR WITH IN EACH PHASE ONLY (TYP)

REMOVE WILDLIFE BARRIER FOR CONSTRUCTION OF POND OUTFALL

CONSTRUCTION ENTRANCE PHASE 14

PHASE 14

AREA TO REMAIN UNDISTURBED UNTIL PHASE 15

RIP RAP OUTLET SEDIMENT TRAP
DRAINAGE AREA = 8 AC
REQUIRED VOLUME = 8 x 3600 CU FT = 28,800 CU FT
ACTUAL VOLUME = 29,970 CU FT
CREATE IN PHASE 2
FILL IN PHASE 15

TOP OF BERM EL 341.00

TOP OF WEIR EL 336.50

EARTH DIKE PHASE 2

DEMOLITION OF EXISTING PAVEMENT, UTILITIES AND STRUCTURES TO OCCUR WITH IN EACH PHASE ONLY (TYP)

LIMITS OF DISTURBANCE PHASE 2

CONSTRUCTION ENTRANCE PHASE 2

LIMITS OF DISTURBANCE PHASE 5

WETLAND PROTECTION/WILDLIFE BARRIER. INSTALL AT BEGINNING OF PHASE 2 & REMOVE AFTER FINAL STABILIZATION

PHASE 2 TEMPORARY BRAIN

EARTH DIKE PHASE 2

EXISTING RESIDENCE
FF EL 334.21
FF EL 344.21

5' MINIMUM SEPARATION FROM WETLAND BOUNDARY TO LIMITS OF DISTURBANCE (TYP)

PHASE 2 TEMP DRAIN

PHASE 2

WETLAND BOUNDARY

PHASE 6

LIMITS OF DISTURBANCE PHASE 6

REMOVE STORM DRAIN AND INLET IN PHASE 2

EARTH DIKE PHASE 2

LIMITS OF DISTURBANCE PHASE 13

NEW RESIDENCE
CELLAR FF EL 334.21
BASEMENT FF EL 344.21

TEMP SWALE PHASE 2

ORANGE-COLORED PLASTIC MESH CONSTRUCTION FENCE (TYP). INSTALL AT BEGINNING OF PHASE 2 & REMOVE AFTER PHASE 16

EXCAVATED DROP INLET PROTECTION (TYP)

DEMOLITION OF EXISTING PAVEMENT, UTILITIES AND STRUCTURES TO OCCUR WITH IN EACH PHASE ONLY (TYP)

PHASE 5

PHASE 6

PHASE 1

WETLAND PROTECTION/WILDLIFE BARRIER. INSTALL AT BEGINNING OF PHASE 2 & REMOVE AFTER FINAL STABILIZATION

AREA TO REMAIN UNDISTURBED UNTIL PHASE 13

LIMITS OF DISTURBANCE PHASE 2

CURB INLET PROTECTION (TYP)

CONSTRUCTION ENTRANCE PHASE 1

PHASE 6

EXIST RESTROOMS

LIMITS OF DISTURBANCE PHASE 9

EXIST GARAGE
FF EL 360.50
FF EL351.00
FF EL 341.50
FF EL 332.00

TEMPORARY SWALE PHASE 2 GRASSED WATERWAY

CONTINUATION ON 1/CE101

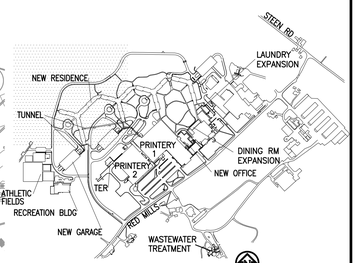
STAGING & MATERIALS HANDLING AREA. CREATE IN PHASE 2 & REMOVE IN PHASE 13

CONSTRUCTION ENTRANCE PHASE 5 & 6

EXCAVATED DROP INLET PROTECTION

1 PLAN – EROSION & SEDIMENT CONTROL

1"=50'
0 25 50 100



KEY PLAN TRUE NORTH

PLOT DATE: 9 Mar 09
DMSCALE: 600.00

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RICHARD JON ELDRED
NO. 070445

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900 RED MILLS ROAD
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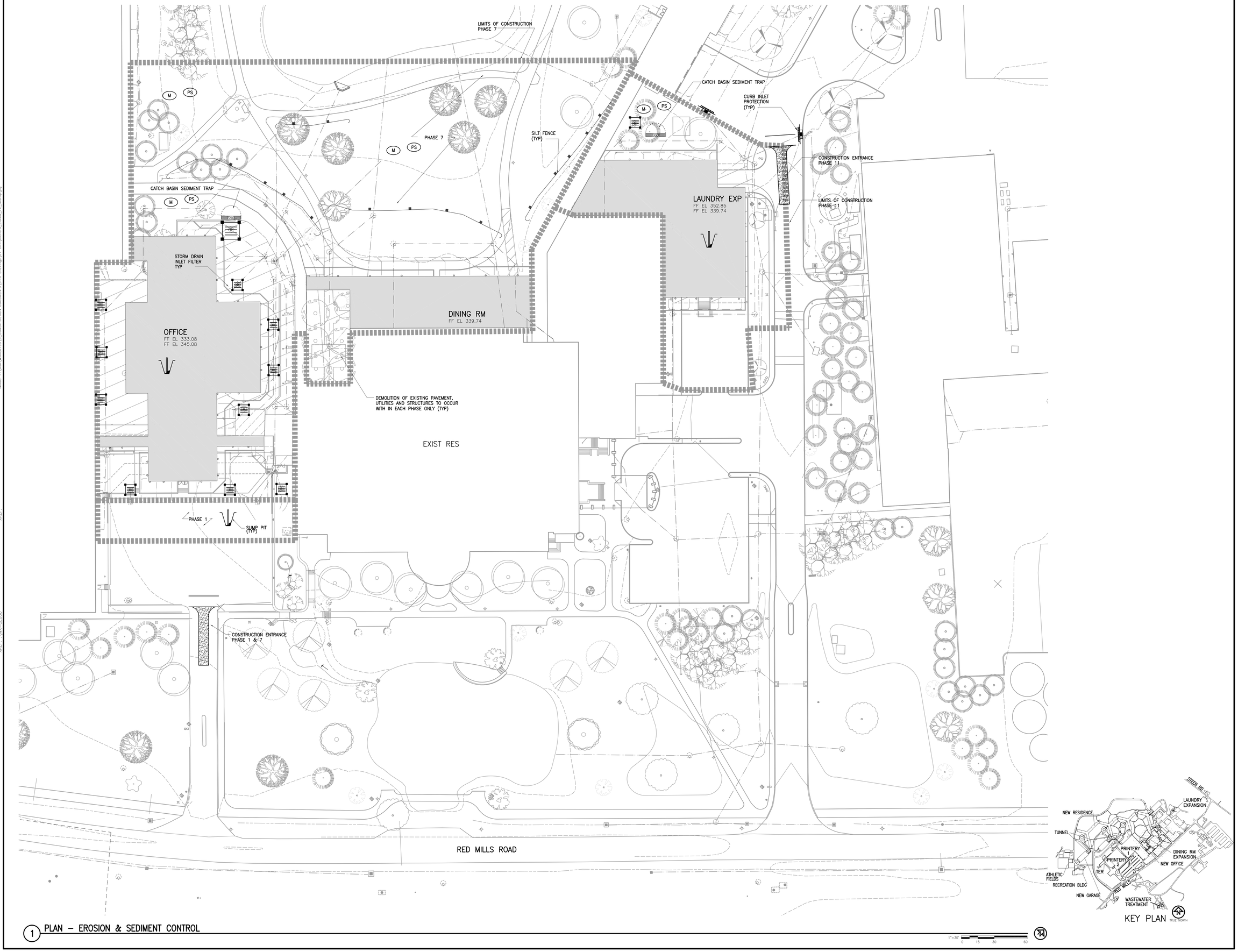
PROJECT No.
WWKLO193

SHEET No.
CE102



1 PLAN – EROSION & SEDIMENT CONTROL

KINGDOM SUPPORT SERVICES, INC.
175 PEARL STREET
BROOKLYN, NY 11201 USA
PH: (718) 560-4800
FAX: (718) 560-8831

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CONSULTANT:

Richard Ian Eldred

STATE OF NEW YORK
RICHARD IAN ELDRED
No. 070445
LICENSED PROFESSIONAL ENGINEER

MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FEIS FILING REVISION
–	15 JAN 09	FEIS FILING
1	01 SEP 08	DEIS FILING REVISION
–	16 MAY 08	DEIS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EROSION & SEDIMENT CONTROL PLAN

PROJECT No.
WWKL0193

SHEET No.
CE103

PLOT DATE: 10 Mar 09
DIMSCALE: 240.00

CONTINUATION
ON 1/CG102

RIM EL 344.97
IE IN 333.43
IE IN 341.20
IE IN 333.83
IE OUT 333.33

BASKETBALL

VOLLEYBALL

RIM EL 341.45
IE OUT 338.78

RIM EL 343.85
IE OUT 341.00

RIM EL 344.50
IE OUT 341.50

RIM EL 342.86
IE OUT 339.76

18" SD

8" SD

10" SD

12" SD

SAND VOLLEYBALL

RIM EL 345.05
IE IN 340.60
IE IN 336.15
IE OUT 336.05

HANDBALL

RIM EL 345.26
IE IN 338.05
IE IN 337.32
IE OUT 337.22

TENNIS

RIM EL 344.50
IE OUT 341.50

ATHLETIC FIELDS

SOCCER/
UTILITY FIELD

RIM EL 345.14
IE IN 332.19
IE IN 337.10
IE IN 341.00
IE OUT 332.09

VOLLEYBALL

CB-5
RIM EL 344.49
IE OUT 341.00 P1

BASKETBALL

RIM EL 342.76
IE IN 338.10 P1
IE OUT 337.60 P2

RIM EL 340.71
IE IN 335.21 P2
IE OUT 334.71 P3

BERM "A"

RIM EL
IE IN 333.73
IE OUT 333.63

NEW GARAGE
L PT @ ROOF 364.00
L PT @ 1ST FLR 354.50
L PT @ BASEMENT 345.00
L PT @ CELLAR 335.50

RIM EL 351.75
IE OUT 348.75

RIM EL 340.82
IE OUT 337.60

12" SD

IE 331.51

RIM EL 347.12
IE IN 343.50
IE IN 331.46
IE OUT 330.46

RIM EL 333.89
IE OUT 331.00

24" SD

8'x15'
OIL/WATER
SEPARATOR
IE IN 330.40
IE OUT 330.15

RIM EL 337.05
IE OUT

RIM EL 338.36
IE IN 330.60
IE IN 329.60
IE OUT 329.60

RIM EL 338.27
IE IN 329.60
IE OUT 329.50

IE 329.00 (TYP)

RIM EL 340.10
IE IN 330.85
IE OUT 330.75

RIM EL 337.97
IE IN 329.95
IE IN
IE OUT 329.85

RECREATION BLDG
FF EL 343.00

RIM EL 340.67
IE IN 332.14 P3
IE OUT 332.04 P4

RIM EL 342.85
IE IN 330.44 P4
IE OUT 330.34 P5

RIM EL 340.77
IE IN 329.61
IE OUT 329.51

30" SD

36" SD

42" SD

24" SD

POND 1

BERM "B"

CONCRETE HEADWALL
WITH OUTLET PROTECTION

IE 316.50

FOREBAY
SEE 1/CG502

POND MAINTENANCE
ACCESS ROAD
REINFORCED TURF

OUTLET STRUCTURE
IE IN 322.75
IE OUT 322.75
SEE 1/CG502

EMERGENCY SPILLWAY
EL 333.75
EXIST GRADE EL 336.20

STORMWATER
TREATMENT
POND

FOREBAY

PRINTERY
2
FF EL 334.71

TER BLDG
333.00

RED MILLS RD

GENERATORS

FUEL TANKS

LPG TANKS

1 PLAN – GRADING & DRAINAGE

1"=50'
0 25 50 100

KEY PLAN
TRUE NORTH

STEEN RD
LAUNDRY EXPANSION
NEW RESIDENCE
TUNNEL
PRINTERY 1
PRINTERY 2
DINING RM EXPANSION
NEW OFFICE
TER
ATHLETIC FIELDS
RECREATION BLDG
RED MILLS
NEW GARAGE
WASTEWATER TREATMENT

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XREF: ..\WK-CG000
XREF: ..\WK-CG000
XREF: ..\WK-CS000

PLOT DATE: 10 Mar 09
DIMSCALE: 600.00

KINGDOM SUPPORT SERVICES, INC.
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JOSEPH ANTHONY ELDRED
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NO. 072445

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–	13 MAR 09	FDS FILING REVISION
–	15 JAN 09	FDS FILING
1	01 SEP 08	DDS FILING REVISION
–	16 MAY 08	DDS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

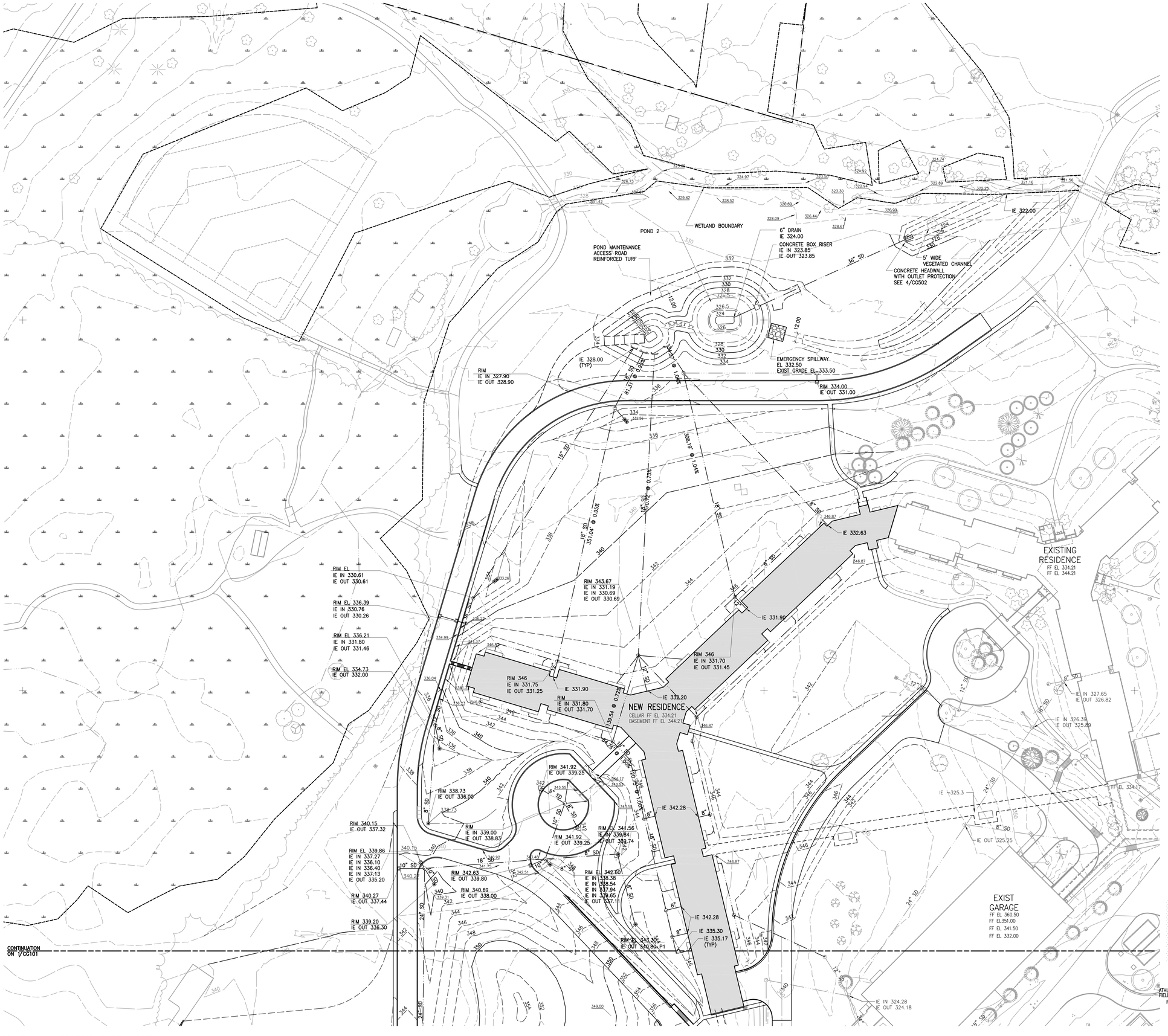
ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

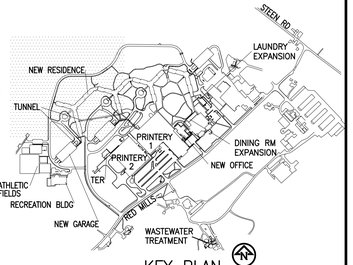
SHEET TITLE:
GRADING & DRAINAGE PLAN

PROJECT No.
WWKL0193

SHEET No.
CG101



1 PLAN – GRADING & DRAINAGE



KEY PLAN

TRUE NORTH

1"=50' 0 25 50 100

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CONSULTANT:

Richard Ian Eldred

STATE OF NEW YORK RICHARD IAN ELDRED No. 070445 LICENSED PROFESSIONAL ENGINEER

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

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WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
GRADING & DRAINAGE PLAN

PROJECT No.
WWKL0193

SHEET No.
CG102

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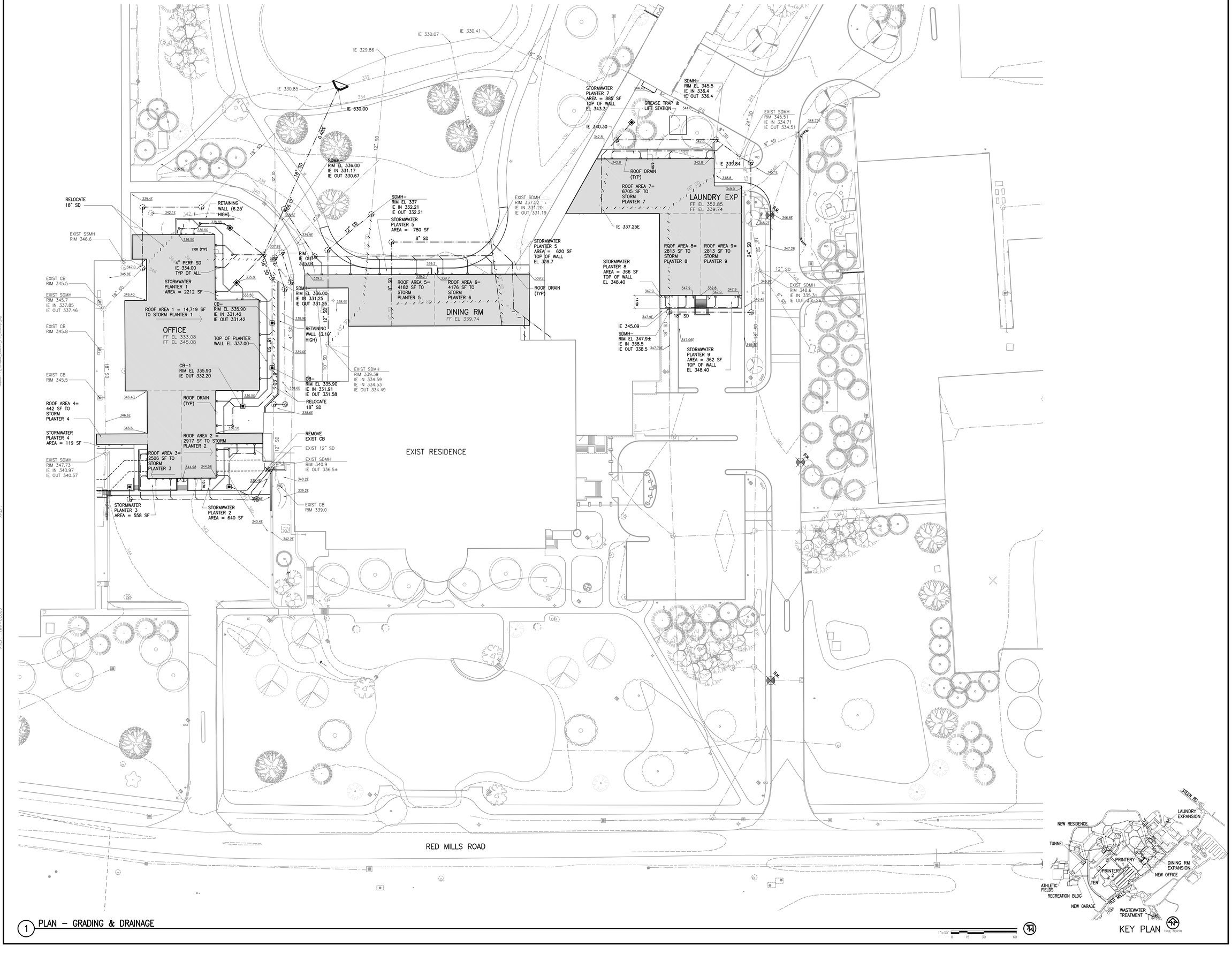
XREF: XREF: XREF: XREF: XREF: XREF: XREF: \WX-CS000 XREF: \WX-CG000 XREF: \WX-CE000 XREF: \Common\X Project Title-DEFAULT.E.USA

PLOT DATE: 10 Mar 09
DIMSCALE: 600.00



1 PLAN – GRADING & DRAINAGE

KINGDOM SUPPORT SERVICES, INC.
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CONSULTANT:

Richard Ian Eldred

STATE OF NEW YORK
RICHARD IAN ELDRED
NO. 070445
LICENSED PROFESSIONAL ENGINEER

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OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
GRADING & DRAINAGE PLAN

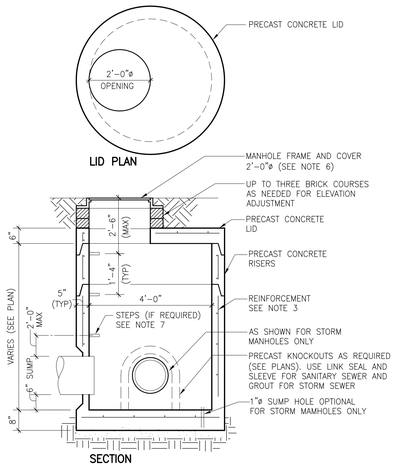
PROJECT No.
WWKL0193

SHEET No.
CG103

PLOT DATE: 10 Mar 09
DIMSCALE: 240.00

NOTES:

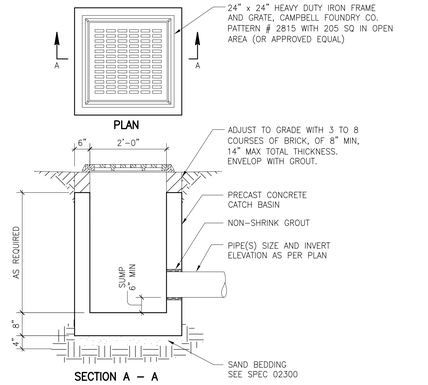
1. INLET PIPES ARE NOT TO EXTEND MORE THAN 3" INTO MANHOLE. OUTLET PIPES ARE TO BE FLUSH AND ALL EDGES SMOOTH WITH MANHOLE WALL.
2. MINIMUM SLOPE OF FLOW CHANNEL INVERT FROM INLET TO OUTLET IS 2% UNLESS NOTED OTHERWISE.
3. REINFORCEMENT SHALL BE FOR H20 LOADING.
4. USE 4000+ PSI PRECAST CONCRETE.
5. IF STRUCTURE EXTENDS BELOW WATER TABLE, ADD WEEP HOLES TO RELIEVE WATER PRESSURE.
6. INSTALL HEAVY DUTY MANHOLE FRAME AND COVER – CAMPBELL #1104 A OR APPROVED EQUAL.
7. STEPS ARE REQUIRED FOR STRUCTURES DEEPER THAN 4 FEET USE PLASTIC STEPS OR ⅝"ø MIN STEEL STEPS COATED WITH PLASTIC.



1 DETAIL – STORM DRAIN MANHOLE REF: 1/CG101

1/2"=1'-0" 0" 1" 2" 4"

NOTE:
REINFORCEMENT SHALL BE FOR H20 LOADING.

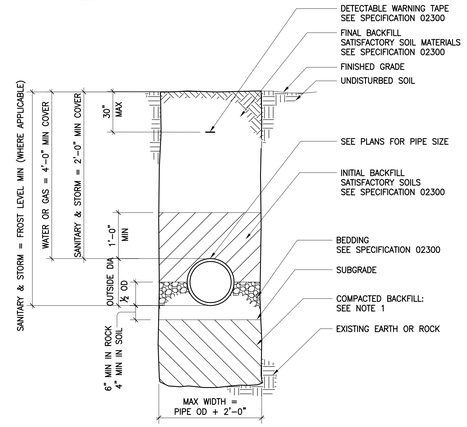


2 DETAIL – PRECAST CONCRETE CATCH BASIN REF: 1/CG101

NOT TO SCALE

NOTE:

1. REMOVE ALL UNSUITABLE MATERIAL TO A MINIMUM OF 30" BELOW THE PIPE OR TWICE THE DIAMETER, WHICHEVER IS GREATER. REPLACE WITH COMPACTED BACKFILL.
2. PROVIDE PROTECTION FOR TRENCH WALLS WHERE THE TRENCH DEPTH IS GREATER THAN 5 FEET.

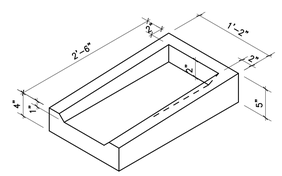


3 DETAIL – UTILITY TRENCH REF: 1/CG101

NOT TO SCALE

NOTES:

1. REINFORCE WITH 4"x4" WELDED WIRE FABRIC OR FIBERMESH



4 DETAIL – CONCRETE SPLASH BLOCK REF: 1/CG101

NOT TO SCALE

KINGDOM SUPPORT SERVICES, INC.

175 PEARL STREET
BROOKLYN, NY 11201 1516

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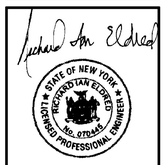

MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FDIS FILING REVISION
–	15 JAN 09	FDIS FILING
–	16 MAY 08	DDIS FILING

OWNER:

WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:

WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:

GRADING & DRAINAGE DETAILS

PROJECT No.
WWKL0193

SHEET No.
CG501

MAGE:
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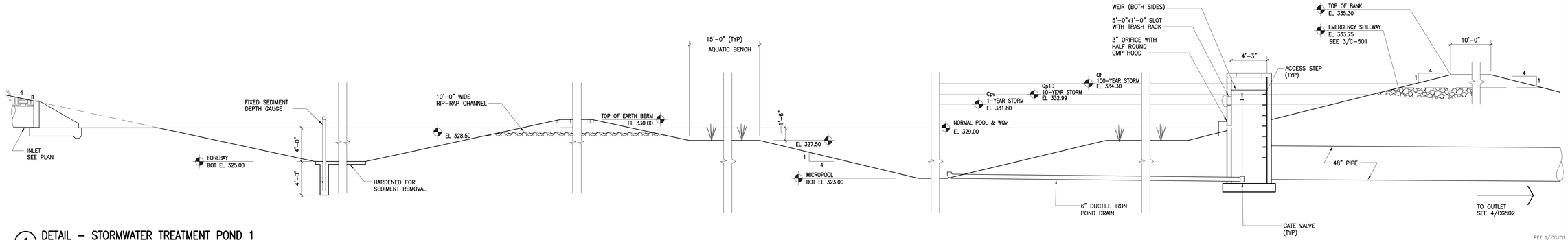
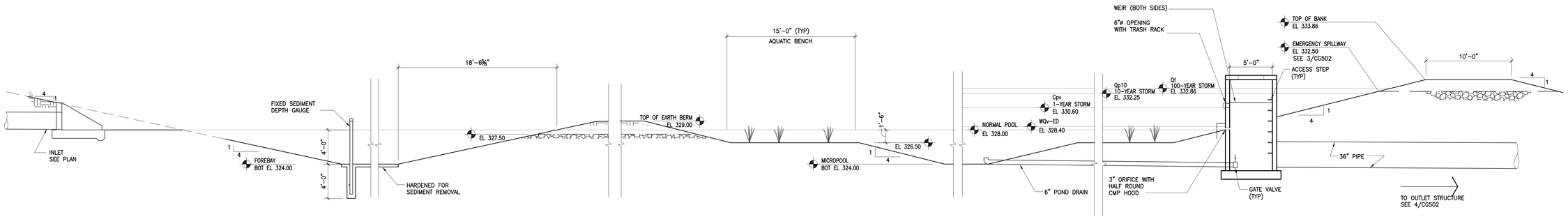
PLOT DATE: 10 Mar 09
DIMSCALE: 1.0000



1 DETAIL – STORMWATER TREATMENT POND 1

REF: 1/CC101

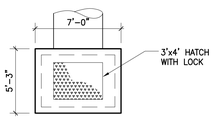
1"=5'-0" 0" 2'-6" 5' 10'



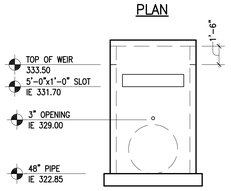
2 DETAIL – STORMWATER TREATMENT POND 2

REF: 1/CC102

1"=5'-0" 0" 2'-6" 5' 10'



PLAN

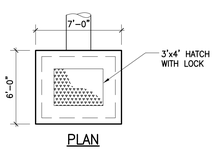


ELEVATION

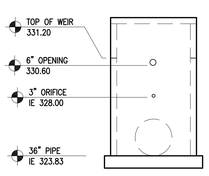
A ELEVATION – OUTLET STRUCTURE POND 1

REF: 1/CC502

1"=5'-0" 0" 2'-6" 5' 10'



PLAN

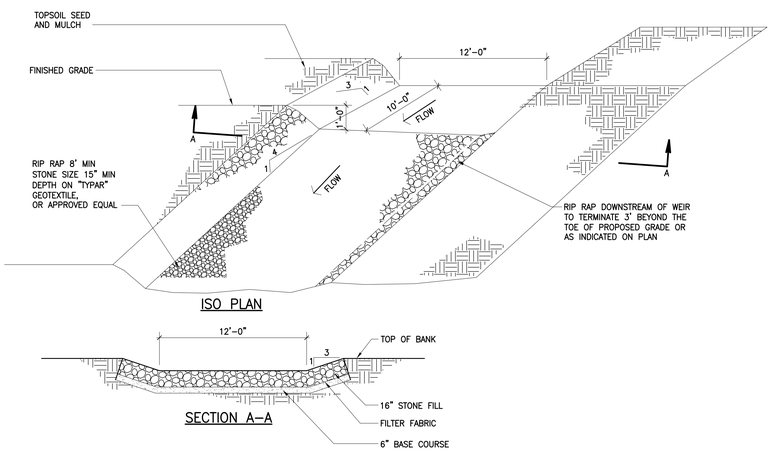


ELEVATION

B ELEVATION – OUTLET STRUCTURE POND 2

REF: 1/CC502

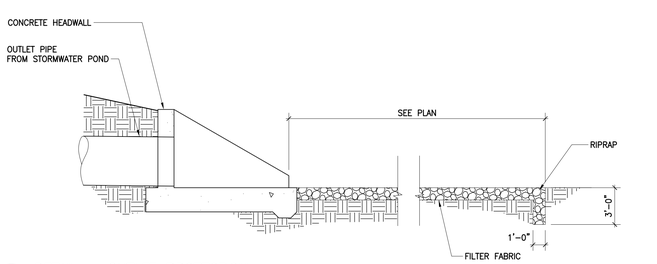
1"=5'-0" 0" 2'-6" 5' 10'



3 DETAIL – EMERGENCY SPILLWAY

REF: 1/CG502

NOT TO SCALE



4 DETAIL – OUTLET PROTECTION

REF: 1/CG502

1"=5'-0" 0" 2'-6" 5' 10'

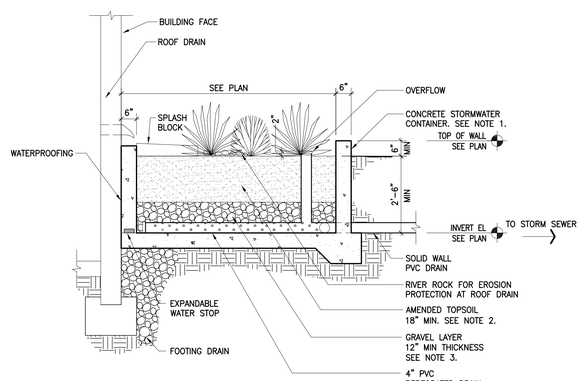
NOTES:

1. COAT INSIDE OF STORMWATER PLANTER WITH NONTOXIC CEMENTITIOUS WATER-PROOFING.
2. NATIVE TOPSOIL SHALL BE AMENDED WITH A MIX OF ONE PART IMPORTED ORGANIC COMPOST AND ONE PART GRAVELY SAND, SUCH THAT THERE ARE EQUAL PARTS COMPOST, SAND, AND NATIVE SOIL. AMENDED SOIL SHALL HAVE AN INFILTRATION RATE OF 2 IN/HR (4 FT/DAY).
   ORGANIC COMPOST SHALL THE FOLLOWING PROPERTIES:
   - 100% SHALL PASS A 1/2-INCH SCREEN
   - pH BETWEEN 5.5 AND 7.0
   - CARBON NITROGEN RATIO BETWEEN 20:1 AND 35:1
   - ORGANIC MATTER CONTENT BETWEEN 40 AND 50%

   ORGANIC COMPOST MAY CONSIST OF MUSHROOM COMPOST, COMPOSTED YARD DEBRIS, OR PEAT MOSS.
   GRAVELY SAND SHALL BE FREE OF ORGANIC MATERIAL, CONTAMINANTS, AND HAZARDOUS MATERIALS, AND SHALL CONFORM TO THE FOLLOWING GRADATIONS:

US SIEVE SIZE	PERCENT PASSING
2-INCH	100
3/4-INCH	70-100
1/4-INCH	50-80
NO. 40	15-40
NO. 200	0-3

   A 2-INCH LAYER OF SHREDDED BARK MULCH SHALL BE USED OVER THE AMENDED SOIL AND BETWEEN PLANTINGS TO COMPLETELY COVER THE SOIL AND PREVENT EROSION OR WEED INSTRUSION.
3. DRAINAGE LAYER SHALL BE 3/4" DIA GRAVEL AND SHALL HAVE AN INFILTRATION RATE OF 5 IN/HR.
4. INFILTRATION TESTING: PERFORM 2 TESTS PER 100 SF OF PLANTER AREA. FILL THE TEST AREA TO A DEPTH OF 2 INCHES AND TRACK THE TIME IT TAKES TO COMPLETELY DRAW DOWN. PERFORM EACH TEST THREE TIMES. IF THE WATER FAILS TO DRAW DOWN IN LESS THAN AN HOUR, ADD COMPOST AND GRAVELY SAND TO THE MIX AND RE-TILL. REPEAT TEST UNTIL FAVORABLE RESULTS ARE ACHIEVED.
5. PLANTINGS SHALL BE SUITABLE FOR WET/DRY CONDITIONS SEE LANDSCAPING PLANS FOR PLANT SPECIFICATIONS.



5 DETAIL – FLOW-THROUGH STORMWATER PLANTER

REF: 1/CG103

NOT TO SCALE

KINGDOM SUPPORT SERVICES, INC.
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RICHARD ANN ELDRED
STATE OF NEW YORK
RICHARD ANN ELDRED
REG. 070845
LICENSED PROFESSIONAL ENGINEER

MARK:	DATE:	DESCRIPTION:
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OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
STORMWATER MANAGEMENT DETAILS

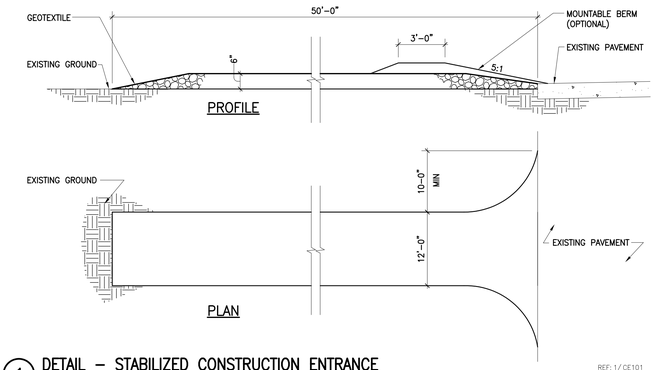
PROJECT No.
WWKL0193

SHEET No.
CG502

XREF: M:\AGE\
XREF: M:\AGE\
XREF: M:\AGE\

NOTES:

1. STONE SIZE – USE 1–4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY–FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



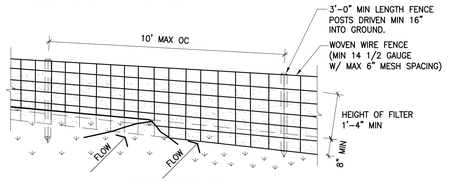
1 DETAIL – STABILIZED CONSTRUCTION ENTRANCE

REF: 1/CE101

NOT TO SCALE

NOTES:

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.

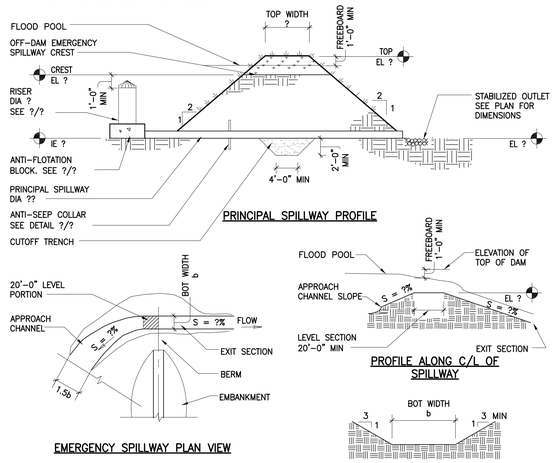


2 DETAIL – SILT FENCE

REF: 1/CE101

NOT TO SCALE

NOTE:
MAXIMUM DRAINAGE AREA = 100 ACRES

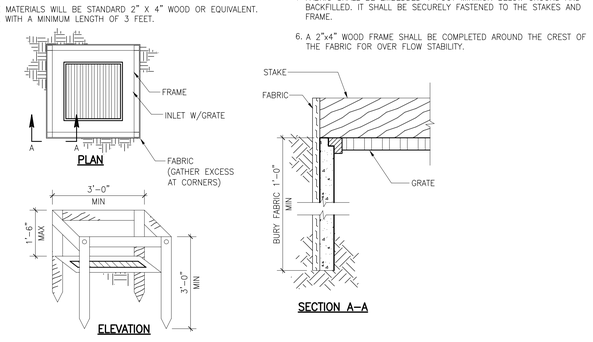


3 DETAIL – SEDIMENT BASIN

NOT TO SCALE

NOTES:

1. FILTER FABRIC SHALL HAVE AN EFFECTIVE OPENING SIZE (EOS) OF 40–85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED, THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"x4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.



5 DETAIL – FABRIC DROP INLET PRTECTION

REF: 1/CE101

NOT TO SCALE

NOTES:

1. ALL DIKES SHALL BE COMPACTED BY EARTH–MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINGAE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABLIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE ARE ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

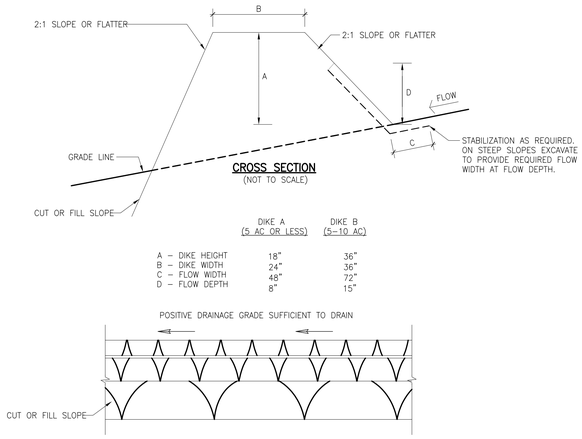
TYPE OF TREATMENT	TYPE OF GRADE	DIKE A	DIKE B
1	0.5 – 3.0 %	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1 – 5.0 %	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR; SOD; 2" STONE
3	5.1 – 8.0 %	SED WITH JUTE, OR SOD: 2" STONE	LINED RIP–RAP 4–8"
4	8.1 – 20.0%	LINED RIP–RAP 4–8"	EGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRSSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.

B. RIP–RAP TO BE 4–8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.

C. APPROVED EQUIVALENTSCAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



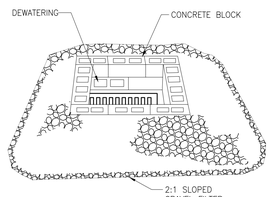
4 DETAIL – EARTH DIKE

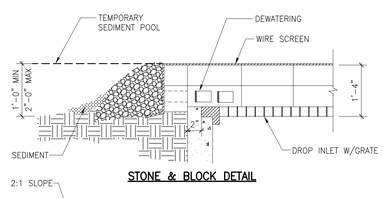
REF: 1/CE101

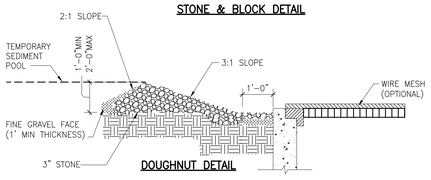
NOT TO SCALE

NOTES:

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR ½" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL ½" TO ¾" IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.







6 DETAIL – STONE & BLOCK DROP INLET PROTECTION

REF: 1/CE101

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CONSULTANT:

Richard Jon Eldred
REGISTERED PROFESSIONAL ENGINEER STATE OF NEW YORK RICHARD JON ELDRED No. 070442

MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FDIS FILING REVISION
–	15 JAN 09	FDIS FILING
–	16 MAY 08	DDIS FILING
–	16 NOV 07	FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EROSION CONTROL DETAILS

PROJECT No.
WWKL0193

SHEET No.
CG503

IMAGE: #:\VISIA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.10 Drawings\01 Civil\Richard Eldred_PE_Stamp.jpg
IMAGE:
IMAGE:
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IMAGE:
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PLOT DATE: 10 Mar 09
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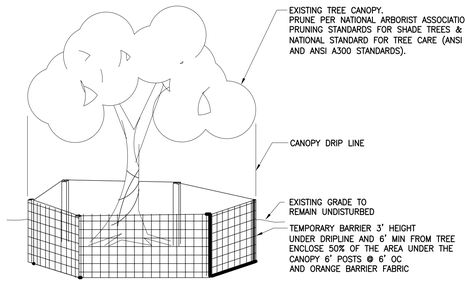
NOTES:

1. VEGETATION PROTECTION SHALL BE REPAIRED AS NECESSARY.
2. AT THE END OF CONSTRUCTION ALL PROTECTION SHALL BE REMOVED.
3. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.



1 DETAIL – EXISTING VEGETATION PROTECTION

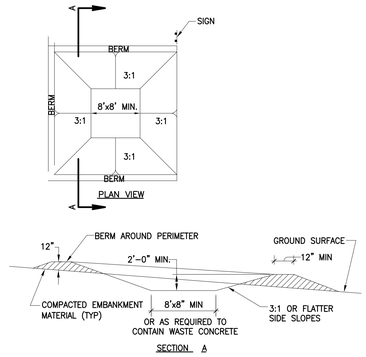
REF: 1/CE101
NOT TO SCALE

CONCRETE WASHOUT AREA INSTALLATION NOTES:

1. SEE PLAN VIEW FOR LOCATIONS OF CONCRETE WASHOUT AREA
2. THE CONCRETE WASHOUT AREA SHALL BE NSTALLED PRIOR TO ANY CONCRETE PLACMENT ON SITE.
3. VEHICLE TRACKING CONTROLS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT THE CONTRUCTION ENTRANCE AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIALS SHALL BE UTILIZED IN PERIMETER PERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES:

1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.



2 DETAIL – CONCRETE TRUCK WASHOUT

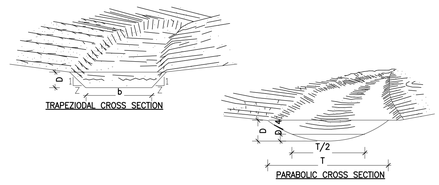
REF: 1/CE101
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETE WATERWAY.
4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
5. STABILIZATION SHALL BE DONE ACCORDING TO THE APPROPRIATE STANDARD AND SPECIFICATIONS FOR VEGETATIVE PRACTICES.

A. FOR DESIGN VELOCITIES OF LESS THAN 3.5 FT. PER. SEC., SEEDING AND MULCHING MAY BE USED FOR THE ESTABLISHMENT OF THE VEGETATION. IT IS RECOMMENDED THAT, WHEN CONDITIONS PERMIT, TEMPORARY WATERWAYS OR OTHER MEANS SHOULD BE USED TO PREVENT WATER FROM ENTERING THE WATERWAY DURING THE ESTABLISHMENT OF THE VEGETATION.

B. FOR DESIGN VELOCITIES OF MORE THAN 3.5 FT. PER. SEC., THE WATERWAY SHALL BE STABILIZED WITH SOD, WITH SEEDING PROTECTED BY JUTE OR EXCELSIOR MATTING OR WITH SEEDING AND MULCHING INCLUDING TEMPORARY DIVERSION OF THE WATER UNTIL THE VEGETATION IS ESTABLISHED.

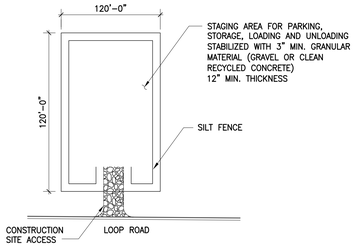


5 DETAIL – GRASSED WATERWAY

REF: 1/CE101
NOT TO SCALE

STABILIZED STAGING AREA INSTALLATION NOTES:

1. SEE PLAN VIEW FOR GENERAL LOCATION OF STAGING AREA.
2. STABILIZED STAGING AREA SHALL BE LARGE ENOUGH TO FULLY CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
3. STAGING AREA SHALL BE STABILIZED PRIOR TO ANY OTHER OPERATIONS ON THE SITE.
4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" OF GRANULAR MATERIAL (GRAVEL OR CLEAN RECYCLED CONCRETE).

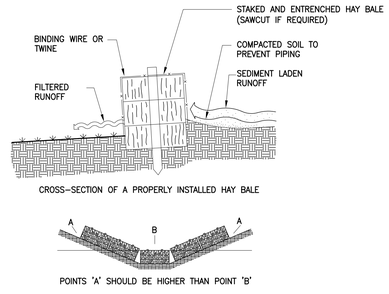


3 DETAIL – COMBINED STAGING AND MATERIALS HANDLING

REF: 1/CE101
NOT TO SCALE

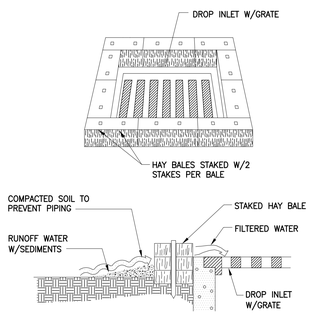
NOTES:

1. EXCAVATE THE TRENCH
2. PLACE AND STAKE HAY BALES
3. WEDGE LOOSE STRAW BETWEEN BALES
4. BACK FILL AND COMPACT THE EXCAVATED SOIL



4 DETAIL – HAYBALE BARRIER

REF: 1/CE101
NOT TO SCALE

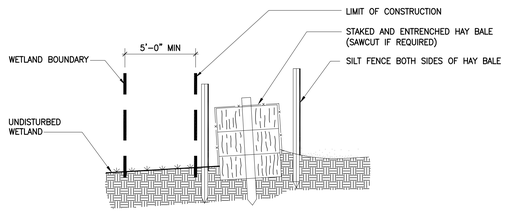


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS ALONG ROADWAYS

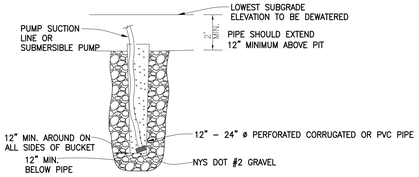
6 DETAIL – HAY BALE DROP INLET PROTECTION

REF: 1/CE101
NOT TO SCALE



7 DETAIL – WETLAND PROTECTION/WILDLIFE BARRIER

REF: 1/CE101
NOT TO SCALE



DEWATERING INSTALLATION NOTES

1. THE CONTRACTOR SHALL PROVIDE, OPERATE, AND MAINTAIN DEWATERING SYSTEMS OF SUFFICIENT SIZE AND CAPACITY TO PERMIT EXCAVATION AND SUBSEQUENT CONSTRUCTION IN DRY CONDITIONS AND TO LOWER AND MAINTAIN THE GROUNDWATER LEVEL A MINIMUM OF 2-FEET BELOW THE LOWEST POINT OF EXCAVATION AND CONTINUOUSLY MAINTAIN EXCAVATIONS FREE OF WATER UNTIL BACK-FILLED TO FINAL GRADE.

8 DETAIL – DEWATERING SUMP PIT

REF: 1/CE101
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MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FEDS FILING REVISION
–	15 JAN 09	FEDS FILING
–	16 MAY 08	DEDS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EROSION CONTROL DETAILS

PROJECT No:
WWKL0193

SHEET No:
CG504

XREF: P:\USA\WWK\0193\3_CONSTRUCTION DOCUMENTS\3_1 Drawings\Common\V_Project Title-DEFAULT.DWG
XREF: P:\USA\WWK\0193\3_CONSTRUCTION DOCUMENTS\3_1 Drawings\Common\V_Planting Plan.dwg
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IMAGE:
IMAGE:
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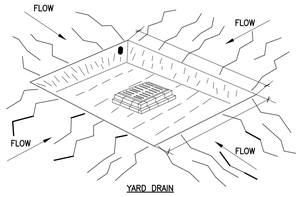
IMAGE: \Planting Plan\PE_Storm.jpg

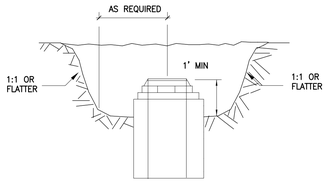
PLOT DATE: 10 Mar 09

NOTES:

1. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE VOLUME OF SEDIMENT STORAGE SHALL BE 1800 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONSTRUCTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
6. ALL CUT SLOPES SHALL BE 1:1 OR FLATTER.



YARD DRAIN



CROSS SECTION

MAXIMUM DRAINAGE AREA: 3 ACRES

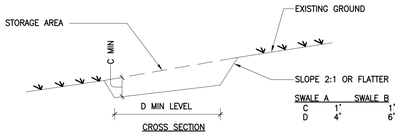
1 DETAIL – CATCH BASIN SEDIMENT TRAP

REF: 1/CE101

NOT TO SCALE

NOTES:

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW.
9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



CROSS SECTION

POSITIVE DRAINAGE: 0.5% OR STEEPER DEPENDENT ON TOPOGRAPHY

OUTLET AS REQUIRED SEE ITEM 8 BELOW.

PLAN VIEW

TYPE OF TREATMENT	CHANNEL GRADE	A(5 AC. OR LESS)	B(5 AC -10AC)
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3	5.1-8.0%	SEED WITH JUTE OR EXCELSIOR, SOD	LINED WITH 4-8" RIP-RAP OR RECYCLED CONCRETE EQUIVALENT
4	8.1-20.%	LINED WITH 4-8" RIP-RAP	ENGINEERED DESIGN

2 DETAIL – TEMPORARY SWALE

REF: 1/CE101

NOT TO SCALE

STANDARD AND SPECIFICATIONS FOR TEMPORARY CRITICAL AREA PLANTINGS

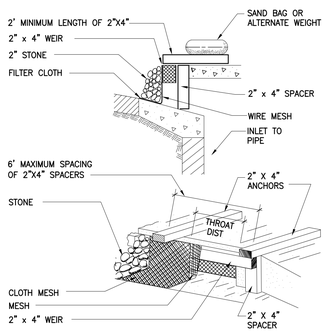
1. TEMPORARY SEEDINGS MAY BE NECESSARY TO PROTECT AREAS WHERE FINAL GRADING IS COMPLETE, OR WHEN AREA WILL BE EXPOSED FOR MORE THAN 7 DAYS, OR TO PROVIDE COVER WHEN PERMANENT SEEDINGS ARE LIKELY TO FAIL (MID-SUMMER OR DROUGHT).
2. AREA TO BE SEEDED SHALL BE ROUGH GRADED AND SLOPES STABLE.
3. SEEDBED MUST BE SEEDED WITHIN 24 HRS OF DISTURBANCE OR SCARIFICATION OF THE SOIL SURFACE WILL BE NECESSARY PRIOR TO SEEDING.
4. IF SPRING, SUMMER OR EARLY FALL, THEN SEED THE AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 30 LBS PER ACRE OR APPROXIMATELY 1 LB/ 1,000 SF
5. IF LATE FALL OR EARLY WINTER, SEED THE AREA WITH CERTIFIED AROOSTOOK" WINTER RYE (CEREAL RYE) AT 100 LBS. PER ACRE OR APPROXIMATELY 2.5 LB / 1,000 SF)
6. MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ ACRE OR APPROXIMATELY 90 LB./1,000 SF
7. WHERE WIND OR AREAS OF CONCENTRATED WATER ARE A CONCERN, MULCH ANCHORING WILL BE REQUIRED.
8. WOOD FIBER HYDROMULCH MAY BE USED IF APPLIED TO MANUFACTURER'S SPECIFICATION.

STANDARD AND SPECIFICATIONS FOR PERMANENT AREA PLANTINGS

1. PERMANENT SEEDING SHALL BE APPLIED WHERE FINAL GRADING IS COMPLETE AND THE AREA WILL NOT BE SUBJECT TO CONSTRUCTION TRAFFIC AND WITHIN 7 DAYS FROM INITIAL DISTURBANCE. DURING TIMES WHEN PERMANENT SEEDINGS ARE LIKELY TO FAIL (MIDSUMMER OR DROUGHT), USE TEMPORARY SEEDINGS. SEE "TEMPORARY CRITICAL AREA PLANTINGS".
2. AREA TO BE SEEDED SHALL BE ROUGH GRADED AND SLOPES STABLE.
3. SEEDBED MUST BE SEEDED WITHIN 24 HRS OF DISTURBANCE OR SCARIFICATION OF THE SOIL SURFACE WILL BE NECESSARY PRIOR TO SEEDING.
4. SEED MIXTURE FOR LAWN AREAS:
   TALL FESCUE AT 2.0 LB/1000 SF
   BLUEGRASS AT 5.0 LB/1000 SF
5. SEED MIXTURE FOR WETLAND BUFFER AREAS: SEE LANDSCAPE DRAWINGS.
6. MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ ACRE OR APPROXIMATELY 90 LB./1,000 SF
7. WHERE WIND OR AREAS OF CONCENTRATED WATER ARE A CONCERN, MULCH ANCHORING WILL BE REQUIRED.
8. WOOD FIBER HYDROMULCH MAY BE USED IF APPLIED TO MANUFACTURER'S SPECIFICATION.
9. INSTALL EXCELSIOR MAT IN GRASS-LINED CHANNELS. EXTEND UP THE BANK AND ANCHOR ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

NOTES:

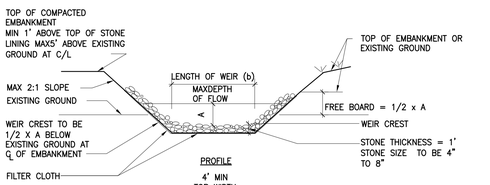
1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
2. WOODEN FRAME SHALL BE CONSTRUCTED OF 2" x 4" CONSTRUCTION GRADE LUMBER.
3. WIRE MESH ACROSS THROAT SHALL BE A CONTINUOUS PIECE 30 INCH MINIMUM WIDTH WITH A LENGTH 4 FEET LONGER THAN THE THROAT. IT SHALL BE SHAPED AND SECURELY NAILED TO A 2" x 4" WEIR.
4. THE WEIR SHALL BE SECURELY NAILED TO 2" x 4" SPACERS 9 INCHES LONG SPACED NO MORE THAN 6 FEET APART.
5. THE ASSEMBLY SHALL BE PLACED AGAINST THE INLET AND SECURED BY 2" x 4" ANCHORS 2 FEET LONG EXTENDING ACROSS THE TOP OF THE INLET AND HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHTS.
6. MAXIMUM DRAINAGE AREA 1 ACRE



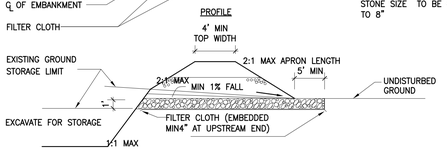
3 DETAIL – CURB DROP INLET PROTECTION

REF: 1/CE101

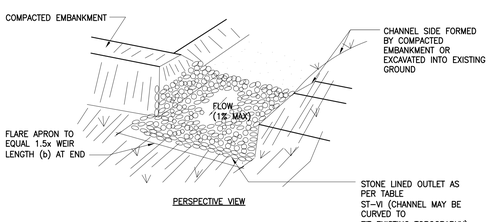
NOT TO SCALE



PROFILE



CROSS SECTION



PERSPECTIVE VIEW

NOTES:

1. THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED 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 OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF OF EMBANKMENT SHALL BE FIVE (5) FEET, MEASURED AT CENTERLINE OF EMBANKMENT.
3. ALL FILL SLOPES SHALL BE 2:1 OR FLATTER, CUT SLOPES 1:1 OR FLATTER.
4. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE HEIGHT OF EMBANKMENT.
5. STORAGE AREA PROVIDED SHALL BE FIGURED BY COMPUTING THE VOLUME AVAILABLE BEHIND THE OUTLET CHANNEL UP TO AN ELEVATION OF ONE (1) FOOT BELOW THE LEVEL WEIR CREST.
6. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.
7. STONE USED IN THE OUTLET CHANNEL SHALL BE FOUR (4) TO EIGHT (8) INCH RIPRAP. TO PROVIDE A FILTERING EFFECT, A LAYER OF FILTER CLOTH SHALL BE EMBEDDED ONE (1) FOOT WITH SECTION NEAREST ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
8. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
9. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.
10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
11. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
12. DRAINAGE AREA FOR THIS PRACTICE IS LIMITED TO 15 ACRES OR LESS.

4 DETAIL – RIPRAP OUTLET SEDIMENT TRAP

REF: 1/CE101

NOT TO SCALE

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NO. 072446

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–	15 JAN 09	FDS FILING
1	01 SEP 08	DDS FILING REVISION
–	16 MAY 08	DDS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
EROSION CONTROL NOTES & DETAILS

PROJECT No.
WWKL0193

SHEET No.
CG505

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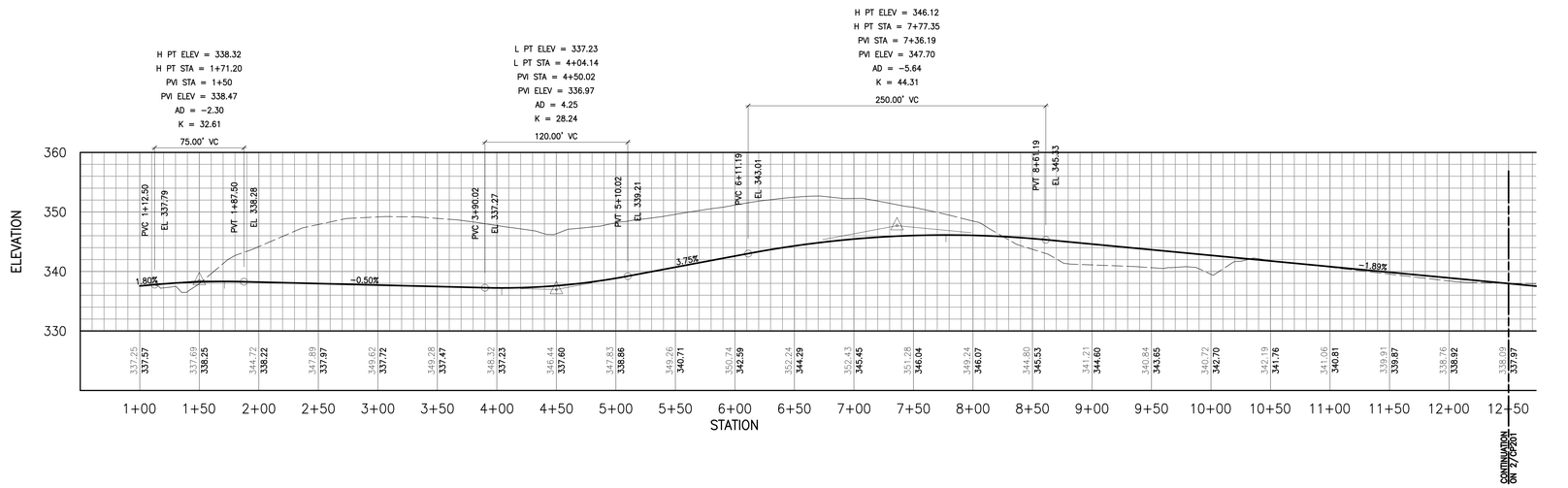
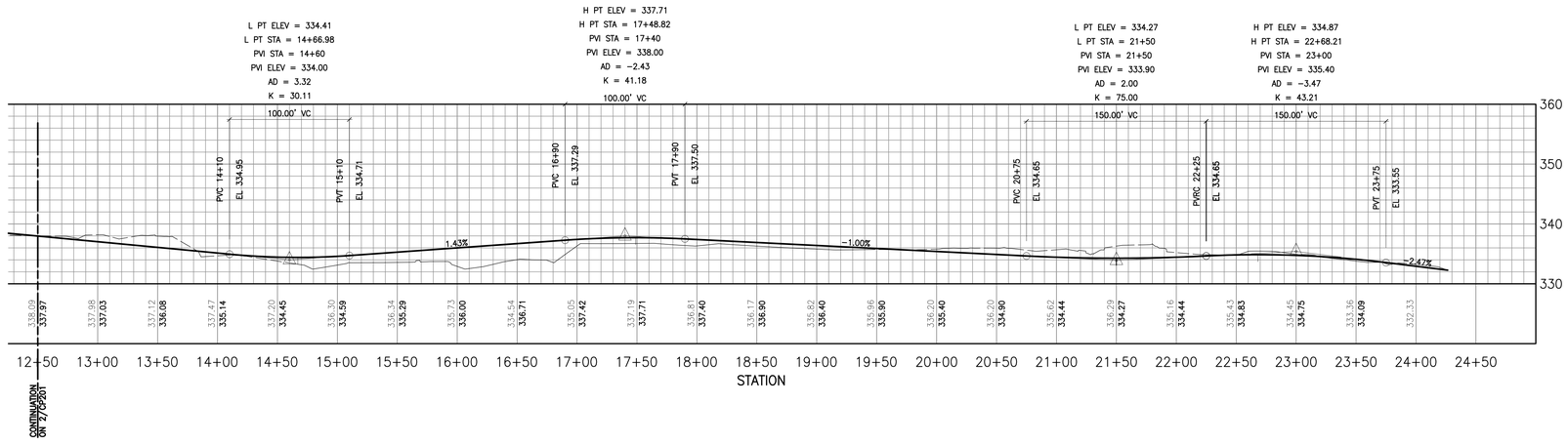


1 PROFILE – LOOP DRIVEWAY STA 1+00 TO STA 12+00

HORIZONTAL SCALE 1"=50' (0 25 50 100)
VERTICAL SCALE 1"=10' (0 5 10 20)



2 PROFILE – LOOP DRIVEWAY STA 12+00 TO STA 24+50

HORIZONTAL SCALE 1"=50' (0 25 50 100)
VERTICAL SCALE 1"=10' (0 5 10 20)

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
LOOP DRIVEWAY PROFILE

PROJECT No.
WWKL0193

SHEET No.
CP201

IMAGE: \Planet_Fitness\Planet_PE_Storm.dgn
IMAGE:
IMAGE:
IMAGE:
IMAGE:
IMAGE:
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XREF:
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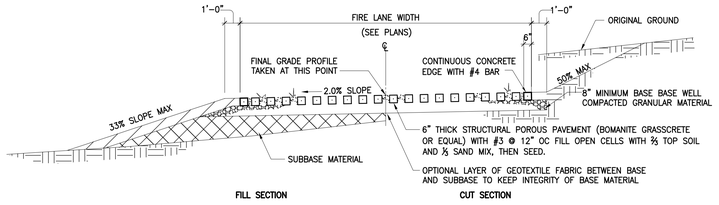
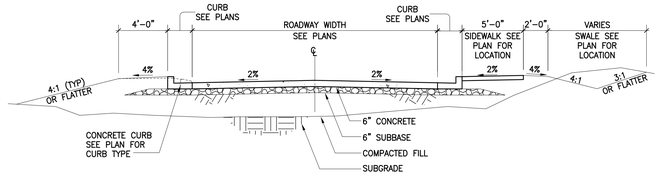


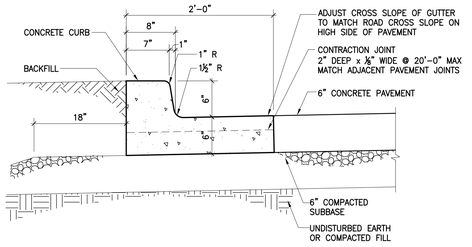
1 DETAIL – CONCRETE REINFORCED TURF ROAD — REF: 1/CS101 — NOT TO SCALE

NOTES:
1. SEE CONCRETE JOINTING DETAILS.
2. SEE EARTHWORK SPECIFICATIONS FOR SUBBASE AND FILL MATERIALS.



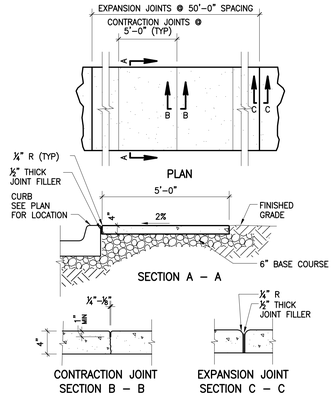
2 DETAIL – CONCRETE CURBED ROAD — REF: 1/CS101 — NOT TO SCALE

NOTE:
PLACE ¾" EXPANSION JOINT MATERIAL
AT PAVEMENT CONSTRUCTION JOINTS



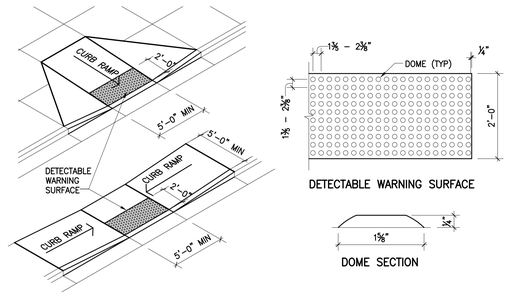
3 DETAIL – TYPICAL CURB AND GUTTER — REF: 1/CS101 — NOT TO SCALE

NOTES:
1. ALL SIDEWALKS SHALL HAVE A FINE HAIR BROOM FINISH.
2. CURB AND GUTTER JOINTS SHALL MATCH SIDEWALK CONTRACTION AND EXPANSION JOINTS.



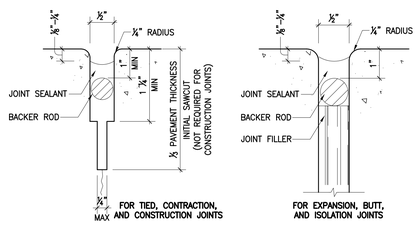
4 DETAIL – CONCRETE SIDEWALK — REF: 1/CS101 — NOT TO SCALE

NOTES:
1. THE CROSS SLOPE OF A CURB RAMP SHOULD BE AS FLAT AS POSSIBLE, NOT TO EXCEED 2%.
2. RAMP TRANSITIONS BETWEEN WALKS, LANDINGS, AND GUTTERS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES (1/4" MAX).
3. THE MAXIMUM LONGITUDINAL SLOPE ON CURB RAMP IS 8.33% (5% PREFERRED).
4. WHERE A PEDESTRIAN WALKWAY CROSSES THE CURB RAMP, THE SIDE FLARES SHOULD NOT EXCEED A SLOPE OF 10% MEASURED PARALLEL TO THE CURB LINE.
5. ALL CURB RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE AS SHOWN. THE REMAINDER OF THE RAMP SHALL HAVE A SLIP RESISTANT SURFACE – A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE.
6. THE SIZE OF THE DETECTABLE FIELD SHALL BE 2'-0" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUDING SIDE FLARES.
7. THE ROWS OF DOMES ON DETECTABLE WARNING SURFACE SHALL BE ALIGNED TO BE PERPENDICULAR TO THE GRADE BREAK BETWEEN THE CURB RAMP AND THE ROAD.
8. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, ROAD, OR WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. CONTRAST MAY BE PROVIDED ON THE FULL RAMP SURFACE BUT SHOULD NOT EXTEND TO THE FLARED SIDES.

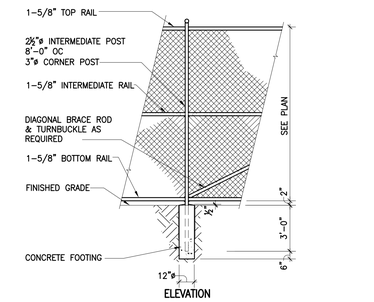


5 DETAIL – SIDEWALK RAMPS — REF: 1/CS101 — NOT TO SCALE

NOTE:
INSTALL JOINT SEALANT ACCORDING TO MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS.

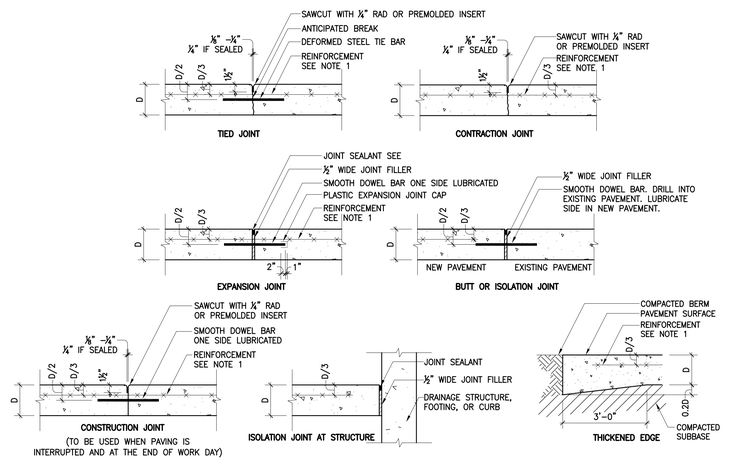


6 DETAIL – JOINT SEALANT — REF: 1/CS101 — NOT TO SCALE

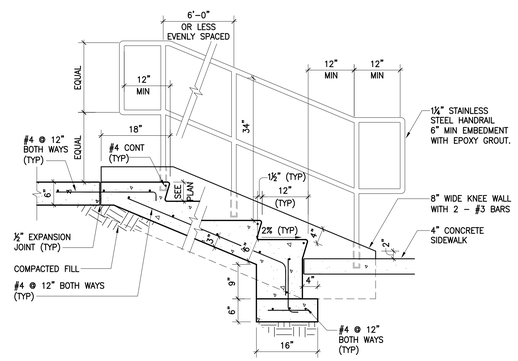


7 DETAIL – CHAIN LINK FENCE — REF: 1/CS101 — NOT TO SCALE

NOTES:
1. CONCRETE SHALL BE REINFORCED WITH FIBERMESH, OR #3 @ 18" EACH WAY.
2. CONTRACTION JOINTS SHALL BE SPACED NO GREATER THAN 15 FEET OR 30 TIMES THE THICKNESS OF THE SLAB. PANELS SHOULD BE APPROXIMATELY SQUARE. THE LENGTH OF THE PANEL MAY BE 25% GREATER THAN THE WIDTH.
3. FOR 6" SLAB THICKNESS USE ¾"x14" DOWEL BARS TO BE SPACED @ 12" OC WITH 6" MIN EMBEDMENT.
4. FOR 6" SLAB THICKNESS USE ½"x24" TIE BARS TO BE SPACED @ 30" OC WITH 12" MIN EMBEDMENT.

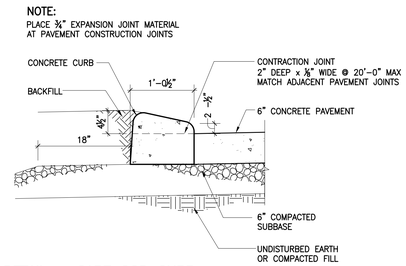


8 DETAIL – CONCRETE PAVEMENT JOINTS — REF: 1/CS101 — NOT TO SCALE



9 DETAIL – EXTERIOR STAIRS WITH HANDRAILS — REF: 1/CS101 — NOT TO SCALE

NOTE:
PLACE ¾" EXPANSION JOINT MATERIAL
AT PAVEMENT CONSTRUCTION JOINTS



10 DETAIL – CAPE COD CURB — REF: 1/CS101 — NOT TO SCALE

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OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
PAVING DETAILS

PROJECT No.
WWKLO193

SHEET No.
CP501

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PLOT DATE: 10 Mar 09
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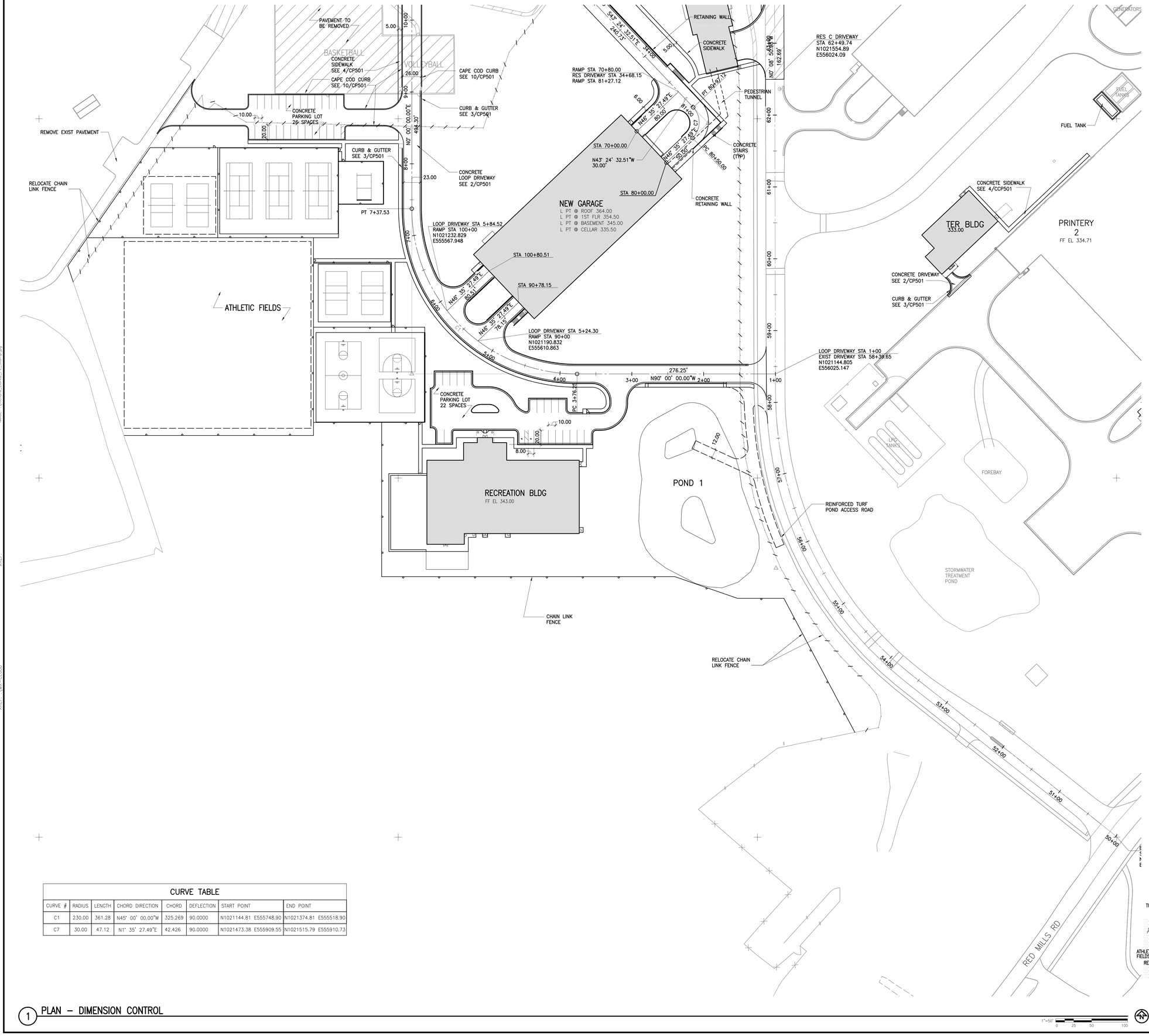

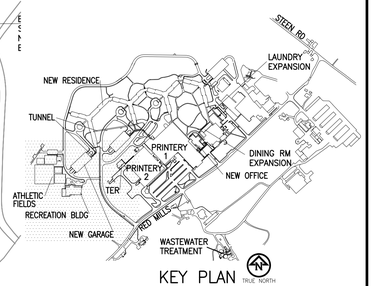

KEY PLAN

CURVE TABLE

CURVE #	RADIUS	LENGTH	CHORD DIRECTION	CHORD	DEFLECTION	START POINT	END POINT
C1	230.00	361.28	N45° 00' 00.00"W	325.269	90.0000	N1021144.81 E555748.90	N1021374.81 E555518.90
C7	30.00	47.12	N1° 35' 27.49"E	42.426	90.0000	N1021473.38 E555909.55	N1021515.79 E555910.73

1 PLAN – DIMENSION CONTROL

1"=50' 0 25 50 100

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1	01 SEP 08	DEIS FILING REVISION
–	16 MAY 08	DEIS FILING

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
DIMENSION CONTROL PLAN

PROJECT No.
WWKL0193

SHEET No.
CS101

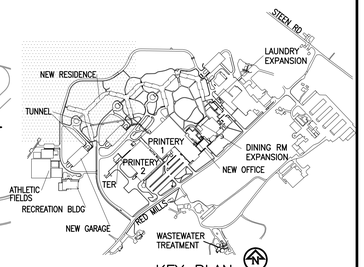
PLOT DATE: 10 Mar 09
DIMSCALE: 600.00

CURVE TABLE							
CURVE #	RADIUS	LENGTH	CHORD DIRECTION	CHORD	DEFLECTION	START POINT	END POINT
C2	300.00	86.87	N8° 17' 43.74"E	86.567	16.5910	N1021869.10 E555518.90	N1021954.76 E555531.39
C3	200.00	256.25	N53° 17' 43.74"E	239.075	73.4090	N1022261.88 E555622.89	N1022404.78 E555814.57
C4	300.00	184.37	N72° 23' 38.20"E	181.482	35.2121	N1022404.78 E556072.08	N1022459.67 E556245.06
C5	200.00	104.72	S58° 24' 32.51"E	103.528	30.0000	N1021766.69 E555636.50	N1021712.46 E555724.68
C6	300.00	243.97	N23° 09' 05.85"E	237.305	46.5955	N1021667.84 E556023.80	N1021886.03 E556117.10

POND ACCESS ROAD
12.00
POND 2
PAVEMENT & STRUCTURES TO BE REMOVED
PT 18+95.41
19+00
N90° 00' 00.00"E
257.52'
20+00
21+00
PC 21+52.92
22+00
C4
23+00
PT 23+37.29
EP 24+03.94
105° 47' 16.44"
66.65'
18+00
C3
17+00
PC 16+39.16
16+00
CONCRETE SIDEWALK SEE 4/CP501
CONCRETE LOOP DRIVEWAY SEE 2/CP501
CAPE COD CURB SEE 10/CP501
PAVEMENT TO BE REMOVED
15+00
N16° 35' 27.49"E
320.46'
EXISTING RESIDENCE
FF EL 334.21
FF EL 344.21
EP 68+40.90
68+41
68+00
14+00
PT 13+18.70
NEW RESIDENCE
CELLAR FF EL 334.21
BASEMENT FF EL 344.21
RETAINING WALL
CAPE COD CURB SEE 10/CP501
C2
PC 12+31.83
LOOP DRIVEWAY STA 11+64.46
RES DRIVEWAY STA 30+00
N1021801.731
E555518.898
35.00
PC 31+22.21
12+00
S73° 24' 32.51"E
122.71'
31+00
CONCRETE SIDEWALK SEE 4/CP501
11+00 N0° 00' 00.00"E
494.30'
CAPE COD CURB SEE 10/CP501
C5
32+00
PT 32+27.43
CURB & GUTTER SEE 3/CP501
CONCRETE SIDEWALK
RETAINING WALL
STA 31+29.85
N1021764.533
E555643.301
5.00 TYP
S58° 24' 32.51"E
240.73'
34+00
PC 63+62.69
64+00
63+00
26.00
10+00
CONTINUATION ON 1/CS101
EXIST GARAGE
FF EL 360.50
FF EL351.00
FF EL 341.50
FF EL 332.00
EP 66+08.68
66+00
C6
65+00
NEW PEDESTRIAN TUNNEL
FF EL 334.17
EP 66+08.68
S58° 26' 52.68"E
234.24'

1 PLAN – DIMENSION CONTROL

1"=50'
0 25 50 100



KEY PLAN TRUE NORTH

KINGDOM SUPPORT SERVICES, INC.
175 PEARL STREET BROOKLYN, NY 11201
PH: (718) 560-4800 FAX: (718) 560-8830

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CONSULTANT:

Richard Jon Eldred
REGISTERED ARCHITECT STATE OF NEW YORK
RICHARD JON ELDRED REGISTERED ARCHITECT NO. 027446
REGISTERED PROFESSIONAL ENGINEER

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1	13 MAR 09	FEIS FILING REVISION
–	15 JAN 09	FEIS FILING
1	01 SEP 08	DEIS FILING REVISION
–	16 MAY 08	DEIS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
DIMENSION CONTROL PLAN

PROJECT No.
WWKLO193

SHEET No.
CS102

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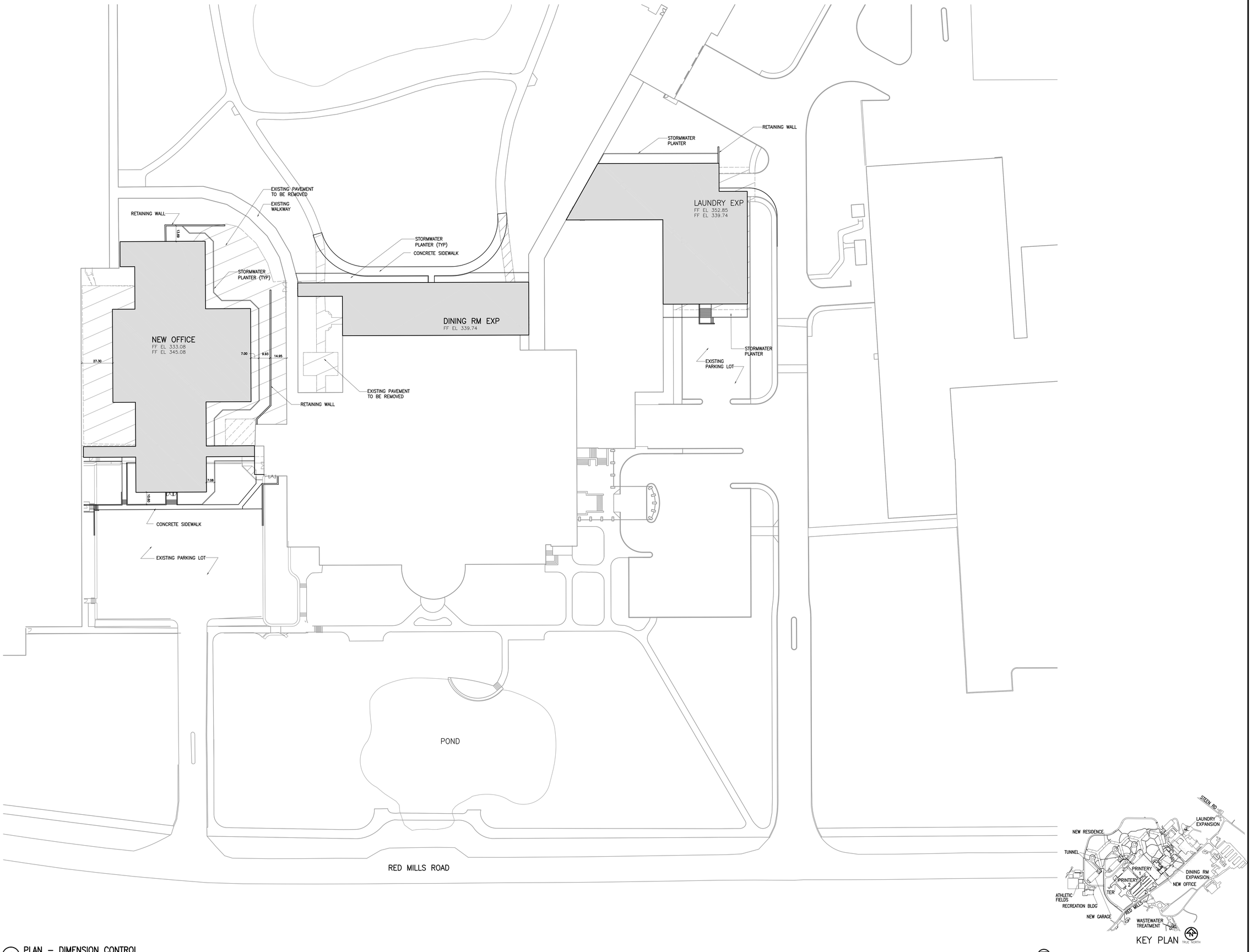
PLOT DATE: 10 Mar 09
DIMSCALE: 600.00



1 PLAN – DIMENSION CONTROL

1"=30'

0 15 30 60

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CONSULTANT:

Richard Ian Eldred

STATE OF NEW YORK
RICHARD IAN ELDRED
No. 070445
LICENSED PROFESSIONAL ENGINEER

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WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
DIMENSION CONTROL PLAN

PROJECT No.
WWKL0193

SHEET No.
CS103

IMAGE:
IMAGE:
IMAGE:
IMAGE:
IMAGE:
IMAGE: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.10 Drawings\01 Civil\Richard_Eldred_PE_Stamp.jpg

XREF:
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PLOT DATE: 10 Mar 09
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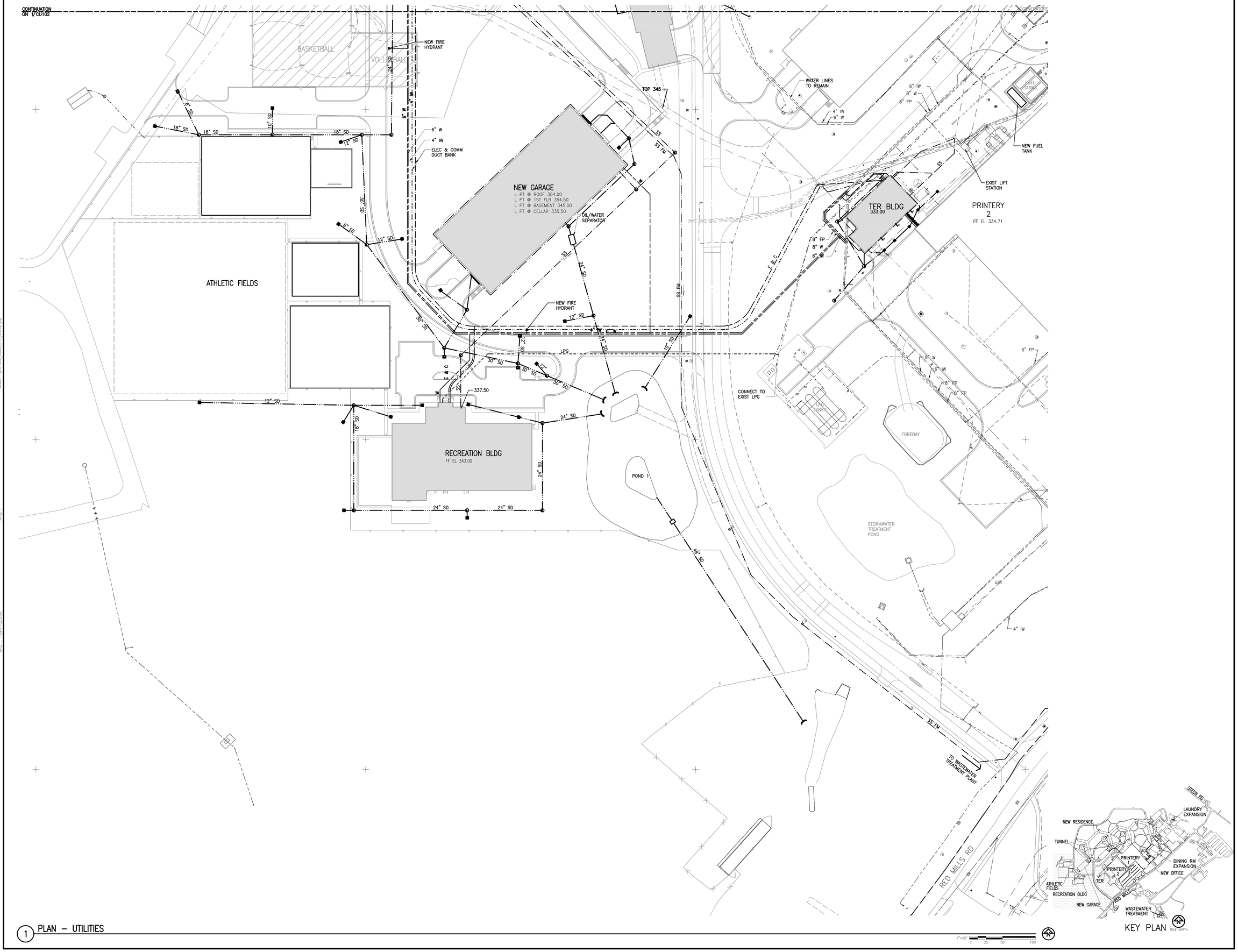

1 PLAN – UTILITIES

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CONSULTANT:

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STATE OF NEW YORK
RICHARD IAN ELDRED
No. 070445
LICENSED PROFESSIONAL ENGINEER

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OWNER:
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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

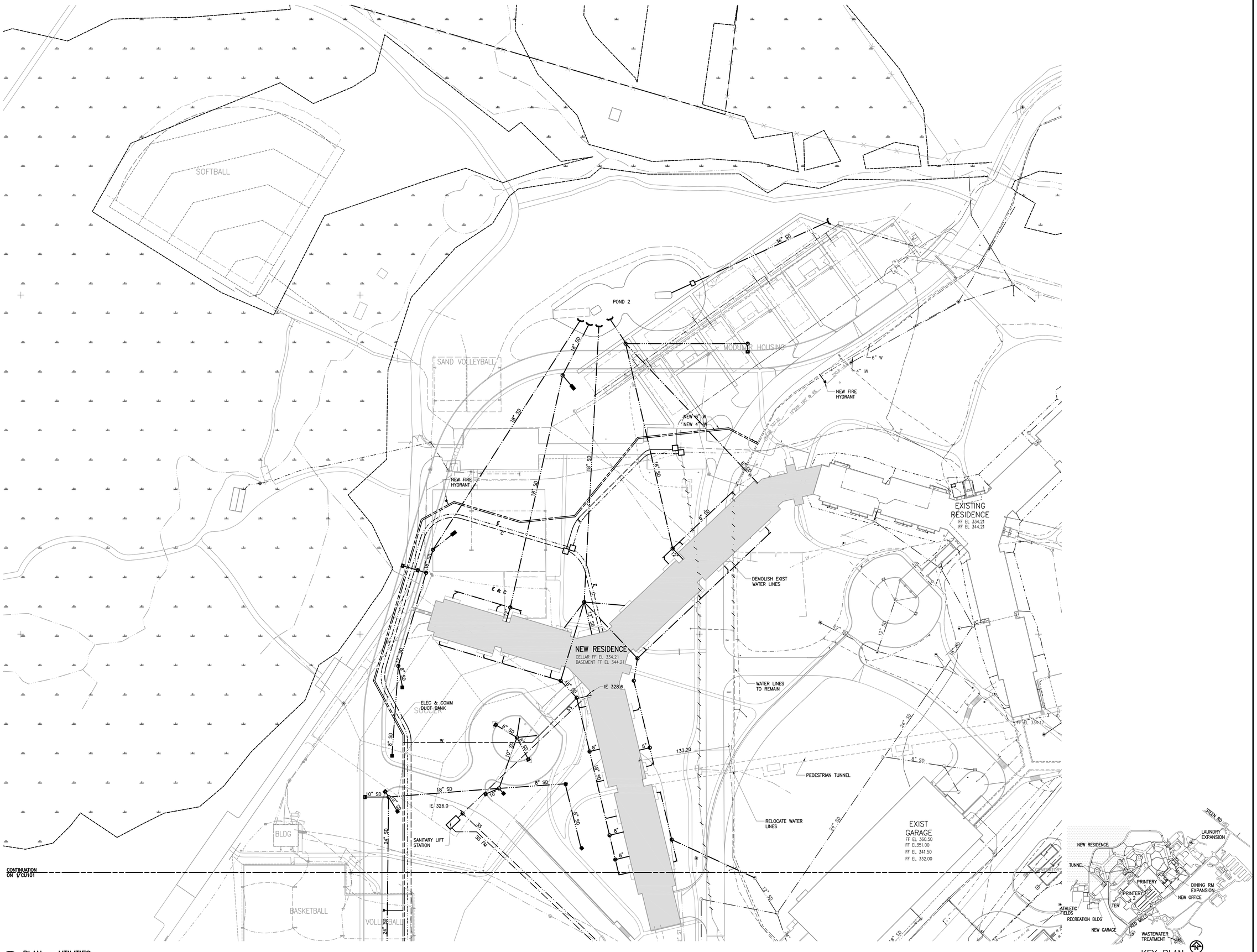
PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
UTILITIES PLAN

PROJECT No.
WWKL0193

SHEET No.
CU101

PLOT DATE: 10 Mar 09
DIMSCALE: 600.00



1 PLAN – UTILITIES

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CONSULTANT:

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STATE OF NEW YORK
RICHARD IAN ELDRED
No. 070445
LICENSED PROFESSIONAL ENGINEER

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

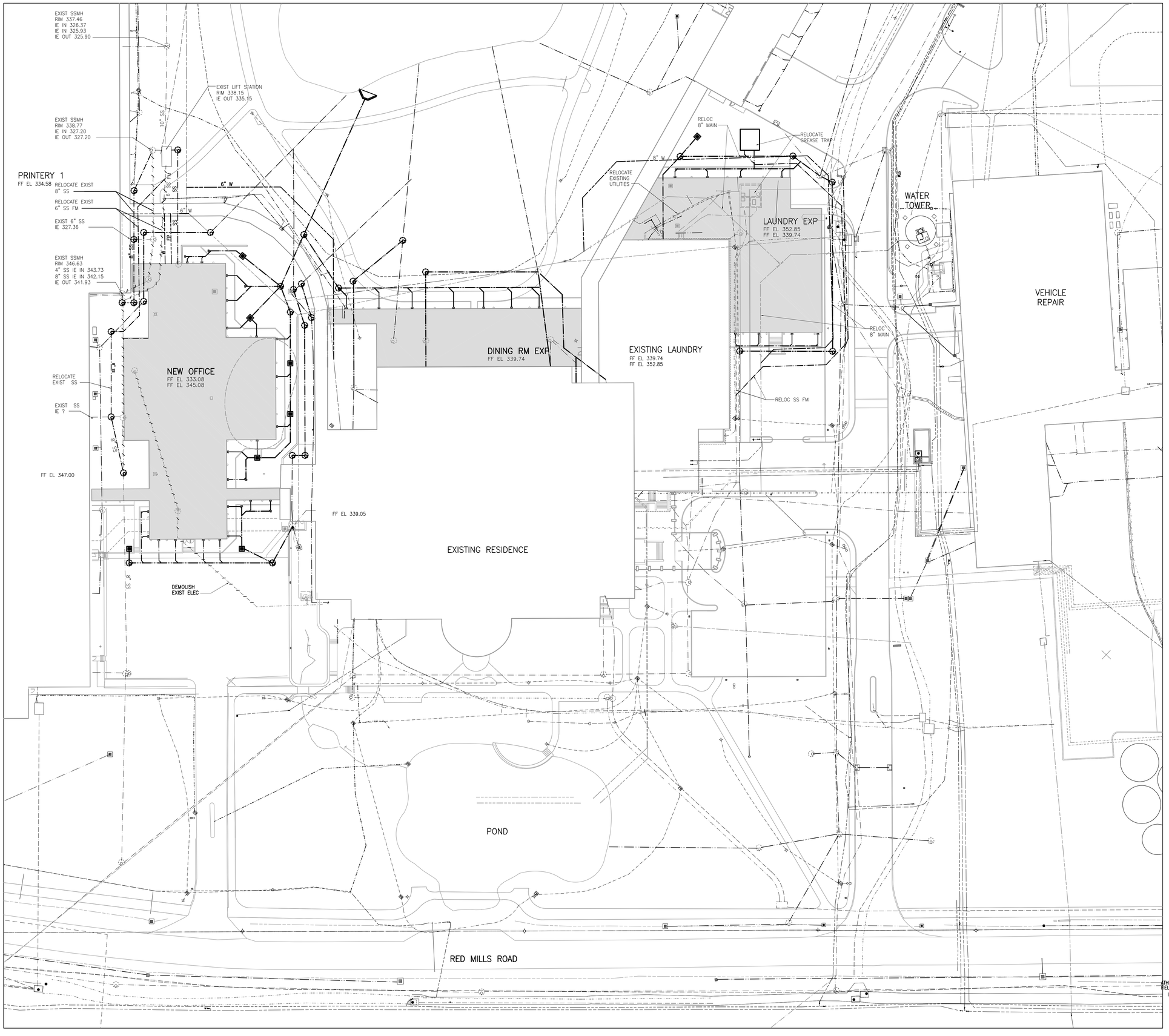
PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
UTILITIES PLAN

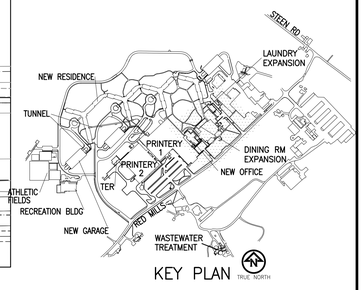
PROJECT No.
WWKL0193

SHEET No.
CU102

PLOT DATE: 10 Mar 09



1 PLAN – UTILITIES



KEY PLAN

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STATE OF NEW YORK
RICHARD IAN ELDRED
No. 070449
LICENSED PROFESSIONAL ENGINEER

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OWNER:
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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
UTILITIES PLAN

PROJECT No.
WWKL0193

SHEET No.
CU103

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PLOT DATE: 10 Mar 09
DIMSCALE: 240.00

IMAGE: \Richard_Eldred_PE_Stamp.jpg
IMAGE:
IMAGE:
IMAGE:
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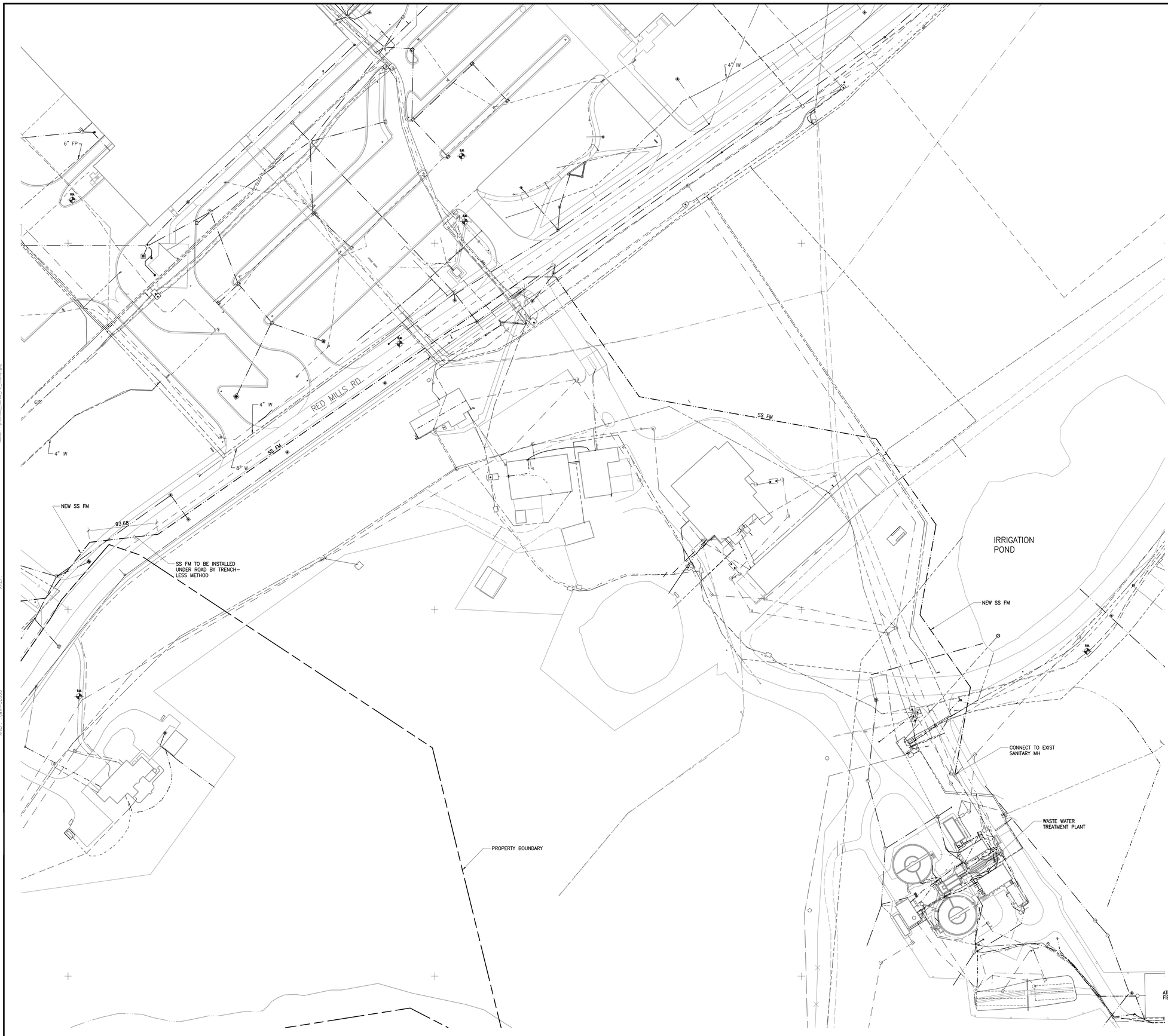

1 PLAN – UTILITIES

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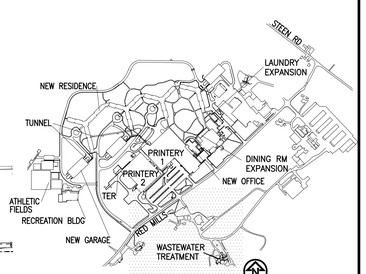

KEY PLAN TRUE NORTH

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CONSULTANT:

Richard Jon Eldred
REGISTERED PROFESSIONAL ENGINEER STATE OF NEW YORK RICHARD JON ELDRED No. 072445

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–	16 MAY 08	DEIS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

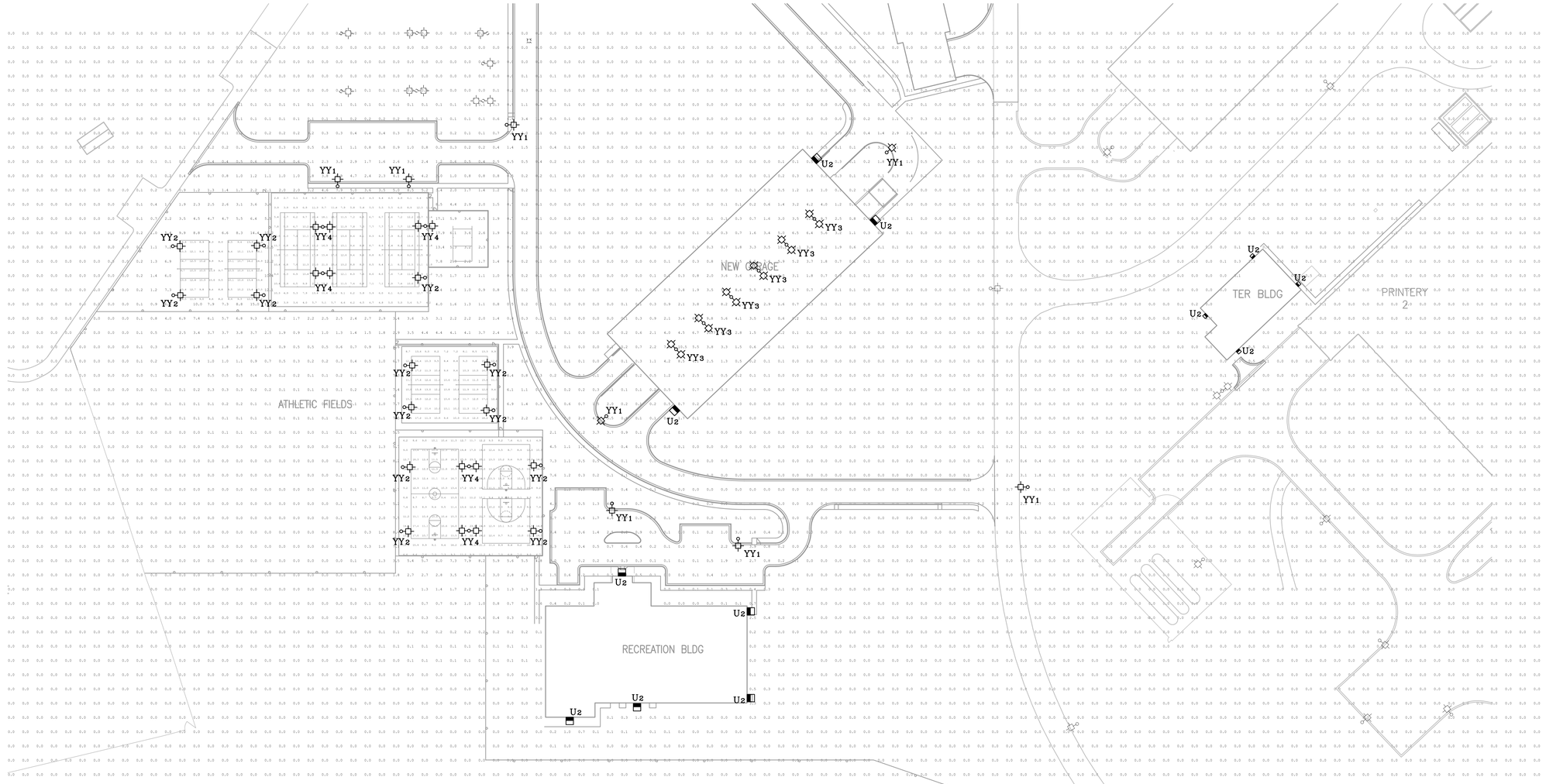
PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
UTILITIES PLAN

PROJECT No.
WWKL0193

SHEET No.
CU104

PLOT DATE: 10 Mar 09



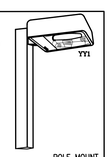
SITE LIGHTING SCOPE OF WORK

1. REMOVE LIGHTS INDICATED FOR DEMOLITION. REUSE IF IN GOOD CONDITION.
2. INSTALL NEW 20' HIGH, 150W HPS LIGHTS, HORIZONTAL MOUNT, CUT OFF, WHERE INDICATED.
3. INSTALL NEW BOLLARDS WHERE INDICATED, 35W HPS.
4. RELOCATE EXISTING ATHELTIC FIELD LIGHTING, 1000W MH.
5. LIGHTING CALCULATIONS PROVIDED BY RUUD LIGHTING.

SYMBOLS

- NEW POLE AND LIGHT FIXTURE
- NEW POLE WITH TWIN LIGHT FIXTURES
- NEW BOLLARD WITH LIGHT
- YY1 LIGHTING FIXTURE TYPE IDENTIFIER
- EXISTING POLE AND LIGHT FIXTURE TO REMAIN
- EXISTING BOLLARD AND LIGHT TO REMAIN
- REMOVE EXISTING BOLLARD WITH LIGHT
- REMOVE EXISTING POLE AND LIGHT FIXTURE

CATALOG: RUUD #MAC2515-5 (480V)
POLE: RUUD #PS4S20C18Z
POLE: 20'-0", 4" SQUARE STEEL
MOUNTING BRACKET: 6" EXTENDED POLE MOUNT FORWARD THROW REFLECTOR



FIXTURE-YY1 (SINGLE)
FIXTURE-YY3 (DOUBLE)
150W HIGH PRESSURE SODIUM

POLE MOUNT PARKING/ROADWAY

CLEAR, TEMPERED GLASS LENS IS HELD IN A DIE CAST, RECESSED DOOR FRAME. LENS FRAME SUPPLIED WITH MTG. FOR OUTDOOR ACCESSORIES SUCH AS

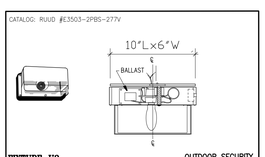
COMPLETE SILICONE GASKETING AROUND LENS FRAME & AT MTG. MEETS U.L. STANDARD FOR WET LOCATIONS. STANDARD 480 VOLT BALLAST.

LAMPS - 150 WATT HPS

HOUSING IS SEAMLESS DIE CAST ALUMINUM. MEDIUM BRONZE, ACRYLIC POWDER FINISH.

FULL CUT OFF, FORWARD THROW DISTRIBUTION. POLE MOUNTS ARE COMPLETELY GASKETED AT FIXTURE, PROVIDE ENCLOSED WIRING CHAMBER.

CATALOG: RUUD #E3503-2PBS-277V



FIXTURE-U2

OUTDOOR SECURITY LIGHT PERIMETER CUTOFF

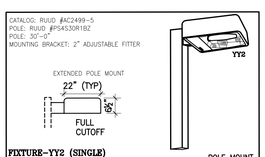
WALL PERIMETER CUTOFF OPTICS: WALL MTD. FIXTURE DESIGNED FOR WIDE LIGHT DISTRIBUTION. FOR INTERIOR AND EXTERIOR USES.

HOUSING: DIE-CAST ALUMINUM FINISHED IN BRONZE THERMO-SET POWDER PAINT. POLYCARBONATE LENS.

INTERNAL POLISHED ALUMINUM SHROUDS ARE DESIGNED TO REFLECT THEIR ENVIRONMENT. THEY ARE ALSO EASILY REMOVABLE FOR PAINTING IF DESIRED.

LAMPS SHALL BE HIGH PRESSURE SODIUM.

CATALOG: RUUD #AC2499-5
POLE: RUUD #PS4S30R1BZ
POLE: 30'-0"
MOUNTING BRACKET: 2" ADJUSTABLE FITTER



FIXTURE-YY2 (SINGLE)
FIXTURE-YY4 (DOUBLE)
1000W METAL HALIDE

POLE MOUNT FLOOD LIGHT

CLEAR, TEMPERED GLASS LENS IS HELD IN A DIE CAST, RECESSED DOOR FRAME. LENS FRAME SUPPLIED WITH MTG.

COMPLETE SILICONE GASKETING AROUND LENS FRAME & AT MTG. MEETS U.L. STANDARD FOR WET LOCATIONS.

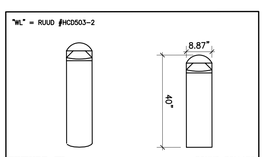
STANDARD 480 VOLT BALLAST.

LAMPS - 1000 WATT

HOUSING IS SEAMLESS DIE CAST ALUMINUM. MEDIUM BRONZE, ACRYLIC POWDER FINISH.

COMPLETELY GASKETED AT FIXTURE, PROVIDE ENCLOSED WIRING CHAMBER.

"WL" = RUUD #HCD503-2



FIXTURE-WL
35W-HPS

ROUND BOLLARD

EXTRUDED ALUMINUM HOUSING WITH STEEL FRAME SUPPORTS.

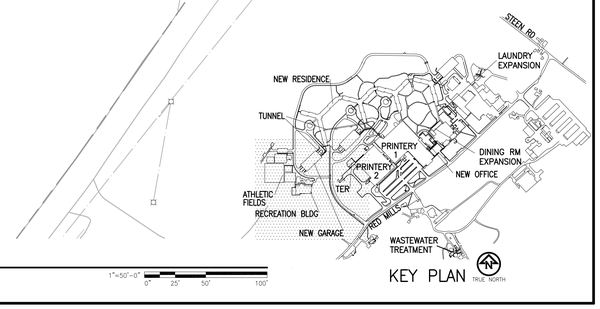
INJECTION MOLDED CLEAR POLYCARBONATE LENS.

HPF. -5°F STARTING TEMPERATURE BALLAST, 277V, 60HZ.

FINISH: ACRYLIC THERMOSET BRONZE POWDER FINISH.

UL LISTED FOR WET LOCATION.

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
GRADE	0.36	17.9	0.0	N.A.	N.A.
BASKETBALL COURTS	12.53	25.9	4.9	2.56	5.29
TENNIS COURT 1	11.95	18.2	7.2	1.66	2.53
TENNIS COURT 2	11.44	18.1	8.0	1.43	2.26
TENNIS COURT 3	9.87	23.8	2.7	3.66	8.81



1 PLAN – SITE LIGHTING

KINGDOM SUPPORT SERVICES, INC.
175 PEARL STREET PH. (718) 560-4800
BROOKLYN, NY 11201 FAX. (718) 560-5855

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CONSULTANT:

Richard Jon Eldred
RICHARD JON ELDRED STATE OF NEW YORK REGISTERED PROFESSIONAL ENGINEER NO. 078245

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–	15 JAN 09	FDIS FILING
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–	16 MAY 08	DDIS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
SITE LIGHTING PLAN

PROJECT No:
WWKL0193

SHEET No:
E-101

XREF: XREF: XREF: XREF: XREF: XREF: XREF: XREF: XREF: XREF:
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PLOT DATE: 10 Mar 09
DIMSCALE: 600.0000

Calculation Summary					
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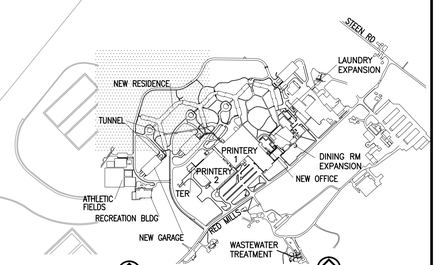
1 PLAN – SITE LIGHTING



KEY PLAN

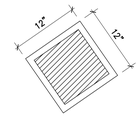
1"=50'-0" 0' 25' 50' 100'

TRUE NORTH

GENERAL NOTES

1. FOR SYMBOLS LIST, SEE E-101.
2. FOR LIGHTING SPECIFICATIONS, SEE E-101.

CATALOG: RUUD #MRC0405-1



FIXTURE-Z1
50W, PSMH

RECESSED CANOPY LIGHT

HOUSING IS DIE CAST ALUMINUM, WHITE STANDARD POWDER FINISH.

ALL FIXTURES ARE SANDARD WITH 277V HIGH POWER FACTOR BALLAST.

UL LISTED.

MOUNTING: FOUR STEEL "L" BRACKETS ARE PROVIDED TO ATTACH THE HOUSING TO CEILING MATERIAL.

TEMPERED GLASS LENS.

KINGDOM SUPPORT SERVICES, INC.

175 PEARL STREET
BROOKLYN, NY 11201 USA

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FAX: (718) 560-8831

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CONSULTANT:

Richard Ian Eldred

STATE OF NEW YORK
RICHARD IAN ELDRED
No. 070445
LICENSED PROFESSIONAL ENGINEER

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25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
SITE LIGHTING PLAN

PROJECT No.
WWKL0193

SHEET No.
E-102

IMAGE: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.10 Drawings\09 Electrical\Richard_Eldred_PE_Stamp.jpg

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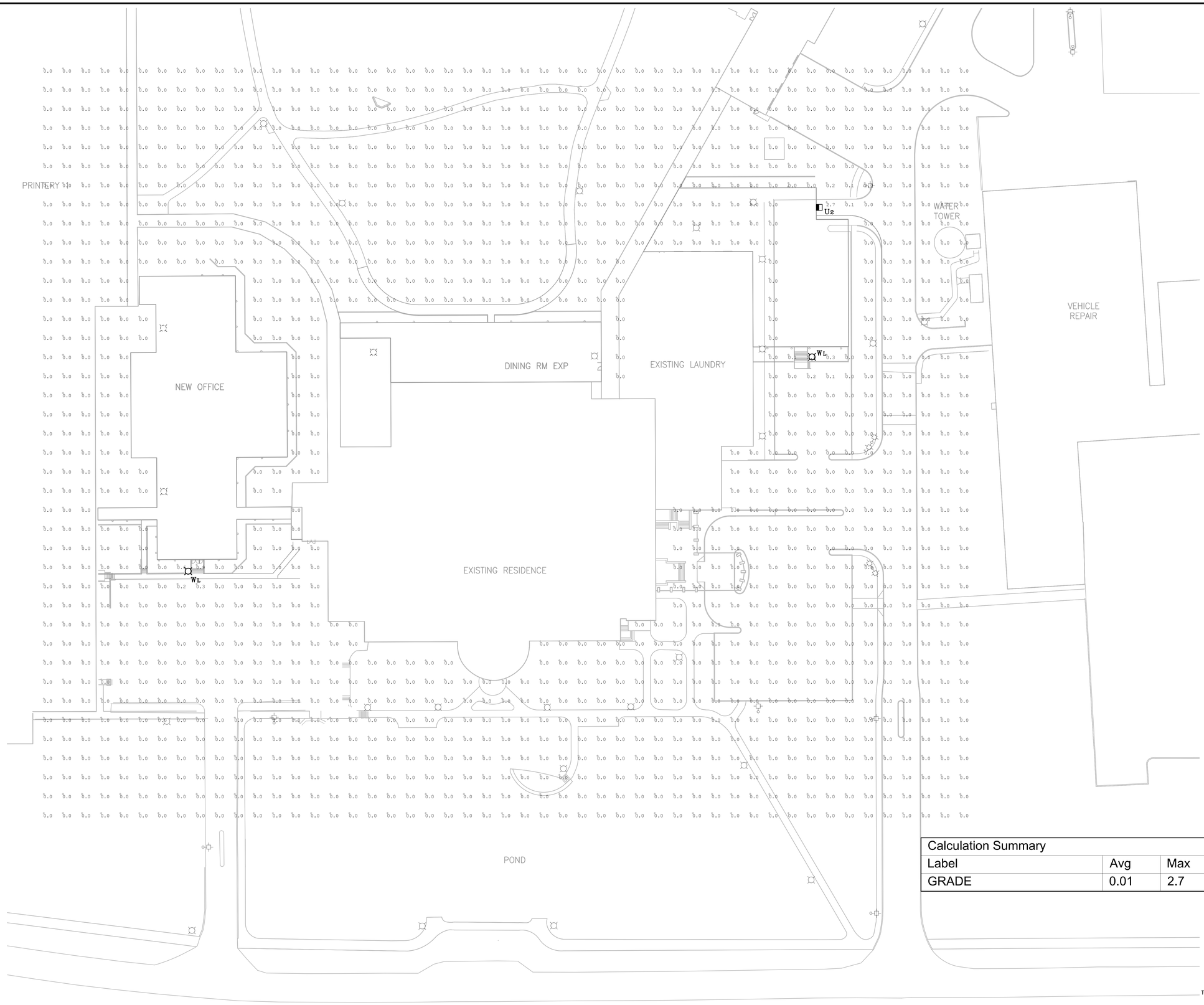
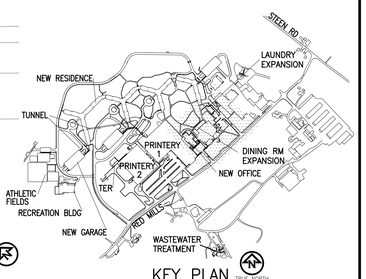
PLOT DATE: 10 Mar 09
DIMSCALE: 600.0000



GENERAL NOTES

1. FOR SYMBOLS LIST, SEE E-101.
2. FOR LIGHTING SPECIFICATIONS, SEE E-101.

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
GRADE	0.01	2.7	0.0	N.A.	N.A.



KEY PLAN

1 PLAN – SITE LIGHTING

1"=30'-0" 0' 15' 30' 60'

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175 PEARL STREET
BROOKLYN, NY 11201 USA
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LICENSED PROFESSIONAL ENGINEER

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900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
SITE LIGHTING PLAN

PROJECT No.
WWKL0193

SHEET No.
E-103

IMAGE:
IMAGE:
IMAGE:
IMAGE:
IMAGE:
IMAGE: P:\USA\WWKL0193\3_CONSTRUCTION DOCUMENTS\3.10 Drawings\09 Electrical\Richard_Eldred_PE_Stamp.jpg

XREF:
XREF:
XREF:
XREF:
XREF:
XREF:

PLOT DATE: 10 Mar 09
DIMSCALE: 360.0000

1 LANDSCAPING PLAN

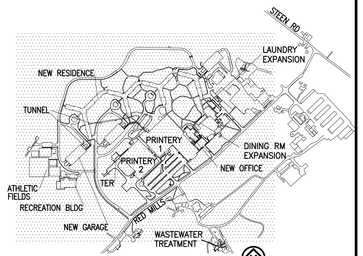
1"=100'-0"

GENERAL NOTES

1. ALL EXISTING AND NEW TREES & SHRUBS ON THIS SHEET SHOWN AS SCREENED. TREES AND SHRUBS TO BE DELETED SHOWN AS BOLD. TOTAL DELETED TREES & SHRUBS @ 110.
2. FOR PROTECTION OF EXISTING TREES SEE CIVIL CG504.
3. PREPARE SOIL FOR FOR ALL AREAS TO BE RESEEDED BY RAKING SMOOTH AND REMOVING LARGE STONES.
4. SEE L-501 FOR PLANT LIST FOR RESTORATION AREAS.

LEGEND

- EXISTING OR NEW TREE
- TREE TO BE DELETED
- UPLAND AREA – TO BE DISTURBED BY CONSTRUCTION & RESEEDED
- WETLAND AREA – EXISTING TURF TO BE INTER-SEEDED
- UPLAND AREA – EXISTING TURF TO BE INTER-SEEDED



KEY PLAN

KINGDOM SUPPORT SERVICES, INC.
175 PEARL STREET
BROOKLYN, NY 11201 USA
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CONSULTANT:

Richard Ian Eldred

STATE OF NEW YORK
RICHARD IAN ELDRED
No. 070446
LICENSED PROFESSIONAL ENGINEER

MARK:	DATE:	DESCRIPTION:
1	13 MAR 09	FEIS FILING REVISION
–	15 JAN 09	FEIS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No. 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
LANDSCAPING PLAN – BUFFER RESEEDING & DELETED TREES

PROJECT No.
WWKL0193

SHEET No.
L-100

PLOT DATE: 9 Mar 09
DIMSCALE: 1200.0000

1 PLAN – LANDSCAPING

1"=50'-0" 0' 25' 50' 100'

GENERAL NOTES

1. DUE TO THE PROXIMITY OF THE RETENTION PONDS TO THE NEW CONSTRUCTION, THE FINAL LANDSCAPE PLANTING PLAN AT NEW BUILDINGS WILL REFLECT THE MORE FORMAL PLANTING SCHEME AROUND EXISTING BUILDINGS.

2. PLANTINGS LISTED BELOW FOR AREAS AROUND RETENTION PONDS WILL REFLECT THE RECOMMENDATIONS SITED IN APPENDIX H OF THE NYS STORMWATER MANAGEMENT DESIGN MANUAL OF AUGUST 2003. PLANTS SELECTED FOR THIS PURPOSE WILL BE FROM, BUT NOT LIMITED TO THE FOLLOWING:

ZONE 2 – SHALLOW WATER BENCH
NORMAL POOL TO DEPTH OF ½ FT
(327.5 TO 329.0)
- *ACORUS CALAMUS*, SWEET FLAG
- *CALAMAGROTIS CANADENSIS*, BLUE JOINT
- *CAREX FLACCA*, BLUE SEDGE
- *IRIS VERSICOLOR*, BLUE FLAG IRIS
- *JUNCUS EFFUSUS*, SOFT RUSH
- *PELTANDRA VIRGINICA*, ARROW ALUM
- *PONTEDERIA CORDATA*, PICKERELWEED
- *SAGITTARIA LATIFOLIA*, ARROWHEAD
- *SAURURUS CORNUS*, LIZARD'S TAIL

ZONE 3 – SHORELINE FRINGE
FROM WATER'S EDGE TO 1'–0" ABOVE
(329.0 TO 330.0)
- *ACORUS CALAMUS*, SWEET FERN
- *CALAMAGROTIS CANADENSIS*, BLUE JOINT
- *CAREX FLACCA*, BLUE SEDGE
- *IRIS VERSICOLOR*, BLUE FLAG IRIS
- *JUNCUS EFFUSUS*, SOFT RUSH
- *LINDERA BENZOIN*, COMMON SPICEBUSH
- *PELTANDRA VIRGINICA*, ARROW ALUM

ZONE 4 – RIPARIAN FRINGE
1'–0 TO 4'–0" ABOVE NORMAL POOL WATER'S EDGE (330.0 TO 334.0)
- *AGROTIS ALBA*, REDTOP
- *ANDROPOGON GERARDI*, BIG BLUESTEM GRASS
- *CALAMAGROTIS CANADENSIS*, BLUE JOINT GRASS
- *DESCHAMPSIA CAESPITOSA*, TUFTED HAIRGRASS
- *LOBELIA CARDINALIS*, CARDINAL FLOWER
- *LOTUS CORNICULATUS*, BIRD'SFOOT TREFOIL

SYMBOLS LIST

TREES

- *ACER PLATANOIDES 'CRIMSON KING'* NORWAY MAPLE 'CRIMSON KING'
- *ACER SACCHARUM* SUGAR MAPLE
- *ABIES FRASERI* FRASER FIR
- *AMELANCHIER CANADENSIS* SHADBLOW SERVICEBERRY
- *BETULA NIGRA MINOR* RIVER BIRCH (CLUMP)
- *CHAMAECYPARIS NOOTKATENSIS* ALASKA CEDAR, NOOTKA FALSE CYPRESS
- *CORNUS KOUSA* KOUSA DOGWOOD
- *FRAXINUS AMERICANA* WHITE ASH
- *GLEDISTIA TRIACANTHOS INERMIS 'SHADEMASTER'* SHADEMASTER HONEYLOCUST
- *JUNIPERIS VIRGINIANA* EASTERN REDCEDAR
- *LARIX LATRICINA* LARCH, TAMARACK
- *LIRIODENDRON TULIPIFERA* TULIP TREE
- *MALUS X 'ADAMS'* CRABAPPLE
- *MALUS X 'MOERLANDSI'* 'PROFUSION' CRABAPPLE
- *MALUS X 'SNOWDRIFT'* CRABAPPLE
- *PICEA GLAUCA* WHITE SPRUCE
- *PINUS ARISTATA* BRISTLECONE PINE
- *PINUS STROBUS* EASTERN WHITE PINE

TREES (CONTINUED)

- *PLATANUS X ACERIFOLIA 'BLOODGOOD'* LONDON PLANETREE
- *PRUNUS SUBHERTILLA 'PENDULA'* WEEPING HIGAN CHERRY
- *PYRUS CALLERYANA 'BRADFORD'* CALLERY PEAR
- *QUERCUS X MACROROBAR* RED OAK
- *QUERCUS PALUSTRIS* PIN OAK
- *QUERCUS RUBRA* NORTHERN RED OAK
- *SALIX BABYLONICA* BABYLON WEEPING WILLOW
- *TILIA PSILOLARIS* LINDEN
- *TSUGA CANADENSIS* EASTERN HEMLOCK

SHRUBS

- *CHAMAECYPARIS PISIFERA 'FILIFERA GOLDEN MOP'* SAWARA FALSE CYPRESS,
- *EUONYMUS ALATUS* BURNING BUSH
- *HAMAMELIS X INTERMEDIA* HAMAMELIS INTERMEDIA
- *ILEX VERTICILLATA* WINTERBERRY
- *JUNIPERUS CHINENSIS* CHINESE JUNIPER
- *JUNIPERUS SCOPULORUM 'MOONGLOW'* MOONGLOW ROCKY MOUNTAIN JUNIPER
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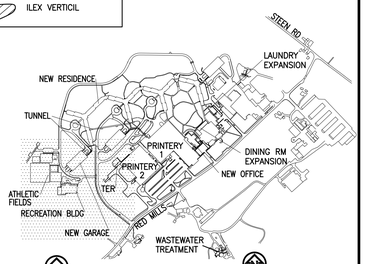
- *WISTERIA SINENSIS* CHINESE WISTERIA, WHITE



KEY PLAN TRUE NORTH

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RICHARD IAN ELDRED LICENSED PROFESSIONAL ENGINEER NO. 075445 STATE OF NEW YORK

MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FDIS FILING REVISION
–	15 JAN 09	FDIS FILING
–	16 MAY 08	DDIS FILING

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25 COLUMBIA HEIGHTS
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900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
LANDSCAPING PLAN

PROJECT No.
WWKL0193

SHEET No.
L–101

XREF: ..\Common\XB.WX–L–000
XREF: ..\Common\XB.WX–C–000
XREF: ..\Common\X.Key Plan–DEFAULT.USA
XREF: ..\Common\X.Project Title–DEFAULT.USA
PLOT DATE: 10 Mar 09
DIMSCALE: 600.0000

1 PLAN – LANDSCAPING

1"=50'-0" 0' 25' 50' 100'

GENERAL NOTES

1. DUE TO THE PROXIMITY OF THE RETENTION PONDS TO THE NEW CONSTRUCTION, THE FINAL LANDSCAPE PLANTING PLAN AT NEW BUILDINGS WILL REFLECT THE MORE FORMAL PLANTING SCHEME AROUND EXISTING BUILDINGS.

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- *VIBURNUM PLICATUM TOMENTOSUM 'MARIESII'* DOUBLEFILE VIBURNUM, JAPANESE SNOWBALL
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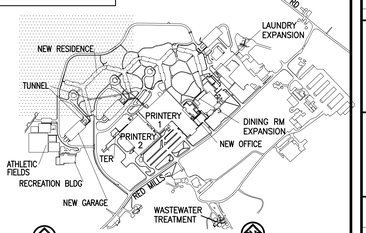
ILEX VERTICIL



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CONSULTANT:

Richard Ian Eldred
STATE OF NEW YORK · RICHARD IAN EldRED · No. 075445 · LICENSED PROFESSIONAL ENGINEER

MARK	DATE:	DESCRIPTION:
–	13 MAR 09	FDIS FILING REVISION
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1	01 SEP 08	DDIS FILING REVISION
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BROOKLYN, NY 11201

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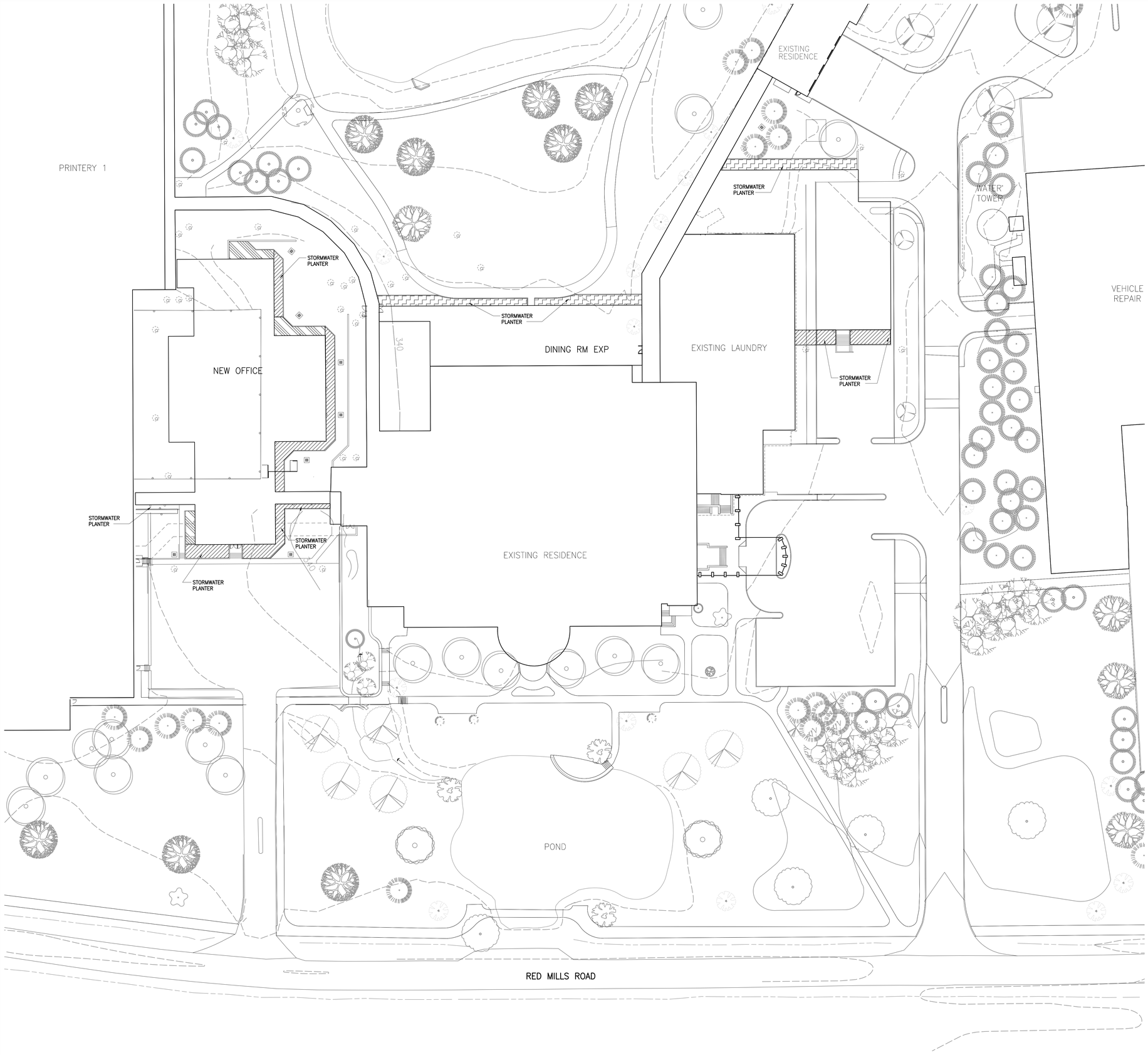
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
LANDSCAPING PLAN

PROJECT No.
WWKL0193

SHEET No.
L–102

XREF: XREF: XREF:



GENERAL NOTES

1. FLOWER BEDS TO CONTAIN COMBINATIONS AS SHOWN BELOW:

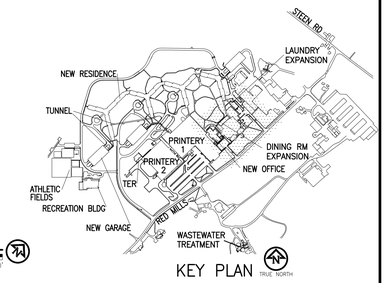
GROUP 1
TREE AS FOLLOWS:
AMELANCHIER CANADENSIS SHADBLOW SERVICEBERRY
SHRUBS AS FOLLOWS:
CLETHRA ALNIFOLIA 'RUBY SPICE' RUBY SPICE SUMMERSWEET
CLETHRA ALNIFOLIA 'SIXTEEN CANDLES' SIXTEEN CANDLES SUMMERSWEET
CORNUS SERVICEA RED TWIG DOGWOOD
HIBISCUS MOSCHEUTOS ROSE MALLOW
ILEX GLABRA 'COMPACTA' COMPACT INKBERRY
ILEX GLABRA 'SHAMROCK' SHAMROCK INKBERRY
ILEX VERTICILLATA 'NANA' RED SPRITE RED SPRITE WINTERBERRY
ILEX VERTICILLATA 'WINTER RED' WINTER RED WINTERBERRY
MYRICA PENSYLVANICA BAYBERRY
ROSA PALUSTRIS SWAMP ROSE
THUJA OCCIDENTALIS 'RHEINGOLD' RHEINGOLD ARBORVITAE
PERENNIALS AS FOLLOWS:
ASTERS, DIFFERENT VARIETIES
IRIS VERSICOLOR BLUE FLAG IRIS
LIGULARIA 'THE ROCKET' LEOPARD PLANT
LOBELIA CARDINALIS CARDINAL FLOWER
LOBELIA SIPHILITICA BLUE CARDINAL FLOWER
MYOSOTIS SCORPIODES FORGET-ME-NOTS

GROUP 2
TREE AS FOLLOWS:
AMELANCHIER CANADENSIS SHADBLOW SERVICEBERRY
SHRUBS AS FOLLOWS:
ILEX CRENATA 'JERSEY PINNACLE' JERSEY PINNACLE JAPANESE HOLLY
ILEX GLABRA 'COMPACTA' COMPACT INKBERRY
KALMA LATIFOLIA MOUNTAIN LAUREL
RHODODENDRON VISCOSUM SWAMP AZALEA
PERENNIALS AS FOLLOWS:
ARISAEMA TRIPHYLLUM JACK-IN-THE-PULPIT
ASTILIBE, DIFFERENT VARIETIES
CIMICIFUGA RACEMOSA 'BRUNETTE' BRUNETTE COHOSH
FERNS, LOCALLY GATHERED
TRILLIUM

GROUP 3
SHRUBS AS FOLLOWS:
ILEX CRENATA 'JERSEY PINNACLE' JERSEY PINNACLE JAPANESE HOLLY
ILEX CRENATA 'SKY PENCIL' SKY PENCIL JAPANESE HOLLY
KALMA LATIFOLIA MOUNTAIN LAUREL
PERENNIALS AS FOLLOWS:
ARISAEMA TRIPHYLLUM JACK-IN-THE-PULPIT
ASTILIBE, DIFFERENT VARIETIES
CIMICIFUGA RACEMOSA 'BRUNETTE' BRUNETTE COHOSH
FERNS, LOCALLY GATHERED
MYOSOTIS SCORPIODES FORGET-ME-NOTS
TRILLIUM

1 PLAN – LANDSCAPING

1"=30'-0"



KEY PLAN

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900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
LANDSCAPING PLAN

PROJECT No.
WWKL0193

SHEET No.
L-103

XREF: \\Common\V.XB WX-I-000
XREF: \\Common\V.XB WX-C-000
XREF: \\Common\V.Key Plan-DEFAULT.LISA
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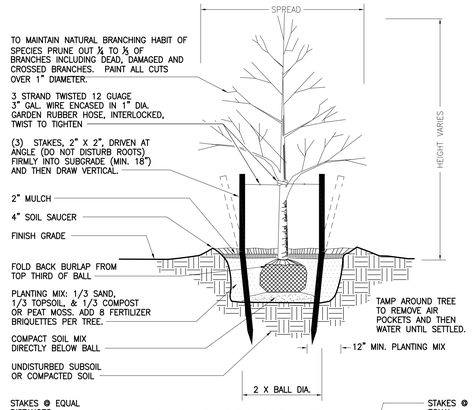
PLOT DATE: 10 Mar 09
DIMSCALE: 360.0000



NOTES:
TREES UP TO AND INCLUDING 3" CALIPER REQUIRE 2 STAKES ON OPPOSITE SIDES OF TREES PARALLEL TO STREET, CURB, PAVEMENT EDGES, AND/OR GRADES AS SHOWN ABOVE.

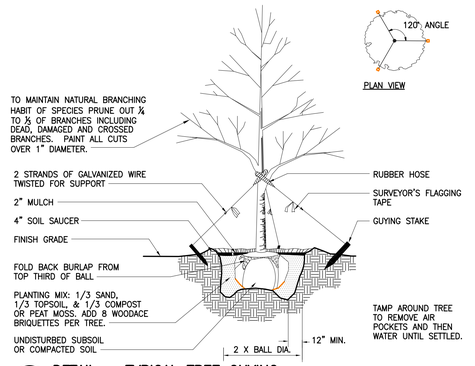
TREES 3 TO 3-1/2" CALIPER REQUIRE 3 STAKES AS SHOWN ABOVE.

TREES OVER 3-1/2" CALIPER REQUIRE 4 STAKES AS SHOWN ABOVE.

TREES SHALL BE PLANTED SO THAT THE ROOTS OR TREE BALL ARE AT THE SAME ELEVATION AT WHICH THEY/IT GREW IN THE NURSERY.

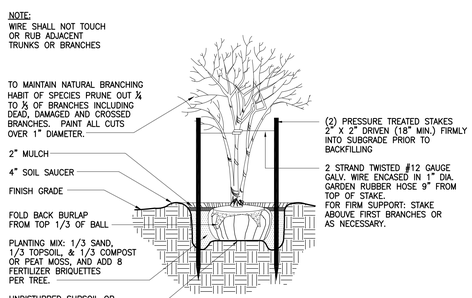
1 DETAIL – DECIDUOUS TREE PLANTING & STAKING

NOT TO SCALE



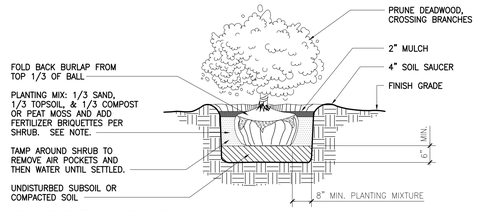
2 DETAIL – TYPICAL TREE GUYING

NOT TO SCALE



3 DETAIL – MULTI-TRUNK TREE PLANTING

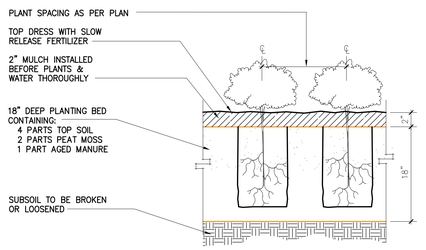
NOT TO SCALE



NOTE:
FERTILIZER BRIQUETTES PER PLANT:
1 GAL. CONTAINER – 1 BRIQUETTE
2 GAL. CONTAINER – 2 BRIQUETTES
3–5 GAL. CONTAINER – 3 BRIQUETTES
15 GAL. CONTAINER – 5 BRIQUETTES

4 DETAIL – SHRUB PLANTING

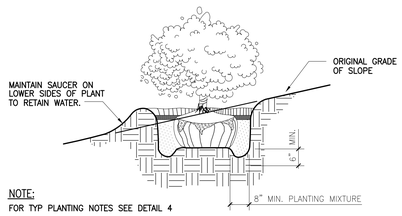
NOT TO SCALE



NOTE:
GROUND COVER ROWS SHOULD BE NEAT AND EVENLY SPACED. PLANTS ARE PLANTED IN A STAGGERED/OFFSET STYLE FOR FULL COVERAGE.

6 DETAIL – PERENNIAL PLANTING

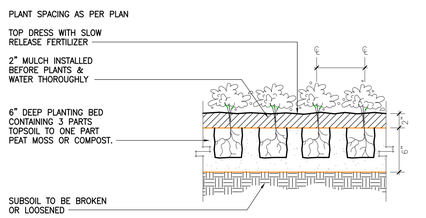
NOT TO SCALE



NOTE:
FOR TYP PLANTING NOTES SEE DETAIL 4

5 DETAIL – SHRUB PLANTING ON SLOPE

NOT TO SCALE



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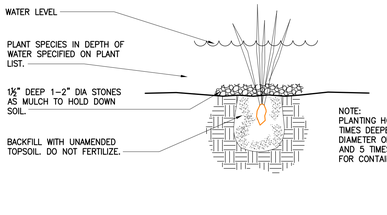
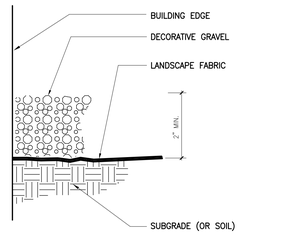
7 DETAIL – GROUND COVER PLANTING

NOT TO SCALE



8 DETAIL – WATER PLANTS

NOT TO SCALE



9 DETAIL – DECORATIVE GRAVEL

NOT TO SCALE

PLANT LIST FOR RESTORATION AREAS (SEE L–100 FOR PLANTING LOCATIONS)

COMMON NAME	SCIENTIFIC NAME	REMARKS
WETLAND AREAS		
GRASSES		
TUFTED FOXTAIL	ALOPECURUS CAROLINIANUS	INTER–SEED IN WETLAND AREAS
RED–TOP PANIC GRASS	PANICUM REGIDULUM	INTER–SEED IN WETLAND AREAS
PRAIRIE CORDGRASS	SPARTINA PECTINATA	INTER–SEED IN WETLAND AREAS, SEED IN DRAINAGE WAYS
SALTMEADOW CORDGRASS	SPARTINA PATENS	SEED IN VEGETATIVE DRAINAGE WAYS TO ABSORB SALT
OTHER GRASS–LIKE		
SOFT RUSH	JUNCUS EFFUSUS	PLANT 2" PLUGS OR 1 GAL IN WETLAND TURF GRASS AREA
CANADA RUSH	JUNCUS CANADENSIS	PLANT 2" PLUGS OR 1 GAL IN WETLAND TURF GRASS AREA, STREAM
UPTIGHT SEDGE	CAREX STRICTA	PLANT 2" PLUGS OR 1 GAL IN WETLAND TURF GRASS AREA, STREAM
HARD–STEM BULRUSH	SCIRPUS ACUTIS	PLANT 2" PLUGS OR 1 GAL IN STREAM CHANNEL
GREEN BULRUSH	SCIRPUS ATROVIRENS	PLANT 2" PLUGS OR 1 GAL IN STREAM CHANNEL
FORBES/VINES		
SWAMP VIRGIN'S–BOWER	CLEMATIS CRISPA	PLANT 2" PLUGS AT EDGE OF EXISTING FOREST IN WETLAND AREA
RIVER–BANK GRAPE	VITIS REPARIA	CUTTINGS, 2'PLUGS IN FORESTED AREAS (MAY ALREADY EXIST)
CARDINAL FLOWER	LOBELIA CARDINALIS	PLANT 2" PLUGS IN WETLAND TURF GRASS AREA OR OTHER OPEN WETLAND AREAS
MEADOW PHLOX	PHLOX MACULATA	SEED OR PLANT 2" PLUGS IN TURF GRASS OR OTHER OPEN WETLAND AREAS
SAW–TOOTH SUNFLOWER	HELIANTHUS GROSSESERRATUS	SEED OR PLANT 2" PLUGS IN TURF GRASS OR OTHER OPEN WETLAND AREAS
TALL SUNFLOWER	HELIANTHUS GIGANTEUS	SEED OR PLANT 2" PLUGS IN TURF GRASS OR OTHER OPEN WETLAND AREAS
BROAD–LEAF WATER–PLANTAIN	ALISMA PLANTAGO–AQUATICA	PLANT 2" PLUGS IN STANDING WATER OR IN SATURATED SOIL (AQUATIC)
SHRUBS		
SWAMP AZALEA	RHODODENDRON VISCOSUM	PLANT (1–3 GAL) IN WETLAND AREA
DOWNY SEVICE–BERRY	AMELANCHIER ARBORIA	PLANT (1–3 GAL) IN WETLAND/UPLAND AREA
COMMON WINTERBERRY	ILEX VERTICILLATA	PLANT (1–3 GAL) IN WETLAND AREA
NORTHERN SPICEBUSH	LINDERA BENZOIN	PLANT (1–3 GAL) IN WETLAND AREA
SWAMP AZALEA	RHODODENDRON VISCOSUM	PLANT (1–3 GAL) IN WETLAND AREA, IN ACTUAL STREAM BANK/BED FOR EROSION
COMMON BUTTONBUSH	CEPHALANTHUS OCCIDENTALIS	PLANT (1–3 GAL) IN WETLAND AREA, IN ACTUAL STREAM BANK/BED FOR EROSION
PALE LAUREL	KALMIA POLIFOLIA	PLANT (1–3 GAL) IN WETLAND AREA, IN ACTUAL STREAM BANK/BED
PUSSY WILLOW	SALIX DISCOLOR	PLANT (1–3 GAL) IN WETLAND AREA
INK–BERRY	ILEX GLABRA	PLANT (1–3 GAL) IN WETLAND AREA
RED–OSIER DOGWOOD	CORNUS STOLONIFERA	PLANT (1–3 GAL) IN WETLAND AREA, IN ACTUAL STREAM BANK/BED FOR EROSION
TREES		
RIVER BIRCH	BETULA NIGRA	PLANT 2–3" CALIPER, MULTI–STEM, BALLED STOCK ALONG STREAM FOR EROSION
SWAMP WHITE OAK	QUERCUS BICOLOR	PLANT 2–3" CALIPER, BALLED STOCK
AMERICAN LARCH	LARIX LARICINA	PLANT 2–3" CALIPER, BALLED STOCK, 3 GAL CONTAINER
NORTHERN WHITE CEDAR	THUJA OCCIDENTALIS	PLANT 2–3" CALIPER, BALLED STOCK, 3 GAL CONTAINER (EVERGREEN)
AMERICAN HORNBEAM	CARPINUS CAROLINIANA	PLANT 2–3" CALIPER, BALLED STOCK, 3 GAL CONTAINER
UPLAND AREAS		
GRASSES		
CANADA BROME	BROMUS CANADENSUS	INTER–SEED IN UPLAND AREAS (MAY ALREADY EXIST)
PERENNIAL BENTGRASS	AGROSTIS PERENNANS	INTER–SEED IN UPLAND AREAS
NORTHERN BENTGRASS	AGROSTIS BOREALIS	INTER–SEED IN UPLAND AREAS
OTHER GRASS–LIKE		
SLENDER WOOD SEDGE	CAREX DIGOTALIS	PLANT 2" PLUGS AT ENTRANCE TO WETLAND BOARDWALK
FORBES/VINES		
VIRGINIA VIRGIN'S–BOWER	CLEMATIS VIRGINIANA	PLANT 2" PLUGS AT EDGE OF EXISTING FOREST
FOX GRAPE	VITUS LABRUSCA	CUTTINGS, 2" PLUGS IN FOREST AREA (MAY ALREADY EXIST)
INDIAN–TOBACCO	LOBELIA INFLATA	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
PRAIRIE DOGBANE	APOCYNUM SIBIRICUM	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
FIREWEED	EPILOBIUM ANGUSTIFOLIUM	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
FALL PHLOX	PHLOX PANICULATA	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
BUTTERFLY–WEED	ASCLEPIAS TUBEROSA	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
SCOTCH BELLFLOWER (HAREBELL)	CAMPANULA ROTUNDIFLOLIA	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
OX–EYE SUNFLOWER	HELIOPSIS HELIANTHOIDES	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
THIN–LEAF SUNFLOWER	HELIANTHUS DECAPETALUS	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
WILD LUPINE	LUPINUS PERENNIS	SEED OR 2" PLUGS IN OPEN TURF GRASS AREAS
SHRUBS		
WILD HYDRANGEA	HYDRANGEA ARBORESCENS	PLANT (1–3 GAL) IN UPLAND FOREST AREA
EARLY AZALEA	RHODODENDRON PRINOPHYLLUM	PLANT (1–3 GAL) IN UPLAND FOREST AREA
SMOOTH ROSE	ROSA BLANDA	PLANT (1–3 GAL) IN UPLAND OPEN AREA
LOW–BUSH BLUEBERRY	VACCINIUM ANGUSTIFOLIUM	PLANT (1–3 GAL) IN UPLAND FOREST AREA AND OPEN AREAS
ARROW–WOOD	VIBURNUM DENTATUM	PLANT (1–3 GAL) IN UPLAND FOREST AREA AND OPEN AREAS
ROSEBAY RHODODENDRON	RHODODENDRON MAXIMUM	PLANT (1–3 GAL) IN UPLAND FOREST AREA
SHEEP–LAUREL	KALMIA ANGUSTIFOLIA	PLANT (1–3 GAL) IN UPLAND FOREST AREA AND OPEN AREAS
TREES		
PAPER BIRCH	BETULA PAPYRIFERA	PLANT 2–3" CALIPER, BALLED STOCK IN SMALL GROVES
FLOWERING DOGWOOD	CORNUS FLORIDA	PLANT 2–3" CALIPER, BALLED STOCK
AMERICAN WITCH–HAZEL	HAMAMELIS VIRGINIANA	PLANT 2–3" CALIPER, BALLED STOCK IN UPLAND DRAINAGES
TULIP TREE	LIRIODENDRON TULIPIFERA	PLANT 2–3" CALIPER, BALLED STOCK
EASTERN HEMLOCK	TSUGA CANADENSIS	PLANT 2–3" CALIPER, BALLED STOCK (EVERGREEN)
RED PINE	PINUS RESINOSA	PLANT 2–3" CALIPER, BALLED STOCK (EVERGREEN)
EASTERN WHITE PINE	PINUS CONCORDA	PLANT 2–3" CALIPER, BALLED STOCK (EVERGREEN)

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Richard Ian Eldred
STATE OF NEW YORK
RICHARD IAN EldRED
No. 075445
LICENSED PROFESSIONAL ENGINEER

MARK	DATE:	DESCRIPTION:
1	13 MAR 09	FDS FILING REVISION
–	15 JAN 09	FDS FILING

OWNER:
WATCHTOWER BIBLE & TRACT SOC. OF NY, INC.
25 COLUMBIA HEIGHTS
BROOKLYN, NY 11201

ACCOUNT No.: 1568

PROJECT TITLE:
WALLKILL SITE IMPROVEMENTS
900 RED MILLS ROAD
WALLKILL, NY

SHEET TITLE:
LANDSCAPING DETAILS

PROJECT No.
WWKL0193

SHEET No.
L–501

XREF: \\Common\V Project Title -DEFAULT.E.USA
XREF: \\Civil\Richard_Eldred_PE_Stamp.jpg
IMAGE:
PLOT DATE: 9 Mar 09
DIMSCALE: 1.0000

WATCHTOWER FARMS IMPROVEMENTS

TOWN OF SHAWANGUNK BULK TABLE
BULK REQUIREMENTS OF PROPOSED EXPANSION

BULK REGULATION REFERENCE	R-AG4 177-7(D)	PROVIDED
MINIMUM LOT AREA	2 ACRES	1141 +/- ACRES WITH PUBLIC WATER/SEWER
MINIMUM YARDS (FEET)		
FRONT	75	370 FROM RED MILLS TO OFFICE
REAR	100	2575 TO 99.4-1-49.21
SIDE		
ONE	50	850 TO 99.4-1-28.2
BOTH	100	2316
MINIMUM LOT WIDTH (FEET)	250	4400
MINIMUM LOT DEPTH (FEET)	200	2500
MAXIMUM IMPERVIOUS COVERAGE (%)	15	2 INCLUDES EXISTING
MAXIMUM HEIGHT		
STORIES	3	3
HEIGHT	35 FEET	LESS THAN 35 FEET
AREA DEDUCTIONS (ACRES)		
WETLANDS & OPEN WATERS		60 +/- ACRES
FLOODPLAIN		133 +/- ACRES

LEGEND

- DISTURBED AREA BOUNDARY
- WETLANDS
- FEMA 100 YEAR FLOODPLAIN
- OPEN WATERS
- SHAWANGUNK KILL RIVER CORRIDOR BOUNDARY 1994

WETLAND DELINEATION LEGEND

- AREA 1 = 1.85 ACRES
- AREA 2 = 2.56 ACRES
- AREA 3 = 22.03 ACRES

1 WETLANDS, FLOODPLAIN, & RECREATIONAL RIVER CORRIDOR MAP

1" = 300'
0 150' 300' 600'

BUILDING RELOCATION NOTE:

THE OWNER/BUILDER OF EACH LOT SHALL BE ALLOWED TO RELOCATE THE BUILDING SHOWN ON THE APPROVED FINAL PLAN WITHOUT FURTHER PLANNING BOARD APPROVAL PROVIDED THAT THE FOLLOWING REQUIREMENTS ARE MET. IF ALL OF THESE REQUIREMENTS CANNOT BE MET, THE MATTER MUST BE REFERRED BACK TO THE PLANNING BOARD FOR FURTHER REVIEW.

1. THE RELOCATED BUILDING REMAINS ON TWENTY PERCENT (20%) OF THE AREA OF THE ORIGINALLY APPROVED BUILDING LOCATION AND MEETS SETBACK LINES.
2. THE RELOCATED BUILDING IS WITHIN REQUIRED SETBACK LINES.
3. THE WELL SHALL NOT BE RELOCATED AND THE SEWAGE DISPOSAL SYSTEM SHALL NOT BE RELOCATED OFF THE AREA WHERE APPROVED PERCOLATION TEST WERE RECORDED. IF THE PROJECT WAS APPROVED BY THE ULSTER COUNTY DEPARTMENT OF HEALTH, RELOCATION OF WELLS AND SEWAGE DISPOSAL SYSTEMS ARE SUBJECT TO ALL OF THE TERMS AND CONDITIONS OF SUCH APPROVAL, INCLUDING THE PROHIBITION OF ANY SUCH RELOCATIONS OF SO STATED.
4. THE DRIVEWAY MEETS THE MAXIMUM GRADE REQUIREMENTS.
5. THE SEWAGE FROM THE BUILDING WILL DISCHARGE BY GRAVITY TO THE SEWAGE DISPOSAL FIELD UNLESS A LIFT OR PUMP STATION HAS ALREADY BEEN APPROVED FOR THE LOT.
6. DRAINAGE PATTERNS ON THE LOT MAY NOT BE CHANGED SO AS TO ADVERSELY IMPACT ADJACENT PROPERTIES.
7. DRIVEWAY CURB CUT OR LOT ACCESS MAY NOT BE RELOCATED.
8. BUILDING LOCATION SHALL NOT BE SHIFTED ONTO AN ENVIRONMENTALLY SENSITIVE SITE FEATURE SUCH AS A FEDERAL OR STATE WETLAND OR BUFFER.
9. BUILDING LOCATION SHALL NOT BE SHIFTED INTO A PREVIOUSLY APPROVED AGRICULTURAL BUFFER.
10. BUILDING SHALL NOT BE SHIFTED IN A LOCATION IN WHICH IS OTHERWISE IN CONTRAVENTION OF A REQUIREMENT OF THE SUBDIVISION REGULATIONS, ZONING LAW, AS MAY BE AMENDED, OR OF THE FINDINGS OR DETERMINATION UNDER THE SEQRA FOR THE SUBDIVISION OF WHICH THE BUILDING LOT IS A PART.
11. THERE SHALL BE A MAPPED DISTANCE FROM PROPERTY LINE TO 3 SIDES OF THE BUILDING.

FEDERAL WETLANDS NOTE:

DREDGING OR FILLING OF FEDERAL WETLANDS OF MORE THAN 0.1 ACRE IN THIS ENTIRE PARCEL REQUIRES A PERMIT FROM THE U.S. ARMY CORPS OF ENGINEERS. CONTACT THE U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT OFFICE FOR ADDITIONAL INFORMATION. NO DISTURBANCE OUTSIDE OF AREAS SHOWN WHICH ARE IN THE FEDERAL WETLANDS IS PERMITTED UNLESS THERE IS COMPLETE COMPLIANCE WITH THE 0.1 ACRE LIMIT OR THE LOT OWNER OBTAINS A PERMIT.

AGRICULTURAL NOTE:

PROPERTY NEAR THIS SITE MAY BE IN ACTIVE AGRICULTURAL OPERATION AND PRODUCTION AND USERS MUST BE AWARE THAT SUCH PROPERTY IS PROTECTED BY NEW YORK STATE "RIGHT TO FARM LAWS" AS REGULATED BY THE DEPT. OF AGRICULTURE AND MARKET. FROM TIME TO TIME DURING AND PRIOR TO THE NORMAL GROWING SEASON LAND AND CROPS MAY BE SPRAYED FROM THE GROUND OR BY AIR. MANURE MAY BE APPLIED, AND PERIODIC NOISE MAY OCCUR FROM MACHINERY OPERATION AT VARIOUS TIMES THROUGHOUT THE YEAR. USERS OF THE SITE SHOULD BE AWARE OF THESE AGRICULTURAL ACTIVITIES ON ADJOINING PROPERTIES.

DEED REFERENCES FOR TAX PARCEL 99.4-1-11:

GOEBEL (FARM 1), LIBER 1133, PAGE 604
GOEBEL (F HOUSE), LIBER 1213, PAGE 398
GOEBEL, LIBER 1214, PAGE 367
ACOSTA, LIBER 1422, PAGE 698
MEREDITH (#1), LIBER 1247, PAGE 779
SEAMAN, LIBER 1262, PAGE 3
COREY, LIBER 2411, PAGE 213
STOCKLI (X RESIDENCE), LIBER 2243, PAGE 222
CALVI, LIBER 2567, PAGE 209
JOHNSON, LIBER 2585, PAGE 321
DUBOIS (#1), LIBER 2591, PAGE 331
BLOCK (Z-1 HOUSE), LIBER 2759, PAGE 272
BLOCK (Z-2 HOUSE), LIBER 2759, PAGE 267

*SEE ALSO C-101 "PROPERTY PARCEL IDENTIFICATION MAP"

WETLANDS CERTIFICATION:

"I, JOHN CHITTY, HEREBY CERTIFY THAT I DELINEATED THE FRESHWATER WETLANDS SHOWN HEREIN ON 7/8/07. WETLANDS HAVE BEEN DELINEATED IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, AS MAY BE AMENDED FROM TIME TO TIME."

"I, JOHN CHITTY, HEREBY CERTIFY THAT I DELINEATED THE FRESHWATER WETLAND ON 7/8/07, WHICH MEET THE DEFINITION PROVIDED IN SECTION 24-0107(1) OF THE NYS FRESHWATER WETLAND ACT."

JOHN CHITTY
ECOLOGIST-WETLAND DELINEATOR

SURVEY NOTES:

1. CERTIFICATIONS INDICATED HERON SIGNIFY THAT THE SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY IS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYORS SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW. ONLY COPIES FROM THE ORIGINAL OF THIS MARKED WITH AN ORIGINAL OF THE LAND SURVEYORS INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE COPIES.
3. SUBJECT TO AN UP TO DATE ABSTRACT OF TITLE, SUBJECT TO UNDERGROUND UTILITIES AND EASEMENTS NOT RECORDED AND/OR NOT VISIBLE AT TIME OF FIELD SURVEY.

CERTIFIED TO:

WATCHTOWER BIBLE & TRACT SOCIETY, INC.

TO BE TRUE SURVEY PERFORMED IN THE FIELD AND THAT IS TO THE BEST OF MY KNOWLEDGE AND BELIEF CORRECT.

STATE OF NEW YORK
RICHARD IAN ELDRED
050154
LICENSED LAND SURVEYOR

RICHARD IAN ELDRED, L.S.
NEW YORK REGISTRATION NO. 050154
2891 ROUTE 22 PATTERSON, NY 12563

WATCHTOWER
BIBLE & TRACT SOCIETY
OF NEW YORK, INC.
25 COLUMBIA HEIGHTS
BROOKLYN,
NEW YORK, 11201

CONSULTANT:

MARK:	DATE:	DESCRIPTION:
–	13 MAR 09	FEIS FILING REVISION
–	15 JAN 09	FEIS FILING
3	01 SEP 08	DEIS REVISION
2	16 JUN 08	DEIS REVISION
1	16 MAY 08	DEIS SUBMITTAL
3	22 JUN 07	DRAWING REVISED
2	27 APR 07	ISSUE DATE

OWNER:
WALLKILL
900 RED MILLS ROAD
WALLKILL, NY 12589

ACCOUNT No.

PROJECT TITLE:
WATCHTOWER FARMS IMPROVEMENTS
RED MILLS ROAD

SHEET TITLE:
WETLANDS, FLOODPLAIN, & RECREATIONAL RIVER CORRIDOR

PROJECT No.
WWKL0193

SHEET No.
C-102

XREF: WASCE WASCE WASCE WASCE WASCE XREF: XREF: XREF: XREF: XREF: XREF: XREF: XREF: XREF:

PLOT DATE: 10 MAR 09 PLOTTED BY: jhunn
DIMSCALE: 3600 DSON.DRFT:
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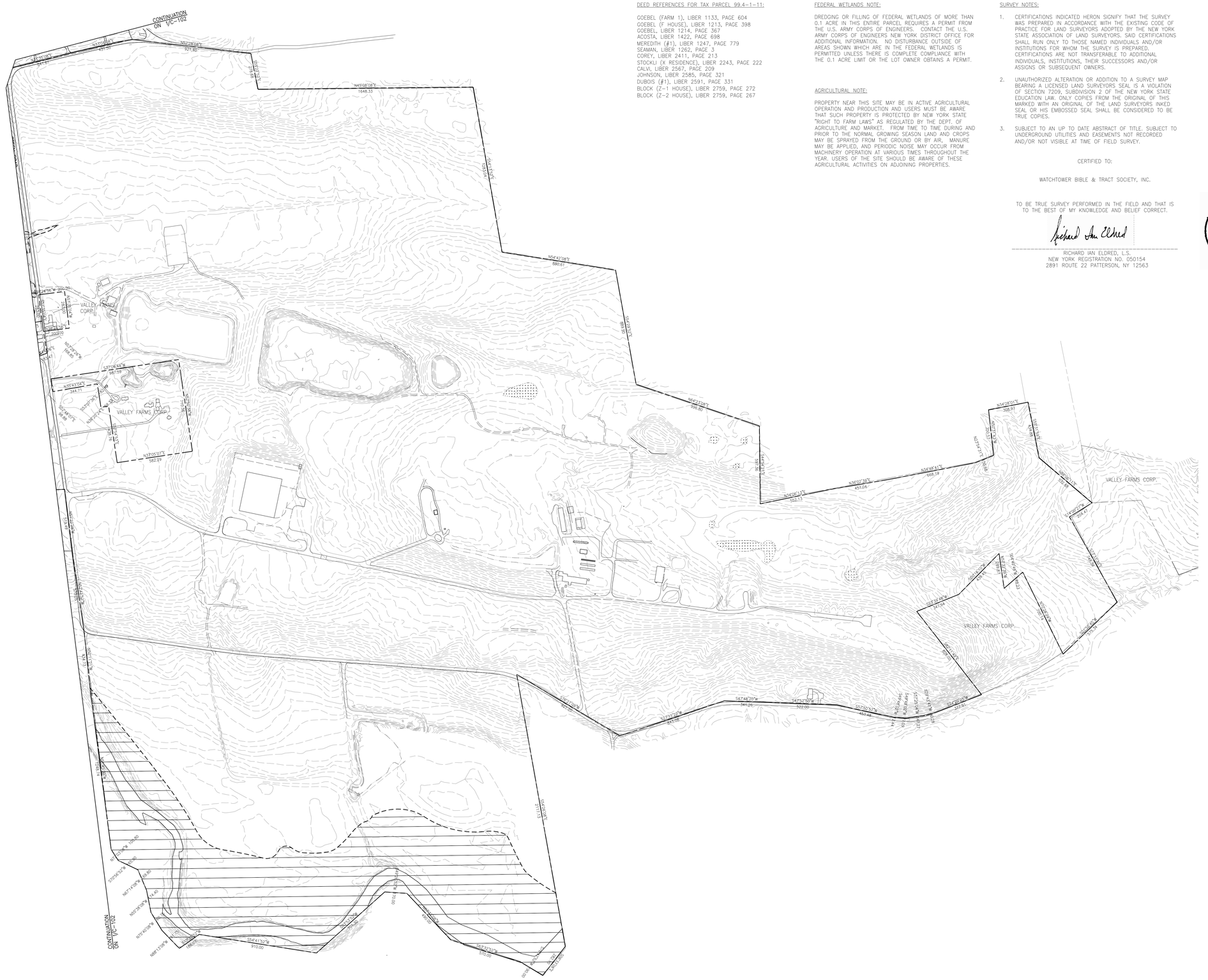
WATCHTOWER FARMS IMPROVEMENTS


CONTINUATION ON 1/C-102
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N45°08'08"E 1648.33'
N54°42'08"E 580.67'
S64°23'52"E 996.00'
S35°06'13"E 564.13'
N26°00'30"E 451.04'
N34°48'41"E 668.19'
N34°26'01"E 308.91'
N52°53'13"W 68.00'
N52°53'13"W 451.57'
S37°06'47"W 308.00'
S52°53'13"E 68.00'
S37°06'47"W 304.47'
S52°53'13"E 68.00'
S37°06'47"W 304.47'
S52°53'13"E 68.00'
S37°06'47"W 304.47