PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN

THE WILLOWS AT ASHCOMBE MANSION <u>UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA</u>

GENERAL NOTES:

- PROPOSED DEVELOPMENT IS THE CONSOLIDATION OF TWO EXISTING LOTS INTO ONE PROPOSED LOT (SUBDIVISION), THE PROPERTY KNOWN AS THE ASHCOMBE MANSION, LOCATED AT 1100 GRANTHAM ROAD, IS CURRENTLY ZONED AS LOW-DENSITY RESIDENTIAL (R-1), AND THE PROPERTY WILL BE USED AS A RESORT. THE PROPOSED FACILITY WILL PROVIDE PRIVATE RENTAL FOR OCCASIONS SUCH AS BUSINESS MEETINGS, WEDDINGS, RECEPTIONS, BANQUETS, PRIVATE PARTIES, FUND-RAISING EVENTS, CONFERENCES AND SIMILAR FUNCTIONS, INCLUDING OVERNIGHT GUESTS, ALTHOUGH NOT OTHERWISE OPEN TO THE GENERAL PUBLIC. THERE WILL BE NO CHANGE TO THE EXISTING BUILDING.
- AT A STATED MEETING ON DECEMBER 18, 2019, THE UPPER ALLEN BOARD OF COMMISSIONERS APPROVED THE CONDITIONAL USE OF A RESORT WITH AN ACCESSORY RESORT BREW PUB. SUBJECT TO CONDITIONS FOUND ON SHEET TWO (2) OF THIS PLAN SET. THE USE (S) SHALL COMPLY WITH ALL CONDITIONS ON THE CONDITIONAL USE PERMIT.
- 3. NO LANDS OR FACILITIES ARE PROPOSED FOR DEDICATION TO PUBLIC USE. STORMWATER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER OF THE LOT.
- NOTHING SHALL BE PLACED, PLANTED, SET OR PUT WITHIN THE AREA OF AN EASEMENT THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR CONFLICT WITH THE EASEMENT AGREEMENT.
- 5. NO PARKING IS PERMITTED ALONG ACCESS DRIVES.
- 6. THE FOLLOWING ZONING DISTRICTS ARE LOCATED ADJACENT TO THE SITE: MEDIUM DENSITY RESIDENTIAL (R-2), NEIGHBORHOOD COMMERCIAL (C-1), & PLANNED RESIDENTIAL DEVELOPMENT (PRD)
- STORMWATER MANAGEMENT PLANS APPROVED BY THE TOWNSHIP SHALL BE ON THE SITE THROUGHOUT THE DURATION OF THE REGULATED CONSTRUCTION ACTIVITY. A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND ANY REQUIRED PERMITS SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
- BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED UPON A COMBINATION OF FIELD SURVEY PERFORMED BY ALPHA CONSULTING ENGINEERS, INC., AS OF OCTOBER 29, 2018 AND RECORD DRAWINGS PROVIDED BY J. MICHAEL BRILL & ASSOCIATES, INC.
- 9. UPPER ALLEN TOWNSHIP IS HEREBY GRANTED USE OF THE ACCESS DRIVES TO ACCESS DRAINAGE EASEMENTS FOR OBSERVATION, AND EMERGENCY MAINTENANCE.
- 10. STEEP SLOPES, WETLANDS, AND FLOODPLAIN/FLOODWAY ARE KNOWN TO EXIST ON THIS SITE. NO STRUCTURES ARE TO BE LOCATED WITHIN THESE ENVIRONMENTALLY SENSITIVE AREAS.
- 11. PORTIONS OF THE PROPERTY ARE LOCATED WITHIN THE STEEP SLOPE PROTECTION OVERLAY DISTRICT, ARTICLE IX OF CHAPTER 245. THIS DESIGN IS IN COMPLIANCE WITH ARTICLE IX, PER SECTION 245-9.2 OF THE CODIFIED ORDINANCE OF UPPER ALLEN TOWNSHIP.
- 12. 100-YEAR FLOOD ELEVATION WAS OBTAINED FROM THE PRELIMINARY FEMA FLOOD MAP DATED MAY OF 2019. NO PERMANENT STRUCTURES SHALL BE LOCATED WITHIN THE FLOODPLAIN/FLOODWAY AREA.
- 13. A WETLAND DELINEATION AND PHASE I BOG TURTLE HABITAT ASSESSMENT REPORT WAS PREPARED BY ADVANTAGE ENGINEERS IN MARCH
- 14. A PHASE II BOG TURTLE VISUAL SURVEY REPORT WAS PREPARED BY AMY S. GREENE ENVIRNOMENTAL CONSULTANTS, INC. ON JULY 13.
- 2018. NO BOG TURTLES OR OTHER STATE-LISTED THREATEND OR ENDANGERED SPECIES WERE INDENTIFIED DURING THE SURVEYS.
- 15. EXISTING OVERHEAD UTILITY POLES AND SERVICE LINES SHALL BE RELOCATED AS NECESSARY FOR CONSTRUCTION. RELOCATION OF FACILITIES SHALL BE DONE BY AND COORDINATED WITH THE UTILITY COMPANY WHO OWNS THE FACILITIES.
- 16. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR SANITARY SEWER EXTENSIONS FOR UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY.
- 17. THE PROPOSED WATER SYSTEM DESIGN SHOWN HEREON IS SCHEMATIC ONLY. THE FINAL WATER DESIGN SHALL BE PREPARED BY SUEZ WATER COMPANY. CONSTRUCTION OF THE WATER SYSTEM SHALL COMPLY WIITH THE RULES AND REGULATIONS OF THE WATER COMPANY.
- 18. WITHIN CLEAR SIGHT TRIANGLES SHOWN HEREON, NO FENCE, SIGN OR OTHER ABOVE GRADE STRUCTURE SHALL BE ERECTED, AND NO HEDGE. TREE. SHRUB OR OTHER GROWTH SHALL BE MAINTAINED OR PERMITTED WHICH MAY CAUSE DANGER TO TRAFFIC BY OBSCURING THE VIEW BETWEEN THREE FEET AND NINE FEET ABOVE THE GRADE OF THE STREET OR DRIVEWAY.
- 19. THE SITE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION SITE MEETING WITH THE UPPER ALLEN TOWNSHIP ENGINEER, PUBLIC WORKS AND SEWER DEPARTMENT STAFF, AND THE CUMBERLAND COUNTY CONSERVATION DISTRICT AT LEAST 48 HOURS PRIOR TO
- 20. CONSTRUCTION OF ALL WORK RELATED TO STORM DRAINAGE REQUIRES INSPECTION BY THE TOWNSHIP. THE CONTRACTOR MUST PROVIDE MINIMUM 48 HOURS OF NOTICE TO THE TOWNSHIP BEFORE STARTING WORK.
- 21. AS-BUILT MYLAR PLANS, PAPER PLANS AND ELECTRONIC DATA FILES SHALL BE PROVIDED TO THE TOWNSHIP. ALL DRAWINGS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR LAND SURVEYOR ATTESTING TO THE CORRECTNESS OF THE FACILITY INFORMATION SHOWN, IN ACCORDANCE WITH SECTION 220-13.C(2) OF THE CODIFIED ORDINANCES OF UPPER ALLEN TOWNSHIP.
- 22. ANY ADDITIONAL ACCESSORY USES ON SITE THAT WOULD OCCUPY A NEW BUILDING OR BUILDING ADDITION SHALL BE SUBJECT TO PROVISIONS OF THE SUBDIVISION LAND DEVELOPMENT ORDINANCE AND ALL OTHER APPLICABLE ORDINACES.
- 23. THE APPLICANT SHALL BE IN COMPLIANCE WITH CHAPTER 192 OF THE CODIFIED ORDINACES OF UPPER ALLEN TOWNSHIP PRIOR TO THE INSSUANCE OF A CERTIFICATE OF OCCUPANCY.
- 24. A MINIMUM 6-INCH WATER LINE SHALL BE INSTALLED TO SERVICE THE PROPOSED FIRE HYDRANT.

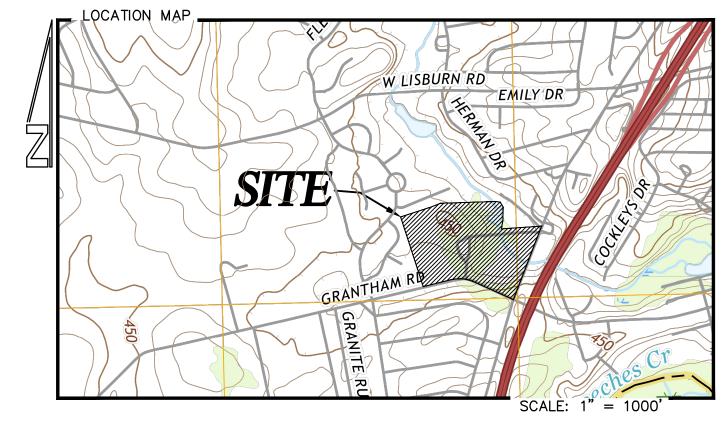
* MODIFICATION ONLY/**DEFERRED ONLY

SIGNATURE OF THE INDIVIDUAL

SIGNATURE AND SEAL OF THE NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ACKNOWLEDGE DEEDS

25. A HIGHWAY OCCUPANCY PERMIT IS REQUIRED PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1945 (P.L. 1242, NO. 428), KNOWN AS

THE FOLLOWING WAIVERS/MODIFICATIONS/DEFERRALS ARE REQUESTED FROM THE UPPER ALLEN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE;



INDEX OF DRAWINGS:

- COVER SHEET
- EXISTING FEATURES/DEMOLITION PLAN
- SITE PLAN
- GRADING/UTILITY PLAN
- LANDSCAPE PLAN
- LIGHTING PLAN
- E/S PLAN
- ROAD PROFILE PLAN
- **ROAD PROFILE PLAN**
- STORMWATER PROFILE PLAN
- MISCELLANEOUS DETAILS STORMWATER DETAILS
- SANITARY SEWER DETAILS
- **EROSION CONTROL DETAILS**

ZONING REQUIREMENTS:

SITE IS ZONED R-1: LOW-DENSITY RESIDENTIAL. MINIMUM LOT AREA: NONE MINIMUM FRONT YARD: 50 FEET MINIMUM SIDE YARD: 30 FEET* MINIMUM REAR YARD: 30 FEET* MINIMUM STREET FRONTAGE: 125 FEET MAXIMUM BUILDING COVERAGE: 30% MAXIMUM IMPERVIOUS COVERAGE: 30%

MAXIMUM PRINCIPAL BUILDING HEIGHT: 35 FEET

SITE DATA:

- APPLICANT: DEBORAH MYERS WELSH ASHCOMBE MANSION PROPERTY, LLC 2850 FORD FARM ROAD MECHANICSBURG, PA 17055-0298 PHONE: (717) 497-318
- 2. TOTAL SITE AREA: LOT #1 = 6.32 AC (GROSS AREA) 0.22 AC (R/W AREA) = 6.10 AC LOT #2 = 16.17 AC (GROSS AREA) - 0.95 AC (R/W AREA) = 15.22 AC TOTAL = 22.49 AC (GROSS AREA) - 1.17 AC (R/W AREA) = 21.32 AC
- 3. SITE IS ZONED R-1: LOW-DENSITY RESIDENTIAL.
- 4. TAX REFERENCE: 42-11-0276-29A (LOT #1) 42-11-0276-29B (LOT #2)
- PROPOSED USES: RESORT.
- 6. CURRENT SITE ADDRESSES ARE 1100 GRANTHAM ROAD, MECHANICSBURG, PA 17055
- 7. EXISTING BUILDING COVERAGE: 0.17 AC/21.32 AC = 0.80%
- 8. EXISTING IMPERVIOUS COVERAGE: 0.73 AC/21.32 AC = 3.40%
- 9. PROPOSED IMPERVIOUS COVERAGE: 4.04 AC/21.32 AC = 18.90%
- 10. PROPOSED LANDSCAPED AREA: 82.18%
- 11. REQUIRED AND PROPOSED OFF-STREET PARKING: (AS OF THE DATE OF THIS PLAN)

 - 1 SPACE PER GUEST ROOM
 - 1 SPACE FOR EACH EMPLOYEE ON THE LARGEST SHIFT 1 SPACE FOR EACH 400 SQUARE FEET OF PUBLIC MEETING AREA

REQUIRED PARKING CALCULATIONS:

RESORT: 31 GUEST ROOMS, 25 EMPLOYEES, 13,800 S.F. OF MEETING SPACE 31 + 25 + (13.800 = 35) = 91

EXISTING PARKING SPACES: 0 SPACES REQUIRED SPACES:

PROPOSED NEW SPACES: 155 SPACES TOTAL SPACES PROVIDED: 155 SPACES

- 12. EXISTING WATER SUPPLY: PUBLIC (SUEZ WATER PENNSYLVANIA INC)
- 13. EXISTING SEWAGE DISPOSAL: PUBLIC (UPPER ALLEN TOWNSHIP)

GROSS FLOOR AREA:

COTTAGES (26): 1ST FL. CONDITIONED: 10.987 SF 2ND FL. CONDITIONED: 1,225 SF SPA: 800 SF UNCONDITIONED: 6,768 SF

MANSION ADDITION:

CONDITIONED: 5,178 SF 1ST FL. UNCONDITIONED: 12.094 SF CRAWLSPACE/BASEMENT: 4,099 SF

THE "STATE HIGHWAY LAW" BEFORE DRIVEWAY ACCESS TO A STATE HIGHWAY IS PERMITTED.

CONDITIONALLY APPROVED BY THE BOARD OF COMMISSIONERS OF UPPER

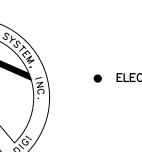
	WAIVER SECTION	DESCRIPTION	DATE OF WAIVER/ MODIFICATION REQUEST	DATE OF WAIVER/ MODIFICATION/DEFERRAL APPROVAL
*	220-9.A	PERTAINING TO PROCESS A COMBINED PRELIMINARY AND FINAL PLAN.	1/17/20	5/20/20
	220-16.B.(3)	PERTAINING TO LOCATION OF SIDEWALK	1/17/20	5/20/20
*	220-16.A(1)	PERTAINING TO CURBING ALONG ACCESS DRIVES AND PARKING	1/17/20	5/20/20
**	220-16.A.(2)	PERTAINING TO INSTALLATION OF CURBING ALONG GETTYSBURG PIKE AND GRANTHAM ROAD	1/17/20	5/20/20

CHAIRMAN

DATE: **JANUARY 17. 2020**

REVISIONS: MARCH 10, 2020 **APRIL 23, 2020** MAY 11, 2020 OCTOBER 23, 2020

UTILITY LISTING FOR UPPER ALLEN TOWNSHIP:



THIS PLAN REVIEWED BY THE TOWNSHIP ENGINEER OF UPPER ALLEN

THIS ______ DAY OF, ______ 2020.

PA ONE-CALL FOR THIS PROJECT:

SERIAL NUMBER: 20181801694

APPLICANT/OWNER

COMCAST CABLE COMMUNICATIONS INC.

SANITARY SEWER TOWNSHIP OF UPPER ALLEN 4601 SMITH ST. HARRISBURG, PA 17109 CONTACT: MICHAEL SWEIGARD TELEPHONE: 717-651-1915 EMAIL: mike_sweigard@cable.comcast.com

 ELECTRIC PPL ELECTRIC UTILITIES 503 NEW MARKET ST. WILKES BARRE, PA 18702 CONTACT: MARK SANTAYANA

EMAIL: mcsantayana@pplweb.com UGI UTILITIES INC. 1301 AIP DR. MIDDLETOWN, PA 17057-5987

CONTACT: CHESTER WENTZ TELEPHONE: 717-930-0223

EMAIL: cwentz@ugi.com

MECHANICSBURG, PA 17055 CONTACT: KODI HOCKENBERRY TELEPHONE: 717-766-0756 EMAIL: khockenberry@uatwp.org TELEPHONE

VERIZON PENNSYLVANIA LLC 1026 HAY ST PITTSBURGH, PA 15221 CONTACT : DEBORAH BARUM EMAIL: deborah.d.delia@verizon.com

100 GETTYSBURG PIKE

 WATER SERVICE 4211 E PARK CIR

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND

THIS ______ DAY OF, ______ 2020.

SUEZ WATER PENNSYLVANIA INC HARRISBURG, PA 17111 CONTACT: NAT SHEFFER TELEPHONE: 717-564-3664 EMAIL: nathaniel.sheffer@suez.com

STORMWATER MANAGEMENT PLAN CERTIFICATE:	CUMBERLAND COUNTY PLANNING DEPARTMENT REVIEW STATEMENT:
IT IS HEREBY CERTIFIED THAT THE STORMWATER MANAGEMENT FACILITIES AND BMP'S ARE PERMANENT FIXTURES AND CANNOT BE ALTERED OR REMOVED UNLESS A REVISED PLAN IS APPROVED BY UPPER ALLEN TOWNSHIP.	REVIEWED ON <u>FEBRUARY 10, 2020</u> BY THE CUMBERLAND COUNTY PLAI DEPARTMENT.

FOR CUMBERLAND COUNTY

RECORDED IN INSTRUMENT #

DIRECTOR OF PLANNING

ALPHA CONSULTING ENGINEERS, INC

APPLICANT/DEVELOPER

1100 GRANTHAM ROAD

PHONE: (717) 497-3187

MECHANICSBURG, PA 17055

PLANNING • ENGINEERING • SURVEYING 115 LIMEKILN RD, P.O. BOX 'G' NEW CUMBERLAND, PA 17070 PHONE: (717) 770 - 2500 FAX: (717) 770 - 2400 WWW.ALPHACEI.COM

ASHCOMBE MANSION PROPERTY. LLC

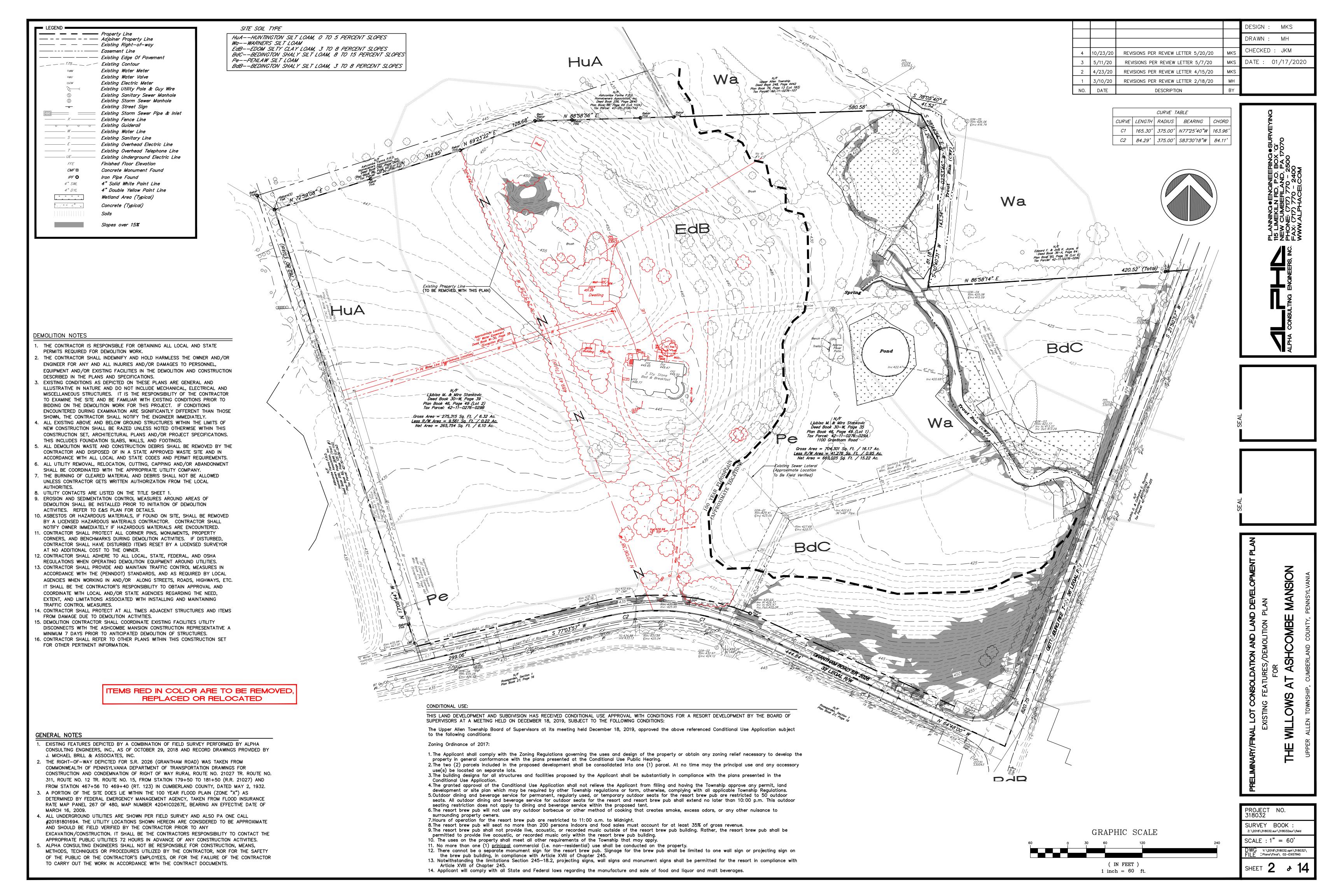
DEBORAH MYERS WELSH, PRESIDENT

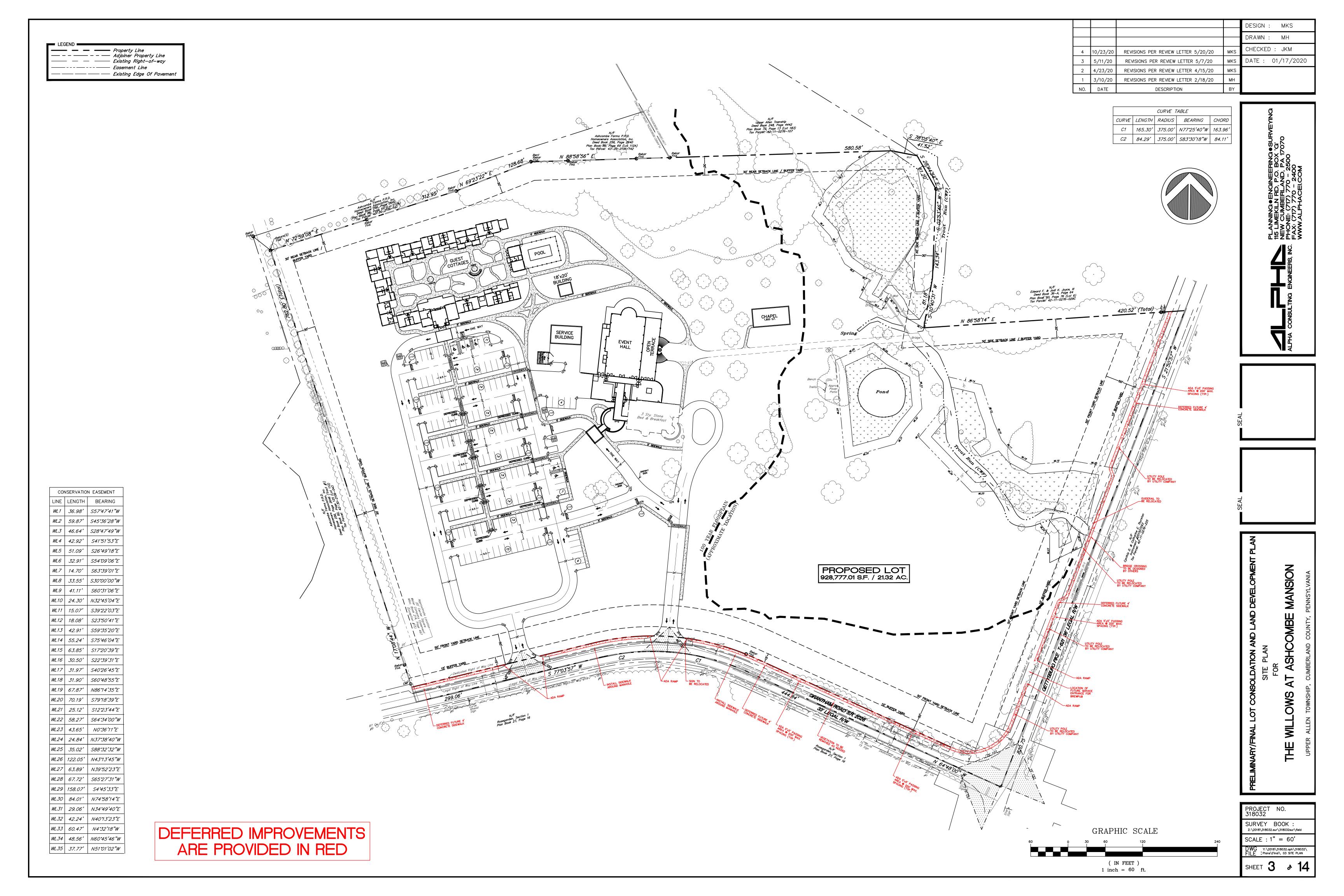
COMMONWEALTH OF PENNSYLVANIA	ALLEN	TOWNSHIP			
COUNTY OF	THIS	20	DAY OF,	MAY	2020.
ON THIS, THE DAY OF, 2020, BEFORE ME, THE UNDERSIGNED, PERSONALLY APPEARED*,BEING,	THE CO	NDITIONS O	F APPROVAL WE	RE SATISFIED	
WHO BEING DULY SWORN ACCORDING TO LAW, DISPOSES AND SAYS THAT HE IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN THEREOF WAS MADE AT HIS DIRECTION, THAT IT ACKNOWLEDGES THE SAME TO BE HIS ACT AND PLAN AND DESIRES THE SAME TO BE RECORDED, AND THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY (EXCEPTING THOSE AREAS LABELED "NOT FOR DEDICATION") ARE HEREBY DEDICATED TO THE PUBLIC USE.	THIS		DAY OF,		2020.
	CHAIRM	AN			
*	OF OPET	100			

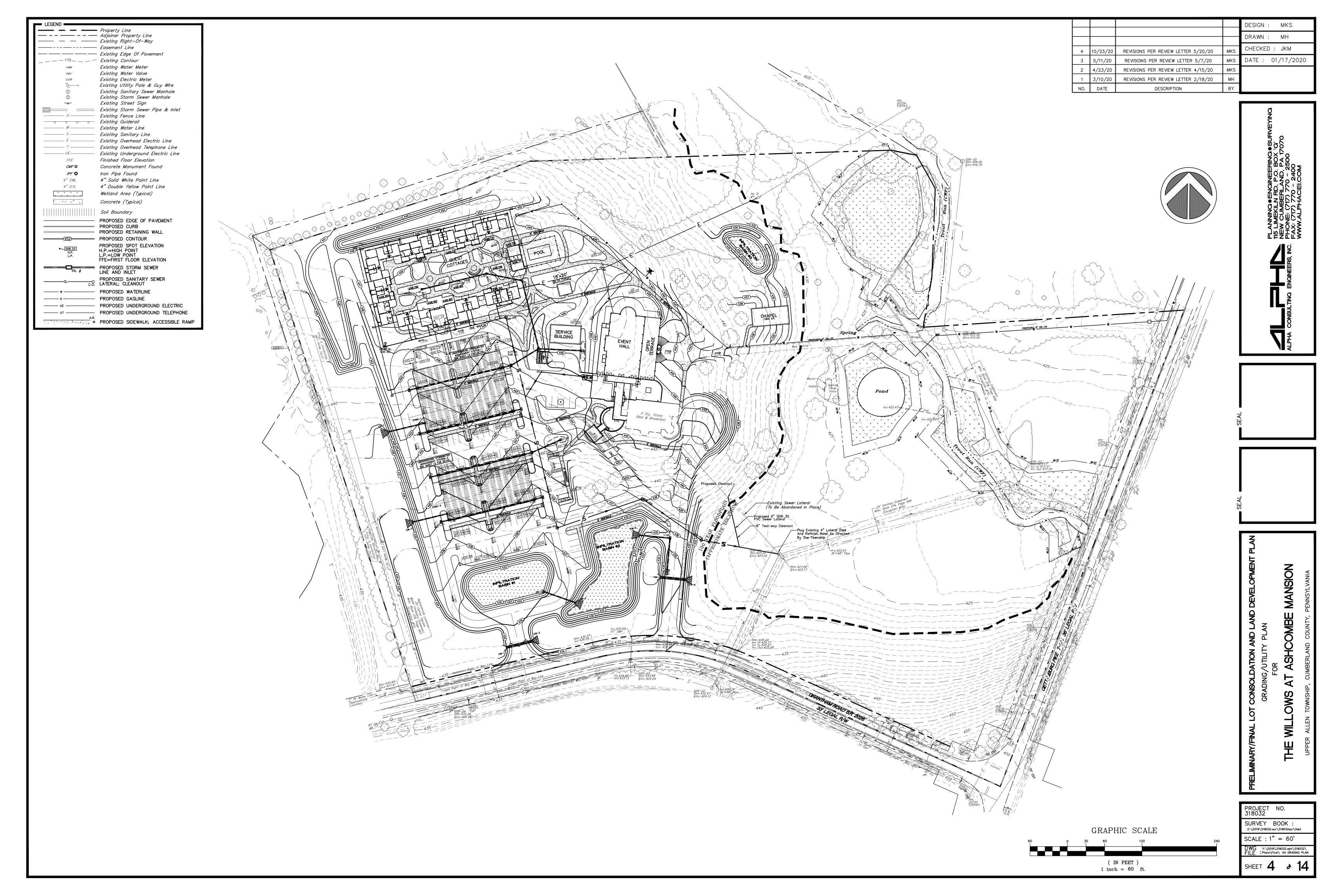
THIS PLAN RECOMMENDED FOR APPROVAL BY THE UPPER ALLEN TOWNSHIP PLANNING COMMISSION THIS <u>27</u> DAY OF, <u>APRIL</u> 2020.

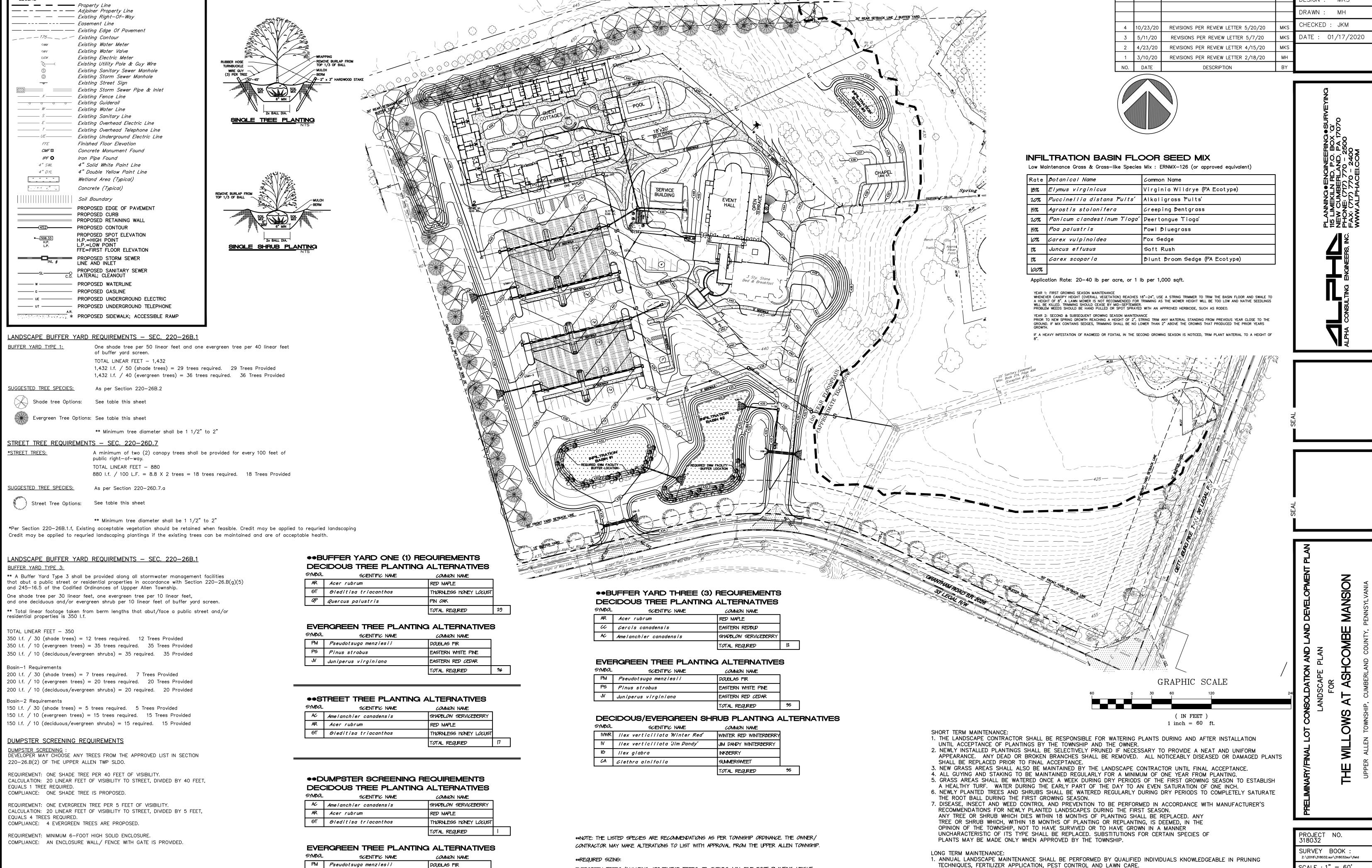
. JOHN K. MURPHY, P.L.S., HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, OR REGISTERED ENGINEER IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY IN AREA OF DEVELOPMENT COMPLETED BY ME ON THAT ALL THE MONUMENTS SHOWN THEREON ACTUALLY EXIST; AND THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN. . JOHN K. MURPHY, P.E., ON_____ HAVE REVIEWED AND HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE UPPER ALLEN TOWNSHIP STORMWATER MANAGEMENT ORDINANCE, AND THAT ACCORDING TO GEOLOGIC MAPPING. THIS SITE IS NOT DIRECTLY UNDERLAIN

HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN, AND THAT ALL ELEMENTS OF THE PLAN ARE IN CONFORMITY WITH TOWNSHIP CODE AND ANY APPLICABLE STATE REGULATIONS.









EVERGREEN TREES (INCLUDING ARBORVITAE TREES OR SHRUBS: MIN. FIVE-FOOT PLANTING HEIGHT

DECIDUOUS/EVERGREEN SHRUBS (MIN. EIGHTEEN-INCH PLANTING HEIGHT, REACHING A MINIMUM OF

30-INCHES WITHIN TWO YEARS. ALL SHRUBS MUST HAVE A MINIMUM SPREAD OF 12 INCHES TO 15

DECIDUOUS TREES (MIN. TWO-INCH CALIPER AND SIX-FOOT PLANTING HEIGHT

WHEN PLANTED.

PS | Pinus strobus

Juniperus virginiana

EASTERN WHITE PINE

EASTERN RED CEDAR

TOTAL REQURIED

SCALE : 1'' = 60'

2. THE OWNER SHALL BE RESPONSIBLE FOR REGULAR MOWING OF ALL GRASS AREAS.

IN KIND BY THE OWNER WITHIN A SIX MONTH PERIOD.

MONTHS FOLLOWING TOWNSHIP INSPECTION / APPROVAL.

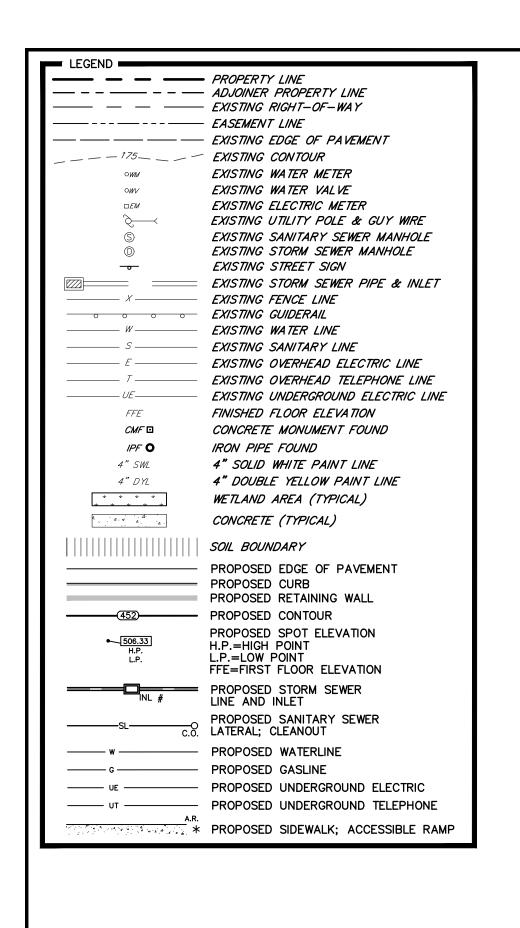
3. ANY PLANTINGS SHOWN ON THE APPROVED PLAN WHICH DOES NOT SURVIVE OR IS DAMAGED SHALL BE REPLACED

4. THE APPLICANT GUARANTEES THAT ALL REQUIRED LANDSCAPE IMPROVEMENTS SHALL BE MAINTAINED IN A HEALTHY

AND SOUND CONDITION, OR OTHERWISE BE REPLACED BY EQUIVALENT IMPROVEMENTS, FOR A PERIOD OF TWENTY-FOUR

Y: \2018\318032.aph\318032\ : Plans\Final\ 05 LANDSCAPE PL

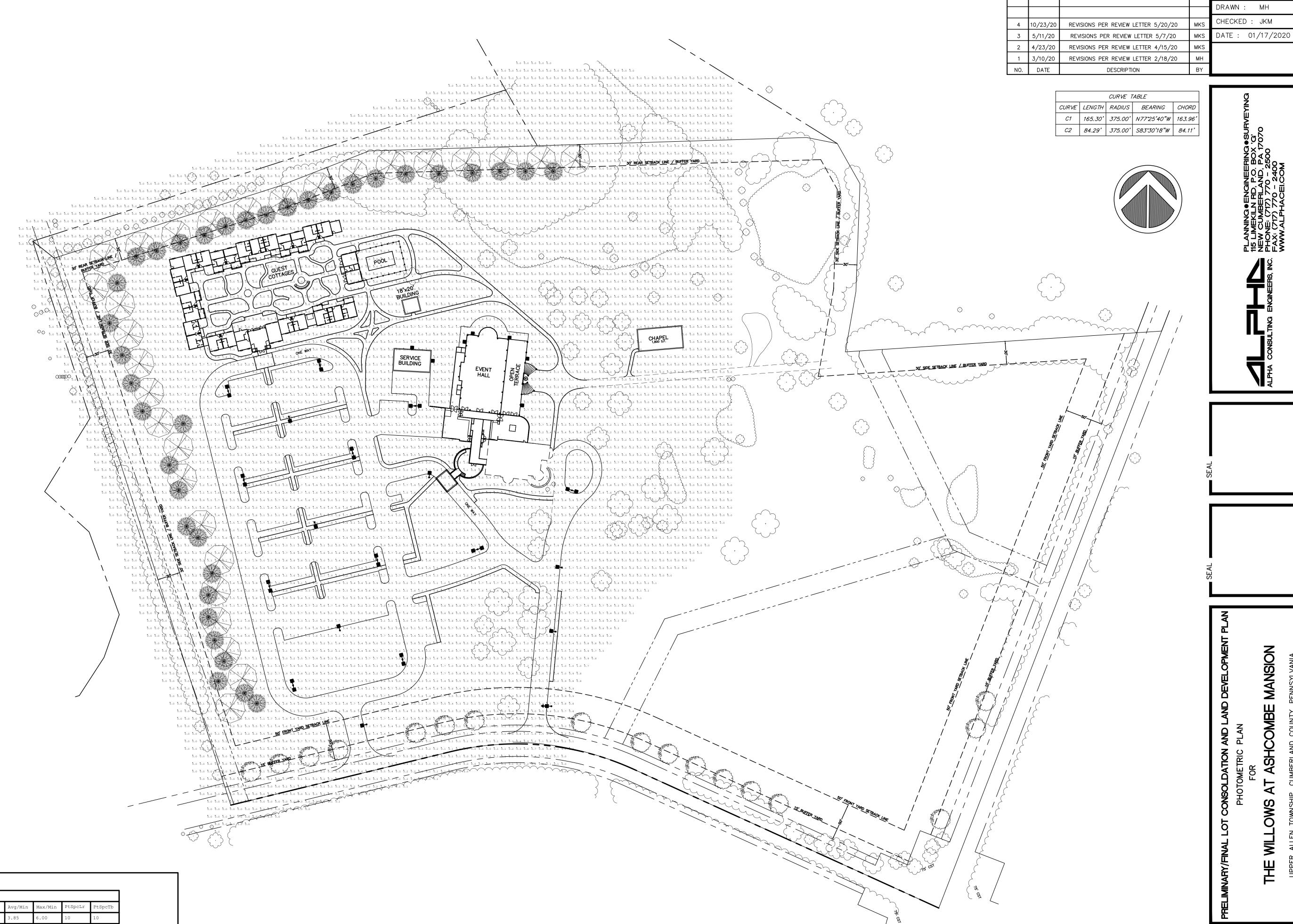
SHEET 5



NOTE:

- 1. THE STYLE OF LIGHTS AND THEIR DETAILS SHALL COMPLY WITH SECTION 245—16.10, 245—17.8 AND 220—32 OF THE CODIFIED ORDINANCES OF UPPER ALLEN TOWNSHIP.

 2. THE MAXIMUM AVERAGE FOOTCANDLES CANNOT EXCEED (6)
- 2. THE MAXIMUM AVERAGE FOOTCANDLES CANNOT EXCEED (6) FOOTCANDLES.



	PARKING A	ND DRIVES		Fc	2.31	5.4	0.6	3.85	6.00	10	10	
Luminaire Sch	nedule											
WLS11911 TF	WLS11911 THE WILLOWS AT ASHCOMBE MANSION UPPER ALLEN TOWNSHIP, PA PM: HOLLY PLEASE EMAIL US FOR PRICING AT HOLLY@WLSLIGHTING.COM											
Symbol	Qty	Label	Lum. Lumens	LLF	Descript	tion						Lum. Watts
	11	А	16897	0.980	WLS-OSQ	-A-5SH-K-	40K 25'	MOUNTING	HEIGHT			130
• - 7//	7	В	16897	0.980	WLS-OSQ	-A-5SH-K-	40K 25'	MOUNTING	HEIGHT			130
•	1	С	13389	0.980	WLS-OSQ	-A-3ME-K-	40K-BLS	25' MOUNT	'ING HEIGH'	Г		130
	7	E	4270	0.980	WLS-XSP	W-B-WM-4M	E-4L-40K	15' MOUN	TING HEIG	НТ		31

GRAPHIC SCALE

60 0 30 60 120 240

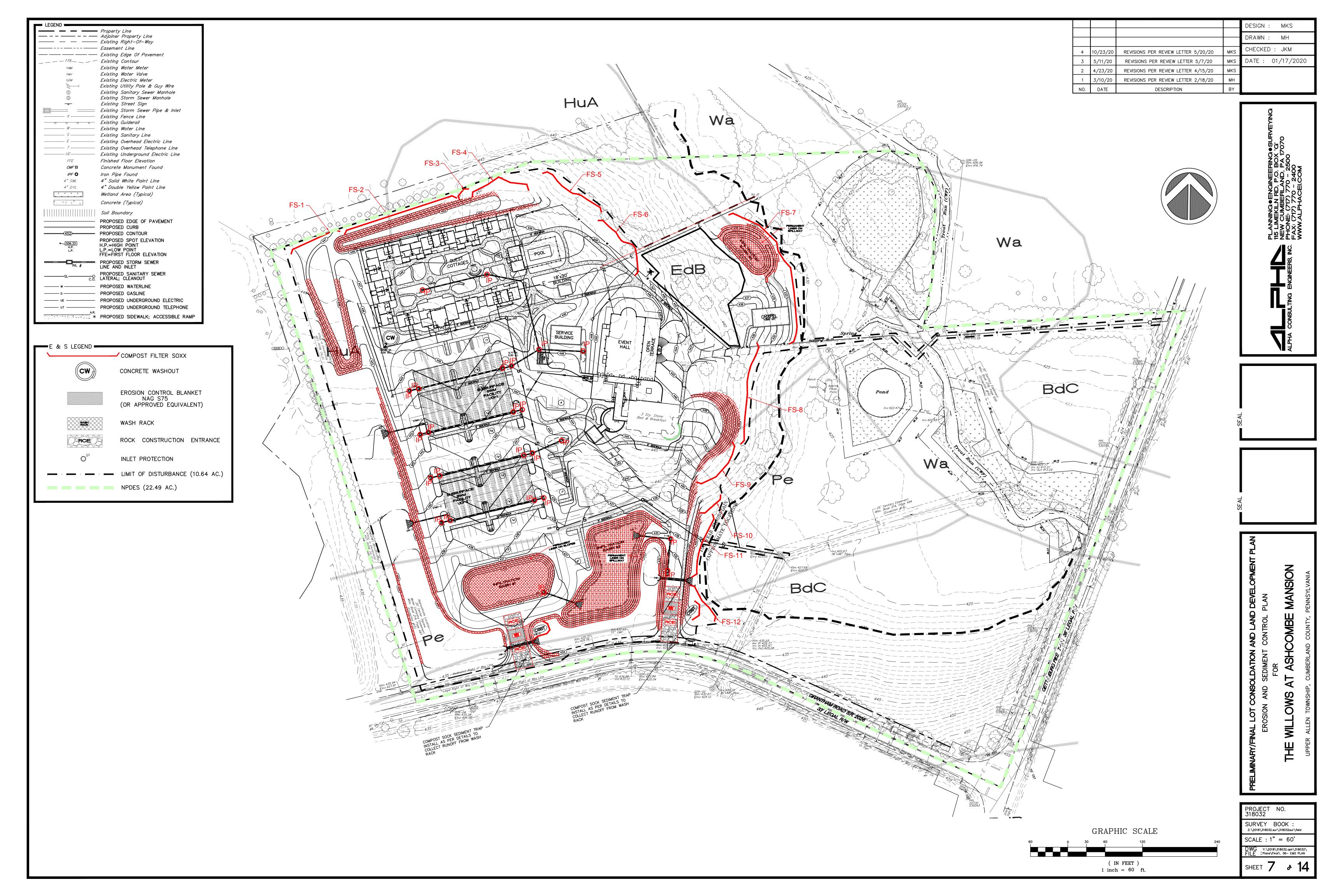
(IN FEET)
1 inch = 60 ft.

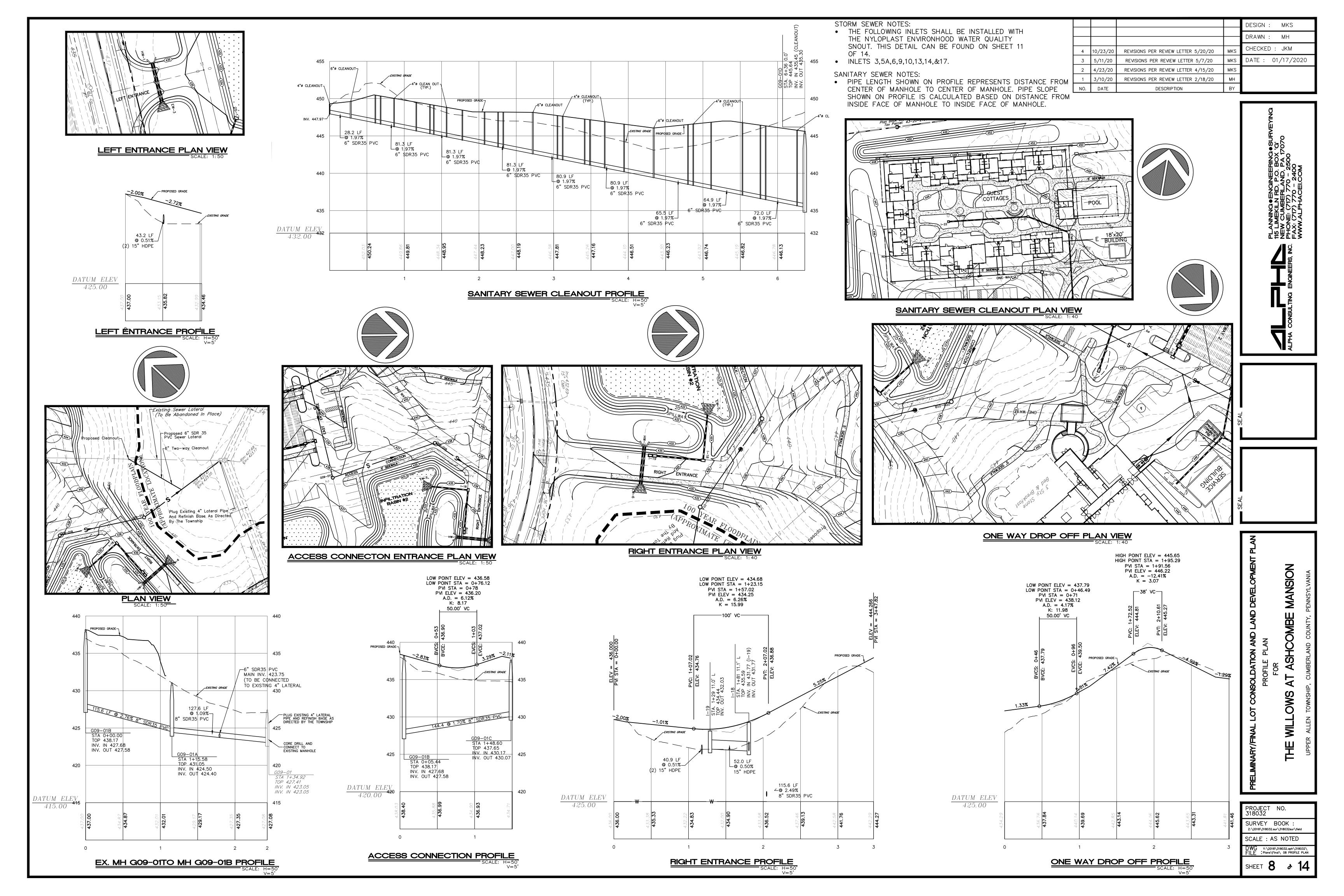
SURVEY BOOK : z: \2018\318032.sur\318032sur\field

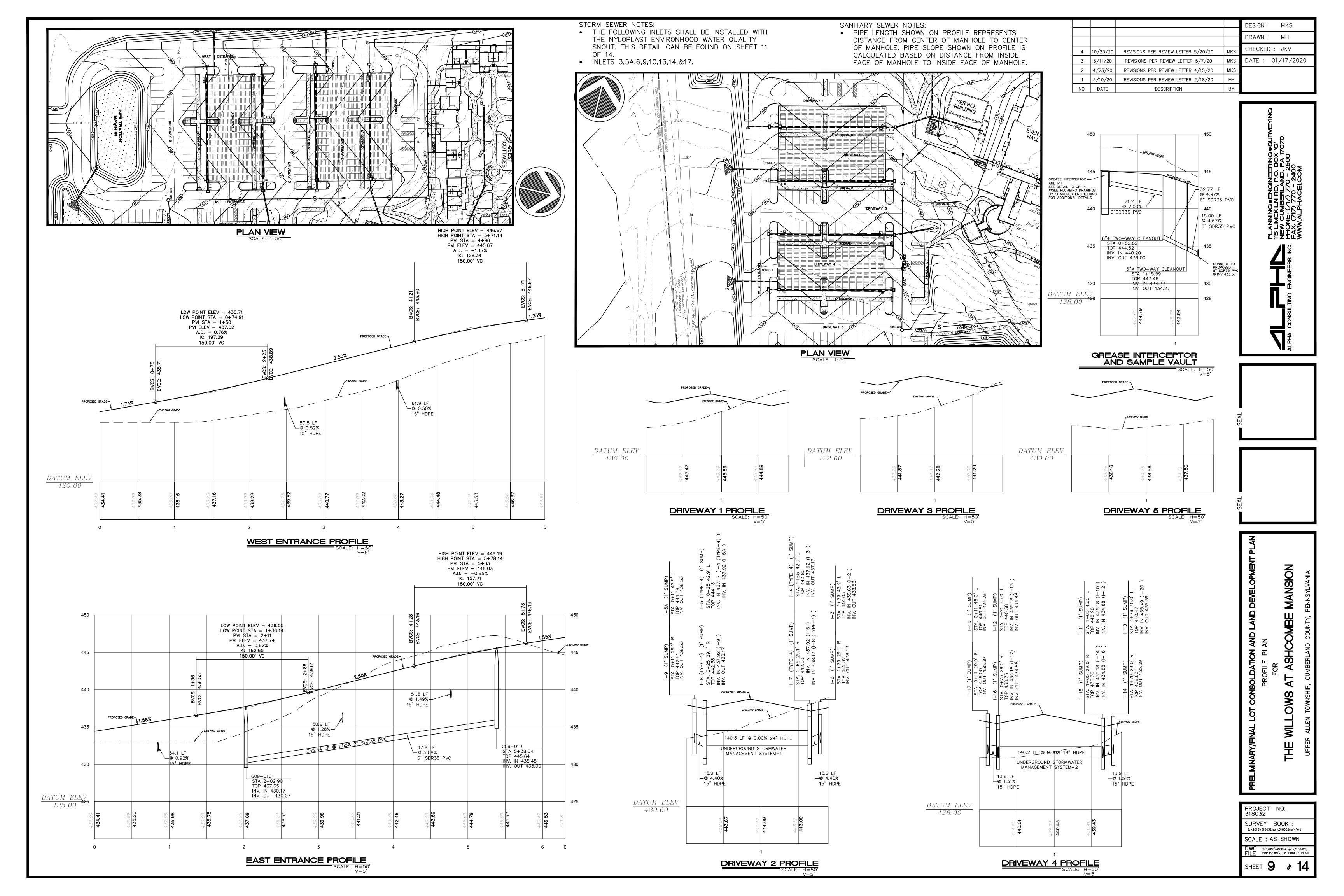
SCALE: 1" = 60

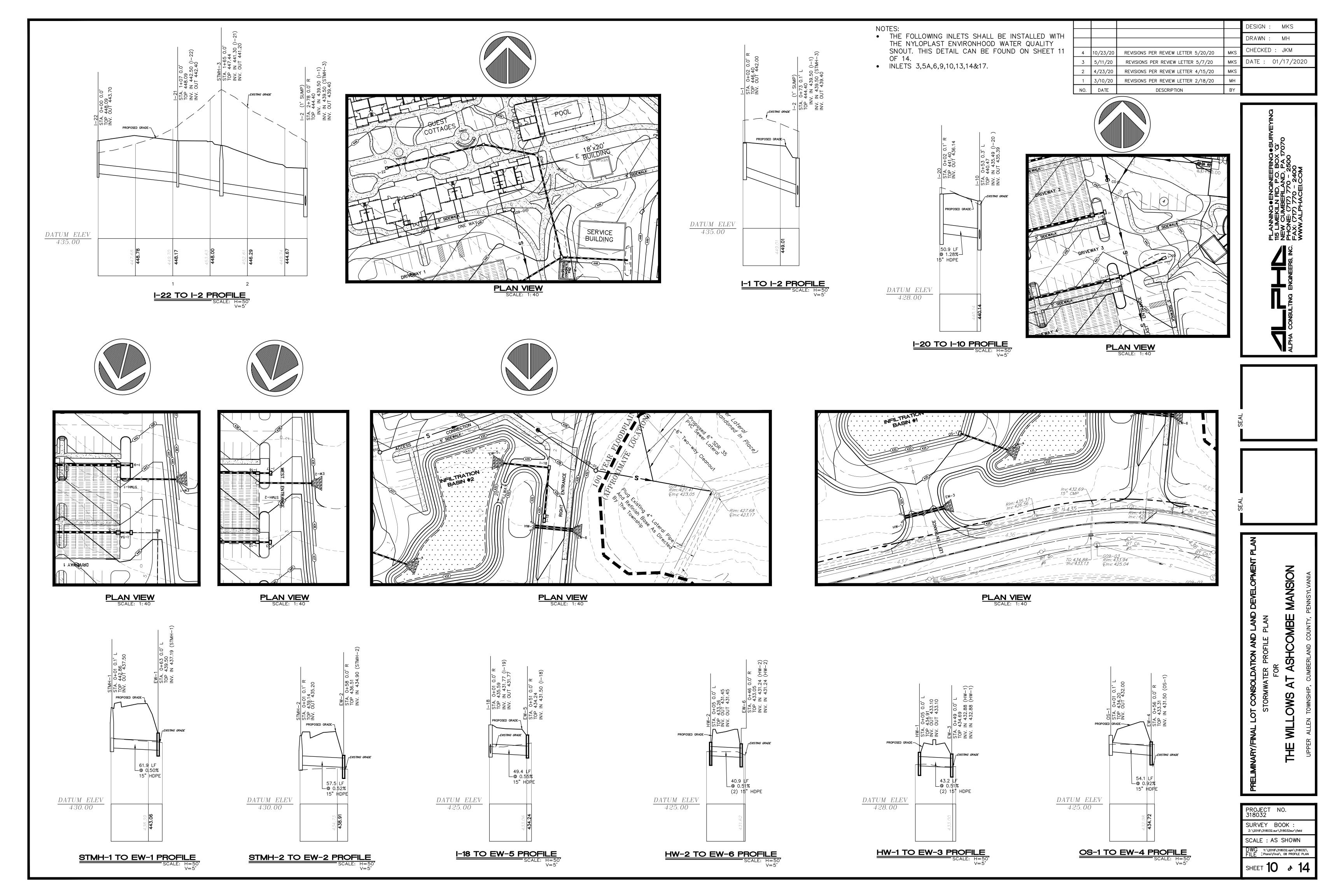
) WG Y:\2018\318032.aph\318032\ || E :Plans\Final\ 07 PHOTOMETRIC PLAN

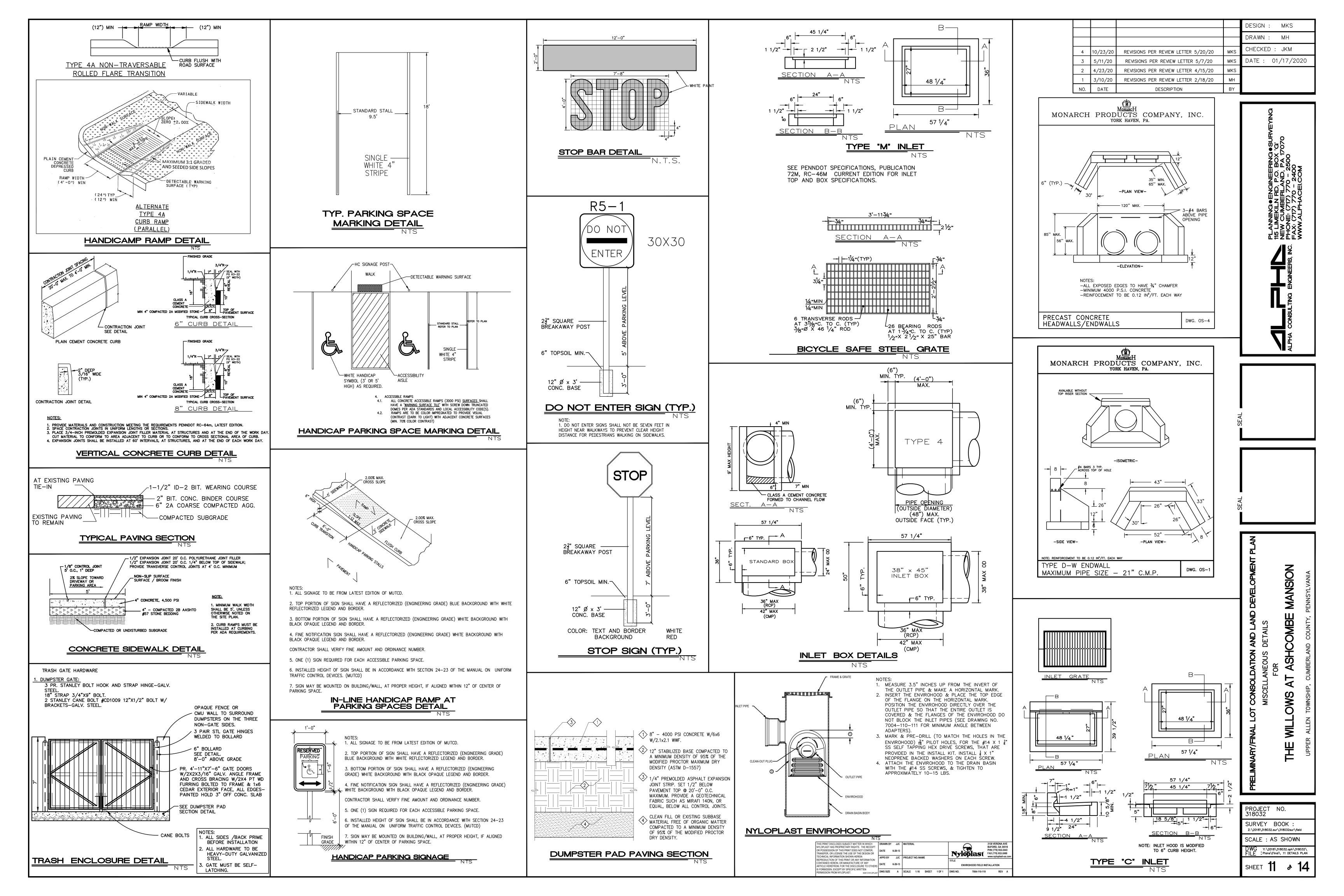
SHEET 6 & 14

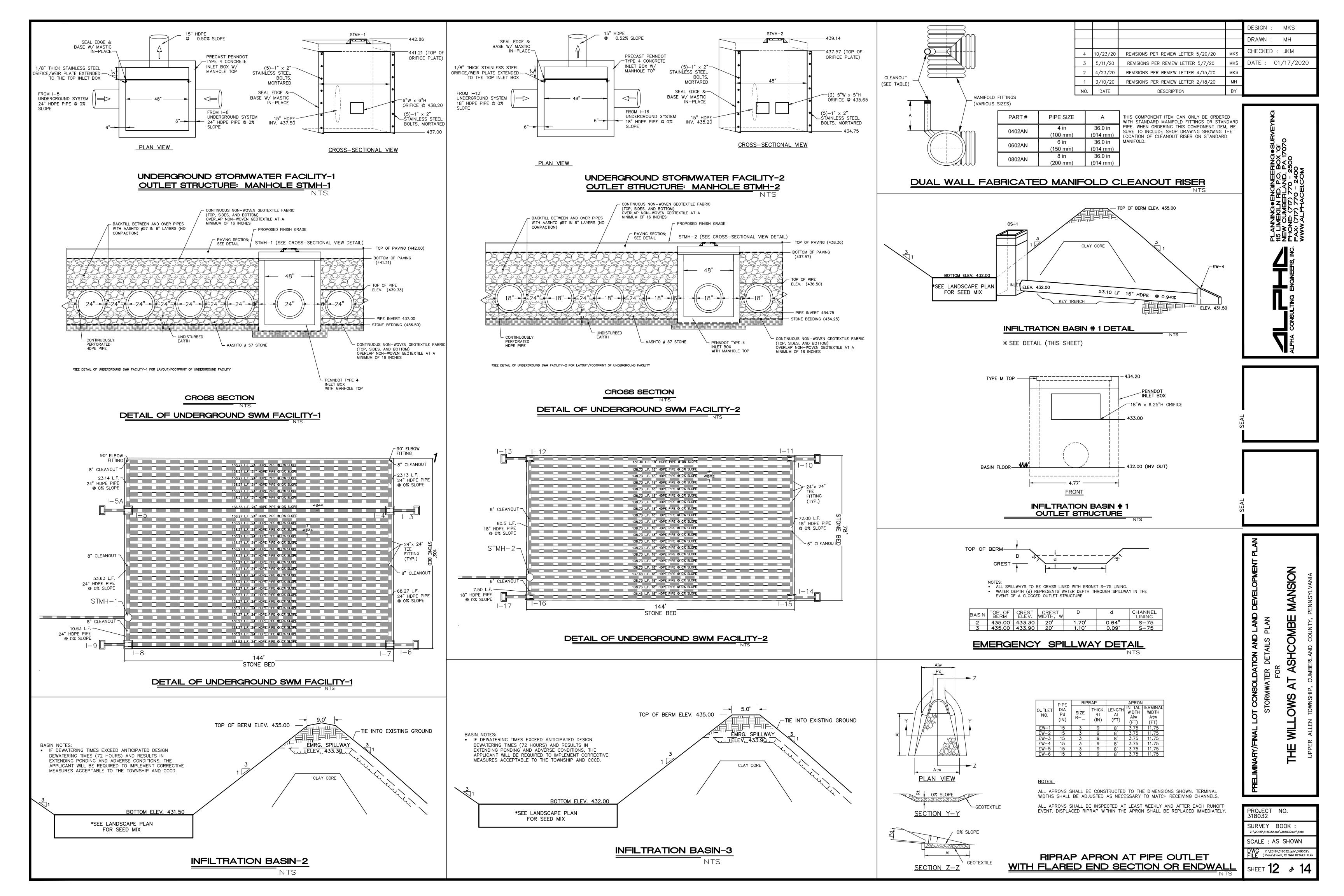


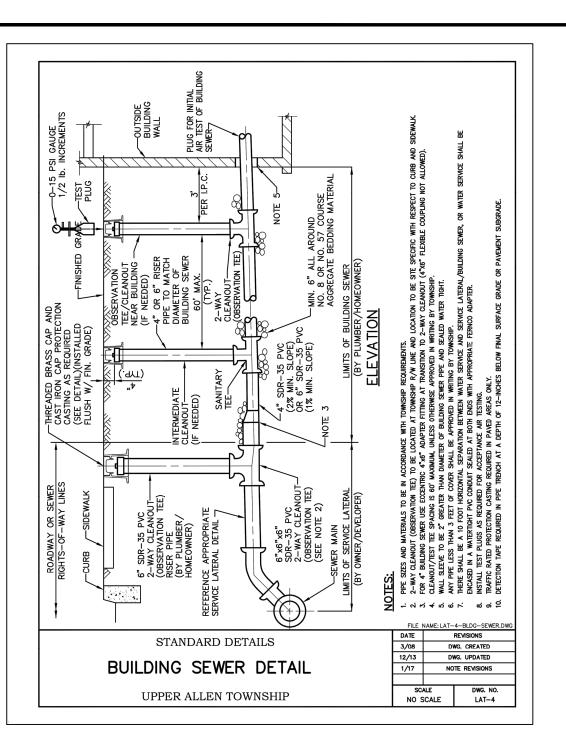


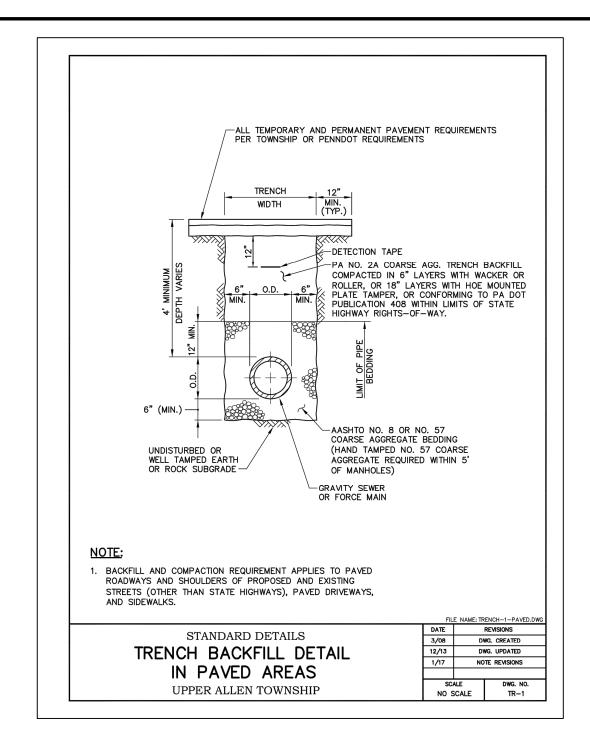


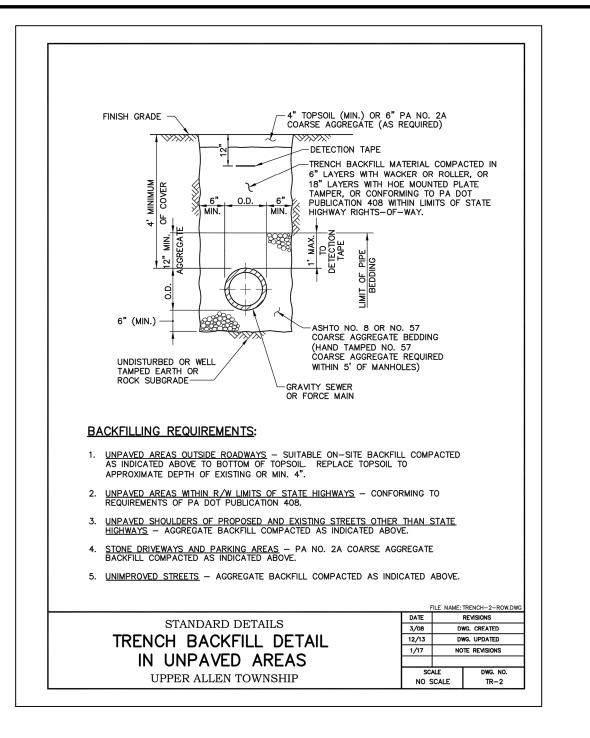


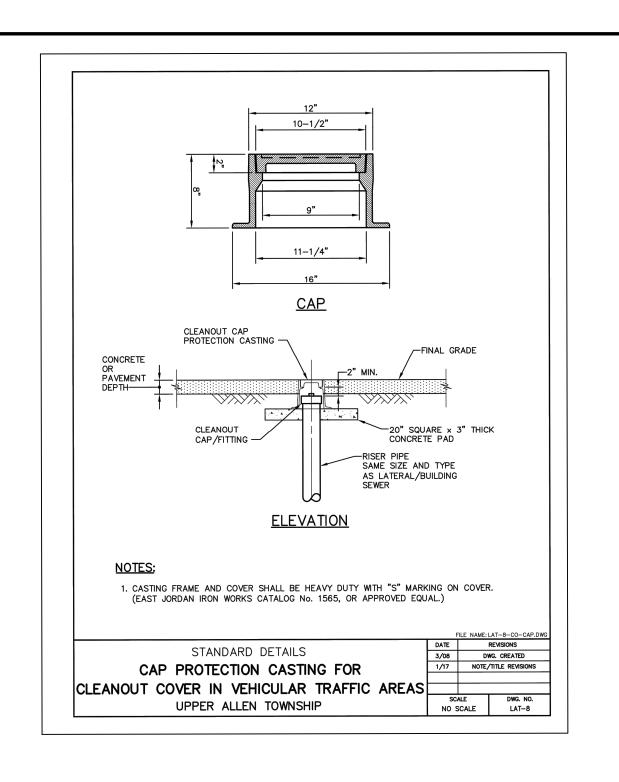


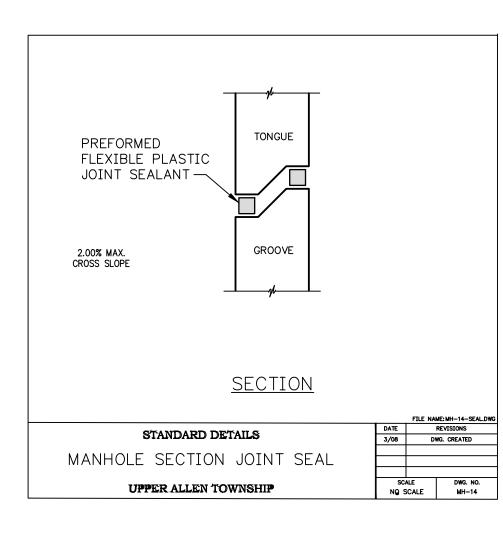










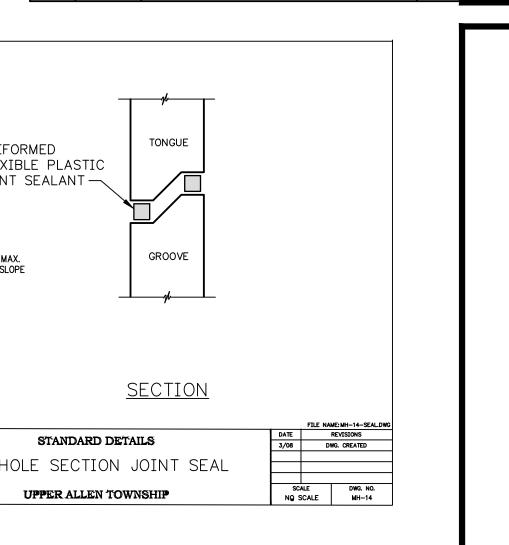


4 10/23/20

4/23/20

3/10/20

DATE



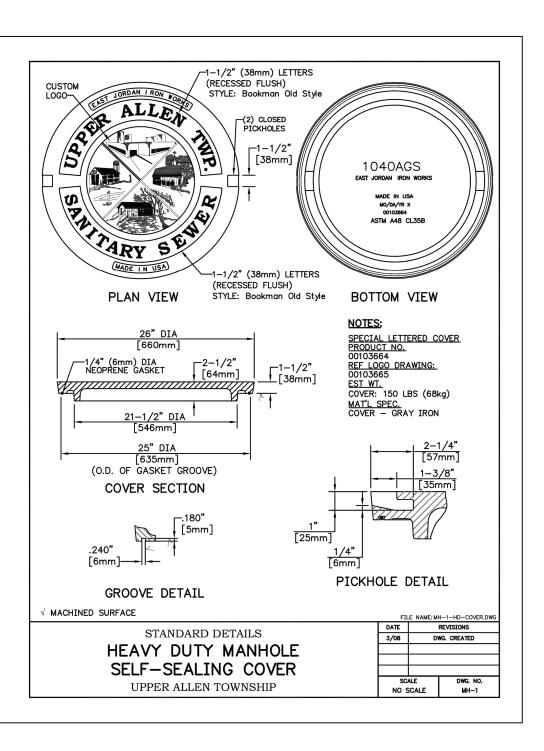
REVISIONS PER REVIEW LETTER 5/20/20

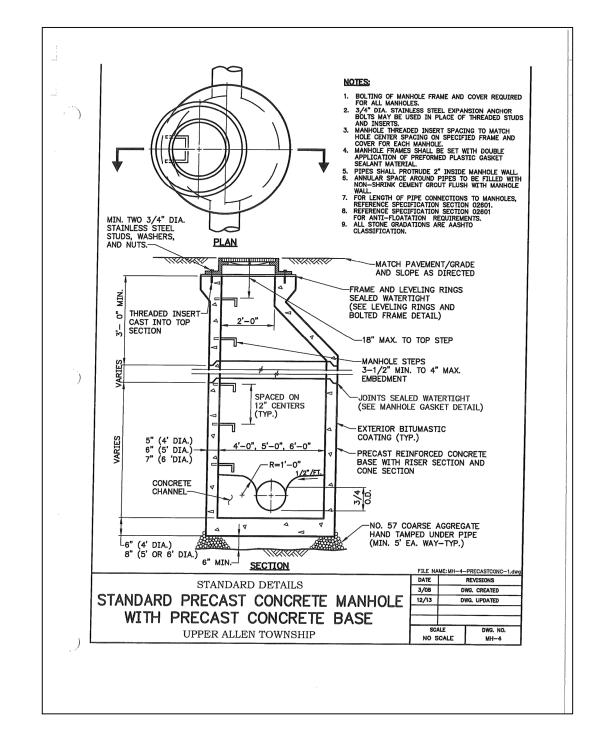
REVISIONS PER REVIEW LETTER 5/7/20

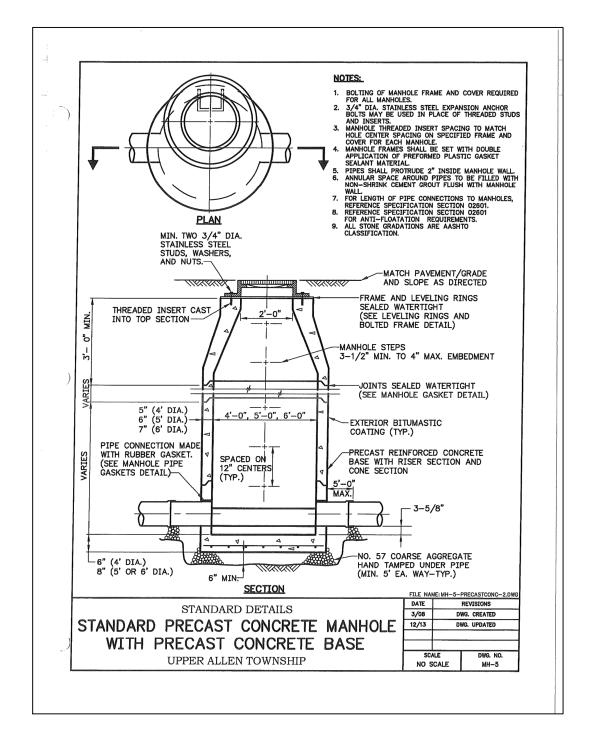
REVISIONS PER REVIEW LETTER 4/15/20

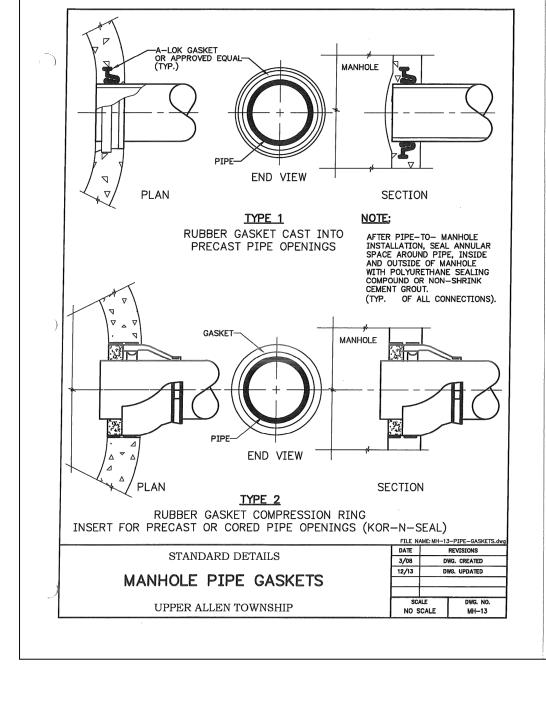
REVISIONS PER REVIEW LETTER 2/18/20

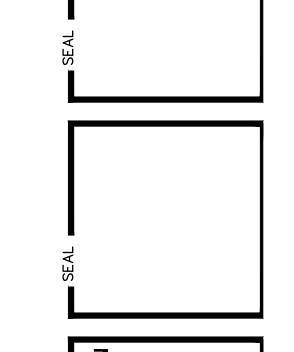
DESCRIPTION











DESIGN :

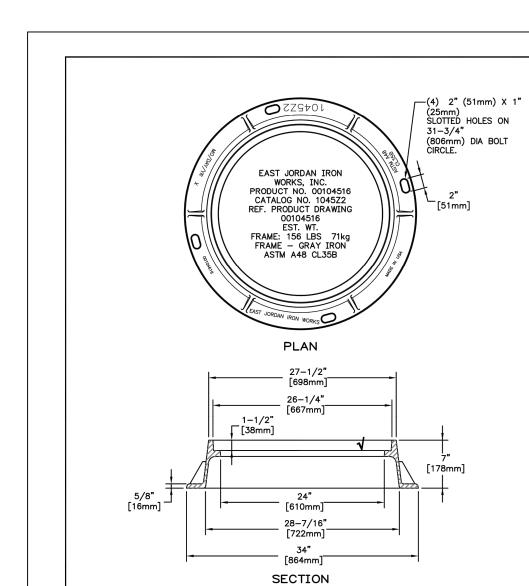
DRAWN:

CHECKED : JKM

DATE: 01/17/2020

MKS

МН



STANDARD DETAILS

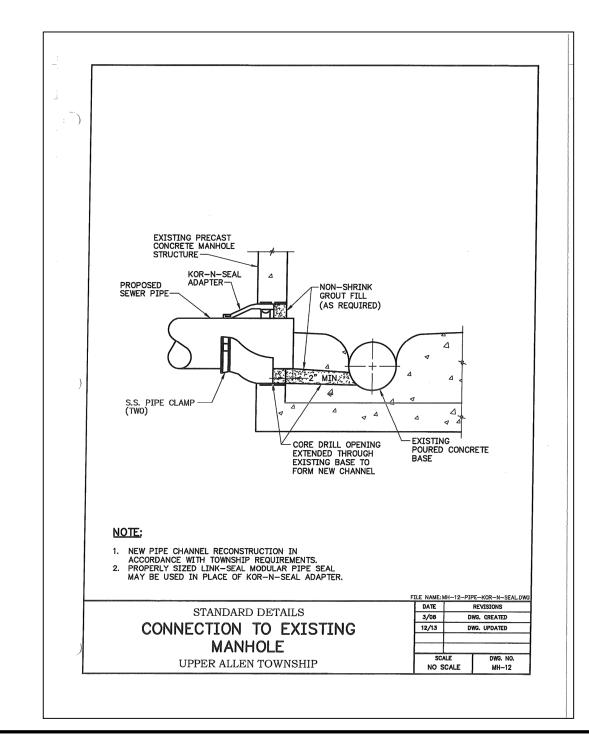
HEAVY DUTY

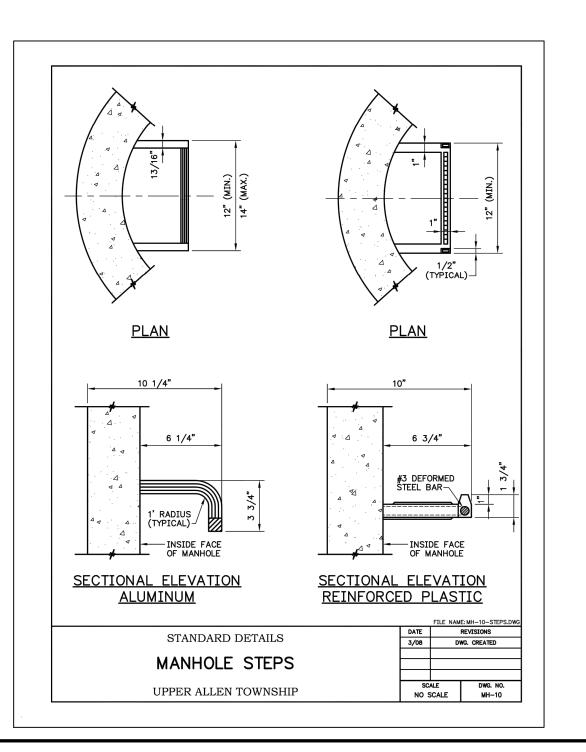
MANHOLE FRAME (H-25)

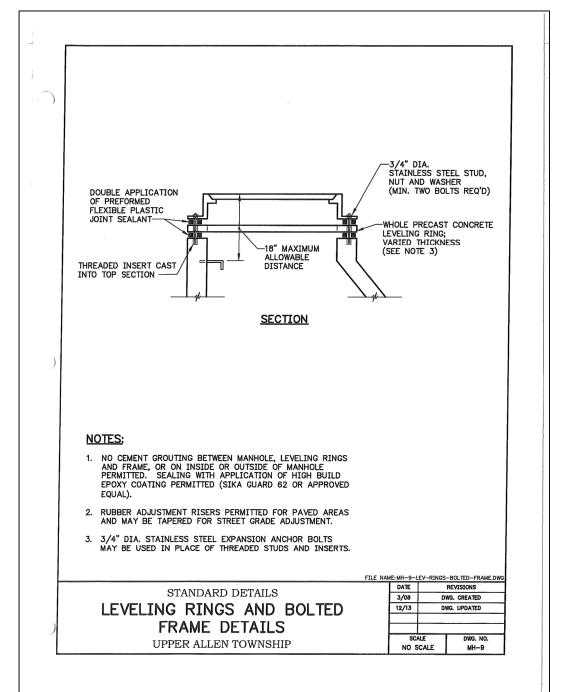
UPPER ALLEN TOWNSHIP

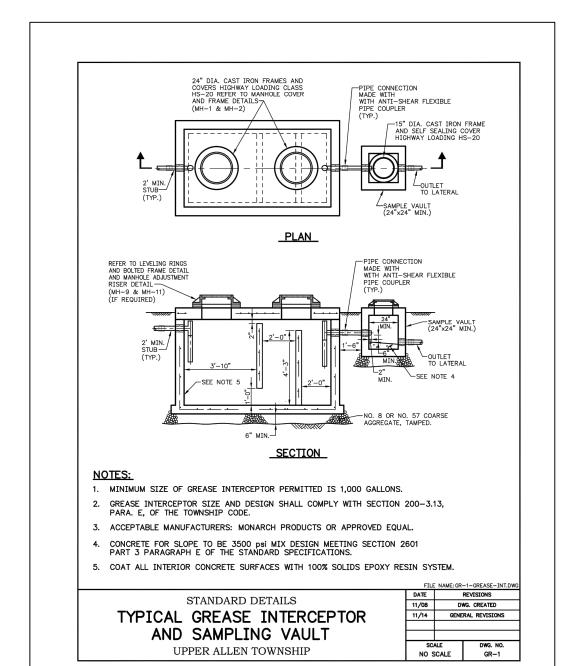
SCALE DWG. NO.
NO SCALE MH-2

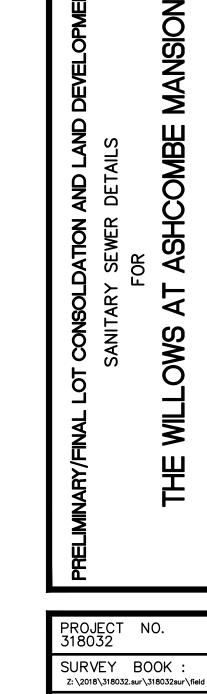
★ MACHINED SURFACE











SCALE : AS SHOWN

SHEET 13 & 14

Plans\Final\13 SANITARY SEWER

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ONGOING MAINTENANCE OF ALL EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES THROUGHOUT THE PERIOD OF CONSTRUCTION AND UNTIL SUCH TIME THAT THE SITE IS DEEMED PERMANENTLY STABILIZED. THE ITEMS OF RESPONSIBILITY INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

1. THE ROCK CONSTRUCTION ENTRANCES SHALL BE INSPECTED AT THE END OF EACH CONSTRUCTION DAY. ROCK CONSTRUCTION ENTRANCES WITH WASH RACKS SHOULD BE MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK WHEN NECESSARY AT THE END OF EACH WORKDAY. THE ROCK PILE SHALL BE MAINTAINED AT A THICKNESS OF 8 INCHES. A STOCKPILE OF ROCK SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ANY SEDIMENTS THAT HAVE BEEN DEPOSITED ON PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY. DRAIN SPACE UNDER THE WASH RACK SHALL BE KEPT OPEN AT ALL TIMES, DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE

2. COMPOST SOCK SEDIMENT TRAP SHALL BE INPECTED AT THE END OF EACH WORKDAY, WEEKLY, AND AFTER EACH RAINFALL. SEDIMENT COLLECTED FROM THE WASH RACK RUNOFF SHALL BE REMOVED WHEN IT REACHES 1 HEIGHT OF THE SOCKS.

3. ALL COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF FOR WASHOUTS OVERTOPPING, AND PHYSICAL DAMAGE. ANY DAMAGE SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACE AFTER 6 MONTHS: PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATION. ACCUMULATED SEDIMENTS SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER AS DESCRIBED IN THIS PLAN.

4. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG IS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. ACCUMULATED SEDIMENT SHOULD BE DISPOSED IN THE APPROVED MANNER AS DESCRIBED IN THIS PLAN. BAGS THAT WILL BE REUSED SHOULD BE RINSED AT A LOCATION WHERE THE RINSE WATER WILL ENTER A SEDIMENT TRAP OR SEDIMENT BASIN. DAMAGED FILTER BAGS SHOULD BE REPLACED. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS.

5. ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.

6. THE PROPER TIMING OF THE INSTALLATION AND REMOVAL OF ALL FACILITIES AS HEREIN SPECIFIED SHALL BE ASSURED. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THE SITE. SEDIMENT REMOVED FROM EROSION AND SEDIMENTATION CONTROL MEASURES IS TO BE PLACED WITH THE TOPSOIL STOCKPILE AREAS ON SITE.

7. ALL SEEDED AREAS SHALL BE INSPECTED THREE (3) WEEKS AFTER SEED APPLICATION TO ENSURE A MINIMUM UNIFORM SEVENTY PERCENT (70%) VEGETATIVE COVERAGE OF THE SEEDED AREAS ARE COVERED. IF LESS THAN SEVENTY PERCENT (70%) UNIFORM COVERAGE IS ACHIEVED. THEN RE-SEEDING SHALL BE INITIATED.

8. WEEKLY INSPECTIONS SHOULD BE MADE TO ALL EROSION AND SEDIMENTATION CONTROLS. REPAIRS SHOULD BE COMPLETED WITHIN A 24 HOUR PERIOD, AND AFTER EVERY MEASURABLE STORM EVENT.

9. THE PERMITTEE AND/OR CO-PERMITEE MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND AFTER EACH MEASURABLE PRECIPITATION EVENT BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL. TO ASCERTAIN THAT THE EROSION AND SEDIMENT CONTROL (E&S) BMP'S ARE OPERATING AND EFFECTIVE IN PREVENTING POLLUTION TO WATERS OF THE COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT, AND INCLUDE: A. A SUMMARY OF THE SITE CONDITIONS, E&S BMPS, AND COMPLIANCE: AND B. THE DATE, TIME, AND NAME OF THE PERSON CONDUCTING THE INSPECTION.

GENERAL NOTES

1. PROPER IMPLEMENTATION OF THIS EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN WILL SERVE TO MINIMIZE INCREASED STORMWATER FROM THE PROJECT BOUNDARIES AND SHALL CONTROL ACCELERATED RUN-OFF DURING CONSTRUCTION AND EARTHMOVING ACTIVITIES.

TOPSOIL STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SIDE SLOPES MUST BE 2:1 OR FLATTER. 3. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

4. A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

5. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE THE DISTURBED AREAS. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE NOT AT FINAL GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

6. AN EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL DISTURBED SLOPES 3:1 OR STEEPER AND ALL AREAS OF CONCENTRATED FLOWS. ANY SEDIMENT REMOVED FROM BMP'S DURING CONSTRUCTION WILL BE RETURNED TO UPLAND AREAS ON SITE AND

8. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL / IMPORT OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING OR EXPORTING THE EXCESS HAS AN APPROVED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE AND FEDERAL REGULATIONS.

10. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE OPERATOR SHALL STABILIZE IMMEDIATELY THE DISTURBED AREAS TO PROTECT FROM ACCELERATED EROSION.

11. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

12. THE ANTICIPATED CONSTRUCTION WASTE ASSOCIATED WITH THIS PROJECT WOULD BE THE NORMAL TYPICAL SUPPLIES (IE, PIPES, WOOD, CURBING, PAVEMENT, & UTILITIES ETC.) USED TO CONSTRUCT A PROJECT LIKE THIS. THESE WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR

13. PERMANENT STABILIZATION IS DEFINED AS MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

14. TO MINIMIZE THE AMOUNT OF LAND CLEARING AND GRADING, A SEQUENCE OF CONSTRUCTION FOR EARTHMOVING ACTIVITIES HAS BEEN PROVIDED ON THIS PLAN THAT WAS FORMULATED TO EXPOSE ONLY THE MINIMAL AREA NECESSARY TO COMPLETE THIS PROJECT.

15. TO MINIMIZE THE AMOUNT OF SOIL COMPACTION OCCURRING ON SITE, EARTHMOVING ACTIVITIES WILL EXPOSE ONLY THE AREA NECESSARY TO COMPLETE THIS PROJECT. 16. THIS SITE IS UNDERLAIN BY KARST GEOLOGY AND MAY BE SUBJECT TO THE DEVELOPMENT OF SINKHOLES. SPECIAL CONSTRUCTION MAY BE REQUIRED TO MITIGATE THE EFFECT OF SINKHOLES ON BUILDINGS AND OTHER SITE

17. IF A SINKHOLE IS TO FORM, FIRST DIVERT ANY STORMWATER RUNOFF AWAY FROM THAT AREA UNTIL THE SINKHOLE HAS BEEN REPAIRED. THEN INSTALL THE INVERTED FILTER AS DETAILED WITHIN THIS PLANS SET. A QUALIFIED ENGINEER, GEOLOGIST, AND/OR HYDROGEOLOGIST SHOULD BE CONTACTED TO EVALUATE THE SINKHOLE TO DETERMINE IF ANY OTHER MEASURES WILL NEED TO BE TAKEN.

TEMPORARY SEEDING

LIMING RATE FOR TEMPORARY STABILIZATION SHOULD BE (1) TON OF PULVERIZED AGRICULTURAL LIMESTONE PER ACRE FERTILIZER RATE FOR TEMPORARY STABILIZATION SHOULD BE 10-20-20 FERTILIZER AT 11 POUNDS PER 1,000 SQUARE YARDS. TEMPORARY SEED SHALL BE FORMULA E, ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), APPLIED AT A RATE OF 10 POUNDS PER 1,000 SQUARE YARDS. SEED SHALL CONFORM TO THE REQUIREMENTS OF PENNDOT PUBLICATION 408.

PERMANENT SEEDING

LIMING RATE FOR PERMANENT STABILIZATION SHOULD BE (4) TONS OF PULVERIZED AGRICULTURAL LIMESTONE PER ACRE. FERTILIZER RATE FOR PERMANENT STABILIZATION SHOULD BE 10-20-20 FERTILIZER AT 11 POUNDS PER 1,000 SQUARE YARDS. PERMANENT SEED SHALL BE , 10% ANNUAL RYEGRASS, 40% FESCUES, 20% PERENNIAL RYEGRASS AND 30% BLUEGRASS APPLIED AT THE RATE OF 6 POUNDS PER 1000 SQUARE YARDS. SEEDING SHALL CONFORM TO THE REQUIREMENTS OF PENNDOT PUBLICATION 408 SECTION 804. THE CONTRACTOR SHALL INSPECT SEEDED AREAS THREE (3) WEEKS AFTER APPLICATION. ANY AREA WITH LESS THAN SEVENTY PERCENT (70%) COVERAGE SHALL BE

<u>MULCHING</u>

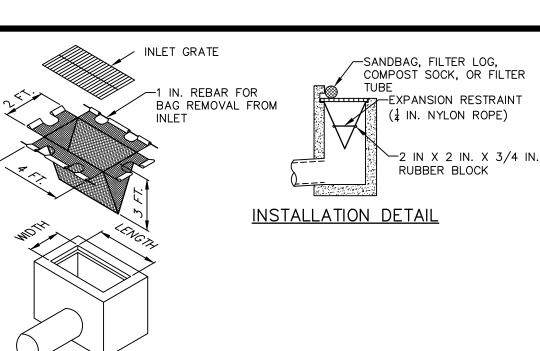
RECOMMENDATIONS.

MULCH MATERIAL SHALL BE HAY OR STRAW AS DEFINED IN SECTION 805 OF PENNDOT PUBLICATION 408 AND SHALL BE FREE FROM FOREIGN MATERIAL, COARSE STEMS, AND ANY SUBSTANCE TOXIC TO PLANT GROWTH, ALSO FREE FROM MATURE SEED BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS, BOTH AS DEFINED BY LAW. PLACE MULCH IMMEDIATELY AFTER SEEDING IN A UNIFORM CONTINUOUS BLANKET AT A MINIMUM RATE OF 1,200 POUNDS PER 1,000 SQUARE YARDS (3 TONS PER ACRE).

STRAW MULCH SHOULD BE ANCHORED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW INTO THE SOIL. THIS METHOD IS LIMITED TO SLOPES NO STEEPER THAN 3:1. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. (NOTE: CRIMPING OF STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED).

ASPHALT, EITHER EMULSIFIES OR CUT-BACK, CONTAINING NO SOLVENTS OR OTHER DILUTING AGENTS TOXIC TO PLANT OR ANIMAL LIFE, UNIFORMLY APPLIED AT THE RATE OF 31 GALLONS PER 1000 SQ. YD. MAY BE USED TO TACK MULCH. SYNTHETIC BINDERS (CHEMICAL BINDERS) MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL

LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S



EXTEND BERM OVER CURB IF RUNOFF IS BYPASSING INLET ON -2:1 MAX LANDWARD SIDE \INLET, PLAN VIEW SECTION VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. 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

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR 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 OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15 FILTER BAG INLET PROTECTION - TYPE C INLET NOT TO SCALE

ADAPTED FROM VA DSWC

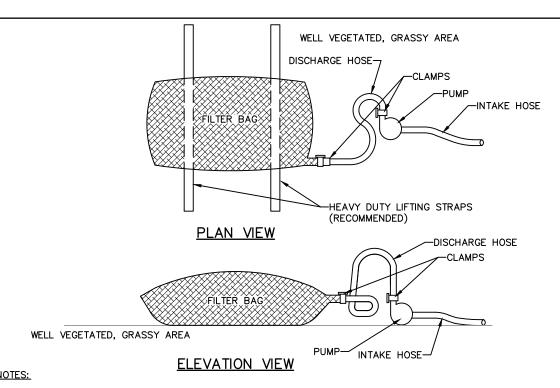
GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING O THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.

TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM

-- 2 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN
PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.

TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE

	TABLE 11.1	
CUBIC YARDS OF TO	PSOIL REQUIRED FOR APPLICATION	TO VARIOUS DEPTHS
DEPTH (IN)	PER 1,000 SQUARE FEET	PER ACRE
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806
7	21.7	940
8	24.8	1,074



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 SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE

OLLOWING 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%

ASTM D-4751 A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

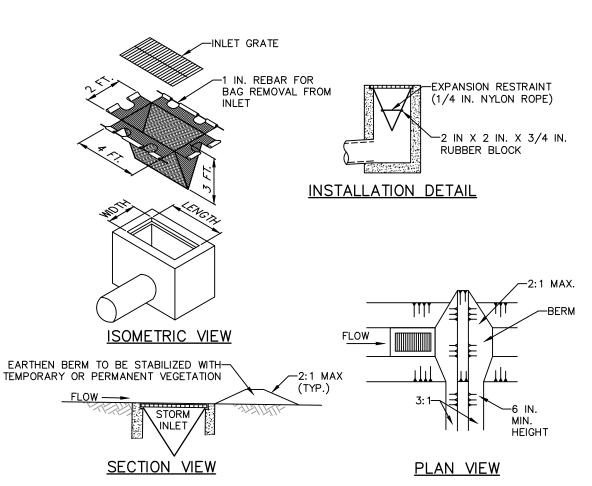
BAGS SHALL BE LOCATED IN WELL—VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER 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. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY

RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY TH MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE

MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

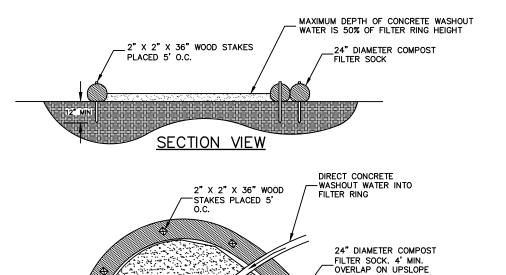


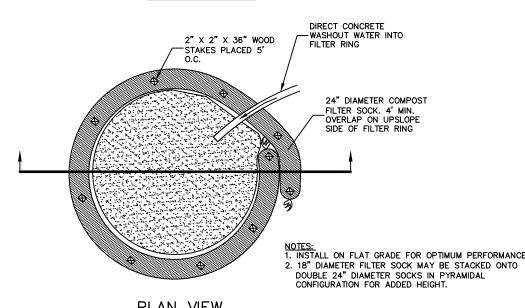
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

NLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE ROLLED 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 JNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY. AT A MINIMUM. THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST AT A MINIMUM, THE PARTIC SHALL HAVE A MINIMUM GRAD TENSILE STRENGTH OF 120 LBS., A MINIMUM BOR. 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.

EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR 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 MMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

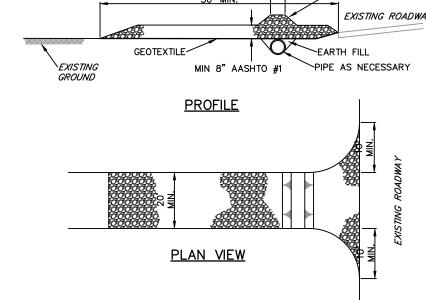
STANDARD CONSTRUCTION DETAIL #4-16 FILTER BAG INLET PROTECTION - TYPE M INLET NOT TO SCALE





STANDARD CONSTRUCTION DETAI EROSION CONTROL CONCRETE WASHOUT

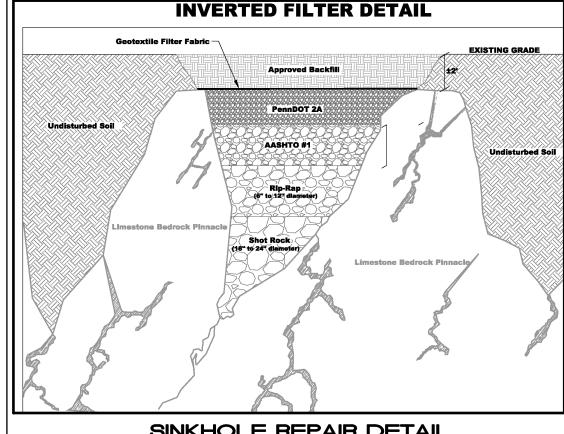
BERM (6 IN. MIN.)*



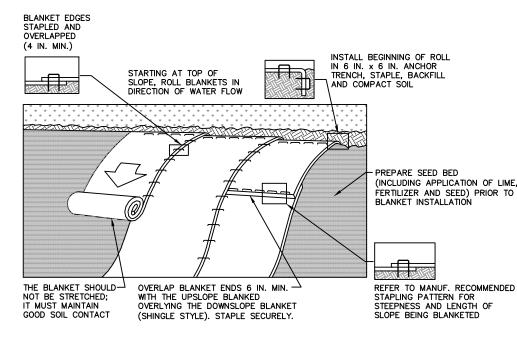
* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED. 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 MEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED O ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING TH ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

> STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE NOT TO SCALE



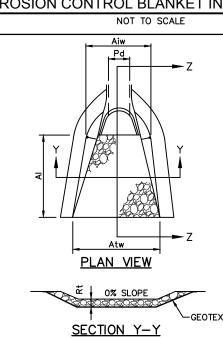
SINKHOLE REPAIR DETAIL (OR APPROVED EQUAL) (IF NEEDED)

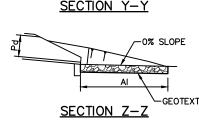


SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

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. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS 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 4 CALENDAR DAYS.

> STANDARD CONSTRUCTION DETAIL #11-1 EROSION CONTROL BLANKET INSTALLATION





NA SIZE Rt AI (IN) (FT) (FT)

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY. STANDARD CONSTRUCTION DETAIL #9-1

RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

Low Maintenance Grass & Grass-like Species Mix: ERNMX-126 (or approved equivalent)

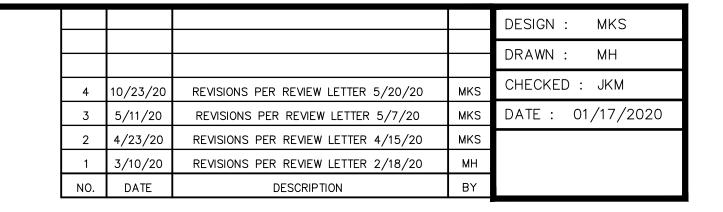
INFILTRATION BASIN FLOOR SEED MIX

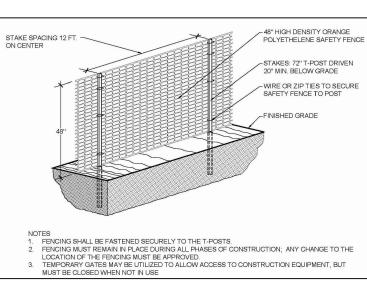
Rate	₿otanical Name	Common Name
18%	Elymus virginicus	Virginia Wildrye (PA Ecotype)
10%	Puccinellia distans Fults'	Alkaligrass 'Fults'
5%	Agrostis stolonifera	Creeping Bentgrass
20%	Panicum clandestinum Tioga'	Deertongue Tioga
5%	Poa palustris	Fowl Bluegrass
0%	Carex vulpinoidea	Fox Sedge
1%	Juncus effusus	Soft Rush
%	Carex scoparia	おlunt おroom Sedge (PA Ecotype)
00%		

Application Rate: 20-40 lb per acre, or 1 lb per 1,000 sqft. YEAR 1: FIRST GROWING SEASON MAINTENANCE

YEAR 1: FIRST GROWING SEASON MAINTENANCE
WHENEVER CANOPY HEIGHT (OVERALL VEGETATION) REACHES 18"-24", USE A STRING TRIMMER TO TRIM THE BASIN FLOOR
AND SWALE TO A HEIGHT OF 8". A LAWN MOWER IS NOT RECOMMENDED FOR TRIMMING AS THE MOWER HEIGHT WILL BE TOO
LOW AND NATIVE SEEDLINGS WILL BE KILLED. TRIMMING SHOULD CEASE BY MID-SEPTEMBER.
PROBLEM WEEDS SHOULD BE HAND PULLED OR SPOT SPRAYED WITH AN APPROVED HERBICIDE, SUCH AS RODEO. YEAR 2: SECOND & SUBSEQUENT GROWING SEASON MAINTENANCE

PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2", STRING TRIM ANY MATERIAL STANDING FROM PREVIOUS YEAR CLOSE TO THE GROUND. IF MIX CONTAINS SEDGES, TRIMMING SHALL BE NO LOWER THAN 2" ABOVE THE CROWNS THAT PRODUCED THE PRIOR YEARS GROWTH. IF A HEAVY INFESTATION OF RAGWEED OR FOXTAIL IN THE SECOND GROWING SEASON IS NOTICED, TRIM PLANT MATERIAL TO A HEIGHT OF 8"





ORANGE CONSTRUCTION FENCING DETAIL

ADDITIONAL NOTES: FENCING SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHMOVING FENCING SHALL REMAIN UNTIL ALL AREAS OF DISTURBANCE IS PERMANENTLY STABILIZED.

. ANY DAMAGED FENCE SHALL BE REPAIRED IMMEDIATELY.

4. ANY EARTH DISTURBANCE WITHIN THE FENCE NECESSARY FOR FINAL SEEDING OR MINOR SHAPING SHALL BE MINIMIZED AND STABILIZED IMMEDIATELY. COMPOST FILTER SOCK--2 IN. x 2 IN. WOODEN STAKES PLACED 10 FT ON CENTER BLOWN / PLACED FILTER MEDIA-UNDISTURBED AREA DISTURBED AREA DISTURBED AREA CONTOURS COMPOST UNDISTURBED AREA FILTER SOCK-WOODEN STAKES PLACED 10 FT ON CENTER

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURERS SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED

ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH

SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT. WHERE SOCK CROSSES PAVEMENT, ANCHOR SOCK IN PLACE WITH A FILLED SANDBAG BUTTED ON EACH SIDE OF THE SOCK, EVERY 30 FEET OF SOCK.

THE PHYSICAL PARAMETERS OF THE COMPOST SHOULD COMPLY WITH THE STANDARDS IN TABLE 4.2 THE STANDARDS CONTAINED IN THE PENNDOT PUBLICATION 408 ARE AN ACCEPTABLE ALTERNATIVE.

ORGANIC MATTER CONTENT	80% — 100% (dry weight basis)				
ORGANIC PORTION	FIBROUS AND ELONGATED				
рН	5.5 - 8.0				
MOISTURE CONTENT	35% - 55% 98% PASS THROUGH 1" SCREEN				
PARTICLE SIZE					
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM				

COMPOST FILTER SOCK

COMPOSITE POLYPROPYLENE FABRIC

(WOVEN LAYER AND NON-WOVEN FLEECE

MECHANICALLY FUSED VIA NEEDLE PUNCH)

2.20

		IAD	LE 4.1				
	COMPOST SO	OCK FABRIC	MINIMUM SPE	ECIFICATIONS			
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)			
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE		
MATERIAL CHARACTERISTICS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"		
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"		
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI		
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.		
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEAR		
		TWO-PLY	SYSTEMS				
			HDPE BIAXIAL NET CONTINUOUSLY WOUND FUSION-WELDED JUNCTURES				
INNER CO	NTAINMENT NETTI	NG	3/4" X 3/4" MAX. APERTURE SIZE				

SLOPE LENGTH SOCK NO. DIA. IN. LOCATION (%) | ABOVE BARRIER (FT 12" NW. OF GUEST COTTAGES BUILDING 105.00 12" NW. OF GUEST COTTAGES BUILDING 25.00 20.0 12" NW. OF GUEST COTTAGES BUILDING 123.00 12" NE. OF GUEST COTTAGES BUILDING 1.50 101.00 12" | NE. OF GUEST COTTAGES BUILDING 4.25 141.00 12" NE. OF GUEST COTTAGES BUILDING 182.00 12" S. OF SWM INFILTRATION BASIN 217.00 6.90 12" | S. OF CHAPEL BUILDING 6.00 150.00 12" | E. OF RIGHT ENTRANCE 89.00 9.00 24" | E. OF RIGHT ENTRANCE 2.20 694.00

SUBSTITUTION OF FILTER SOCKS SHALL BE APPROVED BY CCCD BEFORE INSTALLATION.

OCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.

COMPOST FILTER SOCK TABLE

24" | E. OF RIGHT ENTRANCE

FS-12 | 24" | E. OF RIGHT ENTRANCE

OUTER FILTRATION MESH

PROJECT NO. 318032 SURVEY BOOK Z: $\2018\318032.sur\318032sur\field$ SCALE : AS SHOWN Plans\Final\ 14 E&S DETAILS PL

714.00

766.00