

THOMAS J. WATSON
RESEARCH CENTER
YORKTOWN, N.Y.

FACILITIES DESIGN
COMPUTER GRAPHICS

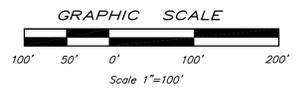
FACILITIES ENGINEERING
REARRANGEMENT ENGINEERING
FACILITIES PLANNING

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- NOTES:
1. BACKGROUND INFORMATION IS BASED ON A COMBINATION OF SURVEY PROVIDED BY IBM AND SSM GROUP, INC.
 2. LOCATION OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DEVELOPED FROM EXISTING UTILITY RECORDS AND/OR ABOVE GROUND EXAMINATION OF THE SITE. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES OR STRUCTURES CANNOT BE GUARANTEED.
 3. WETLANDS WERE IDENTIFIED AND DELINEATED ON SITE AS INDICATED ON THE DRAWINGS. NO WETLANDS WILL BE IMPACTED BY THE PROPOSED IMPROVEMENTS.

LEGEND



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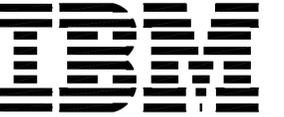
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NO.	DATE	DESCRIPTION	BY
0	07/16/12	ISSUED FOR BID AND CONSTRUCTION	KMF
-	06/21/12	ISSUED FOR TOWN PERMIT	GHC
-	02/10/12	ISSUED FOR TOWN APPROVAL	GHC

SHEET TITLE:
**BUILDING 801
HELISTOP
CIVIL
OVERALL PLAN**

DRAWN BY: G.H.C.	SCALE: 1"=100'
CHECKED BY: K.M.F.	DATE: 07-16-12
PROJECT NO. YK11KS08	DRAWING NO. C.1-01
SHEET 1 OF 19	

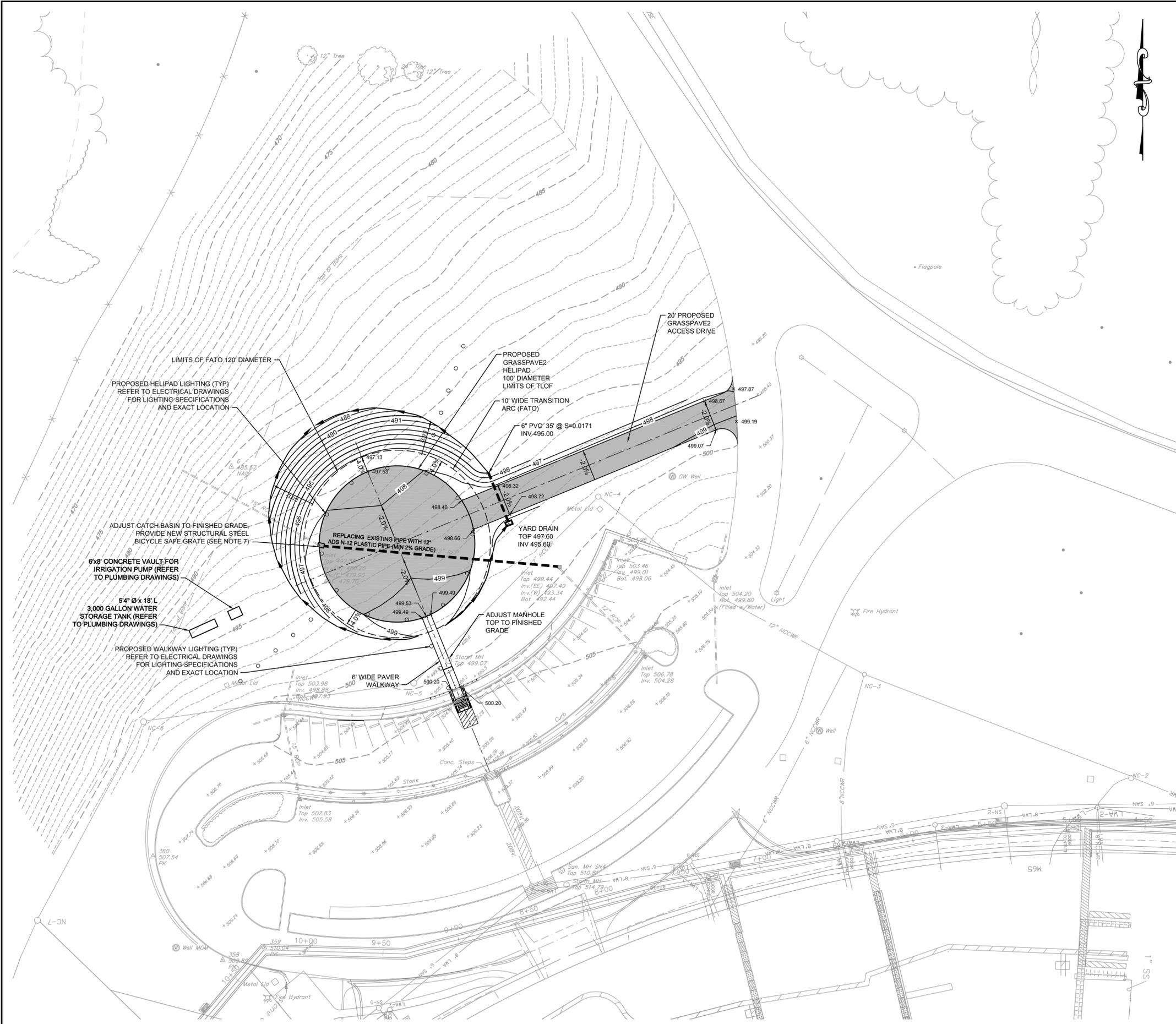


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REARRANGEMENT ENGINEERING
FACILITIES PLANNING

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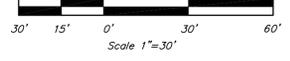


- NOTES:
ALL EARTHWORK SHALL BE PERFORMED IN GENERAL ACCORDANCE WITH NYS DOT STANDARD SPECIFICATIONS, SECTION 200
- TOPSOIL REMOVAL QUANTITIES ARE AS FOLLOWS:
CUT - 266.59 CU. YD. (ASSUMES 4" OF TOPSOIL REMOVAL)
BULK EARTHWORK QUANTITIES ARE AS FOLLOWS:
CUT - 2.00 CU. YD.
FILL - 2,009.63 CU. YD.
NET - 2,007.63 CU. YD. (FILL)
TOPSOIL REPLACEMENT QUANTITIES ARE AS FOLLOWS:
FILL - 202.43 CU. YD.
 - EXCAVATION GENERAL NOTES:
 - BEFORE STARTING EXCAVATION, REMOVE TOPSOIL TO ITS FULL DEPTH, FROM ALL AREAS THAT ARE TO BE FURTHER EXCAVATED, RE-LANDSCAPED OR REGRADED. DO NOT EXCAVATE SATURATED TOPSOIL.
 - TOPSOIL SHALL BE STOCKPILED AT THE SITE AS DIRECTED FOR USE IN FURTHER FINISH GRADING. ALL STOCKPILES SHALL RECEIVE TEMPORARY SEEDING.
 - AFTER REMOVAL OF TOPSOIL, THE EXPOSED SUBGRADE SHALL BE PROOF-ROLLED WITH APPROVED CONSTRUCTION EQUIPMENT, SUCH AS A LOADED 10-TON STATIC CAPACITY ROLLER. THE MINIMUM EXTENT OF PROOF-ROLLING SHALL CONSIST OF TWO (2) PASSES WITH APPROVED EQUIPMENT OVER THE ENTIRE AREA RECEIVING NEW FILL.
 - UNSTABLE AREAS SHALL EITHER BE EXCAVATED, SCARIFIED, AERATED AND RE-COMPACTED PRIOR TO FILL PLACEMENT, OR BE REMOVED AND REPLACED WITH CONTROLLED FILL.
 - THE EXPOSED SUBGRADE SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER AND TESTED BY PROOF-ROLLING, AS DESCRIBED ABOVE, PRIOR TO PLACEMENT OF COMPACTED FILL.
 - FILL MATERIALS:
 - SATISFACTORY MATERIALS PLACED WITHIN SUBGRADE AREAS SHALL CONSIST OF AASHTO CLASSIFICATION A-1-A OR A-1-B SOILS.
 - SATISFACTORY MATERIALS SHALL NOT CONTAIN ANY DEBRIS, WASTE, OR FROZEN MATERIALS, AND SHALL CONTAIN LESS THAN TWO (2) PERCENT ORGANIC MATERIALS BY WEIGHT.
 - ALL PROPOSED FILL MATERIALS SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT AS CONTROLLED FILL.
 - REPRESENTATIVE SAMPLES OF PROPOSED FILL MATERIALS SHALL BE SUBMITTED TO THE ENGINEER BY THE CONTRACTOR A MINIMUM TWO (2) WEEKS PRIOR TO PLACEMENT OF THAT MATERIAL FOR COMPLETION OF THE NECESSARY LABORATORY TESTS.
 - FILL PLACEMENT:
 - NEW FILL SHALL NOT BE PLACED ON SURFACES THAT ARE MUDDY OR FROZEN, OR HAVE NOT BEEN APPROVED BY TESTING AND/OR PROOF-ROLLING.
 - ALL FILL MATERIAL COMPACTED BY HEAVY CONSTRUCTION EQUIPMENT SHALL BE PLACED IN MAXIMUM 12-INCH LOOSE LIFTS. ALL FILL MATERIAL COMPACTED BY HAND-OPERATED OR LIGHT CONSTRUCTION EQUIPMENT SHALL BE PLACED IN MAXIMUM 6-INCH LOOSE LIFTS.
 - ALL FILL AREAS SHALL BE SUFFICIENTLY SLOPED AND PROPERLY SEALED WITH A SMOOTH DRUM ROLLER AT THE END OF EACH WORK DAY.
 - COMPACTION REQUIREMENTS:
 - COMPACT SUBGRADE MATERIALS TO THE FOLLOWING PERCENTAGES OF MAXIMUM LAB DENSITY AS DETERMINED BY ASTM D698:
 - ROADWAYS/DRIVEWAYS/HELIPAD: 95%
 - GRASSED AREAS: 85%
 - OTHER AREAS: AS INDICATED
 - MAINTAIN OPTIMUM MOISTURE CONTENT OF BACKFILL MATERIALS, WITHIN THE RANGE OF TWO PERCENTAGE POINTS, PLUS OR MINUS, TO ATTAIN REQUIRED COMPACTION DENSITY.
 - FIELD DENSITY TESTS SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D2922 (NUCLEAR METHOD), A MINIMUM OF THREE (3) TESTS SHALL BE PERFORMED FOR EACH LIFT OF FILL PLACED, OR A MINIMUM OF EVERY 2,500 SQUARE FEET OF FILL PLACED, WHICHEVER IS GREATER.
 - IF TESTS INDICATE WORK DOES NOT MEET THE SPECIFIED REQUIREMENTS, IT SHALL BE REMOVED, REPLACED AND RETESTED UNTIL COMPLIANCE IS ACHIEVED AT NO ADDITIONAL COST TO THE OWNER.
 - ALL COMPACTED FILL SHALL BE TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
 - TOPSOIL REQUIREMENTS:
 - PROVIDE COMPACTED TOPSOIL THICKNESS AS NOTED BELOW IN AREAS TO RECEIVE THE FOLLOWING TREATMENT:
 - SEEDED GRASS: 4 INCHES
 - THE EXISTING CATCH BASIN SHALL BE ADJUSTED USING CONCRETE RISER SECTIONS DESIGNED IN ACCORDANCE WITH ASTM C913. INLET GRATE SHALL BE STRUCTURAL STEEL BICYCLE SAFE GRATE

LEGEND

- GRASSPAVE2
- DIRECTION OF STORM FLOW

GRAPHIC SCALE



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-	02/10/12	ISSUED FOR TOWN APPROVAL	GHC

SHEET TITLE:
BUILDING 801
HELISTOP
CIVIL
PROPOSED GRADING PLAN

DRAWN BY: G.H.C.	SCALE: 1"=30'
CHECKED BY: K.M.F.	DATE: 07-16/12
PROJECT NO. YK11KS08	DRAWING NO. C.1-03
SHEET 3 OF 19	



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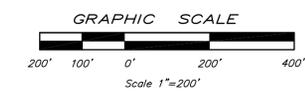
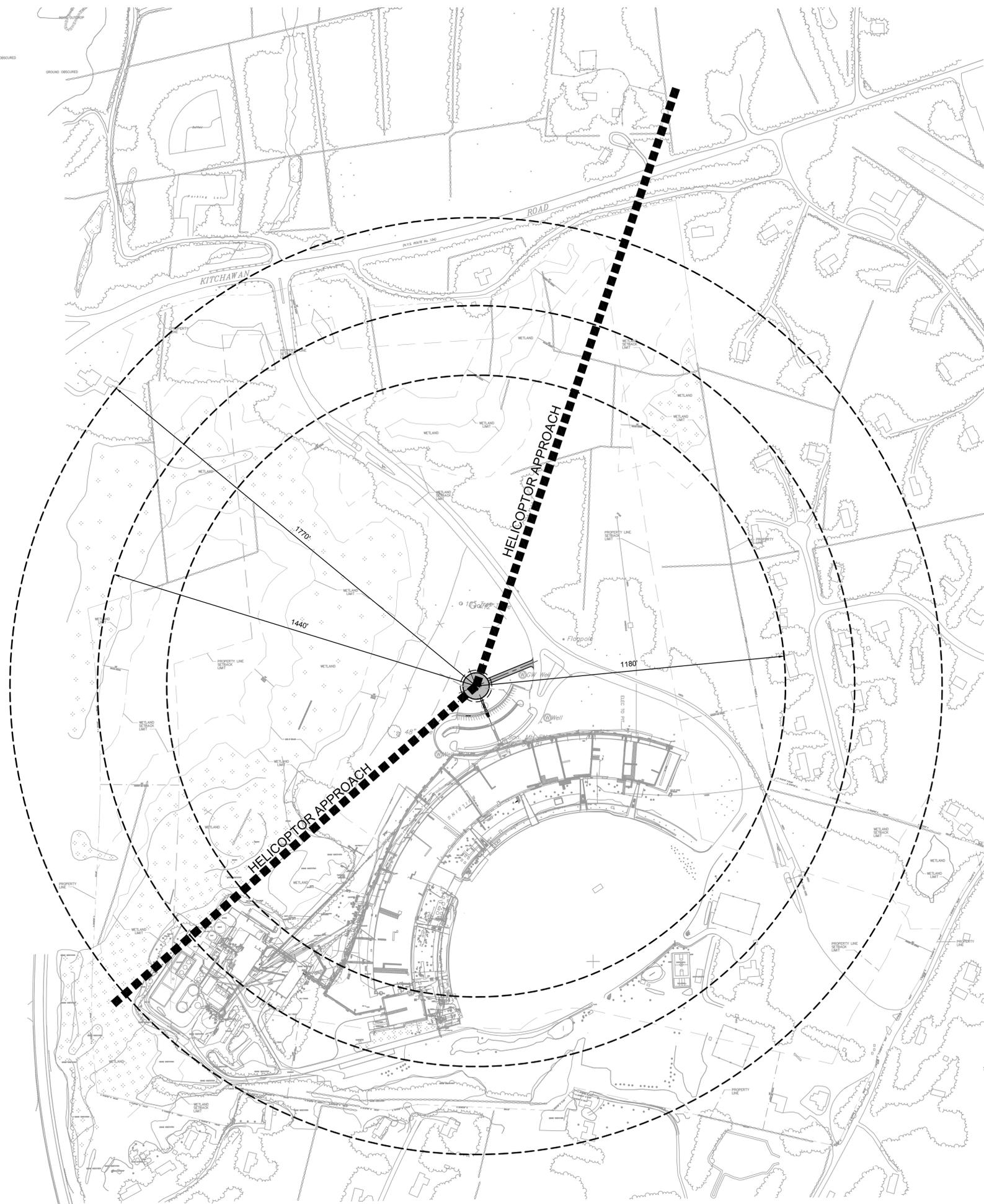
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NO.	DATE	DESCRIPTION	BY

REVISIONS

SHEET TITLE:

BUILDING 801
HELISTOP
CIVIL
HELICOPTOR APPROACH PLAN

DRAWN BY: G.H.C.	SCALE: 1"=200'
CHECKED BY: K.M.F.	DATE: 07-16-12
PROJECT NO. YK11KS08	DRAWING NO. C.1-04
SHEET 4 OF 19	



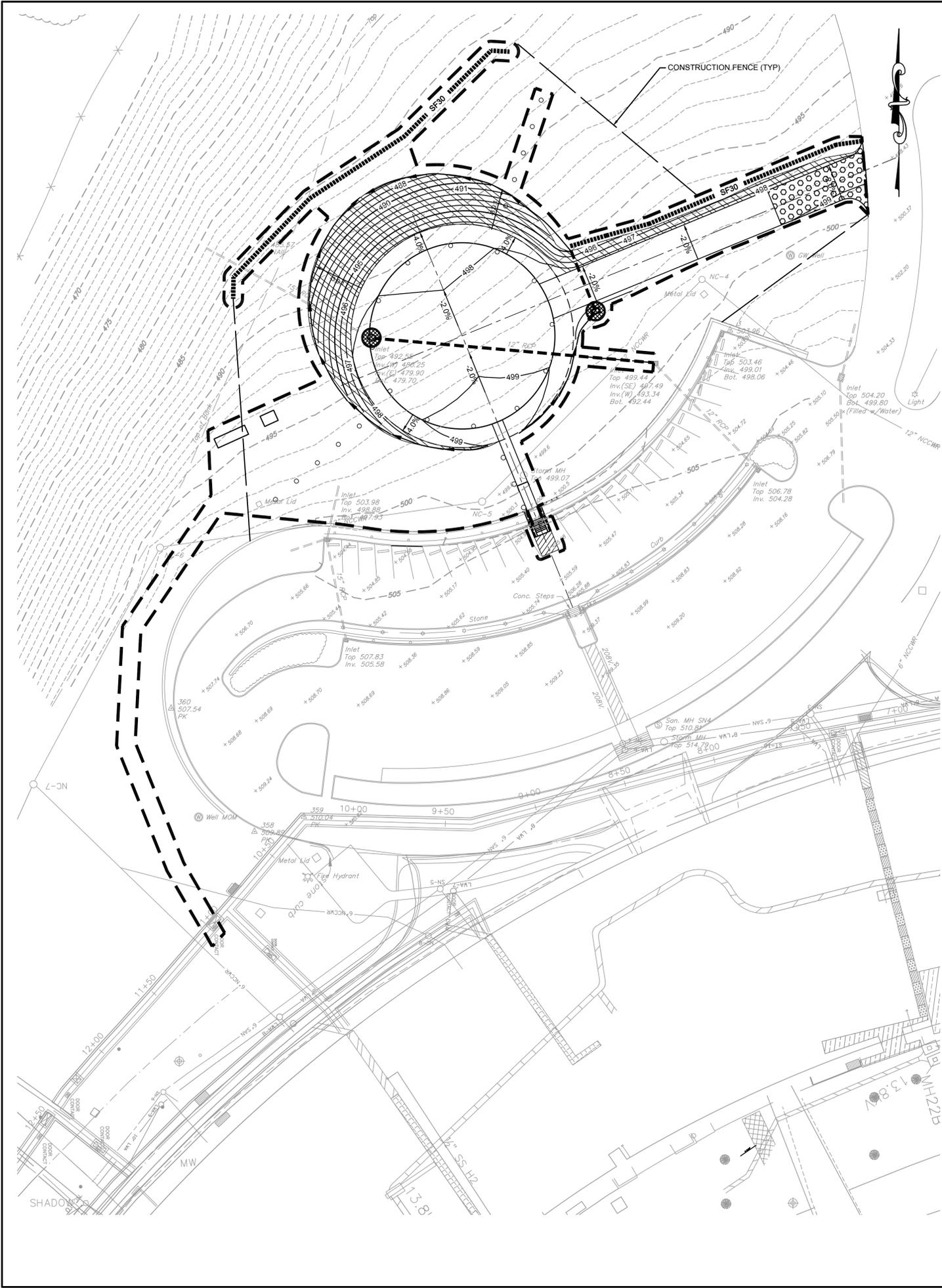
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GENERAL NOTES:

1. THE GENERAL CONTRACTOR SHOULD TAKE INTO ACCOUNT THE LOCAL WEATHER FORECAST PRIOR TO BEGINNING ANY EXCAVATION ACTIVITIES.
2. SOIL MAY NEED TO BE STOCKPILED WHILE CONSTITUENT TESTING TAKES PLACE.
3. THE OPERATOR SHOULD REMOVE FROM THE CONSTRUCTION AREA AND RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES AS APPROVED BY IBM ENVIRONMENTAL AND IN ACCORDANCE WITH THE STATE'S SOLID AND HAZARDOUS WASTE MANAGEMENT REGULATIONS.
4. BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR SHOULD ASSURE THAT EACH SPOIL OR BORROW AREA IS APPROVED BY BOTH IBM ENVIRONMENTAL AND THE APPROPRIATE STATE AGENCY.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS PROPOSED FOR THIS PROJECT. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS.
6. AT THE END OF EACH WORKING DAY, ANY AND ALL SEDIMENT TRACKED ONTO OR CONVEYED ONTO ANY ADJACENT ROADS OR PARKING AREAS MUST BE REMOVED AND RETURNED TO THE CONSTRUCTION AREA. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT SHOULD NEVER BE WASHED OFF THE ROAD SURFACE WITH WATER.
7. ALL VEHICLES THAT HAVE ACCESSED THE SITE MUST CLEAN OFF TIRES, VIA THE ROCK CONSTRUCTION ENTRANCE, IN THE AREA DESIGNATED ON THE PLAN PRIOR TO LEAVING THE SITE.
8. CONSTRUCTION MUST REMAIN WITHIN THE LIMITS OF DISTURBANCE UNTIL THE WORK IS STABILIZED.
9. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
10. ALL GRADING AND EXCAVATION SHOULD BE DONE IN SUCH A WAY AS TO MINIMIZE EROSION. DISTURBED AREAS SHOULD BE KEPT TO A PRACTICAL MINIMUM AND STABILIZED AS QUICKLY AS PRACTICAL.
11. INSTALL EROSION CONTROL BLANKET (NAG SC250 OR EQUAL) ON ALL SLOPES GREATER THAN 3:1.
12. STABILIZE ALL DISTURBED AREAS WITH TEMPORARY SEEDING AND MULCHING IF FOR ANY REASON CONSTRUCTION MUST CEASE.
13. ALL PUMPING OF SEDIMENT-LADEN WATER SHOULD BE THROUGH A PUMPED WATER FILTER BAG DEVICE, OVER STABILIZED AREAS.
14. SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR MUST TAKE IMMEDIATE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, CRUSHED STONE AND OTHER MULCHES SHOULD BE HELD ON SITE TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
15. SEDIMENT REMOVED FROM CONTROL FACILITIES MAY BE USED AS TOPSOIL, IF SUITABLE, OR SHOULD BE PROPERLY DISPOSED PER IBM STANDARDS.
16. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROLS MUST BE PROPERLY MAINTAINED. MAINTENANCE SHOULD INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROLS AFTER EACH STORM EVENT, AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, ETC. MUST BE PERFORMED IMMEDIATELY.
17. TOTAL DISTURBED AREA IS 0.92 ACRES.

TEMPORARY EASC MEASURES

EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED AND STABILIZED AND FUNCTIONAL PRIOR TO GENERAL SITE DISTURBANCE. THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, WHICH WILL BE USED DURING CONSTRUCTION, INCLUDE:

1. ROCK CONSTRUCTION ENTRANCE
2. PUMPED WATER FILTER BAGS
3. EROSION CONTROL BLANKET
4. FILTER FABRIC FENCE REINFORCED BY STAKED STRAW BALES
5. FILTER BAG INLET PROTECTION

MAINTENANCE OF EASC FACILITIES

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COMPLETE CONSTRUCTION, STABILIZATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL FACILITIES AS PER PERMIT REQUIREMENTS OR AUTHORITIES HAVING JURISDICTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE INSPECTED AT LEAST ONCE A WEEK AND AFTER ALL SIGNIFICANT RAINFALLS FOR CONDITION AND INTEGRITY. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. EROSION AND SEDIMENT CONTROLS MUST BE MAINTAINED IN THE FOLLOWING MANNER:

ROCK CONSTRUCTION ENTRANCE:

- A. AASHTO #1 STONE SHOULD BE STOCKPILED AT THE SITE.
- B. IF THE ROCK CONSTRUCTION ENTRANCE DEGRADES (SINKS-IN), ADDITIONAL STONE MUST BE PLACED ON THE ROCK CONSTRUCTION ENTRANCE TO MAINTAIN THE ORIGINAL ROCK CONSTRUCTION ENTRANCE ELEVATION.
- C. ALL STONE BROUGHT ON SITE MUST ORIGINATE FROM AN APPROVED SOURCE.

PUMPED WATER FILTER BAGS:

- A. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL WITH HIGH STRENGTH, DOUBLE STITCHED 1/2" TYPE SEAMS.
- B. GEOTEXTILE MATERIAL SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
- C. REPLACE FILTER BAGS WHEN THEY BECOME ONE-HALF FULL.
- D. PLACE BAGS ON 6" AASHTO #57 STONE IN A WELL-VEGETATED AREA.
- E. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.

EROSION CONTROL BLANKET:

- A. PREPARE (FERTILIZE, SEED, ETC.) SOIL PRIOR TO INSTALLING BLANKET.
- B. BEGIN INSTALLATIONS AT THE TOP OF THE SLOPE TO BE STABILIZED. ANCHOR THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT AFTER STAPLING BLANKET INTO THE TRENCH.
- C. ROLL THE BLANKETS DOWN OR HORIZONTALLY ACROSS SLOPE.
- D. STAPLE THE EDGES OF PARALLEL BLANKETS TO PROVIDE APPROXIMATELY 2" OF OVERLAP.

FILTER FABRIC FENCE REINFORCED BY STAKED STRAW BALES:

- A. EVERY RUNOFF EVENT, ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY.

FILTER BAG INLET PROTECTION:

- A. FILTER BAGS SHALL TRAP ALL PARTICLES LARGER THAN 150 MICRONS.
- B. INSTALL FILTER BAGS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- C. INSPECT INLET FILTER BAGS ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
- D. REMOVE SEDIMENT FROM INLET FILTER BAGS AFTER EACH STORM EVENT, OR WHEN THE DISTANCE BETWEEN THE GRATE AND THE SEDIMENT LEVEL IS REDUCED TO 18".
- E. CLEAN AND/OR REPLACE FILTER BAGS WHEN THE BAG IS ONE-HALF FULL.
- F. REPLACE DAMAGED FILTER BAGS.
- G. COMPLETE NEEDED REPAIRS IMMEDIATELY AFTER THE INSPECTION.

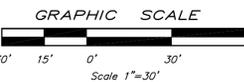
GRASS SEEDING AND SEEDING RESTORATION

RESTORATION CONDITION	TOP SOIL	LIME	BASIC FERTILIZER	STARTER FERTILIZER	SEED MIX & SOWING RATE
TEMPORARY COVER	N/A	100#/1,000 SQ. FT.	N/A	10-6-4@ 40# PER 1,000 SQ. FT.	100% ANNUAL RYEGRASS SOW @ PER 1,000 SQ. FT. MARCH THRU MAY/AUGUST THRU SEPTEMBER
LAWNS	YES	4 TONS/ACRE	10-20-20	10-6-4@ 1,000# 40# PER/ACRE 1,000 SQ. FT.	20% KENTUCKY BLUE GRASS (POA PRATENSIS) 60% TALL FESCUE (FESTUCA ARUNDINACEA) 20% PERENNIAL RYEGRASS (LOLIUM PERENNE) SOW @ PER 1,000 SQ. YDS. MARCH THRU MAY/AUGUST THRU SEPTEMBER
BANKS STEEPER THAN OR EQUAL TO 3 to 1	YES	4 TONS/ACRE	NO	12-18-10@ 18# PER 1,000 SQ. FT. OR 18-24-10 @20# PER 5,000 SQ. FT.	60% PENNLAWN RED FESCUE 40% PERENNIAL RYEGRASS SOW @ PER 1,000 SQ. YDS. MARCH THRU MAY/AUGUST THRU SEPTEMBER

E&SC LEGEND

- LIMIT OF DISTURBANCE
- NPDES PERMIT BOUNDARY
- ==== SF18==== STANDARD SILT FENCE (18" HIGH)
- ==== SF30==== SILT FENCE (30" HIGH) REINFORCED BY STAKED STRAW BALES
- SSF ----- SUPER SILT FENCE
- ==== CFS18==== COMPOST FILTER SOCK (18" DIAMETER)
- FFT9 --- FIBER FILTRATION TUBES (9" DIAMETER)
- ◻ RIPRAP APRON
- ◻ RFO ROCK FILTER OUTLET
- ▨ EROSION CONTROL BLANKET
- +++ FLEXIBLE GROWTH MEDIUM (FGM)
- ◉ FILTER BAG INLET PROTECTION
- ▨ STONE AND CONCRETE BLOCK INLET PROTECTION
- ◻ ROCK CONSTRUCTION ENTRANCE
- UmB MuA SOIL BOUNDARY AND TYPES
- ◻ TOPSOIL STOCKPILE AREA
- DRAINAGE AREA TO SEDIMENT CONTROL FACILITY

NOTE: SYMBOLS INDICATED IN THIS LEGEND MAY NOT APPEAR ON THIS DRAWING.



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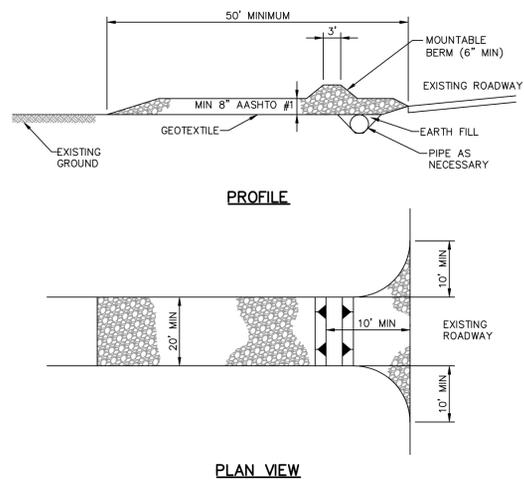
SHEET TITLE:
**BUILDING 801
HELISTOP
EROSION AND SEDIMENT
CONTROL PLAN**

DRAWN BY: G.H.C. SCALE: 1"=30'

CHECKED BY: K.M.F. DATE: 07-18-12

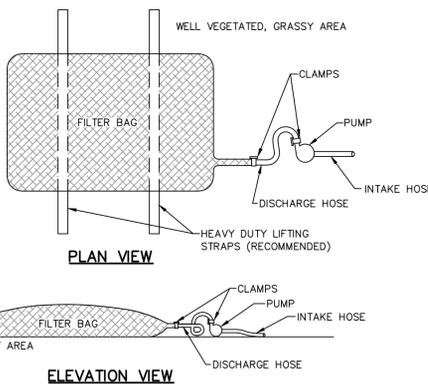
PROJECT NO. YK11KS08 DRAWING NO. C.2-50

SHEET 5 OF 19



- NOTES:**
1. TOPSOIL SHOULD BE REMOVED PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE.
 2. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
 3. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
 4. MOUNTABLE BERM SHOULD BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED. PIPE TO BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
 5. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FEET INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWER, CULVERTS, OR OTHER DRAINAGEWAYS IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE



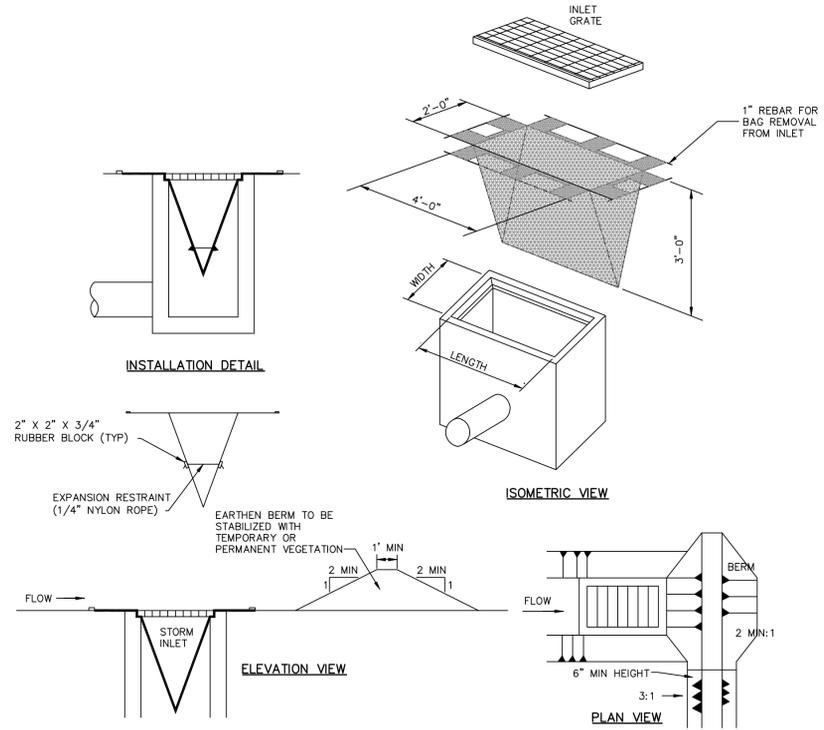
NOTES:

1. LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS MAY BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

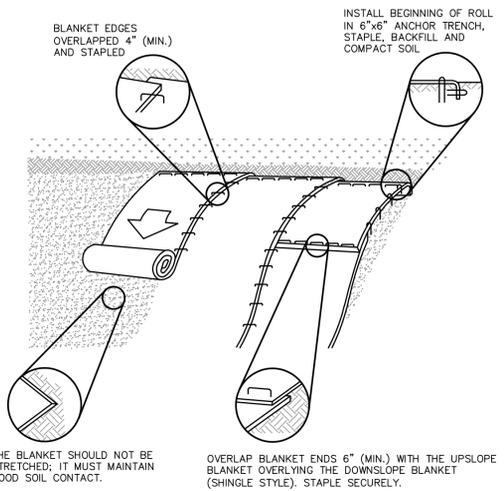
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. IT IS RECOMMENDED THAT BAGS BE PLACED ON STRAPS TO FACILITATE REMOVAL.
3. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
4. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHOULD BE INSTALLED BELOW BAGS LOCATED WITHIN 50 FEET OF RECEIVING STREAM OR WHERE GRASSY AREA IS NOT AVAILABLE A COMPOST BERM OR COMPOST FILTER SOCK SHALL BE PLACED BELOW ANY BAG DISCHARGING TO A SPECIAL PROTECTION SURFACE WATER.
5. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
6. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.
7. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

PUMPED WATER FILTER BAG



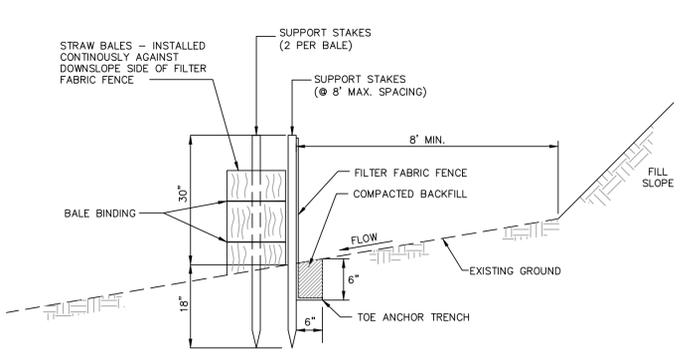
- NOTES:**
1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
 2. INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS REQUIRED FOR ALL INSTALLATIONS.
 3. EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.
 4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
 5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN 1/2 FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
 6. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION - TYPE M INLET



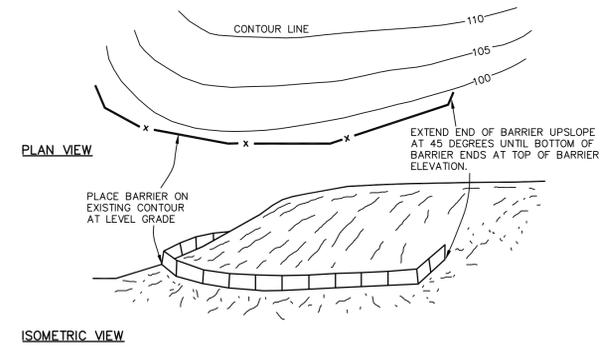
- NOTES:**
1. STARTING AT TOP OF SLOPE, ROLL BLANKETS IN DIRECTION OF WATER FLOW.
 2. PREPARE SEED BED (INCLUDE APPLICATION OF LIME, FERTILIZER, & SEED) PRIOR TO INSTALLATION OF BLANKET.
 3. REFER TO MANUFACTURERS RECOMMENDED STAPLING PATTERN FOR STEEPNESS AND LENGTH OF SLOPE BEING BLANKETED.
 4. SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
 5. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
 6. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOUDS, STICKS, AND GRASS.
 7. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
 8. STAPLING OF THE BLANKET SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 9. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 5 CALENDAR DAYS.

EROSION CONTROL BLANKET INSTALLATION



- NOTES:**
1. AT A MINIMUM, THE FABRIC SHALL HAVE THE FOLLOWING PROPERTIES:
- | FABRIC PROPERTY | MINIMUM ACCEPTABLE VALUE | TEST METHOD |
|-------------------------------------|--------------------------|------------------------|
| GRAB TENSILE STRENGTH (LB) | 120 | ASTM D1682 |
| ELONGATION AT FAILURE (%) | 20% MAX. | ASTM D1682 |
| MULLEN BURST STRENGTH (PSI) | 200 | ASTM D 3786 |
| TRAPEZOIDAL TEAR STRENGTH (LB) | 50 | - |
| PUNCTURE STRENGTH (LB) | 40 | ASTM D 751 (MODIFIED) |
| SLURRY FLOW RATE (GAL/MIN/SF) | 0.3 | - |
| EQUIVALENT OPENING SIZE | 30 | US STD. SIEVE CW-02215 |
| ULTRAVIOLET RADIATION STABILITY (%) | 80 | ASTM G-26 |
2. NOT SUITABLE FOR PROJECTS LASTING LONGER THAN 3 MONTHS UNLESS BALES ARE REPLACED QUARTERLY.
 3. FABRIC SHALL BE 42" MINIMUM.
 4. SILT FENCE MUST BE INSTALLED AT EXISTING LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO MAIN FENCE ALIGNMENT.
 5. SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
 6. ANY FENCE SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
 7. FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.
 8. SUPPORT STAKES SHALL BE SPACED AT 8' MAX. USE 2"x2" WOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE REINFORCED BY STAKED STRAW BALES



SEDIMENT BARRIER ALIGNMENT

108934.0166

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FACILITIES DESIGN
COMPUTER GRAPHICS

FACILITIES ENGINEERING
REARRANGEMENT ENGINEERING
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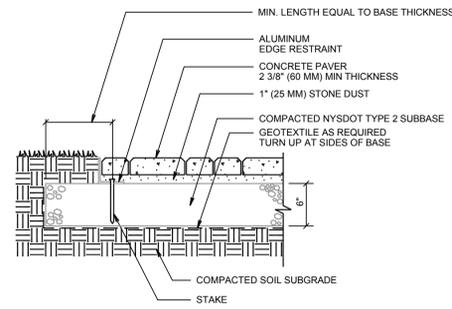
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0	07/16/12	ISSUED FOR BID AND CONSTRUCTION	KMF
-	06/21/12	ISSUED FOR TOWN PERMIT	GHC
-	02/10/12	ISSUED FOR TOWN APPROVAL	GHC

REVISIONS

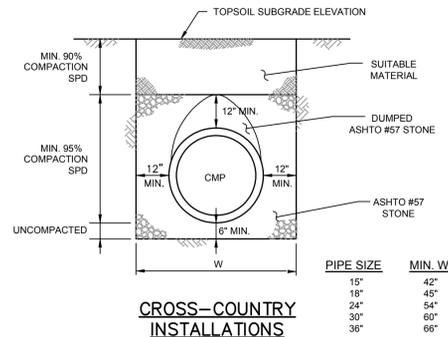
SHEET TITLE:
**BUILDING 801
HELISTOP
EROSION AND SEDIMENT
CONTROL DETAILS**

DRAWN BY: G.H.C.	SCALE: AS NOTED
CHECKED BY: K.M.F.	DATE: 07-16-12
PROJECT NO: YK11KS08	DRAWING NO.
SHEET 6 OF 19	C.2-51



PAVER DETAIL

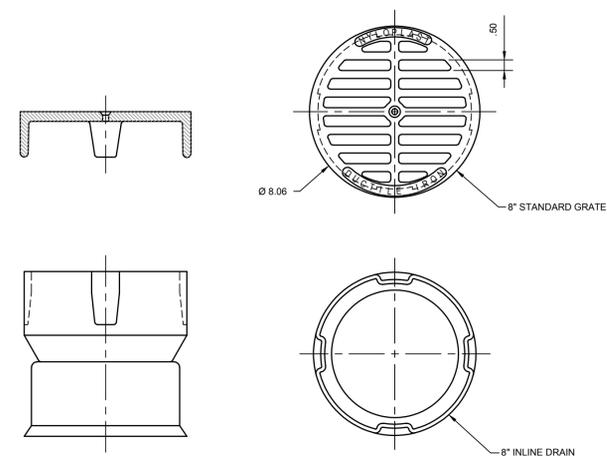
NOTE: ALL PAVERS SHALL BE HANOVER ARCHITECTURAL PRODUCTS, PREST ARCHITECTURAL PAVERS WITH TUDOR FINISH. CONTRACTOR TO SUBMIT SAMPLE PAVER FOR APPROVAL.



CROSS-COUNTRY INSTALLATIONS

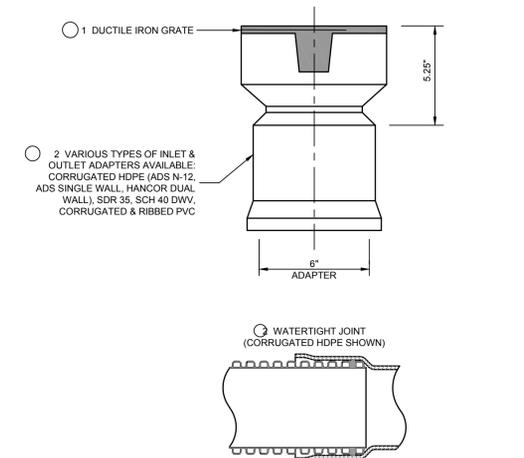
NOTES:
1. SPD IS STANDARD PROTECTOR DENSITY.

TRENCH & BACKFILL FOR CORRUGATED METAL PIPE



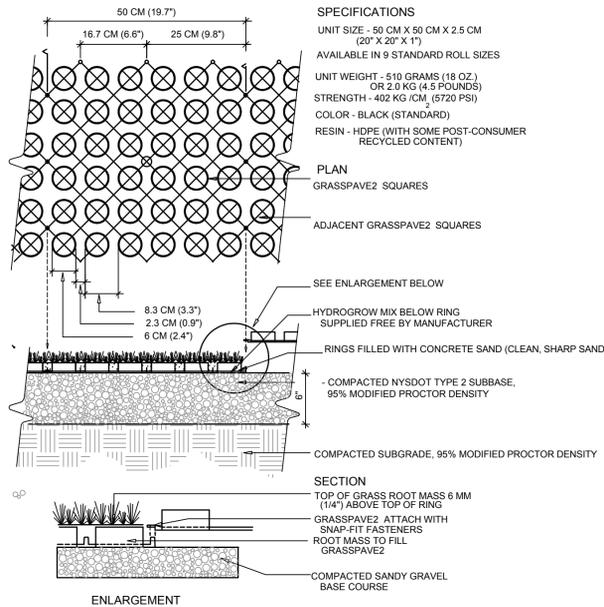
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE
GRATE HAS A LIGHT DUTY RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-038
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36. NONDISCRIMINATION ON THE BASIS OF DISABILITY BY PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES, FINAL BY RULE.

NYLOPLAST 8" STANDARD GRATE ASSEMBLY



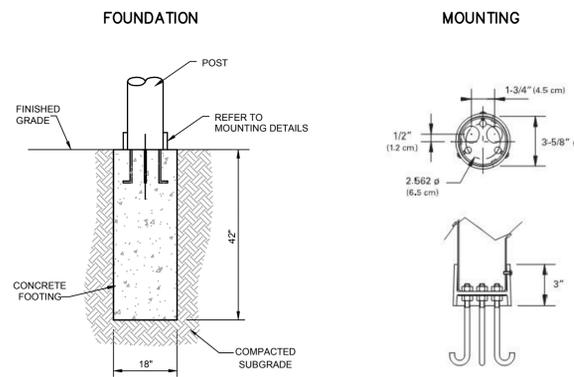
- 1. GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05 WITH THE EXCEPTION OF THE BRONZE GRATE.
- 2. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC

NYLOPLAST 8" INLINE DRAIN



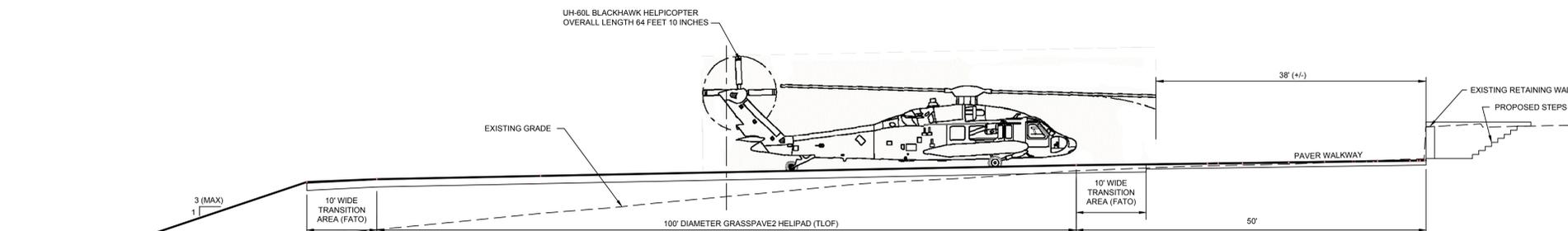
TYPICAL GRASSPAVE2 DETAIL

NOTE: GRASS/PLANT TYPES SHALL BE SPECIFIED BY A LANDSCAPE ARCHITECT OR LANDSCAPE DESIGNER.



NOTES:
1. SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION.
2. REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SPECIFICATIONS.
3. CONCRETE FOOTING SHALL BE 3,000 PSI, 3" SLUMP (MAX), 2%-4% ENTRAINED AIR.

BOLLARD LIGHT DETAIL



SECTION THROUGH NORTH/SOUTH CENTERLINE OF PAD AREA

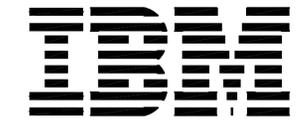
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