

PLAN LEGEND

EXISTING CONTOUR LINE
PROPOSED CONTOUR LINE
EXISTING WATER LINE
PROPOSED WATER LINE
EXISTING GAS LINE
PROPOSED GAS LINE
EXISTING SANITARY SEWER GRAVITY LINE
PROPOSED SANITARY SEWER GRAVITY LINE
EXISTING SANITARY SEWER FORCE MAIN LINE
PROPOSED SANITARY SEWER FORCE MAIN LINE
EXISTING OVERHEAD ELECTRIC LINE
PROPOSED OVERHEAD ELECTRIC LINE
EXISTING OVERHEAD ELECTRIC AND TELEPHONE LINES
PROPOSED OVERHEAD ELECTRIC AND TELEPHONE LINES
EXISTING OVERHEAD ELECTRIC AND CABLE LINES
PROPOSED OVERHEAD ELECTRIC AND CABLE LINES
EXISTING OVERHEAD TELEPHONE LINE
PROPOSED OVERHEAD TELEPHONE LINE
EXISTING OVERHEAD TELEPHONE AND CABLE LINES
PROPOSED OVERHEAD TELEPHONE AND CABLE LINES
EXISTING OVERHEAD ELECTRIC, TELEPHONE, AND CABLE LINES
PROPOSED OVERHEAD ELECTRIC, TELEPHONE, AND CABLE LINES
EXISTING UNDERGROUND ELECTRIC LINE
PROPOSED UNDERGROUND ELECTRIC LINE
EXISTING UNDERGROUND TELEPHONE LINE
PROPOSED UNDERGROUND TELEPHONE LINE
EXISTING SIGN
PROPOSED SIGN
EXISTING FIRE HYDRANT
PROPOSED FIRE HYDRANT
EXISTING PROPERTY CORNER (AS STATED)
PROPOSED PROPERTY CORNER (AS STATED)
PROPERTY CORNER
PROPERTY CORNER - CONCRETE MONUMENT
EXISTING UTILITY POLE
PROPOSED UTILITY POLE
GUY ANCHOR
EXISTING CLEANOUT
PROPOSED SANITARY SEWER CLEANOUT
PROPOSED STORM SEWER CLEANOUT
EXISTING WATER VALVE
PROPOSED WATER VALVE
EXISTING HOSE BIB
PROPOSED HOSE BIB
EXISTING GAS VALVE
PROPOSED GAS VALVE
EXISTING BOLLARD
PROPOSED BOLLARD
EXISTING DOWNSPOUT
PROPOSED DOWNSPOUT
EXISTING SPOT LIGHT
PROPOSED SPOT LIGHT
EXISTING LIGHT POLE
PROPOSED LIGHT POLE
EXISTING LIGHT STANDARD
PROPOSED LIGHT STANDARD
EXISTING WALL PACK LIGHT
PROPOSED WALL PACK LIGHT
EXISTING MAN DOOR LOCATION
PROPOSED MAN DOOR LOCATION
EXISTING DOCK/OVERHEAD LOCATION
PROPOSED DOCK/OVERHEAD DOOR LOCATION
CENTERLINE
EXISTING WELL
PROPOSED WELL
EXISTING WATER METER PIT
PROPOSED WATER METER PIT
EXISTING STORM DRAINAGE MANHOLE
PROPOSED STORM DRAINAGE MANHOLE
EXISTING SANITARY SEWER MANHOLE
PROPOSED SANITARY SEWER MANHOLE
EXISTING MONITORING WELL
PROPOSED MONITORING WELL
EXISTING GAS METER
PROPOSED GAS METER
EXISTING GAS LINE MARKER
PROPOSED GAS LINE MARKER
EXISTING ELECTRIC METER
PROPOSED ELECTRIC METER
EXISTING CABLE PEDESTAL
PROPOSED CABLE PEDESTAL
EXISTING TELEPHONE PEDESTAL
PROPOSED TELEPHONE PEDESTAL
EXISTING TRANSFORMER
PROPOSED TRANSFORMER
EXISTING TELEPHONE MANHOLE
PROPOSED TELEPHONE MANHOLE
EXISTING ELECTRIC MANHOLE
PROPOSED ELECTRIC MANHOLE
EXISTING GAS LINE MANHOLE
PROPOSED GAS LINE MANHOLE
EXISTING PARKING SPACE COUNT
PROPOSED PARKING SPACE COUNT (T.B.R.)
FLAG POLE
SURVEY/SITE BENCH MARK
PIPE CONTINUATION (LOCATION UNKNOWN)
PIPE END (CAPPED)
BOTTOM OF BANK
BALLED AND BURLAPPED

EXISTING UNDERGROUND CABLE LINE
PROPOSED UNDERGROUND CABLE LINE
EXISTING UNDERGROUND TELEPHONE AND CABLE LINES
PROPOSED UNDERGROUND TELEPHONE AND CABLE LINES
DELINEATED WETLAND BOUNDARY LINE
EXISTING FENCE LINE
PROPOSED FENCE LINE
EXISTING STREAM, DRAINAGEWAY OR WATER SURFACE BOUNDARY LINE
PROPOSED DRAINAGEWAY OR WATER SURFACE BOUNDARY LINE
EXISTING PROPERTY LINE
PROPOSED PROPERTY LINE
ADJACENT PROPERTY LINE
EXISTING RIGHT-OF-WAY LINE
PROPOSED RIGHT-OF-WAY LINE
EASEMENT LINE
EXISTING CENTERLINE
PROPOSED CENTERLINE
BUILDING SETBACK LINE
EXISTING STORM SEWER DRAINAGE LINE
PROPOSED STORM SEWER DRAINAGE LINE
EXISTING TREE/BRUSH LINE
PROPOSED TREE/BRUSH LINE
FLOODPLAIN BOUNDARY LINE
ZONING DISTRICT BOUNDARY LINE
SOIL BOUNDARY LINE
EXISTING DECIDUOUS TREE
EXISTING CONIFER
EXISTING SHRUB
STORM DRAINAGE INLET TYPE "C"
STORM DRAINAGE INLET TYPE "M"
STORM SEWER STRUCTURE DESIGNATION
SANITARY SEWER STRUCTURE DESIGNATION
CONCRETE AREA
ROCK RIP-RAP AREA
WETLAND AREA
BOTTOM OF CURB
BITUMINOUS
BORO
BASEMENT
BEGINNING OF VERTICAL CURB
CAL
CENTER TO CENTER
CAST IRON (PIPE)
CORRUGATED METAL (PIPE)
COUNTY
CONCRETE
COORDINATES
CORRUGATED POLYETHYLENE (PIPE)
DEED BOOK
DIAMETER BREAST HEIGHT
DIAMETER
DUAL IRON (PIPE)
DOUBLE YELLOW LINE
ELEV.
EDGE OF PAVEMENT
EQUIVALENT SINGLE-AXLE LOAD
EASEMENT
END VERTICAL CURVE
EXISTING
FINISHED BASEMENT (ELEVATION)
FINISHED FLOOR (ELEVATION)
FOUND
FEET OR FOOT
HOT MIX ASPHALT
HANDICAP CURB RAMP
HIGH POINT
IN
INCHES
INVERT
IRON PIN
IRON PIPE
L.A.T.
LATERAL
LINEAR FEET
LIFT
LOW POINT
LEFT
MB.
MANHOLE
MON.
MONUMENT
NORTH AMERICAN GREEN
NOW OR FORMERLY
NUMBER
N/O
ON CENTER
OFFSET
PENNDOT
P.B.
PAGE
P.C.
POINT
P.O.B.
POINT OF BEGINNING
PR.
PROPOSED
P.V.I.
POINT OF VERTICAL INTERSECTION
R
RADIUS
RC
REINFORCED CONCRETE (PIPE)
REV.
RIGHT-OF-WAY
R.O.W.
RIGHT
SAN.
SANITARY
SLO.
SMOOTH LINE CORRUGATED POLYETHYLENE (PIPE)
SPCS
STATION
STW.
STORM
S.W.L.
SINGLE WHITE LINE
T.B.
TOP OF BANK
T.B.C.
TO BE REMOVED
T.C.
TOP OF CURB
T.G.
TOP OF GRADE
T.M.
TAX MAP
T.O.P.
TOP OF PAVEMENT
T.R.
TOP OF RIM
TRAV.
TRAVERSE
TYP.
TYPICAL
U.P.I.
UNIFORM PARCEL IDENTIFIER
UNITED STATES ARMY CORPS OF ENGINEERS
VCP
VITRIFIED CLAY PIPE
WSE
WATER SURFACE ELEVATION
CUMBERLAND COUNTY CONSERVATION DISTRICT
CCPD
CUMBERLAND COUNTY PLANNING DEPARTMENT

UTILITY NOTES

- CONTRACTOR SHALL DESIGN PIT ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. SITE DESIGN CONCEPTS, INC. MAKES NO GUARANTEE THAT THE EXISTING UTILITIES ARE EXACTLY AS SHOWN. UTILITIES SHOWN HEREON ARE DERIVED FROM RECORD DRAWINGS AND FIELD SURVEY DATA. AVAILABLE RECORD DRAWINGS, CONCERNS AND DISCREPANCIES REGARDING LOCATION OF SUCH FACILITIES SHALL BE BROUGHT TO THE ATTENTION OF SITE DESIGN CONCEPTS, INC. IMMEDIATELY.
- NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING UTILITY SERVICES AND MAINS. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE. CONTRACTOR SHALL NOT INTERRUPT EXISTING UTILITY SERVICES WITHOUT PRIOR APPROVAL FROM THE UTILITY PROVIDER. ALL AFFECTED USERS OF THE UTILITY SCHEDULED TO BE INTERRUPTED SHALL BE NOTIFIED IN A TIMELY MANNER, AS REQUIRED.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE (1) FOOT OF CLEARANCE BETWEEN ALL UTILITIES AND A MINIMUM OF TWO (2) FEET OF CLEARANCE BETWEEN UTILITIES AND UTILITY POLES UNLESS OTHERWISE NOTED HEREON. CONTRACTOR SHALL CONTACT SITE DESIGN CONCEPTS, INC. IF THESE MINIMUM CLEARANCES CANNOT BE ACHIEVED. A MINIMUM VERTICAL SEPARATION OF EIGHTEEN (18) INCHES SHALL BE MAINTAINED BETWEEN ALL WATER AND SANITARY SEWER CROSSINGS. IF THIS CLEARANCE CANNOT BE MAINTAINED, A CONCRETE ENCASEMENT SHALL BE PROVIDED, UPON APPROVAL BY MUNICIPALITY AND SITE DESIGN CONCEPTS, INC.
- ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY OR THE SEWER AUTHORITY.
- THE CONTRACTOR SHALL MAINTAIN FIELD RECORDS OF THE LOCATION AND DEPTH OF ALL UTILITY LOCATIONS AND SHALL PROVIDE THIS INFORMATION TO THE SITE DESIGN CONCEPTS, INC. FOR OWNER'S RECORDS AND/OR PREPARATION OF RECORD DRAWINGS.
- ALL SANITARY SEWERS SHALL BE CONSTRUCTED FROM SDR-35 PVC UNLESS OTHERWISE NOTED ON THE PLANS. IN AREAS WHERE COVER EXCEEDS 14 FEET, SD-26 PVC SHALL BE USED FOR BOTH MAINS AND LATERALS.
- UNLESS OTHERWISE INDICATED, ALL GRAVITY SANITARY SEWER MAINS SHALL BE CONSTRUCTED FROM SDR-35 PVC WITH FOUR (4) FEET MINIMUM COVER TO TOP OF PIPE IN UNPAVED AREAS AND FIVE (5) FEET MINIMUM COVER TO TOP OF PIPE IN PAVED AREAS.
- SANITARY SEWER COSTS AND ENGINEERING EXPENSES SHALL BE TABULATED SEPARATELY BY W.D.B.H. SECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS SATISFACTION PRIOR TO DESIRES REIMBURSEMENT AT A LATER DATE.
- ALL UTILITY ELEVATIONS ARE AT THE INVERT UNLESS OTHERWISE NOTED.
- ALL WATER MAIN, VALVE, AND HYDRANT LOCATIONS ARE SUBJECT TO CHANGE BASED UPON FINAL RECORDING TO FULFILL THE REQUIREMENTS OF THE UTILITY PROVIDER. ANY UTILITY CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE PUBLIC WATER SUPPLIER'S CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- TYPES OF STRUCTURES REFER TO THE LATEST PENNSYLVANIA DEPARTMENT OF TRANSPORTATION STANDARD DETAILS, UNLESS OTHERWISE NOTED.
- ALL UTILITY STRUCTURES (I.E. SEWER MANHOLES, INLETS, VALVE BOXES, ETC.) LOCATED WITHIN THE PROPOSED STREETS OR PAVED AREAS SHALL BE ADJUSTED TO MEET PROPOSED FINISHED GRADES.
- EXISTING UTILITIES, ROADS, DRIVEWAYS, AND STRUCTURES SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS SATISFACTION PRIOR TO CONSTRUCTION. NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING UTILITY SERVICES AND MAINS.
- NATURAL GAS, WATER, ELECTRIC AND TELECOM UTILITY LINES ARE APPROXIMATE AN THERE EXACT LOCATION AND DESIGN ARE TO BE CONFIRMED WITH THE APPLICABLE UTILITY PROVIDER.

STORMWATER MANAGEMENT FACILITIES
CONSTRUCTION NOTES (AS APPLICABLE)

- SITE PREPARATION
AREAS DESIGNATED FOR BORROW AREAS, EMBANKMENT, AND STRUCTURAL WORK SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL - WHERE POSSIBLE. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NOT STEEPER THAN 1:1. UNLESS RESTRICTED FROM SUCH, ALL TREES SHALL BE CLEARED AND GRUBBED WITHIN 15 FEET OF THE EMBANKMENT. AREAS TO BE COVERED BY THE STORMWATER FACILITIES SHALL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCES, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS. TREES, BRUSH, AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE. FOR DRY STORMWATER MANAGEMENT PONDS, A MINIMUM OF A 25-FOOT RADIUS AROUND THE OUTLET STRUCTURE SHALL BE CLEARED. ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE AND BELOW THE LIMITS OF THE DAM AND THE STORMWATER FACILITIES AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE. WHEN SPECIFIED, A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.
- EARTH FILL
A. MATERIAL
THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONABLE MATERIAL. FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT AND CUTOFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION CO, SC, CH, OR CL AND MUST HAVE AT LEAST 90% PASSING THE NO. 200 SIEVE. CONSIDERATION MAY BE GIVEN TO THE USE OF OTHER MATERIALS IN THE EMBANKMENT IF DESIGNED BY A GEOTECHNICAL ENGINEER. SUCH SPECIAL DESIGNATIONS SHALL BE THE PROPERTY OF THE SUPERVISOR BY A GEOTECHNICAL ENGINEER. MATERIALS USED IN THE OUTER SHELL OF THE EMBANKMENT MUST HAVE THE CAPABILITY TO SUPPORT VEGETATION OF THE QUALITY REQUIRED TO PREVENT EROSION OF THE EMBANKMENT.
B. PLACEMENT
AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN MAXIMUM 8 INCH THICK (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST PERMEABLE BORROW MATERIALS SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT. THE PRINCIPAL SPILLWAY MUST BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE EMBANKMENT.
C. COMPACTION
THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TREAD TRACK OF HEAVY EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A MINIMUM OF FOUR COMPLETE PASSES OF A SHEEPSFOOT OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION WILL BE OBTAINED WITH THE EQUIPMENT USED. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORMED INTO A BALL IT WILL NOT CRUMBLE. YET NOT BE SO WET THAT WATER THEN BE SQUEEZED OUT. WHEN REQUIRED BY THE REVIEWING AGENCY THE MINIMUM REQUIRED DENSITY SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN +/- 2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99 (STANDARD PROCTOR).
- CUTOFF TRENCH
THE CUTOFF TRENCH SHALL BE EXCAVATED INTO IMPERVIOUS MATERIAL ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE BOTTOM WIDTH OF THE TRENCH SHALL BE GOVERNED BY THE EQUIPMENT USED FOR EXCAVATION, WITH THE MINIMUM WIDTH BEING FOUR FEET. THE DEPTH SHALL BE AT LEAST TWO FEET BELOW EXISTING GRADE OR AS SHOWN ON THE PLANS. THE SIDE SLOPES OF THE TRENCH SHALL BE 1 TO 1 OR FLATTER. THE BACKFILL SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY.
- EMBANKMENT CORE
THE CORE SHALL BE PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE TOP WIDTH OF THE CORE SHALL BE A MINIMUM OF FOUR FEET. THE HEIGHT SHALL EXTEND UP TO AT LEAST THE 10 YEAR WATER SURFACE ELEVATION OR AS SHOWN ON THE PLANS. THE SIDE SLOPES SHALL BE 1 TO 1 OR FLATTER. THE CORE SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY. IN ADDITION, THE CORE SHALL BE PLACED CONCURRENTLY WITH THE OUTER SHELL OF EMBANKMENT.
- STRUCTURE BACKFILL WITH FLOWABLE FILL
BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADDING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL SHALL COMPLETELY FILL ALL SPACES UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE PERMITTED TO OPERATE ON OR OVER THE FLOWABLE FILL. UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE, THE MIXTURE SHALL HAVE A 100-200 PSI, 28 DAY UNCOMPACTED EXISTING STRENGTH. THE FLOWABLE FILL SHALL HAVE A MINIMUM pH OF 4.0 AND A MINIMUM RESISTIVITY OF 2,000 OHM-CM. MATERIAL SHALL BE PLACED SUCH THAT A MINIMUM OF 6" (MEASURED PERPENDICULAR TO THE OUTSIDE OF THE PIPE) OF FLOWABLE FILL SHALL BE UNDER (BEDDING), OVER, AND ON THE SIDES OF THE PIPE. IT ONLY NEEDS TO EXTEND UP TO THE SPRING LINE FOR RIGID CONDUITS. AVERAGE SLUMP OF THE FILL SHALL BE 7" TO ASSURE FLOWABILITY OF THE MATERIAL. ADEQUATE MEASURES SHALL BE TAKEN (SAND BAGS, ETC.) TO PREVENT FLOATING THE PIPE. THE MATERIAL SHALL COMPLETELY FILL ALL VOIDS ADJACENT TO THE FLOWABLE FILL ZONE. BACKFILL MATERIAL OUTSIDE THE STRUCTURAL BACKFILL (FLOWABLE FILL) ZONE SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE CORE OF THE EMBANKMENT OR OTHER EMBANKMENT MATERIALS.
- PIPE CONDUITS
ALL PIPES SHALL BE CIRCULAR IN CROSS-SECTION UNLESS OTHERWISE SPECIFIED.
- REINFORCED CONCRETE PIPE
A. MATERIALS - REINFORCED CONCRETE PIPE SHALL HAVE BELL AND SPIGOT JOINTS WITH RUBBER GASKETS AND SHALL EQUAL OR EXCEED ASTM C-361.
B. BEDDING - REINFORCED CONCRETE PIPE CONDUITS SHALL BE LAID IN A CONCRETE BEDDING/CRADE FOR THEIR ENTIRE LENGTH. THIS BEDDING/CRADE SHALL CONSIST OF HIGH SLUMP CONCRETE PLACED UNDER THE PIPE AND UP TO THE SIDES OF THE PIPE AT LEAST 50% OF ITS OUTSIDE DIAMETER WITH A MINIMUM THICKNESS OF 6 INCHES. WHERE A CONCRETE CRADE IS NOT SPECIFIED, FLOWABLE FILL MAY BE USED AS DESCRIBED IN THE "STRUCTURE BACKFILL" SECTION OF THIS STANDARD. GRAVEL BEDDING IS NOT PERMITTED.
C. LAYING PIPE - BELL AND SPIGOT PIPE SHALL BE PLACED WITH THE BELL END UPSTREAM. JOINTS SHALL BE MADE IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL. AFTER THE JOINTS ARE SEALED FOR THE ENTIRE LENGTH OF THE PIPE, THE BACKFILL SHALL BE PLACED SO THAT ALL SPACES UNDER THE PIPE ARE FILLED. CARE SHALL BE EXERCISED TO PREVENT ANY DEVIATION FROM THE ORIGINAL LINE AND GRADE OF THE PIPE.
D. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL", ABOVE.
- PLASTIC PIPE
A. MATERIALS - PVC PIPE SHALL BE A MINIMUM OF SDR-35 CONFORMING TO ASTM D-1785 OR ASTM D-2241. CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE, COUPLINGS AND FITTINGS SHALL CONFORM TO THE FOLLOWING: 4" THROUGH 10" PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M252 TYPE S, AND 12" THROUGH 60" SHALL MEET THE REQUIREMENTS OF AASHTO M254 TYPE S OR ASTM F2306.
B. JOINTS AND CONNECTIONS TO ANTI-SEEP COLLARS SHALL BE COMPLETELY WATER TIGHT.
C. BEDDING - THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH. WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTION TO PROVIDE ADEQUATE SUPPORT.
D. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL", ABOVE.
- OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC) SHALL BE AS SHOWN ON THE DRAWINGS, OR AS REQUIRED BY MUNICIPAL CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- CONCRETE STRUCTURES
A. CONCRETE SHALL MEET THE REQUIREMENTS OF LATEST EDITION PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, SECTIONS 605, 606 AND 714; AND AS MODIFIED HEREIN.
B. REINFORCEMENT SHALL MEET THE MINIMUM REQUIREMENTS OF LATEST EDITION PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, SECTION 709.
- ROCK RIP-RAP
ROCK RIP-RAP SHALL MEET THE REQUIREMENTS OF LATEST EDITION PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408.

STORM DRAINAGE PIPE INSTALLATION NOTES

- STORM DRAIN PIPES SHALL BE ADS N-12 ST 18 HDPE PIPE WITH BELL & SPIGOT PIPE JOINTS (FOR SOIL TIGHT CONNECTIONS), ADS N-12 WT HDPE PIPE (FOR WATER TIGHT CONNECTIONS), AND/OR ASTM C-76 RCP WITH BELL AND SPIGOT JOINTS OR APPROVED EQUIV. REFER TO PLAN AND PROFILES FOR MATERIALS USED.
- CURVILINEAR INSTALLATION OF ADS (N-12) PIPE SHALL USE PRO-LINK WT JOINTS FOR WATER TIGHT CONNECTIONS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND INSTALLATION REQUIREMENTS. CURVILINEAR PIPE WITH PRO-LINK WT BELL/BELL COUPLER OR MITERED BELL COUPLER SHALL BE INSTALLED WITH A MAXIMUM JOINT DEFLECTION AT EXISTING GRADE OF LESS THAN 1/8" PER JOINT. IF LESS THAN 200 FEET, INSTALL TEN FOOT (10') PIPE LENGTHS WITH A GASKETED BELL/BELL COUPLER. ALL INSTALLATION MUST BE COORDINATED WITH A MANUFACTURER'S REPRESENTATIVE.
- ALL EMBEDED MATERIALS USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL FOR HDPE PIPE SHALL CONFORM TO AASHTO SECTION 30 AND ASTM D-2321 PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- WHERE ANY PART OF THE PROPOSED STORM DRAIN SYSTEM IS TO BE CONSTRUCTED WITHIN A FILL SECTION, THE CONTRACTOR SHALL COMPACT ALL SELECT FILL MATERIAL TO 95% OF ASTM D-698 (AASHTO T-99) WITH A MOISTURE CONTENT \pm 3% OF OPTIMUM UP TO THE PIPE BEDDING.

SINKHOLE PRONE SOILS

ANY PORTION OF THE SITE THAT IS UNDERLAIN BY LIMESTONE MAY GENERALLY BE PRONE TO SOLUTION ACTIVITY AND FORMATION OF SINKHOLES. IF SINKHOLES ARE DISCOVERED DURING CONSTRUCTION OPERATIONS:

- THE CONTRACTOR SHOULD CEASE OPERATIONS WITHIN THE AFFECTED AREA AND CONTACT THE GEOTECHNICAL ENGINEER.
- ALL SOFT SOILS SHOULD BE EXCAVATED TO REVEAL THE THROAT OF THE SINKHOLE. PINNACLES AND OVERHANGS SHOULD BE REMOVED AND CREVICES CLEANED-OUT AND FILLED WITH LEAN CONCRETE AS NECESSARY TO PREVENT FURTHER EROSION.
- THE APPROPRIATE REMEDIAL TREATMENT - WHICH MAY CONSIST OF GROUT OR CONCRETE PLACEMENT, REVERSE FILTER CONSTRUCTION UTILIZING ROCK AND AGGREGATE, AND/OR STABILIZATION VIA PLACEMENT OF GEOTEXTILES - SHOULD BE IMPLEMENTED.
- DURING EARTHMOVING OPERATIONS, EXCAVATIONS SHOULD BE BACKFILLED AS SOON AS PRACTICAL AND ANY DEPRESSIONS SHOULD BE RE-GRADED TO AVOID PONDED WATER.

GENERAL CONSTRUCTION NOTES

- THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION SITE MEETING WITH THE UPPER ALLEN TOWNSHIP ENGINEER AND THE CUMBERLAND COUNTY CONSERVATION DISTRICT AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL ADHERE TO THE SEQUENCE OF CONSTRUCTION OUTLINED IN THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN, UNLESS APPROVED OTHERWISE BY THE LOCAL CONSERVATION DISTRICT, THE MUNICIPALITY, AND SITE DESIGN CONCEPTS, INC.
- ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO SITE DESIGN CONCEPTS, INC. PRIOR TO CONSTRUCTION.
- EXTREME CARE SHOULD BE TAKEN DURING SITE DEMOLITION AND CONSTRUCTION ACTIVITIES SO AS NOT TO DISTURB EXISTING FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING COSTS ASSOCIATED WITH REPLACEMENT OF ANY PROPERTY CORNERS DAMAGED DURING SITEWORK OPERATIONS.
- UNLESS NOTED OTHERWISE HEREIN, MISCELLANEOUS SIGNS, MAILBOXES, FENCES, ETC. LOCATED WITHIN CONSTRUCTION AREAS SHALL BE REMOVED AND RELOCATED BY THE CONTRACTOR, AS REQUIRED.
- IF DISCREPANCIES BETWEEN SCALED AND LABELED DIMENSIONS SHOWN ON THESE PLANS ARE DISCOVERED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT SITE DESIGN CONCEPTS, INC. FOR CLARIFICATION.
- UNLESS NOTED OTHERWISE, IN CASE OF CONFLICTS BETWEEN THE PLANS AND DETAILS SHOWN HEREIN AND MUNICIPAL ORDINANCES OR CONSTRUCTION SPECIFICATIONS, THE MUNICIPAL REQUIREMENTS SHALL TAKE PRECEDENCE.
- ANY EXISTING BITUMINOUS PAVING, CONCRETE CURB, CONCRETE PADS, SIDEWALK, UTILITY OR OTHER EXISTING IMPROVEMENT (SCHEDULED TO REMAIN) THAT IS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REMOVED AND REPLACED, OR REPAIRED WITH MATERIAL EQUAL TO OR EXCEEDING THAT WHICH WAS DISTURBED, OR AS SPECIFIED BY THE OWNER, PROJECT OR MUNICIPAL ENGINEER, AS APPLICABLE. WHEN REMOVING AND REPLACING CONCRETE CURB, CONCRETE PADS AND/OR SIDEWALK, REMOVAL SHALL BE TO THE NEAREST EXPANSION JOINT IF POSSIBLE, TO CREATE A CLEAN, TOOLED (NON-SAWCUT) JOINT. PROVIDE DOWELS AT JOINTS AND INSTALL NEW EXPANSION JOINT MATERIAL AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC AND TRAFFIC CONTROL. AS APPLICABLE, THE CONTRACTOR SHALL COORDINATE ANY TEMPORARY ROAD CLOSING WITH THE MUNICIPALITY AND/OR PENNDOT.
- TEMPORARY TRAFFIC CONTROLS AND TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- CONTRACTOR SHALL MONITOR CONSTRUCTION VEHICLES AS REQUIRED TO AVOID TRACKING MUD AND DEBRIS ONTO ANY PAVED STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE STREET(S) AND/OR ACCESS DRIVE(S) CLEARED AND THE SITE IN AN APPROPRIATE WORKMAN-LIKE MANNER.
- ALL EXISTING LAWN AREAS DISTURBED BY PROPOSED CONSTRUCTION SHALL BE RESTORED TO PROVIDE A MINIMUM SIX INCHES (6") TOPSOIL, GRADED TO SMOOTH, TRUE LINES AND SEEDED AND MULCHED PER SPECIFICATIONS HEREIN.
- ANY LAND AREA THAT CANNOT BE ADEQUATELY STABILIZED WITH SEEDING AND MULCHING SHALL BE STABILIZED WITH AN EROSION CONTROL OR TURF REINFORCEMENT MATTING.
- HANDICAP CURB RAMPS SHALL BE PROVIDED TO PROPOSED SIDEWALKS AT ALL PROPOSED STREET INTERSECTIONS AND AT LOCATIONS INDICATED ON THE SITE PLAN(S). RAMPS SHALL BE CONSTRUCTED PER MUNICIPAL AND A.D.A. REQUIREMENTS.
- PROPOSED STORMWATER MANAGEMENT FACILITIES:

PROPOSED STORMWATER MANAGEMENT FACILITIES HAVE BEEN DESIGNED TO MANAGE POST DEVELOPMENT STORM RUNOFF FROM PROPOSED IMPERVIOUS AREAS SHOWN ON THIS PLAN. NO PROVISIONS HAVE BEEN MADE TO MANAGE STORMWATER RUNOFF FROM ADDITIONAL FUTURE IMPERVIOUS AREAS NOT SHOWN ON THIS PLAN.

ALL PROPOSED STORM INLETS LOCATED WITHIN EXISTING/PROPOSED PUBLIC RIGHTS-OF-WAY SHALL BE PENNDOT 2'x4" TYPE M OR C AS SPECIFIED ON THE PROFILES, UNLESS OTHERWISE NOTED OR REQUIRED DUE TO PIPE SIZES, CONFIGURATIONS OR GEOMETRY. THE REAR EDGE OF THE TOP OF GRADE OF ALL TYPE-C INLETS LOCATED IN PROPOSED STREETS SHALL BE DEPRESSED ONE AND ONE-HALF (1-1/2) INCHES BELOW THE FLOWLINE. VARIANCES SHALL BE PROVIDED ON INLETS AS SPECIFIED ON THE PROFILES. INLETS SHALL INCLUDE A BICYCLE-SAFE INLET GRATE. ALL PROPOSED STORM PIPES SHALL BE WATER TIGHT SMOOTH LINED CORRUGATED POLYETHYLENE (SLOP) UNLESS NOTED OTHERWISE.

THE DESIGN OF THE PERMANENT STORMWATER INFILTRATION AND/OR STORMWATER QUALITY BMPS IS BASED ON REPRESENTATIVE SOIL TESTING PROCEDURES ACCEPTED BY PA DEP. DUE TO POSSIBLE VARIANCES IN THE SOIL PROPERTIES ENCOUNTERED WITHIN THE AREA OF THE ACTUAL BMP FACILITIES, AND THE POTENTIAL ALTERATION OF PERCOLATION PROPERTIES OF THE SOIL DURING CONSTRUCTION, SITE DESIGN CONCEPTS, INC. DOES NOT GUARANTEE OR WARRANTY THAT THE BMPS WILL FUNCTION IN ACCORDANCE WITH THE PARAMETERS USED TO DESIGN THE BMPS.

- PROPOSED SITE GRADING HAS BEEN SHOWN TO PROVIDE A GENERAL REPRESENTATION OF THE FINISHED GROUND CONTOUR AND DRAINAGE PATTERNS FOR STORMWATER DESIGN PURPOSES.
- ALL DIMENSIONS IN AREAS OF PROPOSED CURBING ARE FACE OF CURB TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS ARE AT THE CENTER OF STRUCTURE AT THE FLOWLINE OF THE FACE OF CURB OR AT THE CENTER OF STRUCTURE IN GRASSED AREAS, UNLESS OTHERWISE NOTED.
- FAILURE TO SPECIFICALLY MENTION ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- THE MEASURES REQUIRED IN THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN SHALL APPLY AS IF SHOWN ON THIS PLAN AND SHALL BE COMPLETED AND IN SERVICE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR CONSTRUCTION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- CURB AND PAVEMENT SHALL BE INSTALLED IN A MANNER AS TO ENSURE POSITIVE DRAINAGE IN ALL AREAS.
- FIELD ADJUSTMENTS SHALL BE MADE AS NECESSARY TO PROVIDE A SMOOTH TRANSITION BOTH HORIZONTALLY AND VERTICALLY FROM THE EXISTING TO PROPOSED PAVING SECTIONS AND CURBS.
- WHERE IT IS NECESSARY TO CONNECT TO OR EXTEND AN EXISTING ROAD OR PAVEMENT, SAW CUT THE EXISTING EDGE OF PAVEMENT AND MILL AND OVERLAY AT THE POINT OF TIE-IN TO ENSURE A SMOOTH TRANSITION AND POSITIVE DRAINAGE.
- SITE CONTRACTOR SHALL PROVIDE DETAILED AS-BUILT INFORMATION TO PROJECT ENGINEER FOR ALL PROPOSED SANITARY SEWER AND STORMWATER CONVEYANCE AND B.M.P. STRUCTURES / FACILITIES (PUBLIC AND PRIVATE) FOR PROJECT ENGINEER'S USE IN PREPARATION OF RECORD DRAWINGS. AS-BUILT MYLAR PLANS AND ELECTRONIC DATA FILES SHALL BE PROVIDED TO THE TOWNSHIP. ALL DRAWINGS MUST BE SIGNED AND DATED BY A PROFESSIONAL ENGINEER OR LAND SURVEYOR ATTENDING TO THE CORRECTED VERSION OF THE FACILITY INFORMATION SHOWN, IN ACCORDANCE WITH SECTION 220-4.2(C)(3) OF THE CODIFIED ORDINANCES.

GEOTECHNICAL NOTES

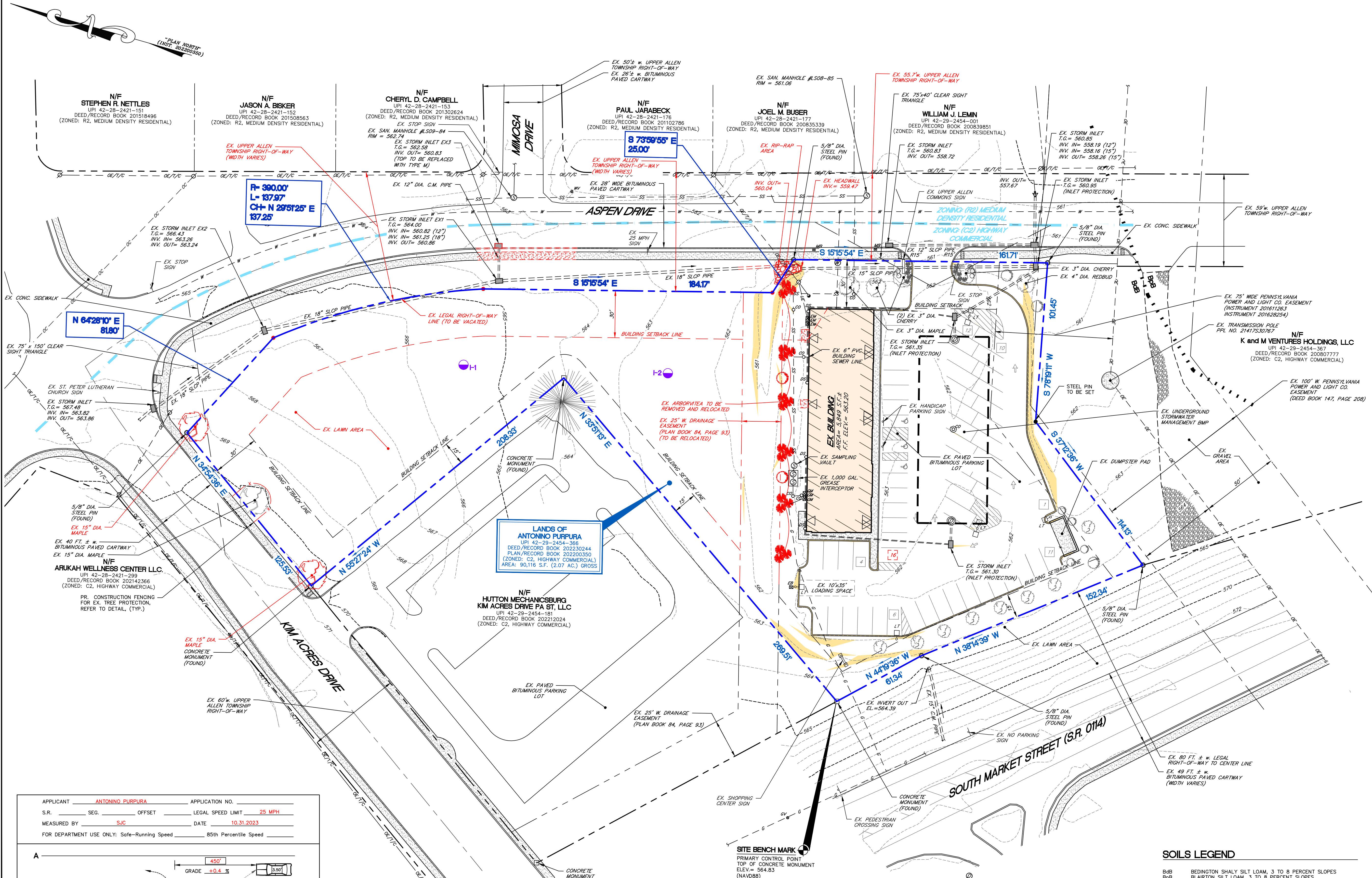
THE SITE IS GENERALLY SUITABLE FOR CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE FOLLOWING PROCEDURES ARE REQUIRED:

- CLEARING, GRUBBING, DEMOLITION OF EXISTING STRUCTURES, AND THE STRIPPING OF ORGANIC SURFACE SOILS SHOULD BE PERFORMED IN ADVANCE OF ANY GRADING OPERATIONS IN STRUCTURAL AREAS.
- AFTER CLEARING, GRUBBING, AND STRIPPING HAVE BEEN COMPLETED, THE RESULTING STRUCTURAL FILL SUBGRADE SHOULD BE PROFILES WITH A FULLY LOADED TANDER AXLE DUMP TRUCK TO LOCATE ANY UNSTABLE OR UNDESIRABLE AREAS PRIOR TO STRUCTURAL FILL PLACEMENT. ANY SUBGRADE IDENTIFIED AS BEING UNSUITABLE OR UNDESIRABLE SHOULD BE UNDERCUT TO A STABLE SOIL STRATUM AND BACKFILLED WITH CONTROLLED, COMPACTED STRUCTURAL FILL.
- SOILS SHALL BE DRIED BY PLACING IN LIFTS NOT TO EXCEED EIGHT (8) INCHES IN LOOSE THICKNESS AND DISCING AND AERATING THE SOIL OR TREATING WITH LIME OR CEMENT UNTIL MOISTURE FALLS WITHIN THE ACCEPTABLE LIMITS.
- SPRINGS AND AREAS OF HIGH GROUNDWATER TABLE ENCOUNTERED DURING CONSTRUCTION SHALL BE DEWATERED USING A PUMPED WATER FILTER BAG. IN AREAS OF PERMANENT EXCAVATION, CEASE WORK AND CONTACT THE PROJECT AND GEOTECHNICAL ENGINEER.
- STRUCTURAL FILLS SUPPORTING FOUNDATIONS, SLABS, AND ROADWAYS AND WITHIN EMBANKMENT SLOPES STEEPER THAN 3(H):1(V) SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT (8) INCHES IN THICKNESS AND SHALL BE COMPACTED TO 95% OF ASTM D-698 (AASHTO T-99) AT +/- 3% OF THE OPTIMUM MOISTURE CONTENT. WHERE HAND-GUIDED COMPACTION EQUIPMENT SUCH AS JUMPING-JACKS OR PLATE-TAMPERS ARE USED, THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED FOUR (4) INCHES.
- STRUCTURAL FILLS WITHIN THE TOP ONE (1) FOOT OF PAVEMENT SUBGRADE SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT (8) INCHES IN LOOSE THICKNESS AND SHALL BE COMPACTED TO 98% OF ASTM D-698 (AASHTO T-99) AT +/- 2% OF THE OPTIMUM MOISTURE CONTENT. WHERE HAND-GUIDED COMPACTION EQUIPMENT SUCH AS JUMPING-JACKS OR PLATE-TAMPERS ARE USED, THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED FOUR (4) INCHES.
- STRUCTURAL FILLS IN STORMWATER MANAGEMENT FACILITIES SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT (8) INCHES IN LOOSE THICKNESS AND SHALL BE COMPACTED TO 98% OF ASTM D-698 (AASHTO T-99) AT +/- 2% OF THE OPTIMUM MOISTURE CONTENT. WHERE HAND-GUIDED COMPACTION EQUIPMENT SUCH AS JUMPING-JACKS OR PLATE-TAMPERS ARE USED, THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED FOUR (4) INCHES.
- UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER, THE MAXIMUM PARTICLE SIZE FOR STRUCTURAL FILLS WITHIN THE UNDERMOST ONE (1) FOOT OF FLOOR SLAB SUBGRADE AND PAVEMENT AND FILLS IN THE VICINITY OF UTILITIES SHOULD BE LIMITED TO FOUR (4) INCHES. FOR FILLS BELOW THE UNDERMOST ONE (1) FOOT AND FILLS WITHIN NON-STRUCTURAL AND LANDSCAPED AREAS, THE MAXIMUM PARTICLE SIZE SHOULD BE LIMITED TO EIGHT (8) INCHES.
- ALL BLASTING REQUIRED FOR ROCK REMOVAL FOR SITE GRADING, INSTALLATION OF PROPOSED SANITARY SEWER AND OTHER UTILITIES OR FACILITIES SHALL BE COMPLETED AT THE SAME TIME IN ACCORDANCE WITH ALL GOVERNING REGULATORY REQUIREMENTS.
- PAVEMENT SUBGRADE SHOULD BE GRADED AND SEALED AT THE END OF EACH WORKOUT. PLACEMENT OF SUBBASE AND ASPHALT PAVING SHOULD BE PERFORMED AS QUICKLY AS POSSIBLE TO MINIMIZE THE IMPACT OF REPEATED SATURATION OF THE SUBGRADE SOILS.
- ALL NEW FILL SLOPES STEEPER THAN 5(H):1(V) SHOULD BE KEVED INTO THE EXISTING SLOPES TO PROTECT THE STABILITY OF THE EMBANKMENT.
- FILL CONTAINING A MAJORITY OF ROCKY MATERIAL MAY BE DIFFICULT TO EXCAVATE IF LOCATED IN AREAS OF UTILITY TRENCH AND FOOTING EXCAVATIONS. THEREFORE, THE CONTRACTOR MAY WANT TO CONSIDER LIMITING THE USE OF ROCK FILL IN AREAS OF PROPOSED EXCAVATION, OR TO STAGE THE EARTHWORK OPERATIONS TO ALLOW THE PLACEMENT OF ROCK FILL AT THE BOTTOM OF THE DEEPER FILL AREAS, BELOW ANY ANTICIPATED STRUCTURE EXCAVATIONS.
- ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL TO A DEPTH AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND/OR PROJECT ENGINEER.
- A GEOTECHNICAL ENGINEER OR OTHER TECHNICAL PROFESSIONAL SHALL BE PRESENT DURING THE CONSTRUCTION OF SLOPES EXCEEDING 3:1 FILL OR 2:1 CUT.
- AVOID RUNNING UTILITIES ALONG FOUNDATIONS LINES.
- MINIMIZE IRRIGATED LANDSCAPED AREAS ADJACENT TO BUILDINGS.
- COMPACTION TESTING TO ENSURE ADEQUATE COMPACTION IS ACHIEVED PER REQUIREMENTS NOTED HEREIN OR THOSE OF ANY AGENCY WITH JURISDICTION, IS REQUIRED AT THE BASE OF ALL STORM, SANITARY SEWER AND WATER SYSTEM STRUCTURES AND PIPES THAT ARE LOCATED IN FILL AREAS, PRIOR TO INSTALLATION OF SAID FACILITIES. RESULTS OF ALL COMPACTION TESTS SHALL BE PROVIDED TO THE OWNER, PROJECT ENGINEER AND AGENCY WITH JURISDICTION.

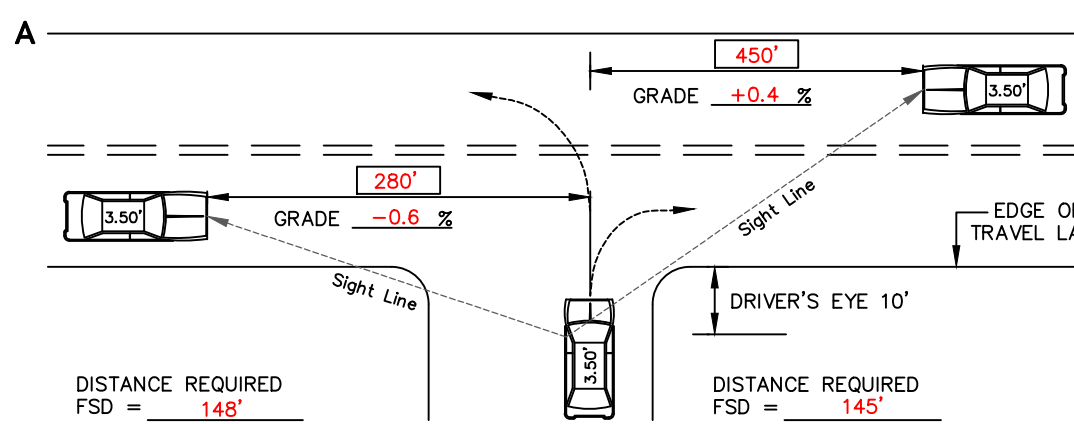
LAND DEVELOPMENT NOTES

- THE PURPOSE OF THIS LAND DEVELOPMENT PLAN IS TO DEPICT A PROPOSED BUILDING ADDITION, PATIO AREA, AND PARKING LOT EXPANSION ON PARCEL 366 LOCATED AT 2210 ASPEN DRIVE, UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA.
- PARCEL INFORMATION:
UNIFORM PARCEL IDENTIFIER: 42-29-2454-366
DEED REFERENCE: DEED/RECORD BOOK 202230244
PLAN REFERENCE: PLAN/RECORD BOOK 202200350
- EXISTING LAND TRACT IS ZONED: C2, HIGHWAY COMMERCIAL.
- ADJACENT LAND TRACTS ARE ZONED:
NORTH: C2, HIGHWAY COMMERCIAL
SOUTH: C2, HIGHWAY COMMERCIAL
EAST: R2, MEDIUM DENSITY RESIDENTIAL
WEST: C2, HIGHWAY COMMERCIAL
- EXISTING LAND TRACT(S) USE: RESTAURANT
PROPOSED LAND TRACT USE: RESTAURANT
- EXISTING LOT IS SERVED BY AN EXISTING PUBLIC WATER SUPPLY BY VEOLIA AND AN EXISTING PUBLIC SANITARY SEWAGE DISPOSAL SYSTEM PROVIDED BY UPPER ALLEN TOWNSHIP.
- MINIMUM REQUIRED LOT AREA: AS REQUIRED PER DIMENSIONAL REGULATIONS
EXISTING LOT AREA: 90,116 S.F. (2.07 AC.) GROSS/NET
PROPOSED LOT AREA: 98,940 S.F. (2.271AC) GROSS/NET
- MINIMUM REQUIRED LOT WIDTH: 150 FT. (AT BLDG. SETBACK LINE)
EXISTING LOT WIDTH (ALONG ASPEN DRIVE): 590 FT.
(ALONG KIM ACRES DRIVE): 125 FT.
- MINIMUM REQUIRED SETBACKS:
PRINCIPAL BUILDINGS & STRUCTURES:
FRONT: 30 FT.
SIDE: 15 FT.
REAR: 15 FT.
*VARIANCES GRANTED TO PERMIT A 15' BUILDING SETBACK ALONG SOUTH MARKET STREET (ZHB APP. 05-12).
*WHEN A WRITTEN AGREEMENT IS PROVIDED BY ADJOINING PROPERTY OWNERS, NO SIDE YARD SHALL BE REQUIRED WHERE TWO OR MORE COMMERCIAL PROPERTIES ADJUT SIDE BY SIDE.
- MAXIMUM ALLOWABLE BUILDING HEIGHT: 35 FT. (PRINCIPAL BLDGS./STRUCTURES).
EXISTING/PROPOSED BUILDING HEIGHT: <35 FT.
- MAXIMUM ALLOWABLE BUILDING COVERAGE: 50%
EXISTING BUILDING COVERAGE: 6% (6,640 S.F./90,116 S.F.)
PROPOSED BUILDING COVERAGE: 9% (8,680 S.F./98,940 S.F.)
- MAXIMUM ALLOWABLE LOT COVERAGE: 70%
EXISTING LOT COVERAGE: 31% (30,514 S.F./90,116 S.F.)
PROPOSED LOT COVERAGE: 61% (60,213 S.F./98,940 S.F.)
- PARKING REQUIREMENTS:
BASIS: RESTAURANT
REQUIREMENTS = ONE SPACE FOR EVERY 4 SEATS OF DESIGN CAPACITY, PLUS 1 SPACE FOR EVERY 2 EMPLOYEES ON THE LARGEST SHIFT
ANALYSIS: EXISTING 68 SEATS / 4 + 12 EMPLOYEES / 2 = 23 SPACES
PROPOSED 150 SEATS / 4 + 12 EMPLOYEES / 2 = 44 SPACES
TOTAL REQUIRED NO. OF SPACES = 67
EXISTING NO. OF SPACES = 40
PROPOSED NO. OF SPACES = 45
NO. OF SPACES TO BE REMOVED = 1
TOTAL NO. OF SPACES = 104
REQUIRED NO. OF ADA HANDICAP PARKING SPACES = 5
EXISTING NO. OF ADA HANDICAP PARKING SPACES = 4
PROPOSED NO. OF ADA HANDICAP PARKING SPACES = 2
TOTAL NO. OF ADA HANDICAP PARKING SPACES = 5
MINIMUM REQUIRED PARKING SPACE SIZE = 18'L x 9.5'W.
- LOADING REQUIREMENTS:
BASIS: RESTAURANT
TOTAL REQUIRED NO. OF LOADING SPACES = 1
EXISTING NO. OF LOADING SPACES = 1
PROPOSED NO. OF LOADING SPACES = 0
TOTAL NO. OF LOADING SPACES = 1
MINIMUM LOADING SPACE SIZE = 35'L x 10'W x 14'H.
- NO NEW STREETS PROPOSED WITH THIS PROJECT.
- PROJECT SITE IS NOT LOCATED WITHIN A MAPPED 100 YEAR FLOOD PLAIN BASED UPON A REVIEW OF THE FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWNSHIP OF UPPER ALLEN, COMMUNITY NUMBER 420372, PANEL 0286, SUFFIX F, MAP NUMBER 4204100286F, EFFECTIVE DATE: SEPTEMBER 7, 2023.
- SITE PROPERTY LINE AND TOPOGRAPHIC INFORMATION IS BASED ON AN ACTUAL FIELD SURVEY BY SITE DESIGN CONCEPTS, INC., COMPLETED IN OCTOBER, 2023.
- THE PROPERTY LINE BEARING BASIS DESCRIBED ON HERON AS "PLAN NORTH" IS BASED UPON THE PROPERTY LINE BEARING BASIS AS SHOWN ON A SUBDIVISION PLAN FOR 2210 ASPEN DRIVE, RECORDED IN CUMBERLAND COUNTY RECORDER OF DEEDS, INSTRUMENT NO. 202200350.
- THIS PROPERTY WAS SURVEYED AND THIS PLAN WAS PREPARED USING DEEDS AND PLANS OF RECORD WITHOUT THE BENEFIT OF TITLE SEARCH. THIS SURVEY IN NO WAY GUARANTEES OR WARRANTS THAT THE PROPERTY IS NOT AFFECTED BY RIGHTS-OF-WAY, EASEMENTS, RESTRICTIONS, ETC. WHICH MAY BE DISCOVERED BY A COMPLETE "TITLE SEARCH".
- SITE BENCH MARK: CONCRETE MONUMENT (PRIMARY CONTROL POINT) LOCATED ON THE NORTH SIDE OF SOUTH MARKET STREET ELEV = 564.83. VERTICAL ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM FROM 1988 (NAVD 88 DATUM) AND ESTABLISHED BY USING GPS TECHNOLOGY.
- CLEAR SIGHT TRIANGLE REQUIREMENTS FOR ALL INTERSECTIONS OF STREETS WITH STREETS, DRIVES, DRIVE WITH STREETS AND PRIVATE ROAD WITH STREETS:
75 FT. MEASURED ALONG CENTERLINE OF INTERSECTING STREETS.
45 FT. MEASURED ALONG CENTERLINE OF A PRIVATE DRIVE OR PRIVATE ROAD AND THE INTERSECTED STREET.
- NO BUILDING OR STRUCTURE IS PERMITTED WITHIN CLEAR SIGHT TRIANGLE. HOWEVER, OBSTRUCTIONS AND PLANTINGS LESS THAN THREE (3) FEET IN HEIGHT SHALL BE PERMITTED.
- THE NATIONAL WETLANDS INVENTORY MAP DEPICTS NO EXISTING WETLAND AREAS ON THIS SITE.
- ALL PROPERTY CORNERS NOT CURRENTLY SET SHALL BE SET IN ACCORDANCE WITH UPPER ALLEN TOWNSHIP SPECIFICATIONS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PENNDOT SPECIFICATION, PUBLICATION 408, CURRENT EDITION OR UPPER ALLEN TOWNSHIP CONSTRUCTION SPECIFICATIONS.
- ALL EXTERIOR LIGHTING SHALL CONFORM TO REQUIREMENTS CONTAINED IN THE UPPER ALLEN TOWNSHIP ZONING ORDINANCE AND BE ARRANGED SO AS NOT TO REFLECT OR GLARE ON ADJONING LOTS OR STREETS.
- ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND, UNLESS PROHIBITED BY THE UTILITY COMPANY.
- THE OWNER HEREBY GRANTS UPPER ALLEN TOWNSHIP OR ITS REPRESENTATIVE A GENERAL EASEMENT ACROSS THE ENTIRE LOT FOR ACCESS TO THE STORMWATER MANAGEMENT FACILITIES.
- NOTHING SHALL BE PLACED, PLANTED, SET OR PUT WITHIN THE AREA OF AN EASEMENT OR PLANTING STRIP THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR PLANTING STRIP OR CONFLICT WITH AN EASEMENT AGREEMENT. NO STRUCTURES SHALL BE PLACED IN ANY EASEMENT OR PLANTING STRIP UNLESS OTHERWISE NOTED IN AN AGREEMENT WITH UPPER ALLEN TOWNSHIP. THE PROPOSED WALKWAY

P:\CIVIL\0851484-LD-1\Antonino Purpura 2020\Antonino Purpura 2020\Drawings\LAND DEVELOPMENT\1484-LD-1.dwg 12/22/2023 9:31 AM

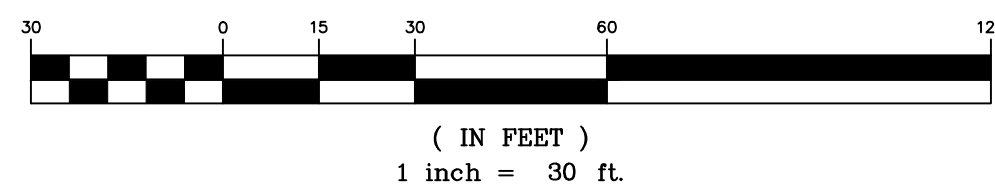


APPLICANT: **ANTONINO PURPURA** APPLICATION NO. _____
S.R. _____ SEG. _____ OFFSET _____ LEGAL SPEED LIMIT **25 MPH**
MEASURED BY: **SJC** DATE: **10.31.2023**
FOR DEPARTMENT USE ONLY: Safe-Running Speed _____ 85th Percentile Speed _____



**EXISTING ACCESS DRIVE ENTRANCE SIGHT
DISTANCE MEASUREMENTS AT ASPEN DRIVE
NO SCALE**

GRAPHIC SCALE



SOIL INFILTRATION TEST TABLE			
TEST PIT NUMBER	EX. ELEV. AT TEST LOCATION	TEST ELEVATION	INFILTRATION RATE (W/SAFETY FACTOR*)
I-1a	565.50	561.00	0.44 IN/HR
I-1b	565.50	561.00	0.50 IN/HR
I-2a	562.50	558.00	0.12 IN/HR
I-2b	562.50	558.00	0.57 IN/HR

*A MINIMUM SAFETY FACTOR OF 2 HAS BEEN APPLIED TO THE AVERAGE INFILTRATION RATE. REFER TO INFILTRATION TESTING REPORT.

SOILS LEGEND

BdB BEDFORD SHALY SILT LOAM, 3 TO 8 PERCENT SLOPES
BpB BLAIRTON SILT LOAM, 3 TO 8 PERCENT SLOPES

DEMOLITION NOTE:
1. ALL EXISTING IMPROVEMENTS TO BE DEMOLISHED AND REMOVED FROM THE SITE, ABANDONED IN-PLACE WITH DEVELOPER'S APPROVAL, OR REUSED ON-SITE WITH DEVELOPER'S APPROVAL ARE SHOWN AS RED.

NOTES:
1. SITE CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES LOCATIONS, DEPTHS AND CROSSINGS WITH PROPOSED SITE IMPROVEMENTS PRIOR TO INSTALLATION. THE SITE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON DISCOVERY OF ANY CONFLICTS.
2. UNDERGROUND UTILITIES ARE SHOWN BASED UPON SURFACE EVIDENCE, PRIOR PLANS OF RECORD, AND/OR ANY AVAILABLE AS-BUILT UTILITY PLANS.

STEEP SLOPES LEGEND

SLOPES OF 15% AND GREATER

HATCH LEGEND

EXISTING BUILDING
EXISTING LINE STRIPING
EXISTING CONCRETE
EXISTING GRAVEL
EXISTING ROCK RIP-RAP (T.B.R.)
EXISTING CONCRETE (T.B.R.)

SOIL TEST LEGEND

PROPOSED INFILTRATION TEST LOCATION

REVISIONS		COMMENTS
NO.	DATE	REVISED PER TOWNSHIP STAFF COMMENTS
1	12.22.23	

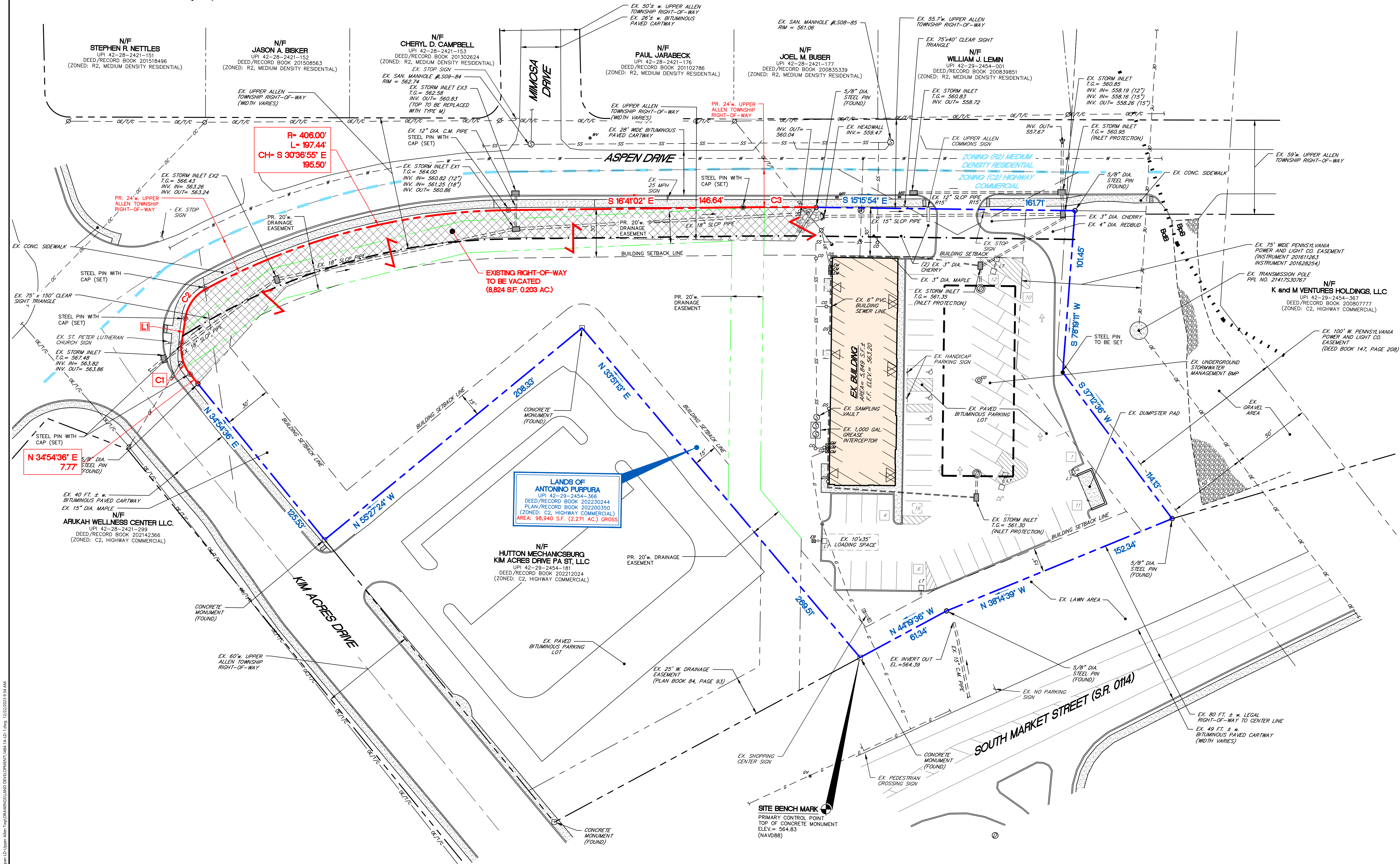
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LAND DEVELOPMENT CONSULTANTS
127 WEST MARKET STREET, SUITE 200 • YORK, PA 17401
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Civil Engineering • Surveying • Landscape Architecture • Land Planning • Environmental Consulting

EXISTING SITE CONDITIONS AND DEMOLITION PLAN
BUILDING AND PARKING LOT EXPANSION
FOR
ANTONINO PURPURA
2210 ASPEN DRIVE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SCALE		AS NOTED
DRAWN BY	SJC	
CHECKED BY	AWA	
CONTACT	AWA	
DATE	11.01.23	
FILE NAME	1484.1A-LD-1	
JOB NO.	1484.1A	
SHEET NO.	C-3	1
SHT. 3 OF 11		

LINE TABLE		
LINE	BEARING	LENGTH
L1	N 82°22'10" E	15.71'

CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	DIRECTION	CHORD
C1	25.00'	20.71'	N 58°38'23" E	20.12'
C2	25.00'	23.16'	S 71°05'19" E	22.34'
C3	1,845.00'	45.70'	S 15°58'27" E	45.70'



LANDS OF ANTONINO PURPURA
UPI 42-29-2454-366
DEED/RECORD BOOK 202230244
PLAN/RECORD BOOK 202200350
(ZONED: C2, HIGHWAY COMMERCIAL)
AREA: 98,940 S.F. (2.271 AC.) GROSS

N/F HUTTON MECHANISBURG
KIM ACRES DRIVE PA ST, LLC
UPI 42-29-2454-181
DEED/RECORD BOOK 202212024
(ZONED: C2, HIGHWAY COMMERCIAL)

N/F K and M VENTURES HOLDINGS, LLC
UPI 42-29-2454-367
DEED/RECORD BOOK 200807777
(ZONED: C2, HIGHWAY COMMERCIAL)

EX. 100' W. PENNSYLVANIA
POWER AND LIGHT CO.
EASEMENT
(DEED BOOK 147, PAGE 208)

EX. 75' WIDE PENNSYLVANIA
POWER AND LIGHT CO. EASEMENT
(INSTRUMENT 201611263
INSTRUMENT 201628254)

EX. 50' W. UPPER ALLEN
TOWNSHIP RIGHT-OF-WAY

N/F WILLIAM J. LEMIN
UPI 42-28-2421-177
DEED/RECORD BOOK 200839851
(ZONED: R2, MEDIUM DENSITY RESIDENTIAL)

N/F JOEL M. BUSER
UPI 42-28-2421-177
DEED/RECORD BOOK 200839339
(ZONED: R2, MEDIUM DENSITY RESIDENTIAL)

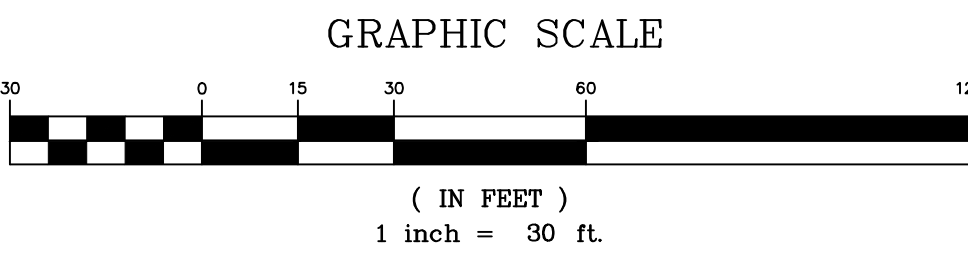
N/F PAUL JARABECK
UPI 42-28-2421-176
DEED/RECORD BOOK 201102786
(ZONED: R2, MEDIUM DENSITY RESIDENTIAL)

N/F CHERYL D. CAMPBELL
UPI 42-28-2421-153
DEED/RECORD BOOK 201302624
(ZONED: R2, MEDIUM DENSITY RESIDENTIAL)

N/F JASON A. BISKER
UPI 42-28-2421-152
DEED/RECORD BOOK 201508563
(ZONED: R2, MEDIUM DENSITY RESIDENTIAL)

N/F STEPHEN R. NETTLES
UPI 42-28-2421-151
DEED/RECORD BOOK 201518496
(ZONED: R2, MEDIUM DENSITY RESIDENTIAL)

HATCH LEGEND	
	EXISTING BUILDING
	EXISTING LINE STRIPING
	EXISTING CONCRETE
	EXISTING ROCK RIP-RAP
	EXISTING GRAVEL
	EXISTING RIGHT-OF-WAY TO BE VACATED



REVISIONS		COMMENTS
NO.	DATE	REVISED PER TOWNSHIP STAFF COMMENTS
1	12.22.23	

site design concepts
LAND DEVELOPMENT CONSULTANTS

sdcc

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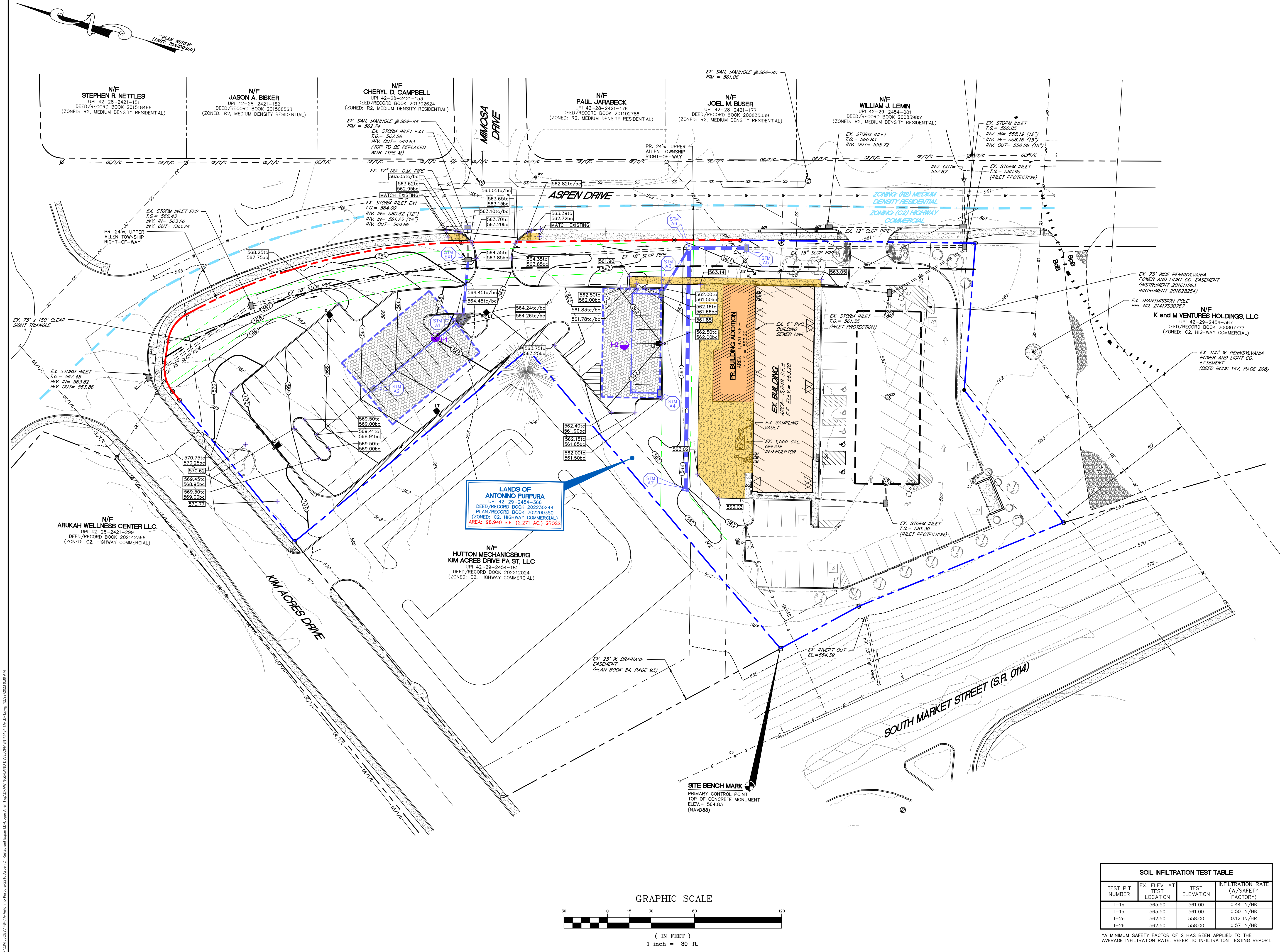
TITLE
EXISTING RIGHT-OF-WAY VACATION PLAN

PROJECT
BUILDING AND PARKING LOT EXPANSION
FOR
ANTONINO PURPURA
2210 ASPEN DRIVE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SCALE	AS NOTED
DRAWN BY	SJC
CHECKED BY	AWA
CONTACT	AWA
DATE	11.01.23
FILE NAME	14841A-LD-1
JOB NO.	14841A
SHEET NO.	C-4
REV.	1
SHT. 4 OF 11	

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HATCH LEGEND

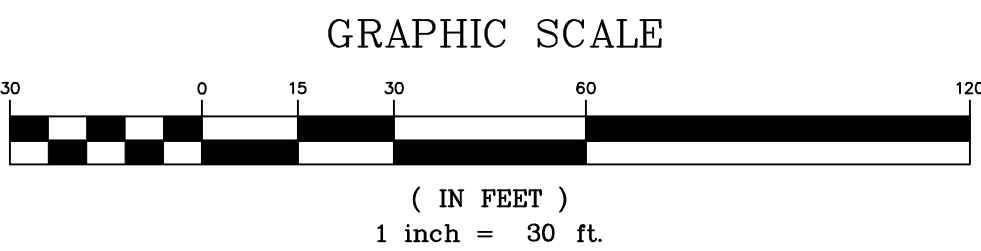
[Hatch]	EXISTING BUILDING
[Hatch]	EXISTING LINE STRIPING
[Hatch]	EXISTING CONCRETE
[Hatch]	EXISTING GRAVEL
[Hatch]	PROPOSED BUILDING
[Hatch]	PROPOSED LINE STRIPING
[Hatch]	PROPOSED CONCRETE
[Hatch]	PROPOSED SUBSURFACE INFILTRATION BED
[Hatch]	PROPOSED RIVER GRAVEL

SOIL TEST LEGEND

[Symbol] PROPOSED INFILTRATION TEST LOCATION

SOIL INFILTRATION TEST TABLE			
TEST PIT NUMBER	EX. ELEV. AT TEST LOCATION	TEST ELEVATION	INFILTRATION RATE (W/SAFETY FACTOR)
I-1a	565.50	561.00	0.44 IN/HR
I-1b	565.50	561.00	0.50 IN/HR
I-2a	562.50	558.00	0.12 IN/HR
I-2b	562.50	558.00	0.57 IN/HR

*A MINIMUM SAFETY FACTOR OF 2 HAS BEEN APPLIED TO THE AVERAGE INFILTRATION RATE. REFER TO INFILTRATION TESTING REPORT.



REVISIONS

NO.	DATE	COMMENTS
1	12.22.23	REVISED PER TOWNSHIP STAFF COMMENTS

site design concepts

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TITLE

SITE GRADING PLAN

PROJECT

BUILDING AND PARKING LOT EXPANSION FOR ANTONINO PURPURA 2210 ASPEN DRIVE UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SCALE

AS NOTED

DRAWN BY

SJC

CHECKED BY

AWA

CONTACT

AWA

DATE

11.01.23

FILE NAME

1484.1A-LD-1

JOB NO.

1484.1A

SHEET NO.

C-6

REV.

1

SHT. 6 OF 11

1. SECTION 220-5.13 - FOR COMMERCIAL AND INDUSTRIAL SUBDIVISIONS AND LAND DEVELOPMENTS, A MINIMUM OF 10% OF THE DEVELOPED AREA SHALL BE LANDSCAPED OR IN BUFFER YARDS.
98,940 S.F. DEVELOPED AREA
36,727 S.F. LANDSCAPE AREA = 39%

2. SECTION 220-5.13.B.2.b - PARKING ISLANDS: EACH REQUIRED PLANTING ISLAND SHALL CONTAIN AT LEAST ONE SHADE OR CANOPY TREE.
7 PROPOSED PARKING ISLANDS
6 PROPOSED SHADE OR CANOPY TREES*
*ONE ISLAND IS LOCATED OVER A PROPOSED UNDERGROUND INFILTRATION BASIN

3. SECTION 220-5.13.B.1 - BUFFERARY, TYPE 2: (WIDTH 18' PER UPPER ALLEN ZONING ORDINANCE SECTION 245-16.5.C) AT 578 S.F. (ASPEN DRIVE)
BASIC: ONE (1) SHADE TREE PER 40 LINEAR FEET AND ONE (1) EVERGREEN TREE PER 30 LINEAR FEET OF BUFFER YARD SCREEN AND ONE (1) DECIDUOUS OR EVERGREEN SHRUB PER 10 LINEAR FEET OF BUFFER YARD SCREEN. AT LEAST 60% OF SHRUB PLANTINGS SHALL BE OF THE EVERGREEN TYPE.

ANALYSIS: 578 LF./40 LF. = 15 SHADE TREES REQUIRED
578 LF./30 LF. = 19 EVERGREENS REQUIRED
578 LF./20 LF. = 29 SHRUBS REQUIRED

PROVIDED: 5 EXISTING SHADE TREES + 7 PROPOSED SHADE TREES = 12 IN BUFFER YARD
0 EXISTING EVERGREEN TREES + 0 PROPOSED EVERGREEN = 0 IN BUFFER YARD
15 EXISTING SHRUB (10 EVERGREEN) + 51 PROPOSED SHRUB (39 EVERGREEN) = 66 (49 EVERGREEN 74%)

NOTES:
1. MAJORITY OF BUFFER YARD IS LOCATED IN PROPOSED 20' WIDE DRAINAGE EASEMENT, 13 ADDITIONAL BUFFER YARD, 6 EVERGREEN AND 59 SHRUBS ARE LOCATED ON SITE, OUTSIDE OF THE PARKING ISLANDS.
2. REFER TO NOTE #28, LAND DEVELOPMENT NOTES SHEET C-2.

4. SECTION 220-513.0.7 - STREET TREES
 BASIS: MINIMUM OF TWO (2) CANOPY TREES SHALL BE PROVIDED FOR EVERY 100 FT. OF PUBLIC RIGHT-OF-WAY.
 ANALYSIS: 742 L.F. PUBLIC RIGHT-OF-WAY/100 FT. = 7.42 X 2 = 15 CANOPY TREES REQUIRED
 PROVIDED: 6 EXISTING CANOPY TREES + 11 PROPOSED CANOPY TREES = 17

[illegible]

PR. LAWN AREA IN PR. DRAINAGE EASEMENT

1-ZS

2-VD

FAM 6-PJ

FOR EX. TREE PROTECTION,
REFER TO DETAIL, (TYP.)

5'-H

1-AG
1-FS

EX. 15" DIA. MAPLE

N/F
ARUKAH WELLNESS CENTER LLC.
UPI 42-28-2421-299
DEED/RECORD BOOK 202142366
(ZONED: C2, HIGHWAY COMMERCIAL)

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	MATURE HGHT. / WIDTH
DECIDUOUS TREE(S) - (N) DENOTES NATIVE						
AG	3	ACER GINALE	RED MAPLE	5" CAL.	40 FT. O.C.	B&B
AR	4	ACER RUBRUM (N)	RED MAPLE	2" CAL.	40 FT. O.C.	B&B
BN	3	BETULA NIGRA (N)	RIVER BIRCH	2" CAL.		B&B
CC	5	CEROC CANADENSIS (N)	EASTERN REDBUD	2" CAL.		B&B
PC	7	PRUNUS CERASIFERA	PURPLE LEAF PLUM	2" CAL.	25 FT. O.C.	B&B
QP	2	QUERCUS PHIELLOS	WILLOW OAK	2" CAL.	40 FT. O.C.	B&B
ZS	2	ZELKOVA SERRATA	ZELKOVA "GREEN VASE"	2" CAL.	40' FT. O.C.	B&B
EVERGREEN TREE(S)						
PS	6	PINUS STROBUS (N)	EASTERN WHITE PINE	6-8 FT. HGT.	20 FT. O.C.	B&B
SHRUB(S)						
HA	19	HYDRANGEA ARBORESCENS (N)	SMOOTH HYDRANGEA	18" HGT.	5 FT. O.C.	CONT.
IC	17	ILEX GRENATA "HELLER"	HELLER HOLLY	12" HGT.	2.5 FT. O.C.	CONT.
IV	5	ILEX VERTICILLATA	WINTERBERRY	24" HGT.	5 FT. O.C.	CONT.
PL	41	PRUNUS LAUROCERASUS "OTTO LUYKEN"	OTTO LUYKEN LAUREL	18" HGT.	5 FT. O.C.	CONT.
PJ	37	RHODODENDRON X "PJM"	PJM RHODODENDRON	18" HGT.	5 FT. O.C.	CONT.
VD	13	VERBURNUM DENTATUM (N)	ARROWWOOD VERBURNUM	36" HGT.	10 FT. O.C.	CONT.
GROUND COVER(S)						
CP	217	CAREX PENSYLVANICA (N)	PENNSYLVANIA SEDGE	1 GAL.	2 FT. O.C.	CONT.

1. PLANTS MUST MEET THE REQUIREMENTS OF THE UPPER ALLEN TOWNSHIP SALDO SECTION 220-5.13.
2. THERE ARE THREE (3) EXISTING TREES WITH A 6" DIAMETER CALIPER OR GREATER LOCATED ON THIS PARCEL. TWO (2) EXISTING TREES TO BE REMOVED DUE TO CONFLICT WITH CLEAR SIGHT TRIANGLES AND ONE (1) IS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION.
3. LANDSCAPING PLAN SHALL INCLUDE FURNISHING AND INSTALLING MULCHED BEDS AND PLANT MATERIALS SHOWN ON THE LANDSCAPING SCHEDULE AND COMPLYING WITH THE LANDSCAPING NOTES AND PLANTING DETAILS.
4. PLANT MATERIAL SHALL COMPLY WITH ANSI 2601-1990. PLANT SIZES AND CONTAINER SIZES SHOWN ON THE LANDSCAPE SCHEDULE ARE MINIMUM.
5. THE TREES SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE PROJECT. VARIETIES OF TREES SHALL BE SUBJECT TO THE APPROVAL OF THE AUTHORITY WHICH ACCEPTS OWNERSHIP OF THE STREET.
6. ALL TREES SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY AND VIGOROUS; THEY SHALL BE FREE FROM DISEASE, INSECTS INFEST EGGS AND LARVAE.
7. CONTRACTOR SHALL LABEL AT LEAST ONE (1) PLANT OF EACH VARIETY WITH A SECURED, ATTACHED TAG BEARING THE LEGIBLE DESIGNATION OF BOTANICAL NAME AND COMMON NAME TO HELP CONFIRM PLANT TYPE. CONTRACTOR TO NOTIFY ENGINEER/LANDSCAPE ARCHITECT THREE (3) PRIOR TO SCHEDULED PLANTING SO ENGINEER/LANDSCAPE ARCHITECT CAN BE ON SITE FOR PLANT VERIFICATION.
8. SUBSTITUTIONS, ADDITIONS, AND DELETIONS ARE PERMISSIBLE UPON APPROVAL FROM OWNER/ENGINEER/LANDSCAPE ARCHITECT AND MUNICIPALITY (WHERE REQUIRED).
9. LANDSCAPING CONTRACTOR TO WARRANT ALL SITE LANDSCAPE PLANTS FOR A ONE (1) YEAR PERIOD FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PLANT MATERIALS INSTALLATION. SUBSTANTIAL COMPLETION DATE SHALL BE DETERMINED BY THE OWNER/ENGINEER/LANDSCAPE ARCHITECT. CONTRACTOR TO WARRANT ALL PLANTS AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH AS DETERMINED BY THE OWNER OR OWNER'S AGENT. CONTRACTOR TO REMOVE AND REPLACE DEAD PLANTINGS IMMEDIATELY UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON. REPLACEMENT PLANTS SHALL CONFORM TO ALL ORIGINAL REQUIREMENTS AND SHALL BE MAINTAINED AND GUARANTEED FOR A MINIMUM OF ONE PLANTING SEASON.
10. STREET TREES ARE TO BE MAINTAINED AND GUARANTEED FOR A MINIMUM OF TWO YEARS BY THE DEVELOPER. PLANTING OF TREES SHALL OCCUR WITHIN THE STANDARD PLANTING SEASON (MARCH THROUGH NOVEMBER). NO MORE THAN 1/3 OF THE TREE SHALL BE DAMAGED OF DEAD WITHOUT REPLACEMENT. REPLACEMENT TREES SHALL CONFORM TO ALL ORIGINAL REQUIREMENTS AND SHALL BE MAINTAINED AND GUARANTEED FOR A MINIMUM OF TWO PLANTING SEASONS.
11. MULCH IS TO BE SHREDED BARK. MULCH BED THICKNESS SHALL BE (THREE) 3 INCHES MINIMUM AFTER LIGHT TAMPING, EXCEPT THAT MULCH DEPTH AT ANNUAL FLOWERS SHALL BE 1-1/2". PLACE MULCH BED OVER WEED BARRIER MAT OR EQUAL, UNLESS NOTED OTHERWISE.
12. WEED BARRIER FABRIC SHALL BE INSTALLED IN PLANTER BEDS AT DIRECTION FROM OWNER. WEED BARRIER MAT SHALL BE EXCLUDED FROM AREA AROUND ANNUAL FLOWERS AS NOTED ON PLANS.
13. ALL LANDSCAPE PLANTING SHALL BE INSTALLED IN ACCORDANCE WITH ACCEPTED PRACTICES AS RECOGNIZED BY THE AMERICAN ASSOCIATION OF NURSESMEN. PLANTING AND MAINTENANCE OF VEGETATION SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO, PROVISIONS FOR SURFACE MULCH, GUYWIRES AND STAKES, IRRIGATION, FERTILIZATION, INSECT AND DISEASE CONTROL, PRUNING, MULCHING, FLOWING, AND WATERING.
14. REQUIREMENTS FOR MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING AND THE BURLAPPING OF TREES SHALL FOLLOW THE CODE OF STANDARDS BY THE AMERICAN ASSOCIATION OF NURSESMEN, INC. IN THE AMERICAN STANDARDS FOR NURSERY STOCK, ANSI260, CURRENT EDITION, AS AMENDED.
15. TREE PROTECTION FENCING TO BE INSTALL AT BEGINNING OF CONSTRUCTION AND REMAIN IN PLACE UNTIL THE ENTIRE SITE IS STABILIZED.

I HEREBY STATE THAT, TO THE BEST OF MY KNOWLEDGE, THE PROPOSED LANDSCAPE PLANS SHOWN AND DESCRIBED HEREON ARE TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE UPPER ALLEN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. COPYRIGHT BY AND FOR:

STEVEN J. CHARRON
REGISTRATION NO. LA-002904
(AGENT FOR SITE DESIGN CONCEPTS, INC.)

The diagram illustrates the typical proposed trees and planting symbol, and the proposed tree key and quantity label. It includes a legend for the symbols used in the plan view.

3-ZV

**TYPICAL PROPOSED TREES
PLANTING SYMBOL**

**PROPOSED TREE KEY AND
QUANTITY LABEL**

HATCH LEGEND

	EXISTING BUILDING
	EXISTING LINE STRIPING
	EXISTING CONCRETE
	EXISTING ROCK RIP-RAP AREA
	EXISTING GRAVEL
	PROPOSED BUILDING
	PROPOSED LINE STRIPING
	PROPOSED CONCRETE
	PROPOSED RIVER GRAVEL
	PROPOSED GROUND COVER PLANTINGS

NO SCALE

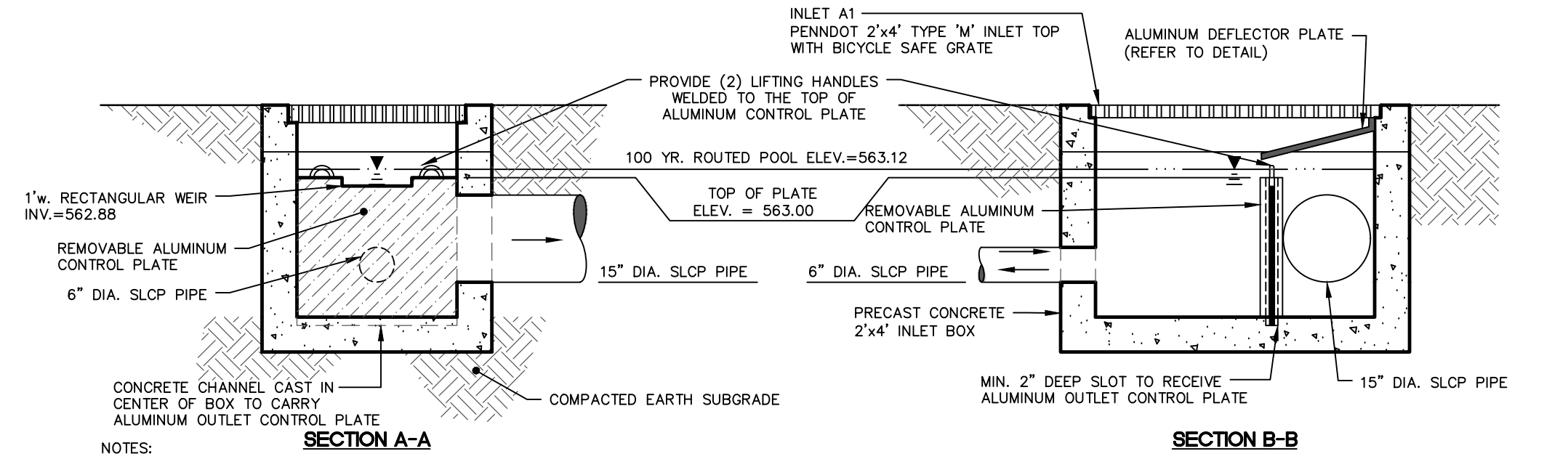
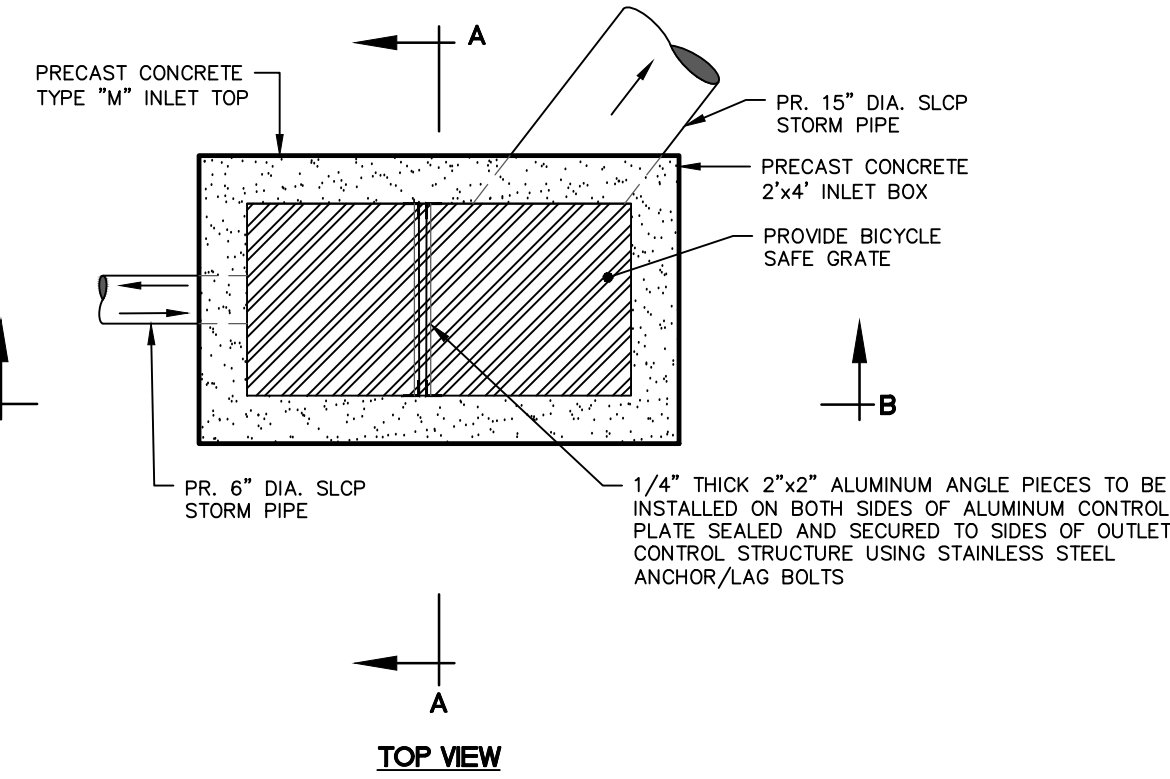
NO SCALE

NO SCALE

PROJECT
BUILDING AND PARKING LOT EXPANSION
FOR
ANTONINO PURPURA
2210 ASPEN DRIVE

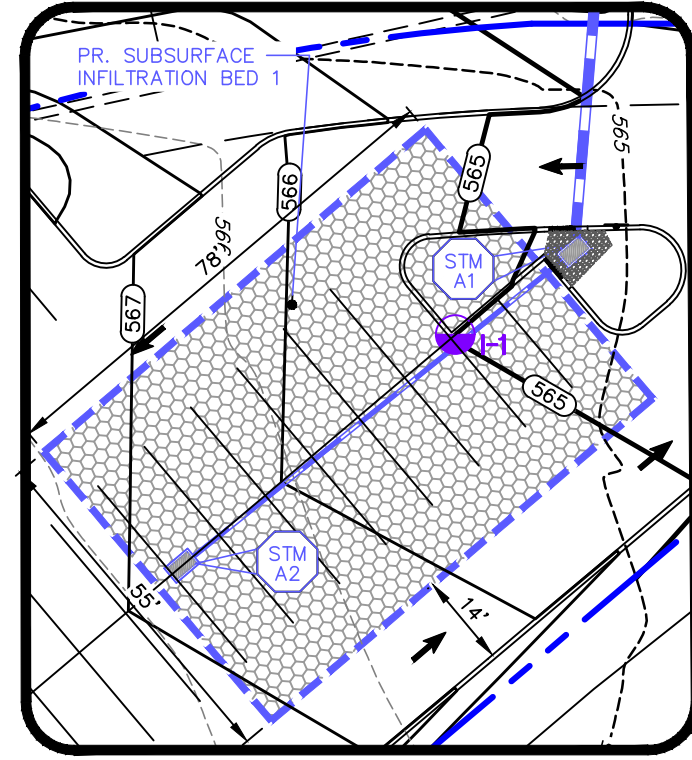
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[illegible]



- NOTES:
1. CONSTRUCT OUTLET CONTROL STRUCTURE PER PENNDOT RC-34 SPECIFICATIONS, WITH A 2'X4' INLET BOX WITH A STANDARD TYPE 'M' INLET TOP.
 2. REFER TO SITE GRADING AND UTILITY PLAN FOR EXACT OUTLET PIPE CONFIGURATION FROM OUTLET STRUCTURE TO PIPE OUTFALL AND FOR LOCATION AND LIMITS OF SUBSURFACE INFILTRATION BED.
 3. OUTLET STRUCTURE TO BE SUPPLIED BY MONARCH PRODUCTS, INC., OR EQUAL APPROVED BY PROJECT ENGINEER.
 4. REMOVABLE ALUMINUM CONTROL PLATE BOTTOM AND SIDE JOINTS WITH OUTLET CONTROL STRUCTURE TO BE MADE WATERTIGHT BY USING MARINE-GRADE SEALANT AT THESE JOINTS.
 5. REMOVABLE ALUMINUM CONTROL PLATE IS PERMANENT AND IS ONLY TO BE REMOVED DURING AN EMERGENCY DEWATERING EVENT.

**SUBSURFACE STONE INFILTRATION BED (SIB) NO. 1
OUTLET CONTROL STRUCTURE (A1) DETAIL**
NO SCALE

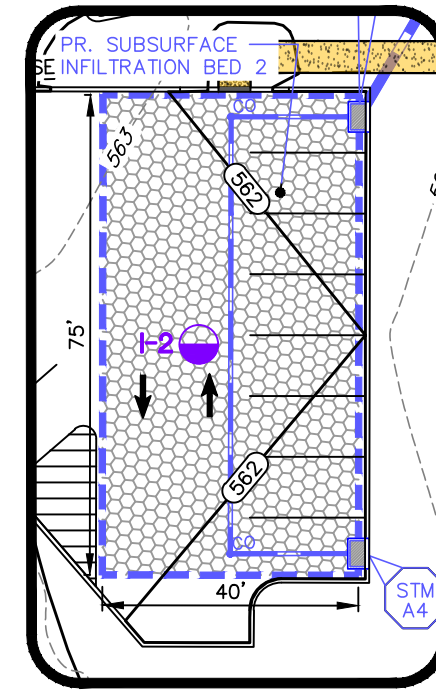


**SUBSURFACE
INFILTRATION BED 1
PLAN VIEW**
SCALE: 1" = 30'

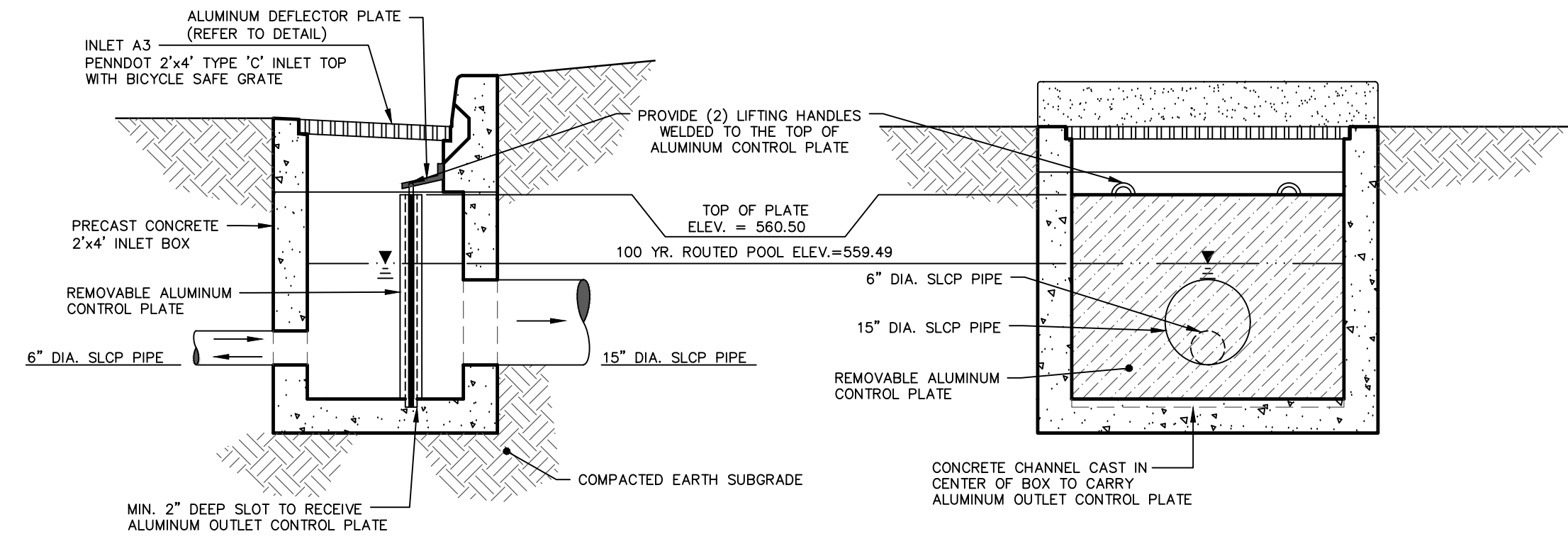
SIB NO.	BED AREA (SF.)	STONE TOP ELEV.	STONE BOTTOM ELEV.	PERF. PIPE ELEV.	PERF. PIPE SIZE
1	4,290	563.00	561.00	561.50	6"
2	3,000	560.50	557.50	558.00	6"

- NOTES:
1. GRATES FOR CLEANOUTS SHALL BE AASHTO H10 OR H20 LOAD RATED DEPENDING ON THEIR PLACEMENT (H20 FOR VEHICULAR LOADING).
 2. DISTRIBUTION PIPES FOR SUBSURFACE INFILTRATION BED SHALL BE CONTINUOUSLY PERFORATED SMOOTH INTERIOR, WITH A MINIMUM INSIDE DIAMETER OF 6 INCHES.
 3. CLEANOUTS WITH GRATES MAY BE PROVIDED AT ENDS OF DISTRIBUTION PIPES CONSISTING OF HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL MEET AASHTO M252, TYPE S OR AASHTO M294, TYPE S.
 4. SIB BACKFILL MATERIAL SHALL BE AASHTO NO. 3 STONE (OR APPROVED EQUAL) WHEN SIB IS LOCATED UNDER ANY PROPOSED PAVEMENT AREA.
 5. REFER TO SITE PLAN FOR STONE BED CONFIGURATION.

SUBSURFACE STONE INFILTRATION BED (S.I.B.) DETAIL
NO SCALE

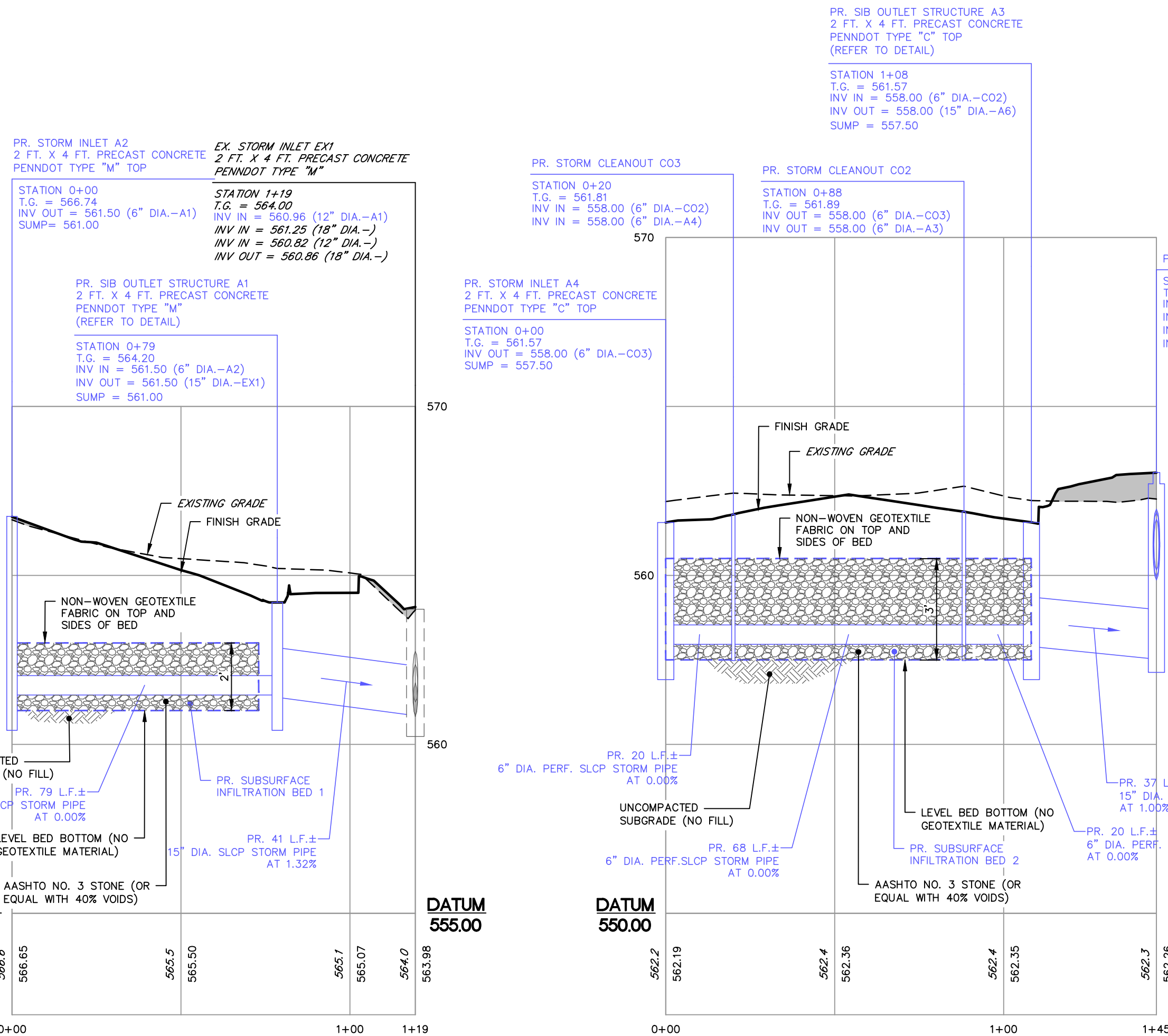


**SUBSURFACE
INFILTRATION BED 2
PLAN VIEW**
SCALE: 1" = 30'

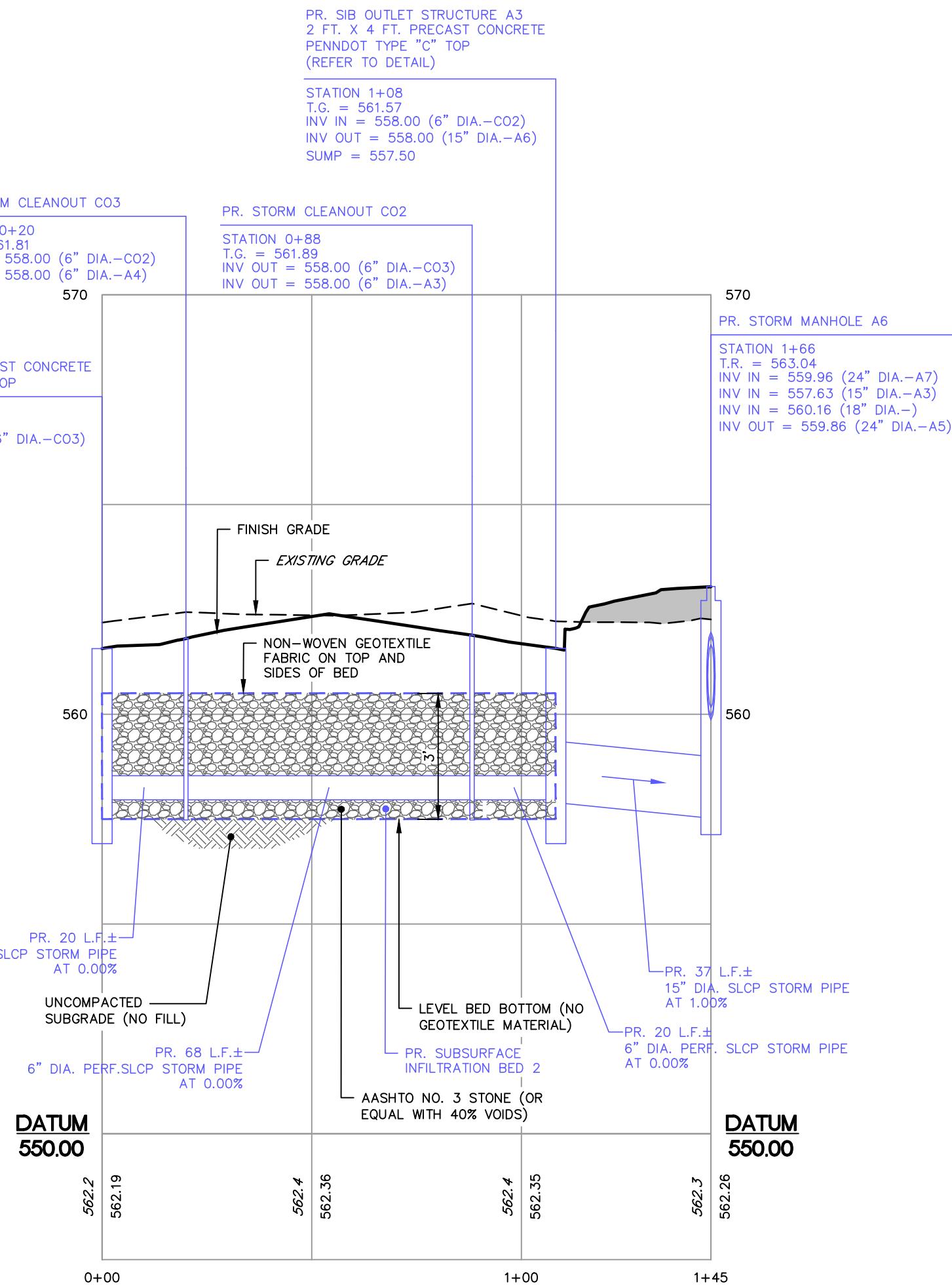


- NOTES:
1. CONSTRUCT OUTLET CONTROL STRUCTURE PER PENNDOT RC-34 SPECIFICATIONS, WITH A 2'X4' INLET BOX WITH A STANDARD TYPE 'C' INLET TOP.
 2. REFER TO SITE GRADING AND UTILITY PLAN FOR EXACT OUTLET PIPE CONFIGURATION FROM OUTLET STRUCTURE TO PIPE OUTFALL AND FOR LOCATION AND LIMITS OF SUBSURFACE INFILTRATION BED.
 3. OUTLET STRUCTURE TO BE SUPPLIED BY MONARCH PRODUCTS, INC., OR EQUAL APPROVED BY PROJECT ENGINEER.
 4. REMOVABLE ALUMINUM CONTROL PLATE BOTTOM AND SIDE JOINTS WITH OUTLET CONTROL STRUCTURE TO BE MADE WATERTIGHT BY USING MARINE-GRADE SEALANT AT THESE JOINTS.
 5. REMOVABLE ALUMINUM CONTROL PLATE IS PERMANENT AND IS ONLY TO BE REMOVED DURING AN EMERGENCY DEWATERING EVENT.

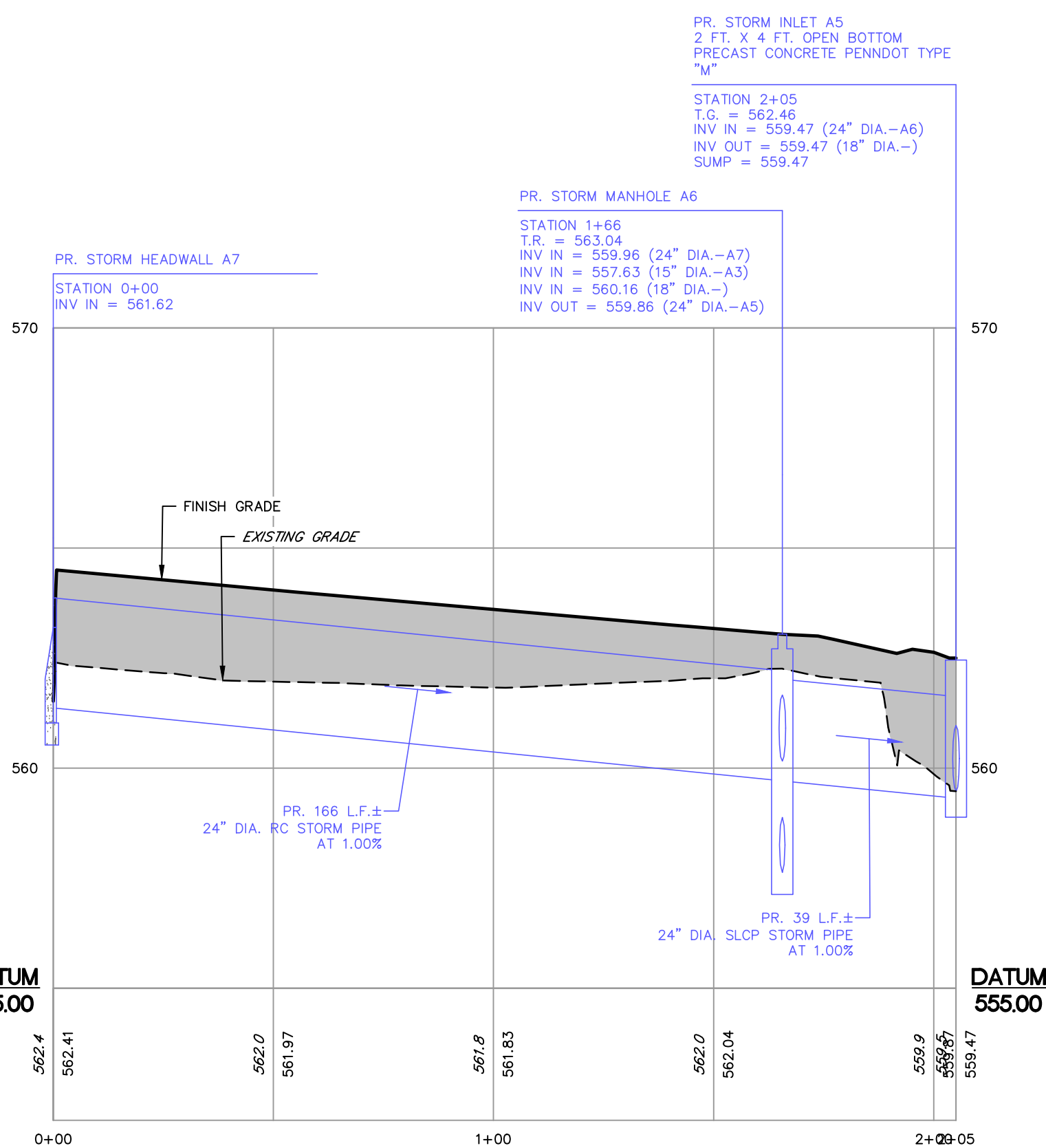
**SUBSURFACE STONE INFILTRATION BED (SIB) NO. 2
OUTLET CONTROL STRUCTURE (A3) DETAIL**
NO SCALE



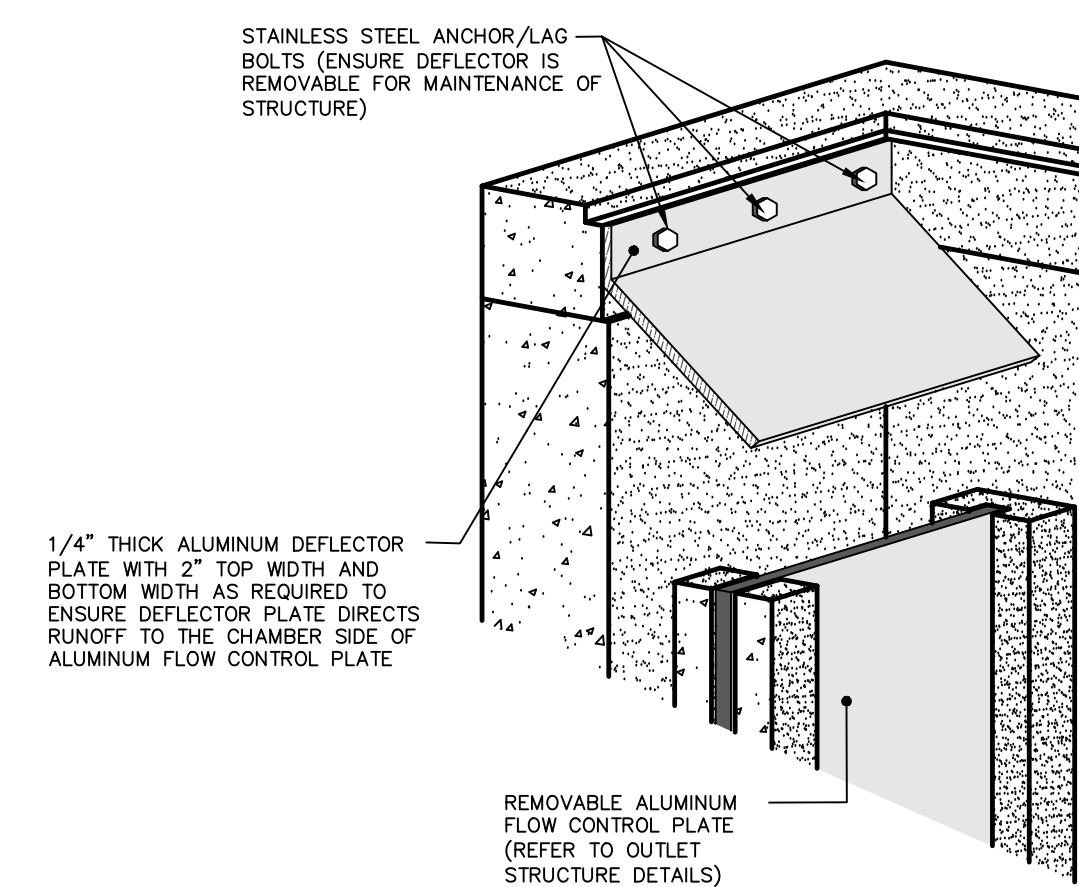
INLET A2 TO INLET EX-1
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



INLET A4 TO MANHOLE A6
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



HEADWALL A7 TO INLET A5
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



**OUTLET STRUCTURE REMOVABLE
ALUMINUM DEFLECTOR PLATE DETAIL**
NO SCALE

NO.	DATE	REVISIONS	COMMENTS
1	12.22.23	REVISED PER TOWNSHIP STAFF COMMENTS	

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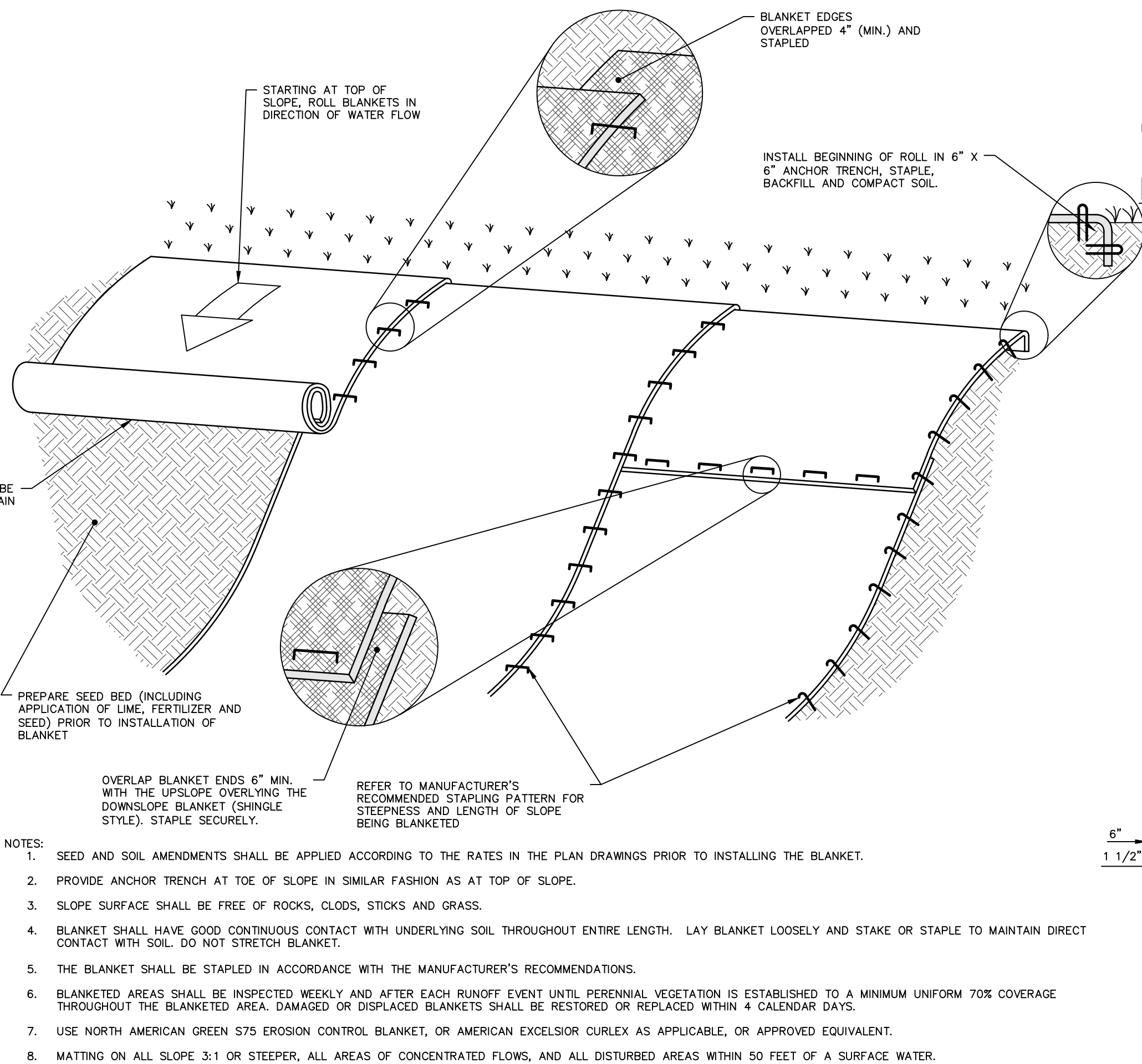
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**POST CONSTRUCTION STORMWATER
MANAGEMENT PROFILES AND DETAILS**

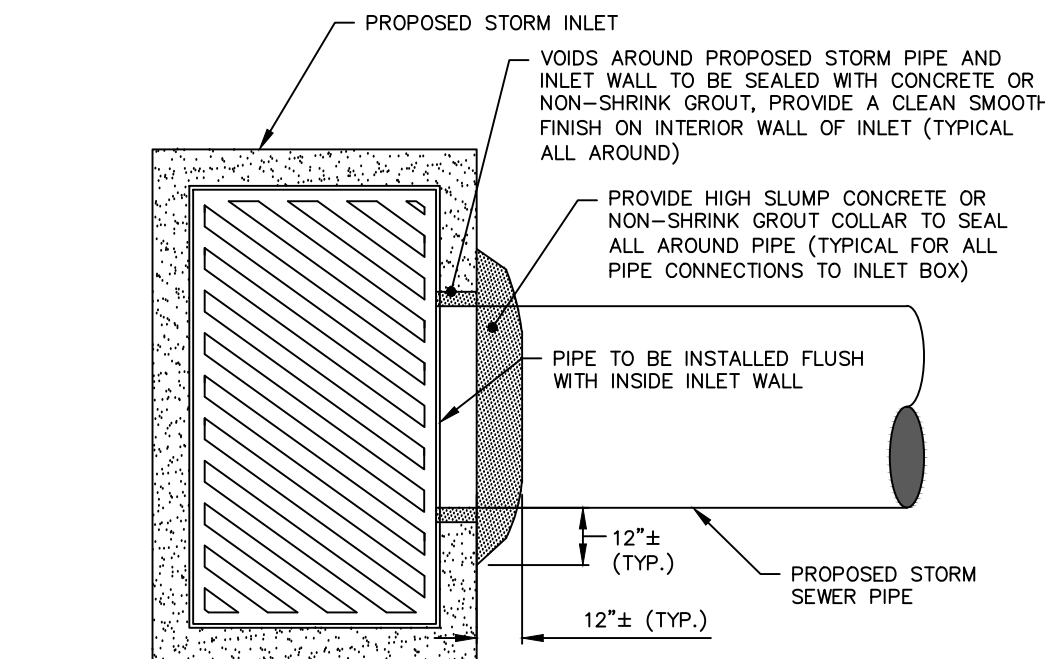
PROJECT
BUILDING AND PARKING LOT EXPANSION
FOR
ANTONINO PURPURA
2210 ASPEN DRIVE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SCALE	AS NOTED
DRAWN BY	SJC
CHECKED BY	AWA
CONTACT	AWA
DATE	11.01.23
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JOB NO.	1484.1A
SHEET NO.	C-8
REV.	1

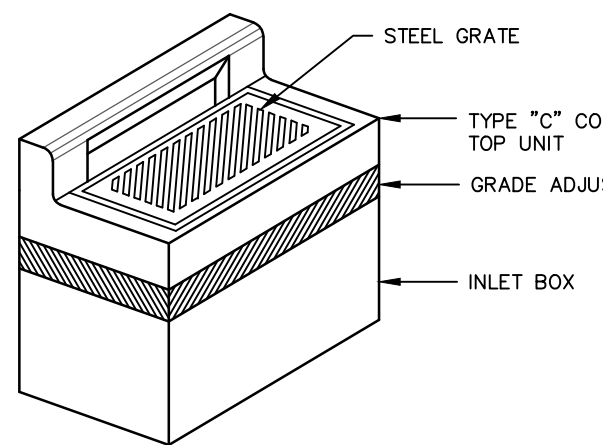
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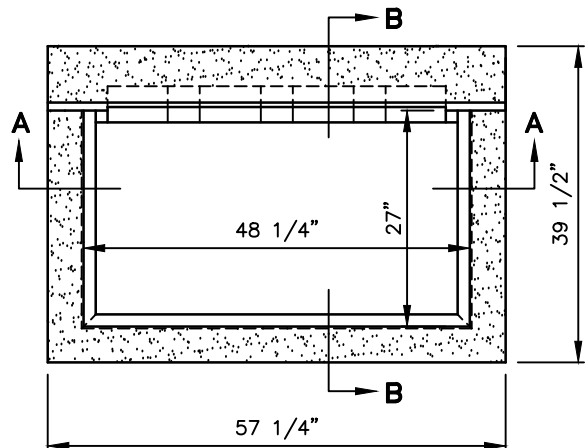
TYPICAL EROSION CONTROL BLANKET INSTALLATION
DETAIL FOR SLOPES
NO SCALE



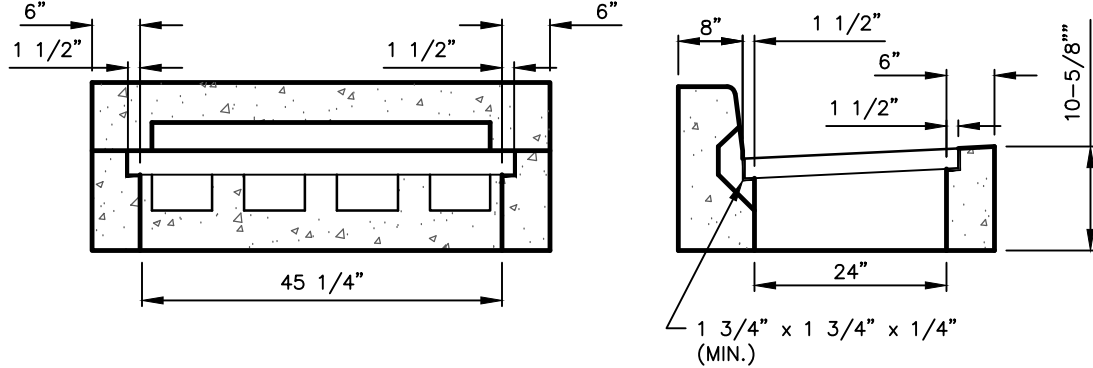
TYPICAL GROUTING/ENCASEMENT
AT STORM INLET/BOX
PIPE CONNECTION
NO SCALE



TYPE 'C' INLET



PLAN VIEW

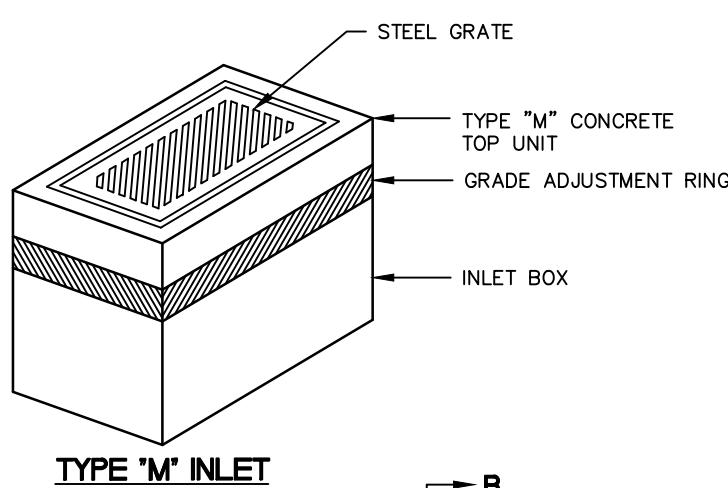


SECTION A-A

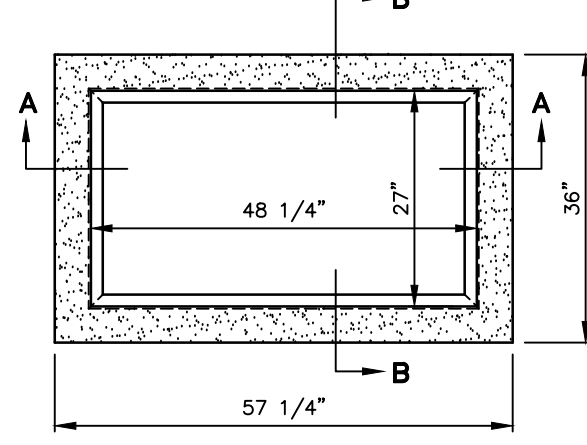
TYPE 'C' CONCRETE TOP UNIT

NOTE:
1. STRUCTURE SHALL BE CONSTRUCTED PER PENNDOT RC-34 STANDARDS FOR ROADWAY CONSTRUCTION

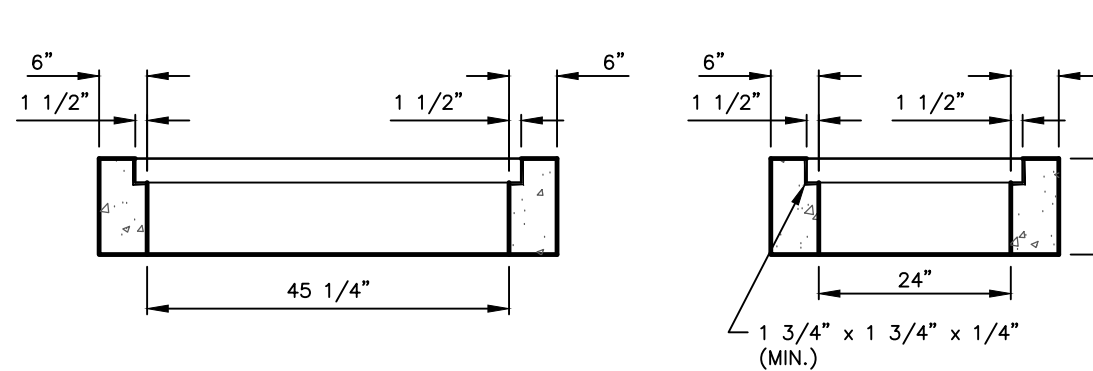
PENNDOT 2'x4' TYPE 'C' STORM INLET
NO SCALE



TYPE 'M' INLET



PLAN VIEW



SECTION A-A

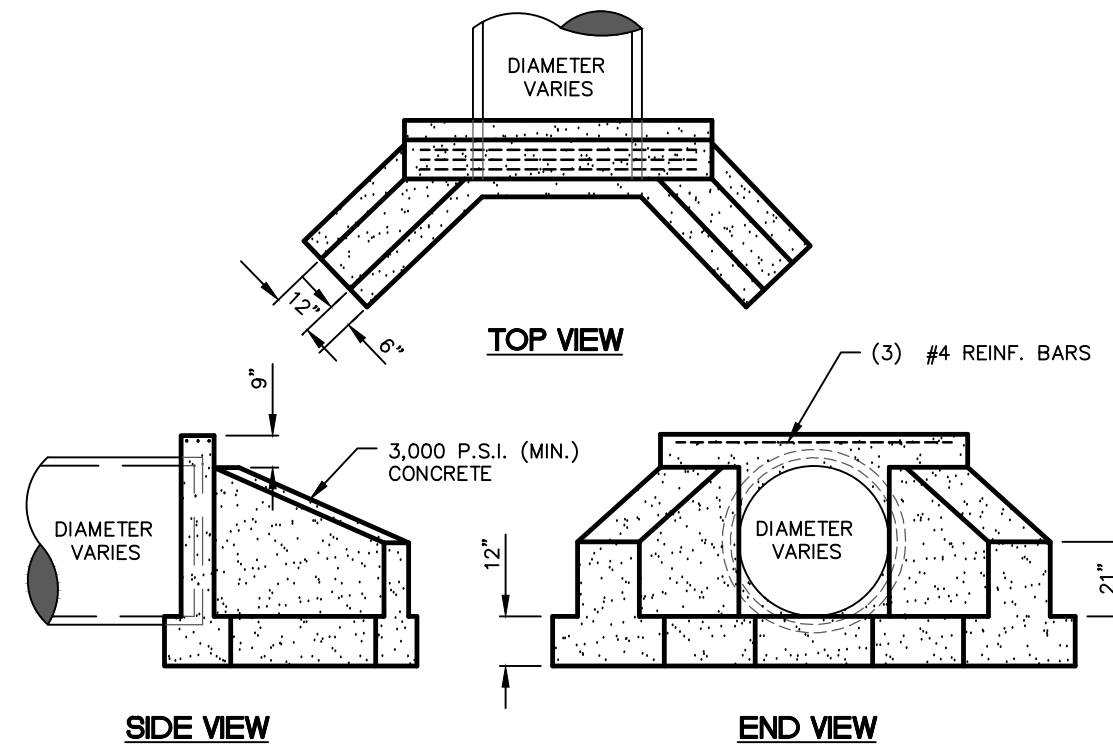
TYPE 'M' CONCRETE TOP UNIT

NOTE:
1. STRUCTURE SHALL BE CONSTRUCTED PER PENNDOT RC-34 STANDARDS FOR ROADWAY CONSTRUCTION

PENNDOT 2'x4' TYPE 'M' STORM INLET
NO SCALE

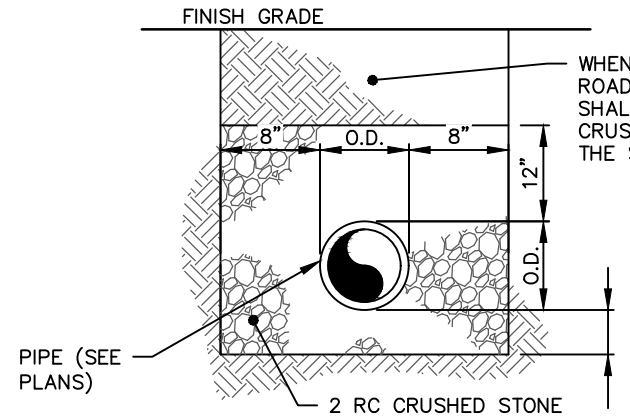
SINKHOLE PRONE SOILS

- ANY PORTION OF THE SITE THAT IS UNDERLAIN BY LIMESTONE MAY GENERALLY BE PRONE TO SOLUTION ACTIVITY AND FORMATION OF SINKHOLES. IF SINKHOLES ARE DISCOVERED DURING CONSTRUCTION OPERATIONS:
1. THE CONTRACTOR SHOULD CEASE OPERATIONS WITHIN THE AFFECTED AREA AND CONTACT THE GEOTECHNICAL ENGINEER.
 2. ALL SOFT SOILS SHOULD BE EXCAVATED TO REVEAL THE THROAT OF THE SINKHOLE. PINNACLES AND OVERHANGS SHOULD BE REMOVED AND CREVICES CLEANED-OUT AND FILLED WITH LEAN CONCRETE AS NECESSARY TO FACILITATE COMPACTION.
 3. THE APPROPRIATE REMEDIAL TREATMENT - WHICH MAY CONSIST OF GROUT OR CONCRETE PLACEMENT, REVERSE FILTER CONSTRUCTION UTILIZING ROCK AND AGGREGATE, AND/OR STABILIZATION VIA PLACEMENT OF GEOTEXTILES - SHOULD BE IMPLEMENTED.
 4. DURING EARTHMOVING OPERATIONS, EXCAVATIONS SHOULD BE BACKFILLED AS SOON AS PRACTICAL AND ANY DEPRESSIONS SHOULD BE RE-GRADED TO AVOID PONDED WATER.



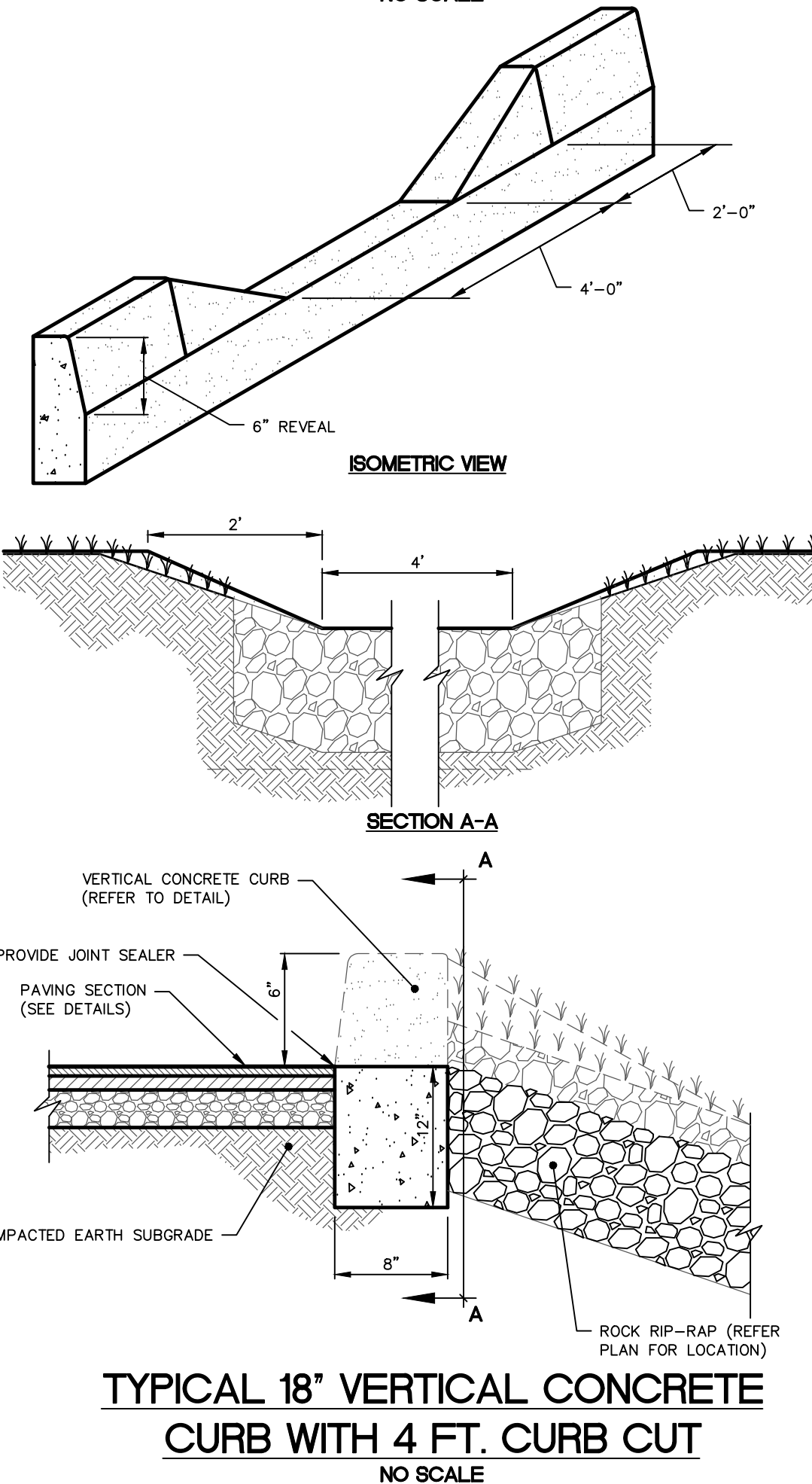
- NOTES:
1. INSTALL AS PER PENNDOT RC-31 CONSTRUCTION SPECIFICATIONS; ENDWALL DIMENSIONS AND CONFIGURATION SHALL BE BASED ON PIPE DIAMETER.
2. PROVIDE 1\"/>

STANDARD PENNDOT TYPE 'DW' ENDWALL
NO SCALE



- NOTES:
1. ALL PIPES SHALL BE BEDDED AS SHOWN ABOVE USING 2 RC STONE WITH THE EXCEPTION OF PVC PIPE AND PLASTIC PIPE.
2. BEDDING MATERIALS FOR ALL DIAMETERS OF PVC PIPE SHALL BE NO. 1B STONE.
3. BEDDING MATERIALS FOR ALL DIAMETERS OF PLASTIC PIPE SHALL BE 1A STONE.

TYPICAL STORM SEWER PIPE TRENCH
BEDDING AND BACKFILLING DETAIL
NO SCALE



TYPICAL 18\"/>
CURB WITH 4 FT. CURB CUT
NO SCALE

INSPECTION / MAINTENANCE / REPAIRS FOR BMP FACILITIES

STORMWATER MANAGEMENT BMP'S SHALL BE INSPECTED BY THE LANDOWNER OR THE OWNER'S DESIGNEE ACCORDING TO THE FOLLOWING LIST OF MINIMUM FREQUENCIES:

1. AT LEAST TWO TIMES EACH YEAR.
2. DURING OR IMMEDIATELY AFTER THE CESSATION OF A STORM EVENT EXCEEDING 1 INCH OF RAINFALL.
3. ALL WASTE AND MATERIALS DEPOSITED IN AND REMOVED FROM POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) BMP FACILITIES AND FROM IMPERVIOUS AREAS (EX. SWEEPING OF STREETS AND PARKING LOTS) DURING OPERATION AND MAINTENANCE SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271-1, AND 287-1 ET. SEQ. NO WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

SUBSURFACE INFILTRATION BEDS

MAINTENANCE & INSPECTION

- INSPECTION SHALL INCLUDE SUBSURFACE INFILTRATION BED, OUTLET CONTROL STRUCTURE, INLET STRUCTURES, AND MEADOW OR GRASS AREAS DRAINING TO BEDS.
- IF FOUND DURING INSPECTIONS, REMOVE SEDIMENT, TRASH AND OTHER DEBRIS FROM SUBSURFACE INFILTRATION BED, INLET STRUCTURES AND MEADOW AND GRASS AREAS DRAINING TO BEDS. IMMEDIATELY IMPLEMENT NEEDED REPAIRS OR ACTIONS.
- DURING INSPECTIONS AFTER RAIN EVENTS, INSPECT SUBSURFACE INFILTRATION BED, INLETS, AND MEADOW OR GRASS AREAS DRAINING TO BED TO DETERMINE IF THE FACILITIES DRAIN BETWEEN 24 AND 72 HOURS.
- ALUMINUM CONTROL PLATE IN OUTLET CONTROL STRUCTURES A1 AND A2 ARE PERMANENT AND ONLY TO BE REMOVED DURING AN EMERGENCY DOWATERING EVENT.
- MAINTAIN SUBSURFACE INFILTRATION BED MEADOW AREAS IN GOOD CONDITION (I.E. UNIFORM PERENNIAL VEGETATIVE COVERAGE). IMMEDIATELY STABILIZE BARE SPOTS OR ERODED AREAS.
- PROHIBIT STORAGE OF HAZARDOUS MATERIALS ON ANY AREA THAT DRAINS TO SUBSURFACE INFILTRATION BEDS.

REPAIR OR REPLACEMENT - SUBSURFACE INFILTRATION BEDS

- IF STANDING WATER CONSISTENTLY REMAINS WITHIN 72 HOURS OF A STORM EVENT EXCEEDING 1\"/>

INLET SUMPS

MAINTENANCE & INSPECTION

- INLETS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. POST-CONSTRUCTION, THEY SHALL BE EMPTIED WHEN OVER HALF FULL OF SEDIMENT (AND TRASH) AND CLEANED AT LEAST TWICE A YEAR.
- THEY SHALL BE INSPECTED AFTER RUNOFF EVENTS OF 1 INCH OR GREATER.
- CHECKING SEDIMENT DEPTH AND NOTING THE SURFACE POLLUTANTS IN THE STRUCTURE WILL BE HELPFUL IN PLANNING MAINTENANCE. THE POLLUTANTS COLLECTED IN STRUCTURES WILL CONSIST OF GRIT AND SEDIMENT ON THE BOTTOM OF THE STRUCTURE.
- IT IS BEST TO SCHEDULE MAINTENANCE BASED ON THE SOLIDS COLLECTED IN THE SUMP. OPTIMALLY, THE STRUCTURE SHOULD BE CLEANED WHEN THE SUMP IS HALF FULL (E.G. WHEN 6 INCHES OF MATERIAL COLLECTS IN A 12 INCH SUMP, CLEAN IT OUT).
- STRUCTURES SHOULD ALSO BE CLEANED IF A SPILL OR OTHER INCIDENT CAUSES A LARGER THAN NORMAL ACCUMULATION OF POLLUTANTS IN A STRUCTURE.
- MAINTENANCE IS BEST DONE WITH A VACUUM TRUCK.
- ALL COLLECTED WASTES SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL AGENCY REQUIREMENTS

PERMANENT SEEDING AND MULCHING SPECIFICATIONS

AND NOTES

PERMANENT GRASS OR LEGUME COVER.

- A. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED SHALL BE COVERED WITH GRASS OR A LEGUME IN ORDER TO MINIMIZE EROSION, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- B. MULCHING SHALL BE USED TO PROTECT SEEDING AND TO REDUCE RUNOFF. STRAW MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS AT A RATE OF 3 TONS/ACRE.
- C. THE BELOW PERMANENT SEEDING MIXTURES ARE FROM THE PENN STATE AGRONOMY GUIDE. THE SEED MIXTURES SHALL CONSIST OF:

SEED TYPE	% BY WT.	SEEDING RATE	SEEDING DATES
LAWN MIX (USED THROUGHOUT SITE)	100%	4 LBS./1,000 S.F.	MARCH 15 TO JUNE 1
KY. BLUEGRASS	30%		AUGUST 1 TO OCTOBER 15
CREEP RED FESCUE	55%		
PERENNIAL RYEGRASS	15%		
- D. IN THE ABSENCE OF SOIL TEST RESULTS, FERTILIZER OF 10-20-20 AT AN APPLICATION RATE OF 1,000 LB./ACRE SHALL BE APPLIED WITH THE PERMANENT SEEDING.
- E. IN THE ABSENCE OF SOIL TEST RESULTS, LIME AT AN APPLICATION RATE OF 6 TONS/ACRE OF AGRICULTURAL GRADE LIME SHALL BE APPLIED WITH THE PERMANENT SEEDING.
- F. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.

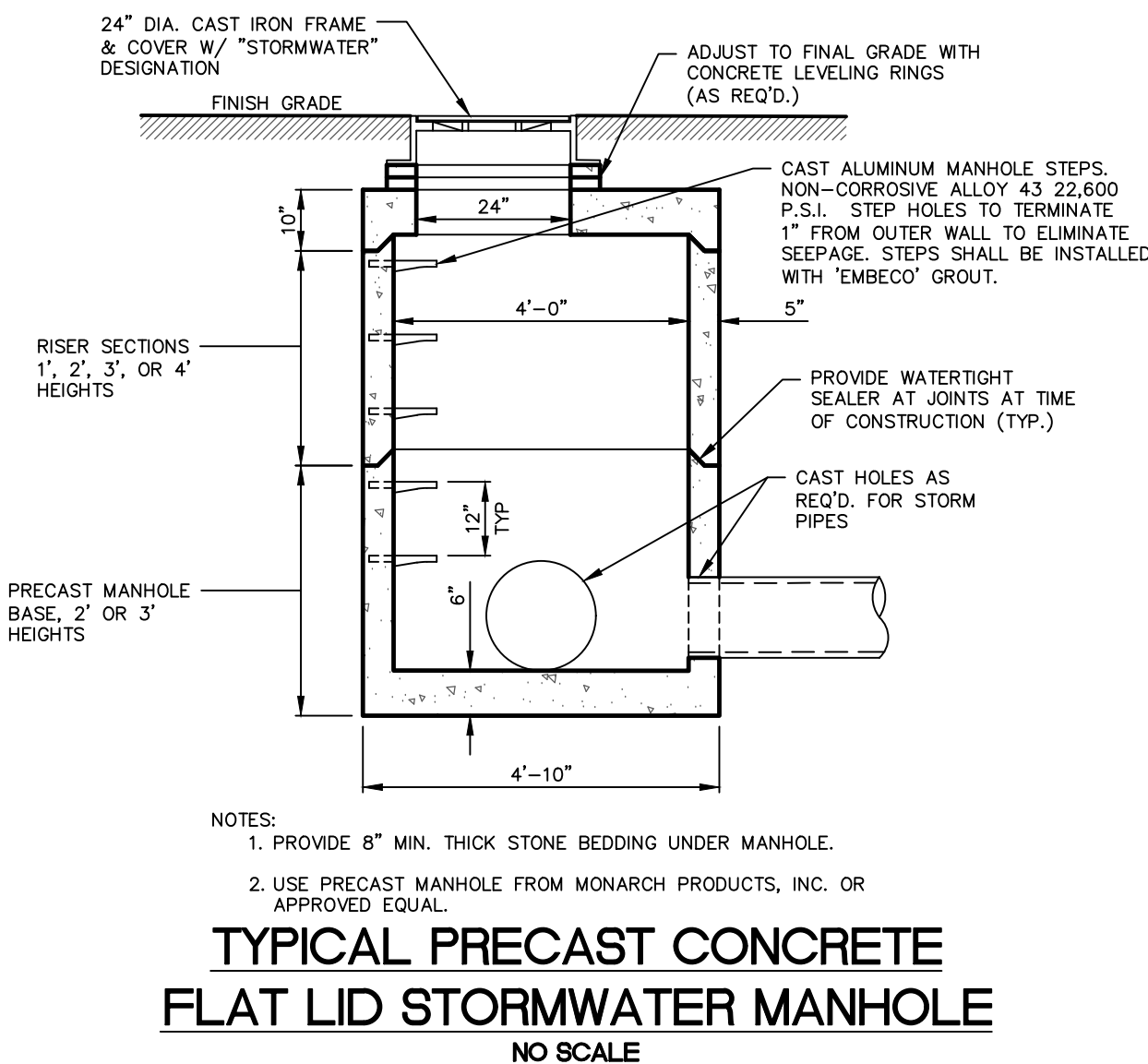
TEMPORARY SEEDING AND MULCHING SPECIFICATIONS

AND NOTES

1. TEMPORARY GRASS COVER.

- A. IN ORDER TO ESTABLISH A QUICK GRASS COVER OVER DISTURBED AREAS, A TEMPORARY SEED MIXTURE SHALL BE USED.
- B. STABILIZATION EFFORTS DURING THE NON-GERMINATING PERIOD, OCT. 15 TO MARCH 15 SHOULD CONSIST OF MULCHING WITH CLEAN STRAW AT A RATE OF 3 TONS/AC. (EQUIVALENT TO 0.75\"/>
- C. THE BELOW MIXTURES ARE FROM THE PENN STATE AGRONOMY GUIDE. THE MIX TO BE USED SHALL BE DEPENDENT UPON THE DATE UTILIZED.

SEED TYPE	% BY WT.	SEEDING RATE	SEEDING DATES
ANNUAL RYEGRASS	100%	1 LB./1,000 S.F. 40 LB./AC.	MARCH 15 TO OCTOBER 15
WINTER RYE	100%	3.5 LBS./1,000 S.F.	MARCH 15 TO OCTOBER 15
- D. STRAW MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS AT A RATE OF 3 TONS/AC. FERTILIZER MIX. OF 5-5-5 AT AN APPLICATION RATE OF 1,000 LB./ACRE SHALL BE APPLIED WITH THE TEMPORARY SEEDING.
- E. LIME SHALL BE APPLIED AT A RATE OF 2,000 LB./ACRE OF AGRICULTURAL GRADE LIME APPLIED WITH THE TEMPORARY SEEDING.
- F. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.



- NOTES:
1. PROVIDE 8\"/>

TYPICAL PRECAST CONCRETE
FLAT LID STORMWATER MANHOLE
NO SCALE

site design concepts
LAND DEVELOPMENT CONSULTANTS
127 WEST MARKET STREET, SUITE 200 • YORK, PA 17401
t: 717.757.9414 • f: 717.840.8205 • WWW.SITEDC.COM

sdC
Civil Engineering • Surveying • Landscape Architecture • Land Planning • Environmental Consulting

THE POST CONSTRUCTION STORMWATER
MANAGEMENT DETAILS
PROJECT
BUILDING AND PARKING LOT EXPANSION
FOR
ANTONINO PURPURA
2210 ASPEN DRIVE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SCALE AS NOTED

DRAWN BY SJC

CHECKED BY AWA

CONTACT AWA

DATE 11.01.23

FILE NAME 14841A-LD-1

JOB NO. 14841A

SHEET NO. C-9

REV. 1

SHT. 9 OF 11

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Overall Lighting At Grade	+	0.4 fc	2.1 fc	0.0 fc	N/A	N/A
New Parking Addition	✕	1.1 fc	2.1 fc	0.5 fc	4:2:1	2.2:1

Notes:

1. All mounting heights are 25' above grade.
2. All fixtures are supplied with house side shields for glare control.
3. Average lighting levels exceed 2.0fc per Township Ordinance.
4. Maximum lighting levels do not exceed 6.0fc per Township Ordinance.



SCALE		AS NOTED	
DRAWN BY		SJC	
CHECKED BY		AWA	
CONTACT		AWA	
DATE		11.01.23	
FILE NAME			
1484.1A-LD-1			
JOB NO.			
1484.1A			
SHEET NO.		REV.	
C-11		1	
SHT. 11 OF 11			