The Plains Intermediate School Renovations & Addition

90 Connett Road The Plains, Ohio 45780



PREPARED FOR:

Athens City School District

21 Birge Dr. Chauncey, Ohio 45719 OHIO FACILITIES CONSTRUCTION COMMISSION

> 30 West Spring Street, Columbus, Ohio 43215

Mike DeWine, Governor Cheryl J. Lyman, **Executive Director**



90% CONSTRUCTION DOCUMENT 02-23-2021

CONSULTANTS

CIVIL ENGINEER: SANDS-DECKER CPS, LLC 1495 OLD HENDERSON ROAD COLUMBUS, OHIO 43220





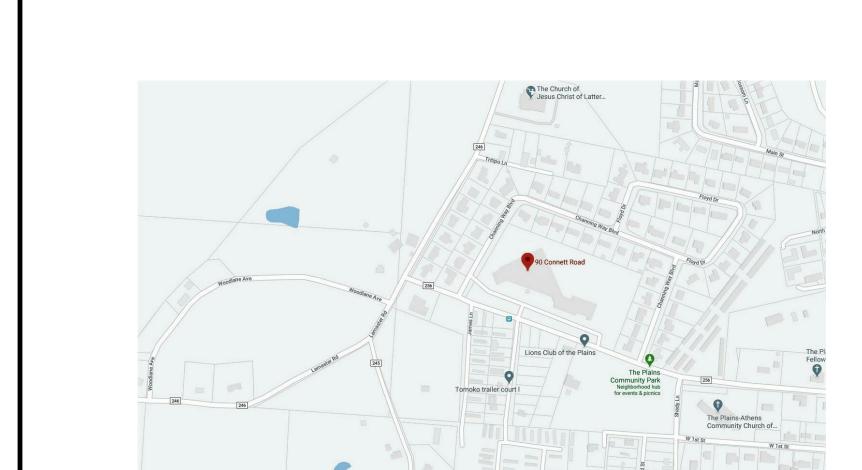


DESIGN GROUP

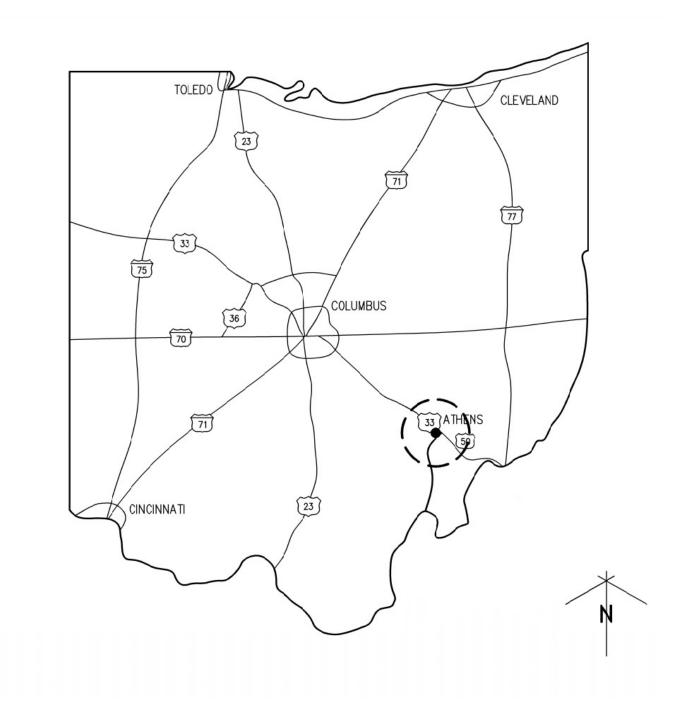
SANDS

DECKER











MECHANICAL / ELECTRICAL ENGINEER: ROGER D. FIELDS & ASSOCIATES 4588 KENNY ROAD COLUMBUS, OHIO 43220-2777



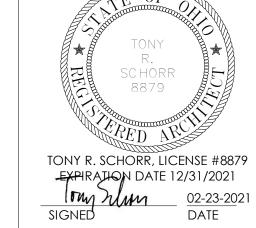
TECHNOLOGY ENGINEER: M-ENGINEERING 750 BROOKSEDGE BLVD. MESTERVILLE, OHIO 43081





VIEW OF ADDITION









COMMUNITY DESIGN ALIANCE 236 HIGH ST. HAMILTON, OHIO 45011 OFFICE: (513) 275 1740

ASSOCIATE ARCHITECT/ INTERIOR DESIGNER:

OMNER'S AGENT:

ARCHITECT:

SCHORR ARCHITECTS, INC.

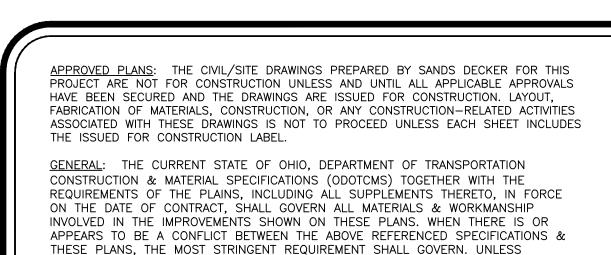
230 BRADENTON AVE.

OFFICE: (614)798-2096

DUBLIN, OH 43017

RUSCILLI CONSTRUCTION CO., INC. 5000 ARLINGTON CENTRE BLVD., Suite 300 COLUMBUS, OH 43220 OFFICE: (614) 876-9484 FAX:(614)876-0253





PROJECT LIMITS: THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHTS-OF-WAY, CONSTRUCTION EASEMENTS & PERMANENT EASEMENTS, & SHALL NOT TRESPASS UPON PRIVATE PROPERTY WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER. MISCELLANEOUS WORK: ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR & THE COST OF SAME SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS RELATED ITEMS.

OTHERWISE SPECIFIED, ALL ITEM NUMBERS REFER TO ODOTCMS.

PERMITS: THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS UNLESS OTHERWISE INDICATED IN THESE DOCUMENTS.

TRAFFIC CONTROL: THE CONTRACTOR SHALL USE ADEQUATE LIGHTS, SIGNS, FLAGGERS, & BARRICADES AS REQUIRED IN ITEM 614 TO SAFEGUARD THE TRAVELING PUBLIC AT ALL TIMES. ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS. WHERE IT IS ANTICIPATED THAT WORK WILL CLOSE A ROAD OR STREET, THE CONTRACTOR SHALL INFORM THE RESIDENTS TO BE AFFECTED, THE LOCAL LAW ENFORCEMENT AGENCY, THE LOCAL FIRE DEPARTMENT. & THE ENGINEER AS TO THE EXTENT, NATURE, & THE TIME OF THE ANTICIPATED WORK THE CONTRACTOR SHALL SUBMIT A PLAN & SCHEDULE FOR DETOURING TRAFFIC 10 DAYS PRIOR TO THE CLOSING OF ANY ROAD OR STREET TO THE ENGINEER & ROAD OWNER, DURING A CLOSING OF A ROAD OR STREET, THE CONTRACTOR SHALL PROVIDE ACCESS TO PROPERTIES FOR EMERGENCY VEHICLES & THE PROPERTY OWNERS. NO ROAD OR STREET SHALL BE CLOSED UNTIL THE SCHEDULE IS

SAFETY OF CONSTRUCTION: THE CONTRACTOR SHALL COMPLY WITH THE FEDERAL OCCUPATIONAL SAFETY & HEALTH ACT OF 1970 (OSHA) & ALL OTHER APPLICABLE FEDERAL, STATE, & LOCAL LAWS, REGULATIONS, FINDINGS & ORDERS RELATING TO SAFETY & HEALTH CONDITIONS ON THE WORK SITE. CONSTRUCTION METHODS FOR COMPLETING THE WORK DESCRIBED IN THESE CONTRACT DOCUMENTS SHALL BE CONSISTENT WITH THE OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) AMENDED CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUB-PART P, EFFECTIVE MARCH 5, 1990.

APPROVED BY THE AGENCY HAVING CONTROL OF THE ROAD.

EROSION & SEDIMENT CONTROL: PROJECTS DISTURBING LESS THAN ONE ACRE & NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT ARE NOT REQUIRED TO SUBMIT A NOTICE OF INTENT (NOI) TO THE OHIO EPA FOR COVERAGE UNDER THEIR GENERAL CONSTRUCTION STORM WATER PERMIT & ARE NOT REQUIRED TO MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN (SWP3) ON SITE. THE CONTRACTOR SHALL, HOWEVER, INSTALL & MAINTAIN SILT FENCES, DITCH CHECKS, TEMPORARY SEEDING, & OTHER MEASURES AS NECESSARY TO CONTROL SOIL EROSION & PREVENT SEDIMENT-LADEN RUN-OFF FROM EXITING THE SITE OR ENTERING STORM SEWER SYSTEMS OR DRAINAGE WAYS.

BORROW MATERIAL & SURPLUS EXCAVATION: THE SITE SHALL BE CONSTRUCTED TO THE FINAL GRADES SHOWN ON THE PLANS. WHERE NECESSARY. THE CONTRACTOR SHALL OBTAIN SUITABLE BORROW MATERIAL ON-SITE OR OFF-SITE AS NEEDED TO COMPLETE THE SITE CONSTRUCTION AS DESCRIBED HEREIN. THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION ON SITE &. IF NECESSARY, SHALL HAUL SURPLUS EXCAVATED MATERIAL AWAY FROM THE SITE & DISPOSE OF PROPERLY.

EXISTING UTILITIES: THE INFORMATION SHOWN CONCERNING EXISTING UTILITIES IS APPROXIMATE. THE LOCATION, SIZES, & OTHER INFORMATION SHOWN IS ONLY AS ACCURATE AS THAT PROVIDED BY THE OWNERS OF THE UTILITY. THIS INFORMATION IS NOT REPRESENTED, WARRANTED OR GUARANTEED TO BE COMPLETE OR ACCURATE. THE ENGINEER DOES NOT INDEPENDENTLY VERIFY NOR FIELD LOCATE UTILITIES. THI CONTRACTOR IS RESPONSIBLE TO PHYSICALLY LOCATE & VERIFY, IN THE FIELD, THE HORIZONTAL & VERTICAL LOCATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL SUPPORT, PROTECT & RESTORE ALL EXISTING UTILITIES & THEIR ASSOCIATED ITEMS. THE CONTRACTOR SHALL ADHERE TO ALL APPLICABLE SECTIONS OF THE OHIO REVISED CODE INCLUDING SECTIONS 153.64 & 3781.28. THE CONTRACTOR SHALL NOTIFY THE REGISTERED UTILITY PROTECTION SERVICE & ALL UTILITY OWNERS HAVING FACILITIES IN THE CONSTRUCTION AREA WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND UTILITY PROTECTION SERVICE. THE CONTRACTOR SHALL GIVE NOTIFICATION AS REQUIRED BY OHIO REVISED CODE, AT LEAST TWO (2) & NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS, EXCLUDING SATURDAYS, SUNDAYS, & LEGAL HOLIDAYS, & SHALL COORDINATE HIS WORK WITH THE UTILITY OWNERS UNTIL HIS WORK IS COMPLETED. THE CONTRACTOR SHALL KEEP THE UTILITY OWNERS APPRISED OF HIS SCHEDULE & REQUIREMENTS & SHALL PROVIDE THE PROJECT OWNER WITH EVIDENCE OF HAVING NOTIFIED THE UTILITIES & PROVIDED THEM WITH HIS WORK SCHEDULE PRIOR TO BEGINNING ANY

THE CONTRACTOR MAY REVIEW THE INFORMATION PROVIDED TO THE ENGINEER BY THE UTILITY OWNERS AT THE ENGINEER'S OFFICE PRIOR TO SUBMITTING A BID. CONTRACTORS REQUIRING MORE INFORMATION REGARDING EXISTING UTILITIES SHOULD CONDUCT THEIR OWN FIELD INVESTIGATIONS OR OTHERWISE LOCATE THE UTILITIES PRIOR TO SUBMITTING A BID FOR THE CONSTRUCTION. SEE EXISTING SITE SURVEY FOR A LISTING OF UTILITIES THAT MAY HAVE UNDERGROUND FACILITIES IN THE

PROJECT AREA.

DRAINAGE TILE: ALL FARM DRAINS, ROADWAY DRAINS, & OTHER DRAINAGE TILE WHICH ARE ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS DURING CONSTRUCTION SHALL BE PROVIDED WITH AN UNOBSTRUCTED OUTLET. EXISTING COLLECTOR TILES WHICH ARE LOCATED BELOW THE PROPOSED FINISHED ELEVATION & WHICH CROSS THE TRENCH SHALL BE REPLACED WITHIN THE TRENCH LIMITS BY ITEM 611 CONDUIT THE LOCATION, TYPE, SIZE, & GRADE OF THE REQUIRED REPLACEMENT SHALL BE DETERMINED BY THE PROJECT ENGINEER OR HIS SITE REPRESENTATIVE DURING CONSTRUCTION. NECESSARY BENDS OR FITTINGS, COMPACTED GRANULAR BACKFILL, &

ASSOCIATED ITEMS SHALL BE INCLUDED IN THE BID PRICE.

TEMPORARY PAVEMENT: TEMPORARY PAVEMENT REPLACEMENT SHALL BE PROVIDED ON PERMANENT PAVEMENT DAMAGED OR REMOVED BY THE CONTRACTOR IN THE PERFORMANCE OF THE WORK. AS SOON AS THE TRENCH HAS BEEN BACKFILLED, TEMPORARY PAVEMENT SHALL BE INSTALLED. THE ENGINEER MAY REQUIRE THAT ALL MATERIALS & EQUIPMENT INCIDENTAL TO PROVIDING THE TEMPORARY PAVEMENT BE ON THE JOB SITE PRIOR TO REMOVING THE EXISTING PAVEMENT. TEMPORARY PAVEMENT SHALL CONSIST OF 2" OF BITUMINOUS COLD MIX PLACED UPON 6" OF COMPACTED ITEM 304, AGGREGATE BASE. TEMPORARY PAVEMENT SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT PAVEMENT IS INSTALLED.

PERMANENT PAVEMENT: WHERE DAMAGED OR REMOVED, THE PAVEMENT SHALL BE REPLACED BY FIRST REMOVING TEMPORARY PAVEMENT DOWN TO CLEAN GRANULAR MATERIAL & REMOVING EXISTING PAVEMENT FOR AT LEAST 12" BEYOND THE TRENCH LIMITS ON EACH SIDE. PAVEMENT TO BE REMOVED SHALL BE NEATLY SAWED NOT MORE THAN 72 HOURS PRIOR TO THE PLACING OF PERMANENT PAVEMENT MATERIALS. PERMANENT PAVEMENT REPLACEMENT MATERIALS & WORKMANSHIP SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS. ITEM 407, TACK COAT, SHALL BE APPLIED TO THE EXPOSED EXISTING PAVEMENT EDGES WHEN EITHER THE EXISTING OR NEW PAVEMENT IS BITUMINOUS MATERIAL. WHEN THE PERMANENT PAVEMENT IS BITUMINOUS MATERIAL, ITEM 407, TACK COAT SHALL BE APPLIED TO BITUMINOUS OR

CONCRETE BASE MATERIAL PRIOR TO THE PLACING OF THE PERMANENT PAVEMENT.

NEW PAVEMENT DESIGN: A GEOTECHNICAL REPORT WITH PAVEMENT DESIGN RECOMMENDATIONS WAS NOT PROVIDED FOR THIS PROJECT. PAVEMENT DETAILS SHOWN HEREIN ARE BASED ON GENERALLY ACCEPTED ENGINEERING STANDARDS. SANDS DECKER CPS, LLC PROVIDES NO GUARANTEE AND ASSUMES NO LIABILITY FOR THE USEFUL LIFE AND/OR PERFORMANCE OF SAID DESIGN RECOMMENDATIONS. <u>INSTALLATION IN EMBANKMENT</u>: WHERE UTILITIES ARE TO BE INSTALLED IN EMBANKMENT AREAS, THE EMBANKMENT SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS, A MINIMUM OF 2' ABOVE THE PIPE BUT

SUFFICIENTLY ABOVE THE PIPE TO PROTECT THE PIPE FROM DAMAGE DUE TO

FURTHER CONSTRUCTION ACTIVITIES PRIOR TO THE INSTALLATION OF THE UTILITY.

CONFLICTS IN GRADE: IN ALL CONFLICTS IN GRADE BETWEEN THE WATER LINES OR WATER SERVICES & OTHER EXISTING UTILITIES, THE WATER LINE/SERVICE LINE SHALL BE LOWERED DURING CONSTRUCTION. A MINIMUM 18" VERTICAL & 10' HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER LINE & ANY SANITARY OR STORM SEWER; 12" MINIMUM VERTICAL CLEARANCE FOR OTHER UTILITIES. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AHEAD OF HIS CONSTRUCTION OPERATIONS TO ALLOW FOR ADJUSTMENTS IN GRADE TO THE WATER LINE THAT MAY BE REQUIRED AS A RESULT OF POTENTIAL CONFLICTS WITH AN EXISTING UTILITY. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR LOWERING THE WATER LINE TO AVOID CONFLICTS WITH EXISTING UTILITIES.

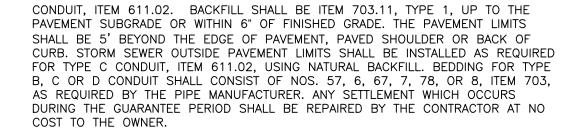
EXISTING DITCHES: WHERE IT BECOMES NECESSARY TO LOCATE A MAIN LINE VALVE, FIRE HYDRANT OR MANHOLE IN AN EXISTING DITCH, THE CONTRACTOR SHALL RELOCATE THE DITCH BEHIND THE PROPOSED VALVE, HYDRANT OR MANHOLE.

MANHOLE TOPS: WHERE MANHOLES ARE LOCATED WITHIN PUBLIC OR PRIVATE PAVEMENT, SIDEWALK, CONCRETE PAD OR PAVED SHOULDER, THE TOPS SHALL BE BUILT TO EXISTING PAVEMENT ELEVATIONS. ELSEWHERE MANHOLES SHALL BE BUILT OR SUBSEQUENTLY ADJUSTED TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE. THE COST OF ADJUSTMENT IS TO BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.

FINAL GRADING & CLEAN-UP: THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS & MATERIALS RESULTING FROM HIS OPERATION & RESTORE ALL SURFACES, STRUCTURES, DITCHES, SIGNS, MAILBOXES, FENCES, GUARDRAILS, OR OTHER PHYSICAL FEATURES OR PROPERTY DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER. THE COST OF ALL SUCH WORK SHALL BE INCLUDED WITH THE VARIOUS

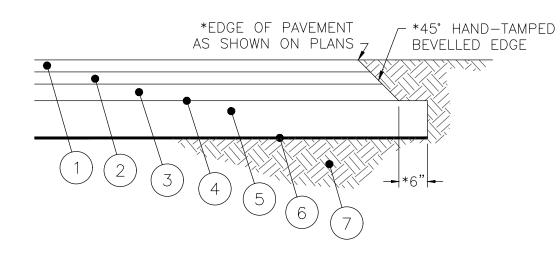
RELATED ITEMS. <u>SEEDING & MULCHING</u>: ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION & ELEVATION OR TO THE PROPOSED ELEVATIONS SHOWN ON THE DRAWINGS. & PROPER DRAINAGE SHALL BE PROVIDED. AFTER FINAL GRADING. THE SEED BED SHALL BE RAKED & ALL STONES, CLODS, LUMPS & OTHER FOREIGN MATERIAL GREATER THAN 1" IN DIAMETER SHALL BE REMOVED PRIOR TO SEEDING & MULCHING. ALL AREAS SHALL BE SEEDED PER ITEM 659.09, CLASS 1 FOR RESIDENTIAL AREAS OR CLASS 2 FOR RURAL ROADSIDE AREAS, UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL WATER, RE-SEED & MULCH AS NECESSARY UNTIL AN ACCEPTABLE STAND OF GRASS IS ACHIEVED. STORM SEWER & CULVERT CONSTRUCTION: UNLESS SHOWN OTHERWISE ON THESE PLANS, STORM SEWER & CULVERT CONSTRUCTION SHALL CONFORM TO ODOT SPECIFICATIONS. PIPE SHALL BE CORRUGATED POLYETHYLENE SMOOTH LINED PIPE,

ITEM 707.33, OR REINFORCED CONCRETE CIRCULAR PIPE, ITEM 706.02. BEDDING & BACKFILL: STORM SEWERS UNDER EXISTING OR PROPOSED PAVEMENT LIMITS & DRIVES SHALL BE INSTALLED AS REQUIRED FOR TYPE B OR TYPE D



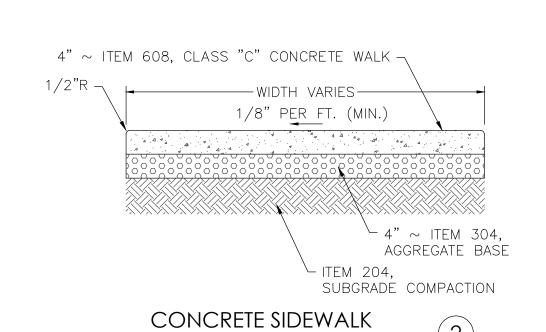
UNDERDRAIN: WHERE DOWNSPOUTS FROM RESIDENTIAL DWELLINGS ARE TO CONNECT INTO THE STREET UNDERDRAIN SYSTEM, THE UNDERDRAIN SHALL BE 6" MINIMUM OR AS OTHERWISE SPECIFIED, 4" UNDERDRAINS ARE ACCEPTABLE WITHOUT DOWNSPOUT CONNECTIONS. PIPE USED FOR UNDERDRAIN SHALL CONFORM TO ITEM

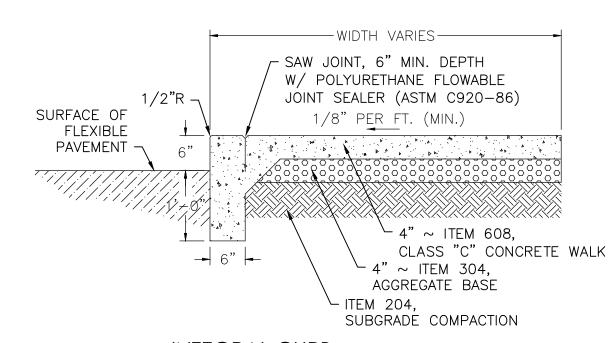
707.31, CORRUGATED POLYETHYLENE DRAINAGE TUBING.

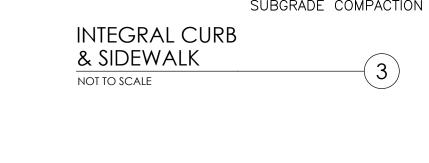


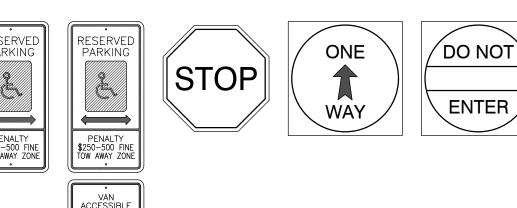
- * ONLY WHERE PAVEMENT DOES NOT ABUT CURB/SIDEWALK
- 1. 1 1/2" ~ ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22
- 2. 2" ~ ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448), PG64-22 3. 4" ~ ITEM 301, ASPHALT BASE COURSE
- 4. ITEM 408, PRIME COAT (0.35 GAL/SY)
- 5. 10" ~ ITEM 304, AGGREGATE BASE 6. ITEM 204, SUBGRADE COMPACTION







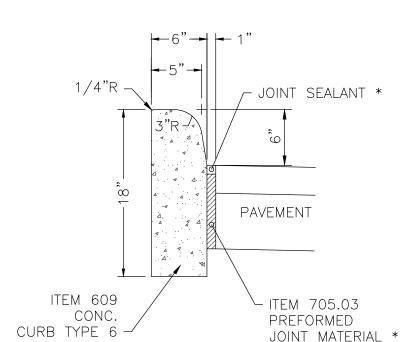




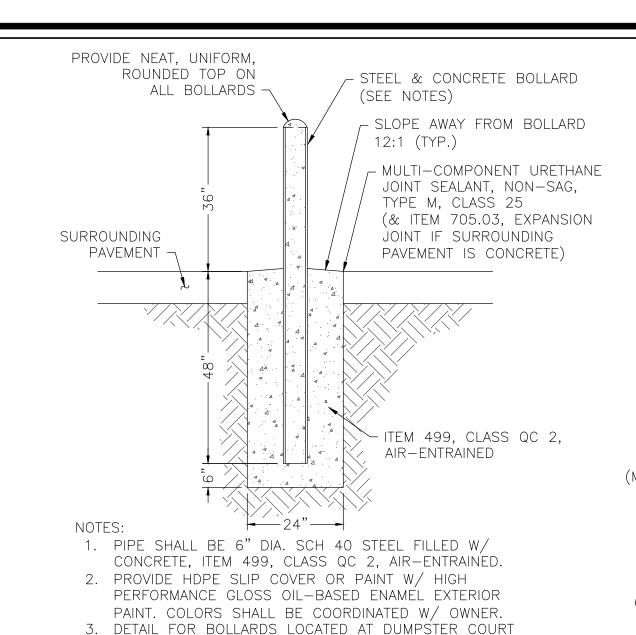
SIGN A SIGN B SIGN C SIGN D SIGN E HT. ABOVE 6'-8" 7'-0" 7'-0" 7'-0" 6'-8" FINISHED GRADE

INSTALL WITH SQUARE STEEL GALVANIZED POLE PER ODOT 730.016 SITE SIGNAGE

NOT TO SCALE



* ONLY WHERE CONCRETE CURB MEETS CONCRETE PAVEMENT STD. CONCRETE CURB



- CATCH BASIN PROPOSED PAVEMENT ∠ 12" PANEL−TYPE AGGREGATE BASE UNDERDRAIN* W/ 4" OUTLET 12" PANEL-TYPE UNDERDRAIN*; CENTER IN TRENCH W/ GEOTEXTILE CONTRACTOR SHALL ORIENT (TYP.)- CLASS B FILTER AXIS TO FOLLOW MAJOR DRAINAGE SWALE NO. 8 AGGREGATE INSTALL 10' LENGTHS OF 12" PANEL-TYPE UNDERDRAIN* AT ALL STRUCTURES WITHIN PAVEMENT AS SHOWN ABOVE. UNDERDRAINS SHALL SLOPE AT 1.0% TOWARD THE STRUCTURE AND SHALL HAVE THE UPSTREAM END PLUGGED. UNDERDRAIN SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC AFTER INSTALLATION

ARE SHOWN ON ARCHITECTURAL PLANS.

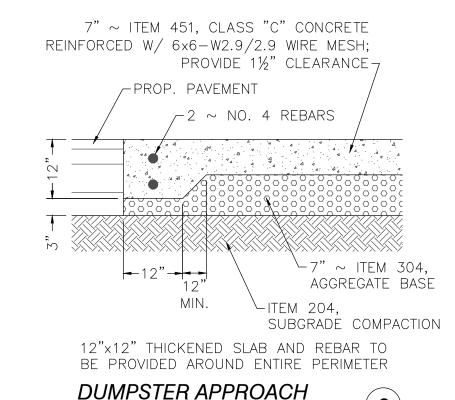
CONCRETE BOLLARD

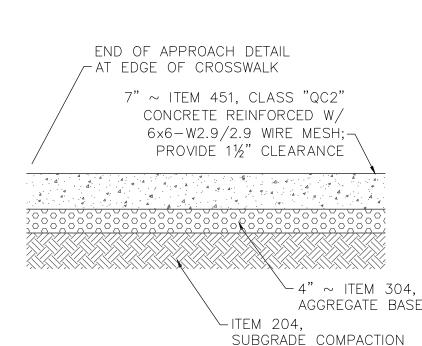
NOT TO SCALE

AT TRAFFIC CONTROL

* 4" SINGLE WALL PERFORATED UNDERDRAIN MAY BE SUBSTITUTED. INVERT SHALL BE 24" (MIN.) BELOW TOP OF CASTING.

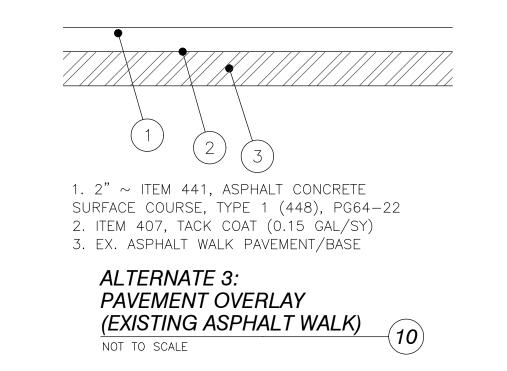
CATCH BASIN FINGER DRAIN

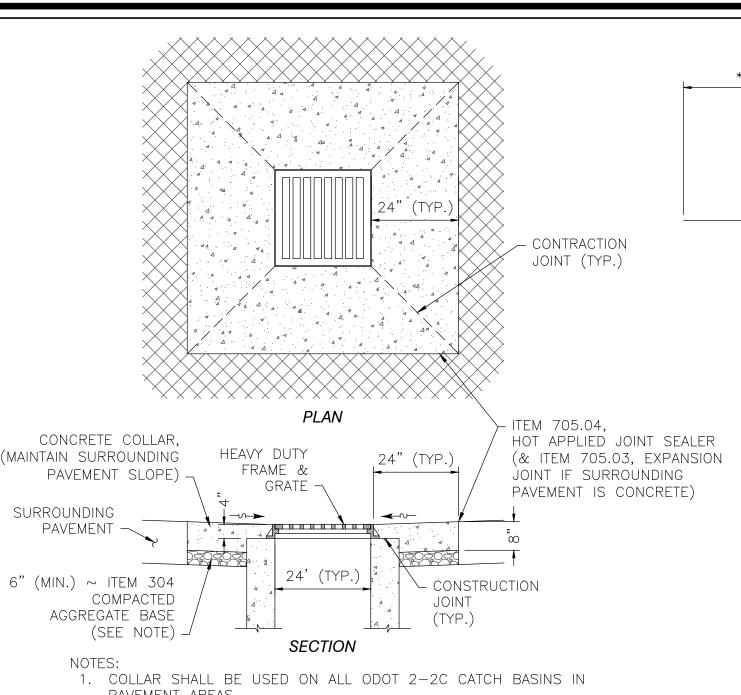




NOT TO SCALE







- PAVEMENT AREAS.
- 2. CONCRETE SHALL BE ITEM 499, CLASS QC 2, AIR-ENTRAINED. . AGGREGATE BASE THICKNESS SHALL BE INCREASED AS NEEDED TO EXTEND TO THE BOTTOM OF BASE FOR THE SURROUNDING
- PAVEMENT. 4. CURING MEMBRANE SHALL BE APPLIED TO ALL EXPOSED

FINISHED SURFACES PER ITEM 451.11. CONCRETE STRUCTURE COLLAR (ODOT 2-2C STRUCTURES)

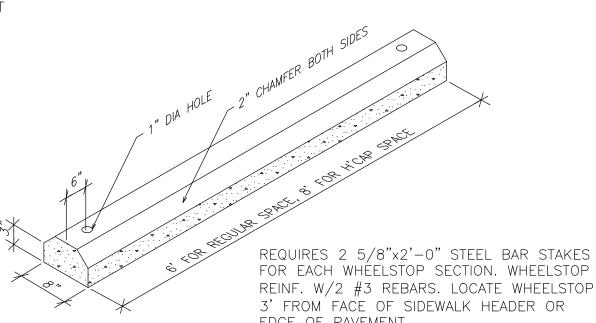
NOT TO SCALE

— 111/2" —-

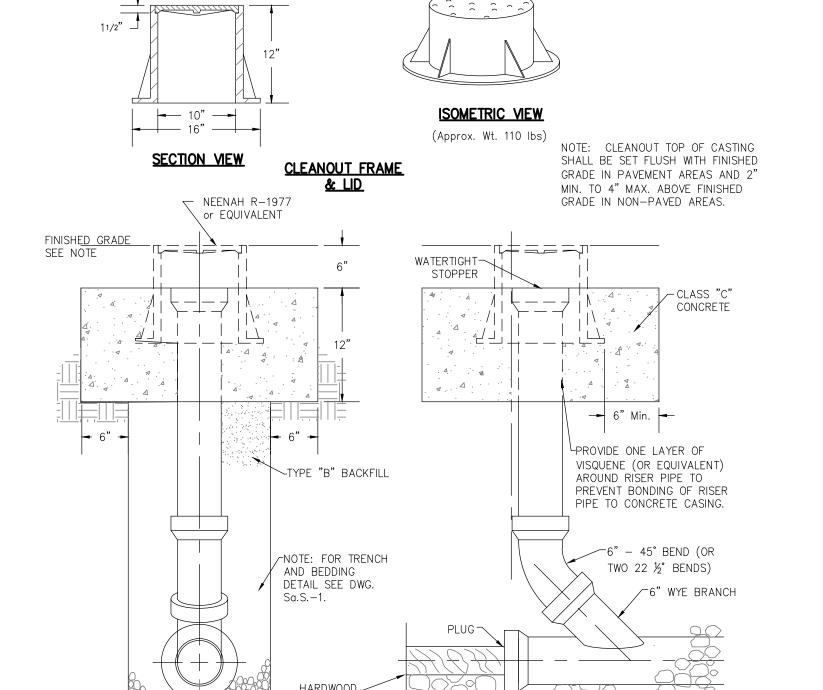
END ELEVATION

DETAIL

TYPICAL CLEANOUT



EDGE OF PAVEMENT. CONCRETE WHEELSTOP NOT TO SCALE



SIDE ELEVATION

* 20' LIMITING LINES FOR PAYMENT OF SEEDING & MULCHING * LIMITING LINES FOR PAYMENT OF REPAVING PAVEMENT REPLACEMENT OR 6" (MIN) TOPSOIL, AS REQUIRED -BACKFILL INITIAL BACKFILL 6"-12" ABOVE TOP OF PIPE HAUNCHING TO SPRINGLINE BEDDING MATERIAL -FOUNDATION

* LIMITING LINES FOR PAYMENT APPLY ONLY WHEN CONTRACT PROVIDES FOR UNIT PRICE PAYMENT OF PAVEMENT REPLACEMENT AND SEEDING & MULCHING.

MIN. TRENCH WIDTH

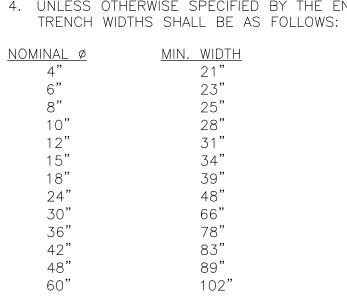
1. FOUNDATION: WHERE TRENCH BOTTOM IS UNSTABLE, CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER & REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321. "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWER & OTHER GRAVITY-FLOW APPLICATIONS", LATEST EDITION. AS AN ALTERNATIVE & AT THE DISCRETION OF THE ENGINEER, TRENCH BOTTOM MAY BE STABILIZED USING WOVEN GEOTEXTILE FABRIC.

2. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III, & INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MIN. BEDDING THICKNESS SHALL BE 4" FOR 4"-24" & 42"-48" PIPE & 6" FOR 30"-36" PIPE.

3. HAUNCHING & INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III, & INSTALLED AS REQUIRED IN ASTM D2321, LATEST

4. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MIN. RECOMMENDED



CONDUIT MAY BE INCREASED WITHOUT EXTRA COMPENSATION. MINIMUM COVER: MIN. RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE AS FOLLOWS. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE FROM TOP OF PIPE TO GROUND SURFACE.

5. THE EXCAVATED TRENCH WIDTH TWELVE INCHES (12") ABOVE THE

SURFACE LIVE LOADING CONDITION MIN. COVER H25 (FLEXIBLE PAVEMENT) 12" ** H25 (RIGID PAVEMENT) E80 RAILWAY HEAVY CONSTRUCTION

** TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION.

TYP. TRENCH CORRUGATED PE PIPE NOT TO SCALE

GENERAL NOTES & DETAILS

ADDITION & RENOVATIONS TO THE PLAINS ELEMENTARY SCHOOL 90 CONNETT ROAD THE PLAINS, OH 45780

PREPARED FOR: ATHENS CITY SCHOOL DISTRICT PO BOX 9 (21 BIRGE DRIVE) CHAUNCEY, OH 45719



OFFICES

128 East Main Street

Zanesville, Ohio 43701

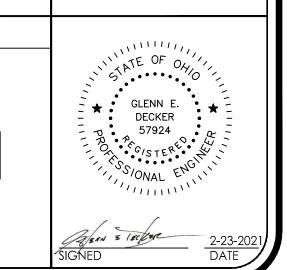
740-450-1640

Call before you dig.

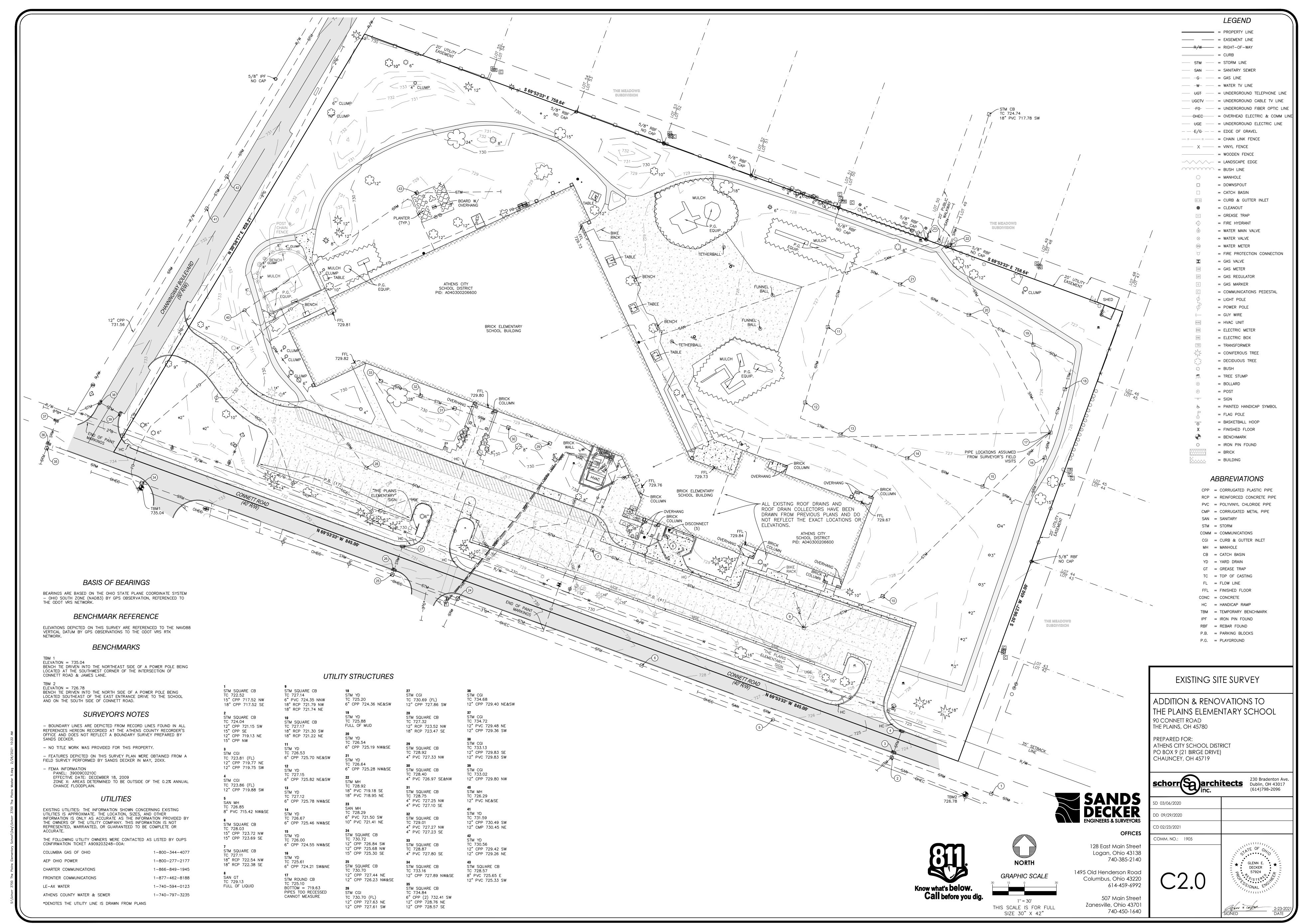
schorr architects | 230 Bradenton Ave Dublin, OH 43017 (614)798-2006 D 02/23/2021

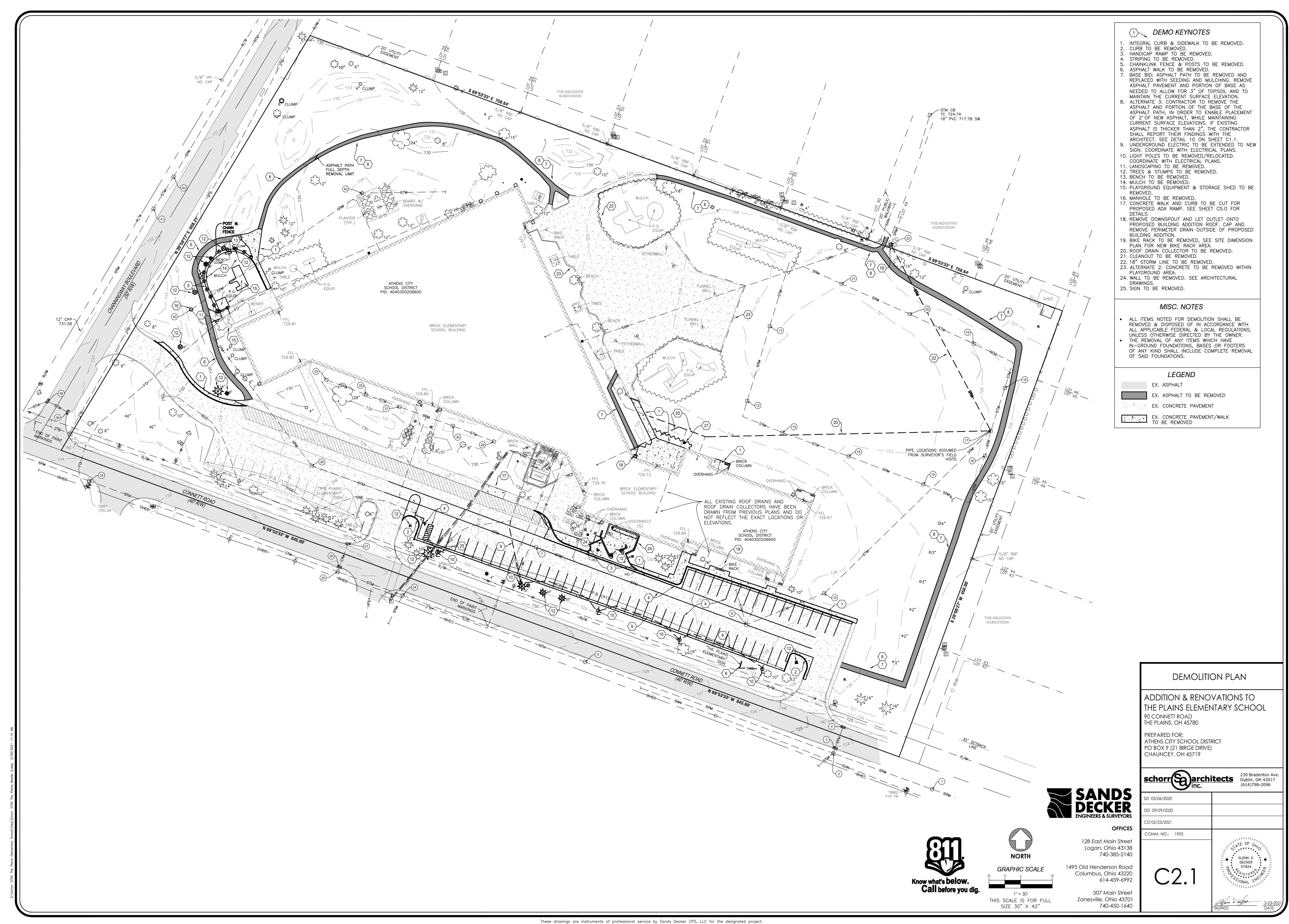
Logan, Ohio 43138 740-385-2140 1495 Old Henderson Road Columbus, Ohio 43220 614-459-6992 507 Main Street

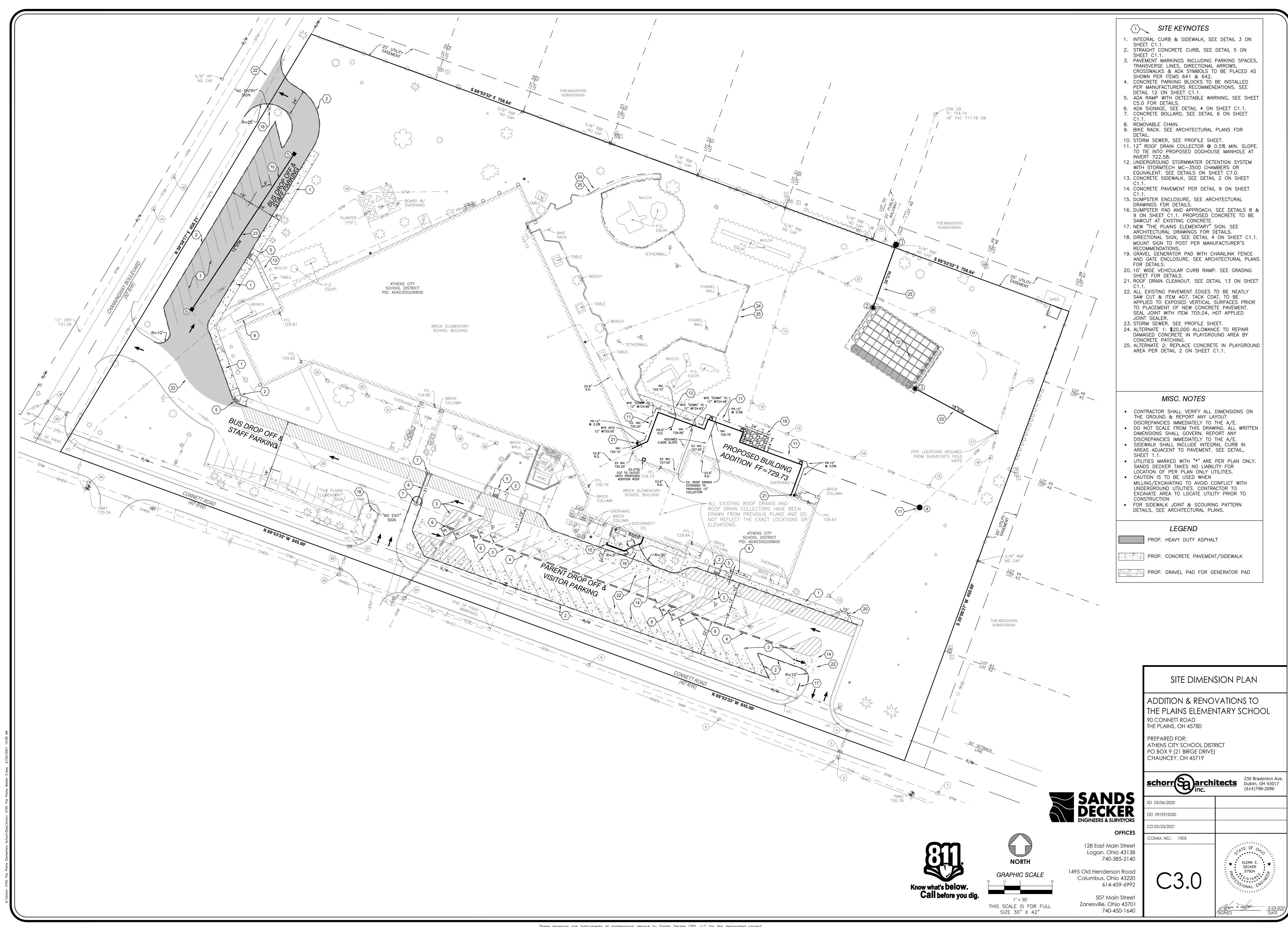
COMM. NO.: 1905

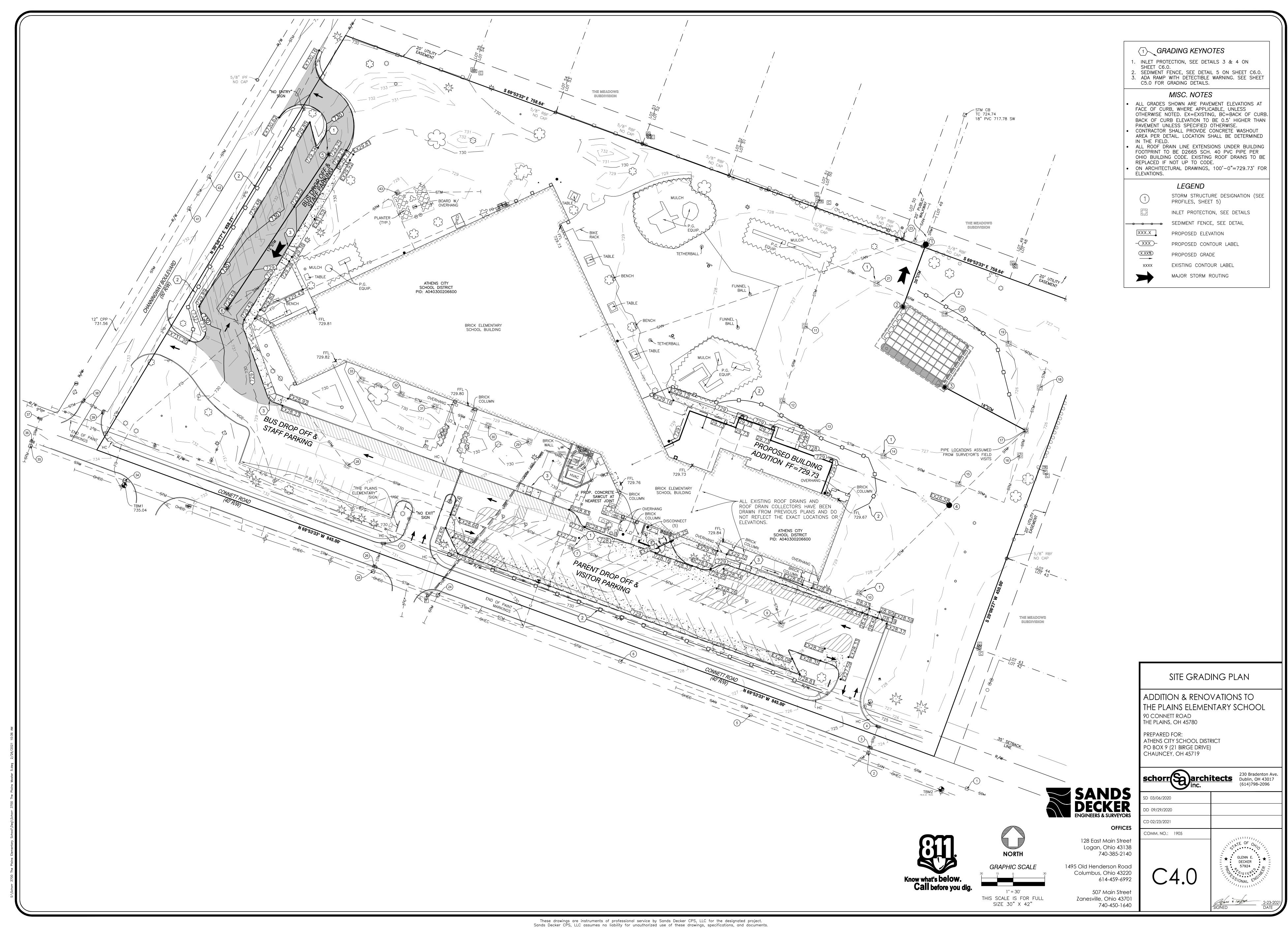


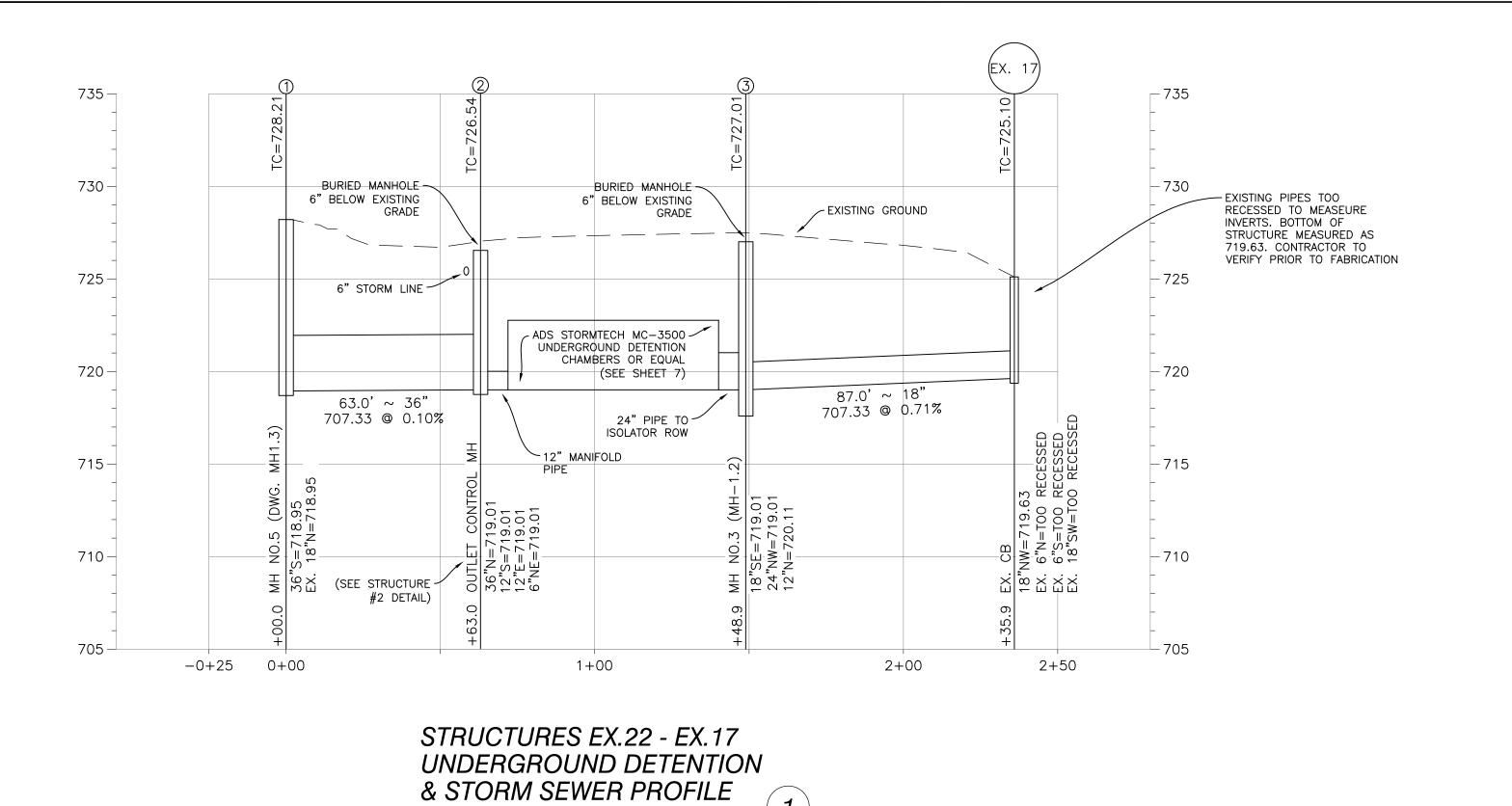
These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.



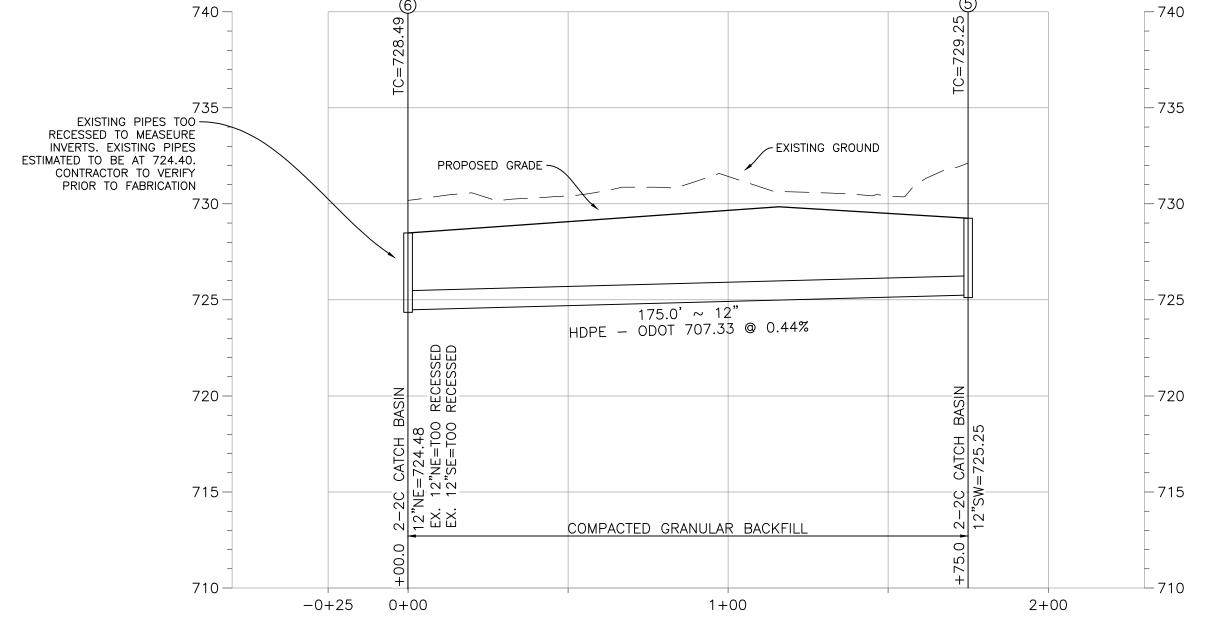








HORIZ: 1"=30' VERT: 1"=5'



STRUCTURES 5-6

HORIZ: 1"=30' VERT: 1"=5'

STORM SEWER PROFILE

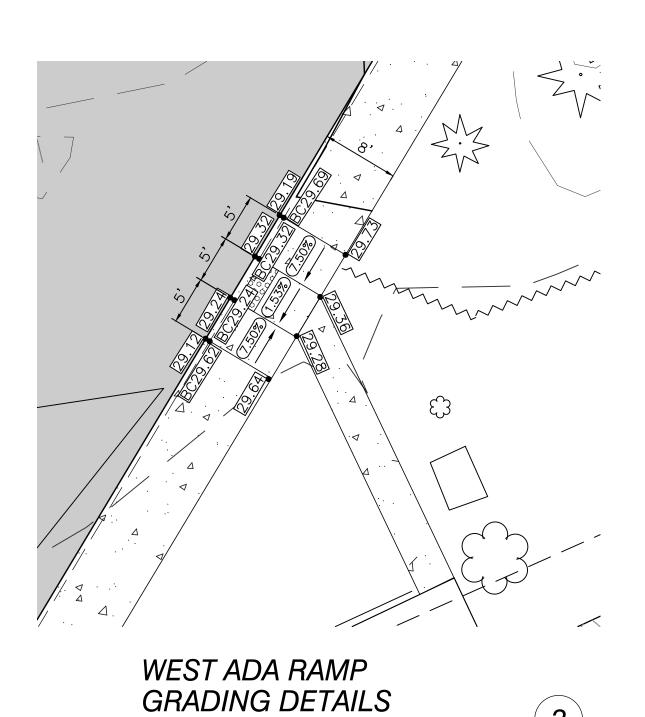
	STORM STRUCTURE LOCATION					
STRUCTURE	NORTHING	EASTING	AS-BUILT NORTHING	AS-BUIL ⁻ EASTING		
1	499651.66	2070257.78				
2	499592.50	2070236.12				
3	499516.24	2070275.74				
4	499404.48	2070279.95				
5	499737.00	2069691.97				
6	499590.83	2069595.74				

NOTES:

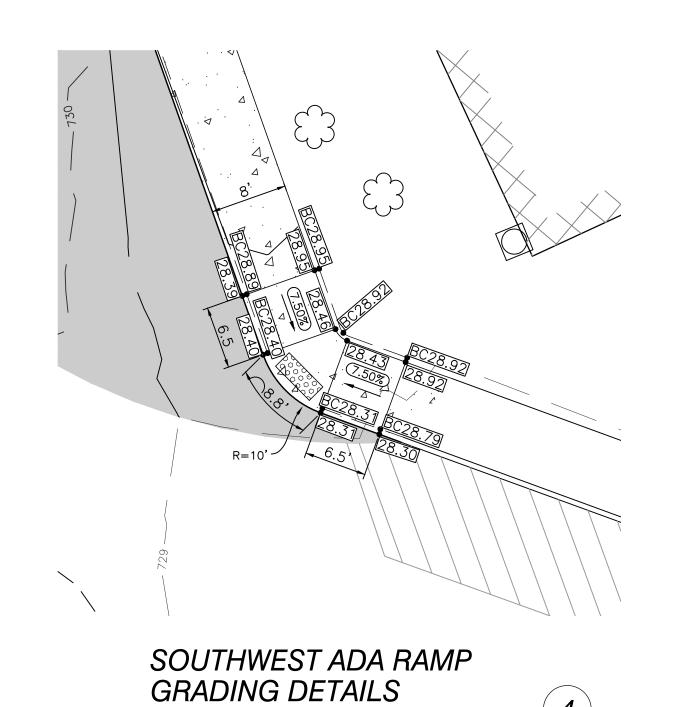
- A MINIMUM OF 18" VERTICAL CLEARANCE IS REQUIRED AT ALL UTILITY CROSSINGS.

- THE DEPTHS OF CROSSING UNDERGROUND UTILITIES ARE APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD BEFORE CONSTRUCTION. CONTRACTOR TO LOWER IN FIELD IF NEEDED. COORDINATE WORK WITH UTILITY OWNER.

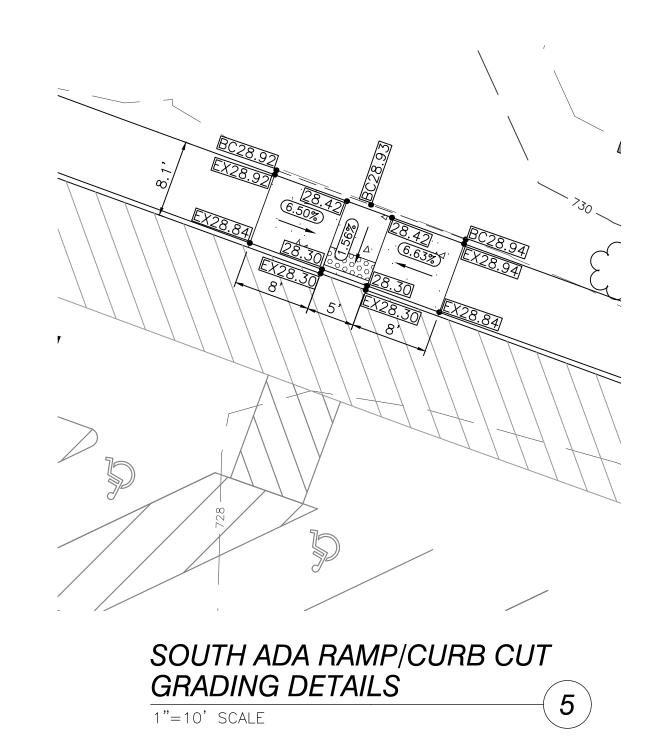
- CONTRACTOR SHALL FIELD VERIFY ELEVATIONS OF EXISTING STORM SEWERS TO PRIOR TO FABRICATION OR CONSTRUCTION.

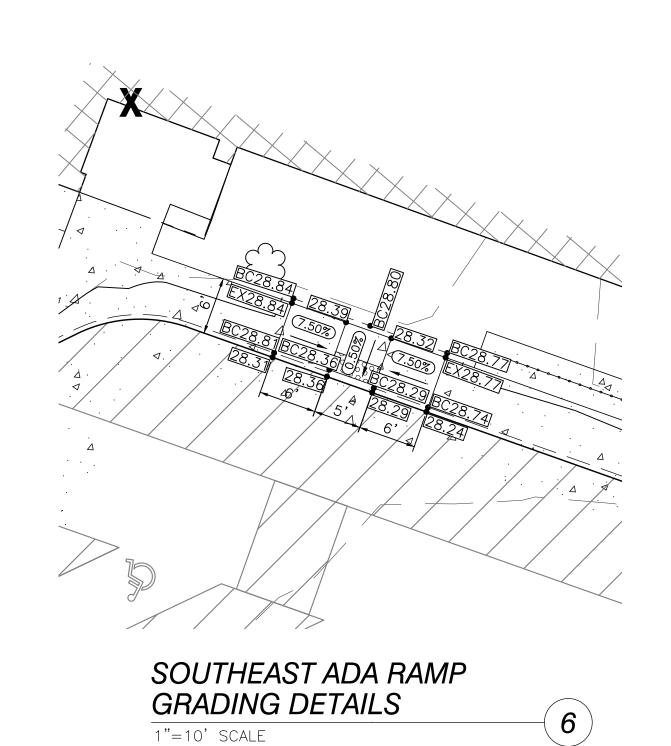


1"=10' SCALE



1"=10' SCALE





ADDITION & RENOVATIONS TO

PROFILES & ADA RAMPS

THE PLAINS ELEMENTARY SCHOOL 90 CONNETT ROAD THE PLAINS, OH 45780

PREPARED FOR: ATHENS CITY SCHOOL DISTRICT PO BOX 9 (21 BIRGE DRIVE) CHAUNCEY, OH 45719



schorr architects Dublin, OH 43017 (614)798-2096

OFFICES

CD 02/23/2021 COMM. NO.: 1905

GLENN E. DECKER 57924

1495 Old Henderson Road

Columbus, Ohio 43220 614-459-6992 507 Main Street Zanesville, Ohio 43701 740-450-1640

740-385-2140

128 East Main Street Logan, Ohio 43138 PERIMETER CONTROLS & OTHER PRACTICES INTENDED TO TRAP SEDIMENT SHALL BE IMPLEMENTED WITHIN 7 DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RESTABILIZED.

FOR DISTURBED AREAS THAT WILL LIE DORMANT FOR 1 YEAR OR MORE, PERMANENT EROSION CONTROLS SHALL BE APPLIED WITHIN 7 DAYS OF MOST RECENT DISTURBANCE.

FOR DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE & AT FINAL GRADE, PERMANENT EROSION CONTROLS SHALL BE APPLIED WITHIN 2 DAYS OF REACHING FINAL GRADE.

FOR ANY OTHER DISTURBED AREAS AT FINAL GRADE, PERMANENT EROSION CONTROLS SHALL BE APPLIED WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA.

FOR DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE & NOT AT FINAL GRADE, TEMPORARY EROSION CONTROLS SHALL BE APPLIED WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14

FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN 1 YEAR, & NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE, TEMPORARY EROSION CONTROLS SHALL BE APPLIED WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA. FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST 7 DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).

FOR DISTURBED AREAS THAT WILL BE LEFT IDLE OVER WINTER, TEMPORARY EROSION CONTROLS SHALL BE APPLIED PRIOR TO ONSET OF WINTER WEATHER.

SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED FOR OVER 14 DAYS.

SEDIMENT BARRIERS: SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE FILTERED OR DIVERTED TO A SETTLING FACILITY.

SEDIMENT BARRIERS SUCH AS SEDIMENT FENCE OR DIVERSIONS TO SETTLING FACILITIES SHALL PROTECT ADJACENT PROPERTIES & WATER RESOURCES FROM SEDIMENT TRANSPORTED BY SHEET FLOW.

TEMPORARY EROSION CONTROL FEATURES SHALL BE ACCEPTABLY MAINTAINED & SHALL BE REMOVED OR REPLACED WHEN DIRECTED BY THE ENGINEER AT NO COST TO THE OWNER. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS.

ALL CONCENTRATED WATER SOURCES SHALL DISCHARGE INTO A VIABLE SEDIMENT BASIN.

SEDIMENT BASINS SHALL BE CLEANED OUT ANY TIME ACCUMULATED STORAGE REACHES
THE SEDIMENT VOLUME ELEVATION AS INDICTED IN THE SEDIMENT BASIN CHART.

ALL WATER SOURCES SHALL DISCHARGE IN A NON-EROSIVE MANNER.

ALL SOIL STOCKPILES SHALL BE PROTECTED FROM EROSION BY PERIMETER CONTROL DEVICES SUCH AS STRAW BALE DIKES OR SILT FENCES. THESE PERIMETER CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.

PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED WHICH, IN THE OPINION OF THE ENGINEER, PROVIDES ADEQUATE COVER & IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY & TO SURVIVE ADVERSE WEATHER CONDITIONS.

INSPECTION SCHEDULE:

1. DIVERSION SWALE & STRUCTURAL PROTECTION — INSPECT EVERY 15 DAYS OR AFTER EACH RAINSTORM PRODUCING RUNOFF. REPAIR AS REQUIRED.

2. INLET PROTECTION — INSPECT FOR SEDIMENT ACCUMULATION AFTER EACH RAINFALL & DAILY DURING CONTINUED RAINFALL. REPAIR OR REPLACE WHEN WATER FLOW IS RESTRICTED BY SEDIMENT.

3. VEGETATIVE PLANTING — INSPECT AFTER SPROUTING OCCURS & REPLANT BARE AREAS. INSPECT ESTABLISHED COVER EVERY 15 DAYS FOR DAMAGE. REPLANT AS REQUIRED. MAINTAIN ESTABLISHED COVER AT MAXIMUM 6" HEIGHT. IRRIGATE AS REQUIRED DURING DRY PERIODS TO MAINTAIN LIVE VEGETATION.

NON-SEDIMENT POLLUTANT CONTROLS: HAZARDOUS/TOXIC WASTES SHALL NOT BE DISPOSED OF ON-SITE OR DUMPED INTO SEWERS, DRAINS OR CATCH BASINS. ANY HAZARDOUS/TOXIC WASTE SHALL BE DISPOSED OF OFF-SITE AT AN APPROVED LOCATION &/OR TAKEN TO AN APPROVED RECYCLING CENTER.

CONSTRUCTION SEQUENCE:

- THE CONTRACTOR SHALL ESTABLISH A STABILIZED CONSTRUCTION ENTRANCE.
 THE CONTRACTOR SHALL PLACE THE REQUIRED SEDIMENT FENCE & OTHER CONTROLS PRIOR TO DENUDING.
- THE CONTRACTOR SHALL EXCAVATE THE DETENTION BASINS & DIVERSIONARY SWALES AS NEEDED FOR TEMPORARY SEDIMENT SETTLING & INSTALL DE-WATERING SKIMMERS.
 THE CONTRACTOR SHALL PERFORM SITE EARTHWORK OPERATIONS IN ACCORDANCE WITH THE PLAN DETAILS & NOTES. THE CONTRACTOR SHALL APPLY WATER OR DUST PALLIATIVE ON DISTURBED AREAS DURING CONSTRUCTION TO ALLEVIATE OR PREVENT DUST NUISANCE PER ITEM 616. DUST PALLIATIVE SHALL CONSIST OF CALCIUM CHLORIDE MEETING THE REQUIREMENTS OF SECTION 712.02. THE WATER
- OR CALCIUM CHLORIDE SHALL BE SPREAD UNIFORMLY OVER THE SURFACE OF THE DISTURBED AREAS.

 EXPOSED SLOPES SHALL BE STABILIZED AS SOON AS THEY ARE CONSTRUCTED.
- 6. THE CONTRACTOR SHALL PLACE SEEDING & MULCHING AS NECESSARY TO STABILIZE ALL DENUDED AREAS. ALL DENUDED AREAS SHALL HAVE SOIL STABILIZATION, EITHER TEMPORARY OR PERMANENT, ACCORDING TO THE GENERAL
- PERMIT & THE NOTES ON THIS SHEET.

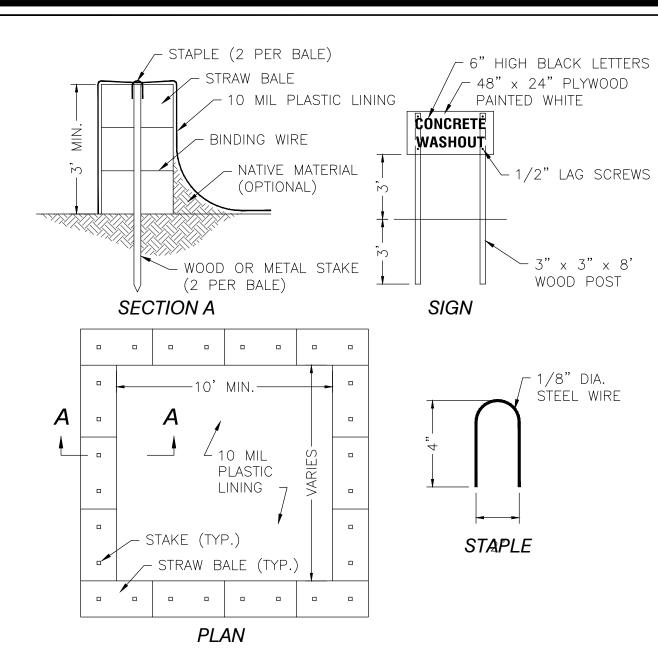
 7. THE CONTRACTOR SHALL REMOVE & DISPOSE OF THE EROSION CONTROL DEVICES
- ONLY AFTER ALL AREAS HAVE ESTABLISHED VEGETATIVE COVER.

 8. AFTER REMOVAL OF EROSION CONTROL DEVICES, THE CONTRACTOR SHALL CLEAN INLETS & STORM PIPES OF ANY/ALL SEDIMENT INCURRED DURING CONSTRUCTION.

AS CO-PERMITEE, THE CONTRACTOR OR HIS/HER AGENT SHALL MAKE REGULAR INSPECTIONS OF ALL CONTROL MEASURES IN ACCORDANCE WITH THE INSPECTION SCHEDULE OUTLINED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN(S). THE PURPOSE OF SUCH INSPECTIONS WILL BE TO DETERMINE THE OVERALL EFFECTIVENESS OF THE CONTROL PLAN & THE NEED FOR ADDITIONAL CONTROL MEASURES. ALL INSPECTIONS SHALL BE DOCUMENTED IN WRITTEN FORM.

AN OEPA NOTICE OF INTENT (NOI) SHALL BE FILED WITH THE OEPA & A COPY OF THE APPROVAL KEPT ON-SITE. PROVISIONS OF THE SWP3 & GENERAL PERMIT SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. NO CONSTRUCTION WORK SHALL BEGIN WITHOUT AN APPROVED & CURRENT OHIO EPA NOTICE OF INTENT (NOI).

ALL CONSTRUCTION & DEMOLITION DEBRIS WASTE SHALL BE RECYCLED OR DISPOSED OF IN AN OHIO EPA APPROVED CONSTRUCTION & DEMOLITION DEBRIS LANDFILL AS REQUIRED BY OHIO REVISED CODE 3714.



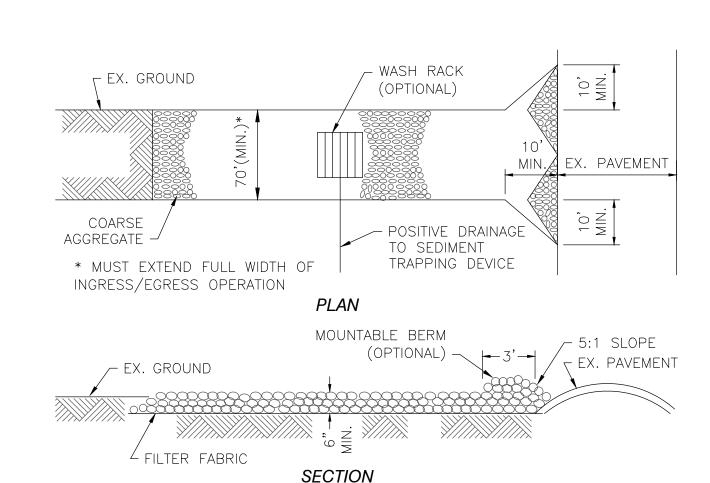
NOTES:

• ACTUAL LOCATION & LAYOUT SHALL BE DETERMINED IN THE FIELD.

• PIT CAN BE DUG INTO THE GROUND OR FORMED ABOVE GRADE.

- PLASTIC LINING SHALL BE MAINTAINED FREE OF TEARS OR HOLES.
 AFTER THE PIT IS USED & WASHWATER HAS EVAPORATED OR BEEN VACUUMED OFF, THE REMAINING HARDENED SOLIDS CAN BE BROKEN UP & REMOVED FROM THE PIT.
 IF DAMAGE OCCURS TO THE STRAW BALES OR PLASTIC LINING DURING THE REMOVAL OF SOLIDS, THE PIT SHALL BE REPAIRED & RELINED WITH NEW PLASTIC TO ACHIEVE
- A PRE-FABRICATED PORTABLE VINYL WASHOUT CONTAINER WITH FILTER BAG OR METAL WASHOUT CONTAINER SERVICE MAY BE USED AS SUBSTITUTES FOR THE STRAW BALE
 - LASTIC LINER PIT.

 CONCRETE WASHOUT AREA



- CONSTRUCTION SPECIFICATIONS:

 1. STONE SIZE 2" STONE OR RECLAIMED/RECYCLED CONCRETE EQUIVALENT.

 2. LENGTH 70' MIN (30' FOR INDIVIDUAL LOTS).
- 3. THICKNESS NOT LESS THAN 6".

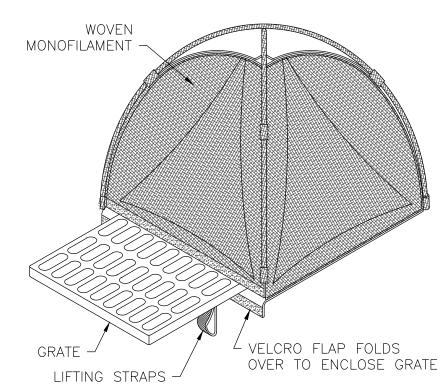
 4. WIDTH 14' MIN. BUT NOT LESS THAN FULL WIDTH AT POINTS WHERE
- INGRESS OR EGRESS OCCURS.

 5. FILTER CLOTH TO BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES IS PERMITTED.
 7. MAINTENANCE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT—OF—WAY. THIS MAY REQUIRE TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND & REPAIR &/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR
- TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

 8. WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE
- ENTRANCE ONTO PUBLIC RIGHTS—OF—WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE.

 9. PERIODIC INSPECTION & NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

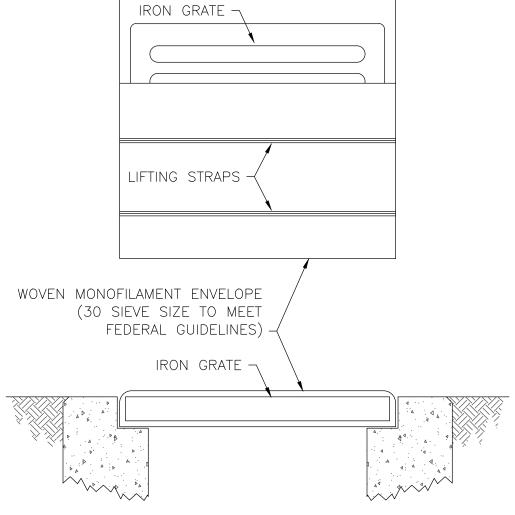
STABILIZED CONSTRUCTION ENTRANCE



INSTALLATION: OPEN UNIT NEAR THE INLET. IF USING OPTIONAL OIL ABSORBENTS, PLACE ABSORBENT PILLOW ON BOTTOM (BELOW-GRADE SIDE) OF UNIT. REMOVE GRATE FROM FRAME & PLACE INTO UNIT. PULL UP SLACK & SEAL TO ENCLOSE GRATE. HOLDING LIFTING STRAPS, INSERT GRATE INTO INLET MAKING SURE THAT GRATE SEATS COMPLETELY IN FRAME.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT & DEBRIS FROM PANELS, SURFACE & VICINITY OF UNIT AFTER EACH RAIN EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN CONTAINMENT AREA OF UNIT AS NEEDED. IF USING OPTIONAL OIL ABSORBENTS, REMOVE & REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

INLET PROTECTION
(LAWN AREAS)
NOT TO SCALE
(3)

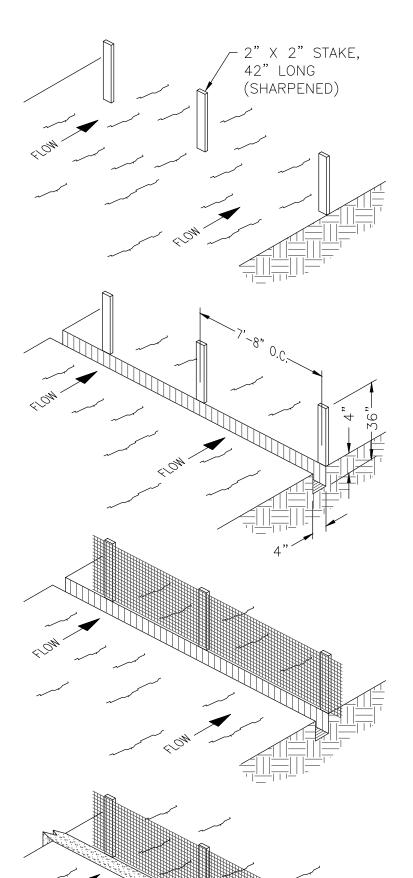


TO INSPECT CATCH BASIN: REMOVE UNIT WITH GRATE INSIDE, INSPECT BASIN AND REPLACE UNIT.

MAINTENANCE: REMOVE DRIED SEDIMENT FROM SURFACE OF UNIT AS NEEDED WITH STIFF BROOM OR SQUARE SHOVEL. REMOVE FINE MATERIAL FROM INSIDE ENVELOPE AS NEEDED.

INLET PROTECTION
(PAVEMENT AREAS)
NOT TO SCALE

4



SILT FENCE: THIS BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRIC & IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.

- 1. HEIGHT OF BARRIER SHALL NOT EXCEED 36". HIGHER BARRIERS MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE STRUCTURE FAILURE.
- 2. FILTER FABRIC SHALL BE FROM A CONTINUOUS ROLL & CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FABRIC SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP. & SECURELY SEALED.
- 3. POSTS SHALL BE SPACED AT 10' (MAX.) APART & DRIVEN SECURELY INTO THE GROUND 12" (MIN.). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT WIRE MESH SUPPORT, POST SPACING SHALL NOT EXCEED 6'.
- 4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE & 4" DEEP ALONG THE LINE OF POSTS & UP—SLOPE FROM THE BARRIER.
- 5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT SHALL BE FASTENED SECURELY TO THE UP-SLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1" LONG, TIE WIRES OR HOG RINGS. WIRE MESH SHALL EXTEND INTO THE TRENCH 2" (MIN.) & SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE.
- 6. STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE MESH & 8" OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. FABRIC SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
- 7. WHEN EXTRA STRENGTH FILTER FABRIC & CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT MAY BE ELIMINATED. IN SUCH CASE, FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO POSTS WITH ALL OTHER PROVISIONS OF ITEM NO. 6 APPLYING.
- 8. THE TRENCH SHALL BE BACKFILLED & SOIL COMPACTED OVER THE FILTER
- 9. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UP—SLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

MAINTENANCE:

INSPECT IMMEDIATELY AFTER EACH RAINFALL & AT LEAST DAILY DURING PROLONGED RAINFALL. REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SHOULD THE FILTER FABRIC DECOMPOSE OR BECOME INEFFECTIVE WHILE THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY HALF THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO EXISTING GRADE, PREPARED & SEEDED.

DESIGN CAPACITY CHART:

MAX. DRAINAGE AREA
PER 100 LF OF BARRIER
0.5 AC.
0.25 AC.

0.125 AC.

RANGE OF SLOPE
PER DRAINAGE AREA
<2%

>2% BUT <20%
>20% BUT <50%

SEDIMENT FENCE
NOT TO SCALE

5

STORM WATER POLLUTION PREVENTION NOTES & DETAILS

ADDITION & RENOVATIONS TO THE PLAINS ELEMENTARY SCHOOL 90 CONNETT ROAD THE PLAINS, OH 45780

PREPARED FOR: ATHENS CITY SCHOOL DISTRICT PO BOX 9 (21 BIRGE DRIVE) CHAUNCEY, OH 45719



740-450-1640

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SD 03/06/2020

09/29/2020

OFFICES

128 East Main Street

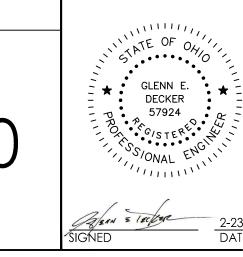
Logan, Ohio 43138 740-385-2140 Old Henderson Road Jumbus, Ohio 43220

1495 Old Henderson Road Columbus, Ohio 43220 614-459-6992 507 Main Street Zanesville, Ohio 43701

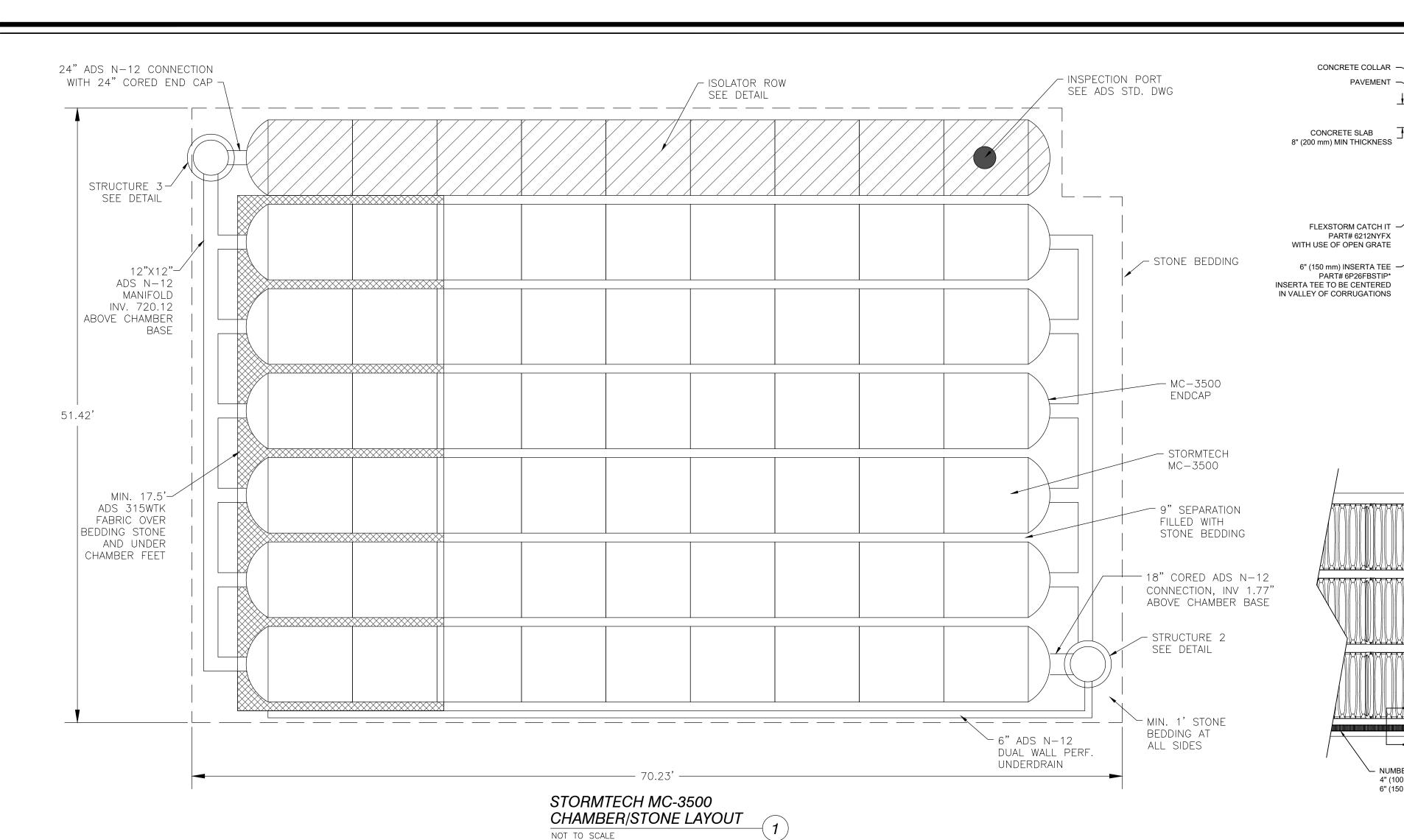
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COMM. NO.: 1905







IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

- 1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH
- 2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
- STONESHOOTER LOCATED OFF THE CHAMBER BED. BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE. BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- 4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- 6. MAINTAIN MINIMUM 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS. 7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- 8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- 9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- 10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER. 11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER
- MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- 1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
- NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE". • WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL

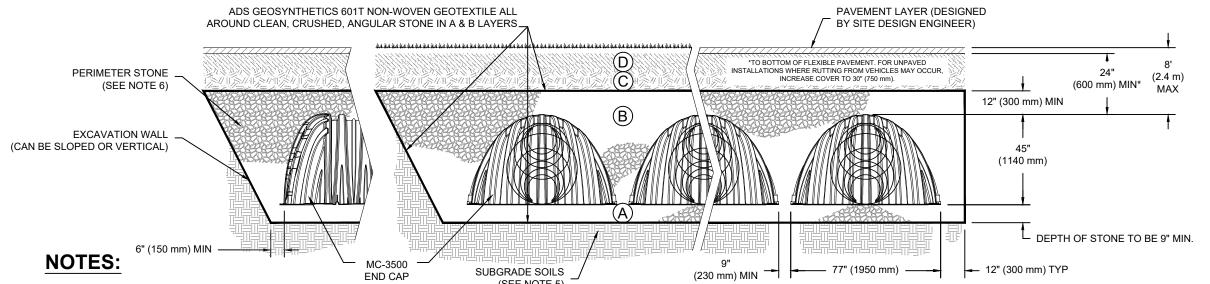
METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL	COMPACTION / DENSITY
		DESCRIPTION	CLASSIFICATIONS	REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOF WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	NO COMPACTION REQUIRED.
Α	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE: 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE"
- 2. STORMTECH COMPACTION RÉQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



- 1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". 2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS. 4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH
- CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. 5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C'

OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION. 6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

STORMTECH CHAMBER SPECIFICATIONS

APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:

2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.

SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.

CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL

REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LIRED BRIDGE DESIGN

SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE

CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787,

7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER

a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT

b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT

c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.

8. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR

DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN

DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD

SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM

F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM

AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC

"STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER

4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION

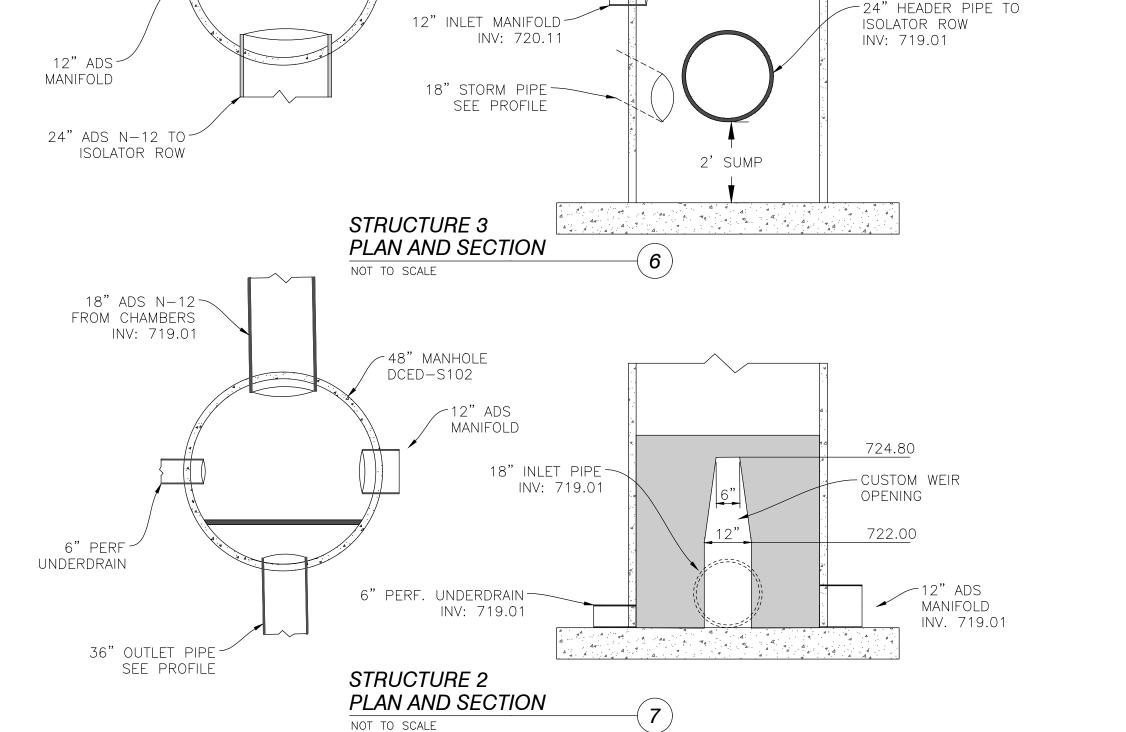
5. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

1. CHAMBERS SHALL BE STORMTECH MC-3500.

VEHICLE PRESENCES

COLLECTION CHAMBERS".

STORMTECH MC-3500 **CROSS SECTION** NOT TO SCALE



18" (450 mm) MIN WIDTH

STORMTECH MC-3500

STORMTECH CHAMBER

STORMTECH END CAP

STORMTECH CHAMBER

FOUNDATION STONE

BENEATH CHAMBERS \

ADS GEOSYNTHETICS 601T

NON-WOVEN GEOTEXTILE

STORMTECH END CAP

FOUNDATION STONE

BENEATH CHAMBERS

ADS GEOSYNTHETICS 601T

NON-WOVEN GEOTEXTILE

OPTIONAL INSPECTION PORT

TWO LAYERS OF ADS GEOSYNTHETICS 315WTM WOVEN

└─ 24" (600 mm) HDPE ACCESS PIPE REQUIRED USE

FACTORY PRE-CORED END CAP PART #:

MC3500IEPP24BC OR MC3500IEPP24BW

STORMTECH MC-3500

ISOLATOR ROW DETAIL

GEOTEXTILE BETWEEN FOUNDATION STONE AND CHAMBERS

8.25' (2.51 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

- OUTLET MANIFOLD

INSPECTION PORT

- NUMBER AND SIZE OF UNDERDRAINS PER SITE DESIGN ENGINEER

6" (150 mm) TYP FOR SC-740, DC-780, MC-3500 & MC-4500 SYSTEMS

NOT TO SCALE

STORMTECH MC-3500

4" (100 mm) TYP FOR SC-310 & SC-160LP SYSTEMS

NOT TO SCALE

MC-3500 CHAMBER -

CATCH BASIN

MANHOLE

COVER PIPE CONNECTION TO END CAP WITH ADS -

GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE

STORMTECH HIGHLY

RECOMMENDS FLEXSTORM PURE

STRUCTURES WITH OPEN GRATES

INSERTS IN ANY UPSTREAM

ELEVATED BYPASS MANIFOLD -

SUMP DEPTH TO BE 2'. SEE

STRUCTURE DETAIL.

18" STORM PIPE

48" MANHOLE

DCED-S102

SEE PROFILE

· CONCRETE COLLAR NOT REQUIRED

- 12" (300 mm) NYLOPI AST INLINE DRAIN BODY W/SOLID HINGED COVER OR GRATE

THE PART# **2712AG6IPKIT** CAN BE

- DUAL WALL

PERFORATED

UNDERDRAIN

SECTION B-B

USED TO ORDER ALL NECESSAR COMPONENTS FOR A SOLID LID INSPECTION PORT INSTALLATION

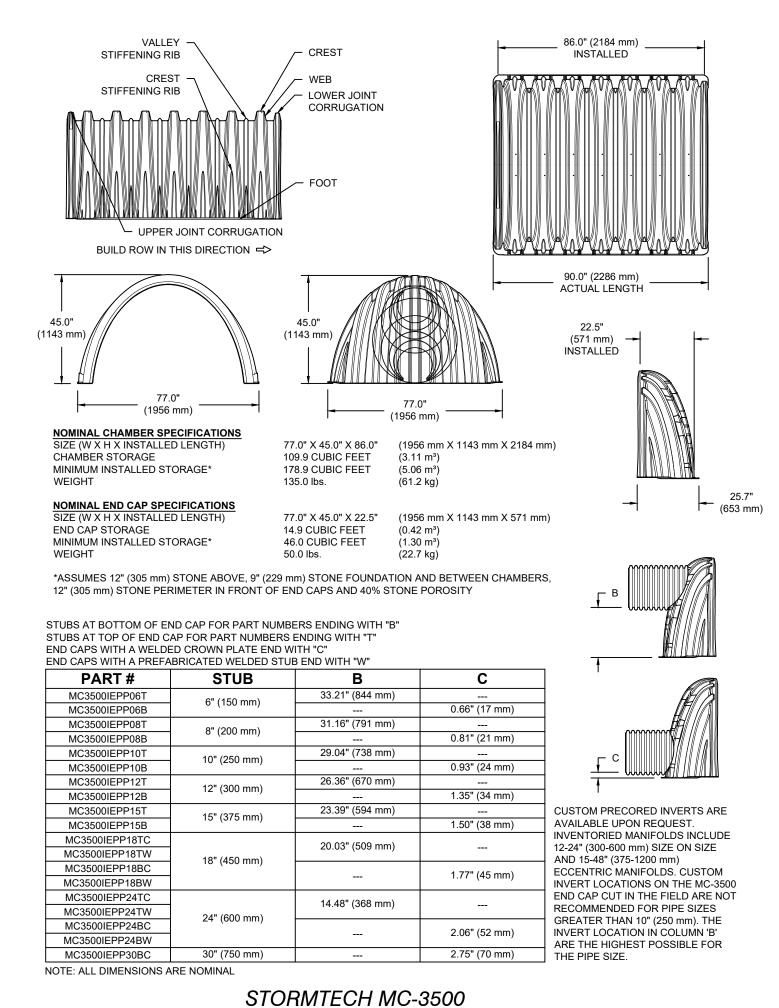
FOR UNPAVED APPLICATIONS

PART# 2712AG6IP*

SOLID COVER: 1299CGC* GRATE: 1299CGS

- 6" (150 mm) SDR35 PIPE

─ MC-3500 CHAMBER



12" (300 mm) MIN SEPARATION 12" (300 mm) MIN INSERTION -MANIFOLD STUB MANIFOLD HEADER - MANIFOLD HEADER MANIFOLD STUB 12" (300 mm) MIN INSERTION

TECHNICAL SPECS

NOT TO SCALE

NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING. STORMTECH MC-3500 ENDCAP INSERTION DETAIL

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT

A. INSPECTION PORTS (IF PRESENT) A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN

NOT TO SCALE

- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3. B. ALL ISOLATOR ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
-) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NECESSARY.

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION, ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS. 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS

OFFICES

128 East Main Street Logan, Ohio 43138 740-385-2140 1495 Old Henderson Road

614-459-6992 507 Main Street Zanesville, Ohio 43701

ADDITION & RENOVATIONS TO THE PLAINS ELEMENTARY SCHOOL 90 CONNETT ROAD HE PLAINS, OH 45780 PREPARED FOR: ATHENS CITY SCHOOL DISTRICT PO BOX 9 (21 BIRGE DRIVE) CHAUNCEY, OH 45719

STORMTECH DETAILS

schorr architects
inc.

230 Bradenton Av.
Dublin, OH 43017
(614)798-3006

D 02/23/2021 COMM. NO.: 1905

Columbus, Ohio 43220 740-450-1640

