<u>CLEAN UP AT END OF PROJECT</u>

SURVEYOR, FOR A FEE.)

PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL ENSURE THAT ALL RECENTLY CONSTRUCTED IMPROVEMENTS AND EXISTING FEATURES IN OR ADJACENT TO THE IMPROVEMENTS ARE CLEAN AND FREE OF ANY AND ALL DEBRIS AND ALL IMPROVEMENTS ARE FUNCTIONING PROPERLY.

CONSTRUCTION SURVEY STAKES THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, PLACING AND MAINTAINING CONSTRUCTION SURVEY STAKES NECESSARY FOR THE PROPER COMPLETION OF THE WORK ASSOCIATED WITH THIS PROJECT. BENCH MARKS WILL BE PROVIDED WITHIN AND/OR ADJACENT . THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE A BENCH CIRCUIT BETWEEN AT LEAST TWO (2) SEPARATE BENCH MARKS WHENEVER ELEVATIONS ARE BEING TRANSFERRED AND/OR SET. ANY DISCREPANCIES OUTSIDE NORMAL SURVEYING STANDARDS/LIMITS WITH THE BENCH MARK ELEVATIONS SHOWN SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE PROJECT ENGINEER. HORIZONTAL CONTROL WILL BE PROVIDED FOR THE CONTRACTOR'S USE BY THE OWNER. (AUTOCAD FILES CAN BE PROVIDED TO THE CONSTRUCTION MANAGER AND

<u>STORMWATER MANAGEMENT BASIN EMBANKMENT REQUIREMENT</u> PRIOR TO CONSTRUCTION, ALL EXISTING TOPSOIL SHOULD BE STRIPPED FROM THE DETENTION AREA. SUBGRADES TO RECEIVE FILL SHOULD BE PROOF-ROLLED UNDER THE DIRECTION OF AN ON-SITE GEOTECHNICAL ENGINEER. ANY SOFT, LOOSE, YIELDING, OR OBVIOUSLY CONTAMINATED ZONES SHOULD BE STABILIZED OR UNDERCUT AS DIRECTED BY THE PROJECT GEOTECHNICAL

ALL FILL OR BACKFILL REQUIRED SHOULD BE SELECT MATERIAL, AS APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER. FOR ALL FILLING OPERATIONS. THE FOLLOWING SHOULD BE OBSERVED: 1. PRIOR TO USE, THE APPROVED FILL MATERIAL SHOULD BE TESTED AS OUTLINED IN ASTM D-698 TO DETERMINE THE MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT FOR SILTY OR COHESIVE SOILS. FOR EACH CHANGE IN BORROW MATERIAL, ADDITIONAL TESTS WILL

2. FOR ALL FILL OR BACKFILL USED FOR THE DETENTION BASINS, THE FILL MATERIAL SHOULD BE PLACED ON THE APPROVED SUBGRADE IN CONTROLLED LIFTS, WITH EACH LIFT COMPACTED TO A STABLE CONDITION. SOIL COMPACTION & SOIL MOISTURE CONTENT SHALL BE IN ACCORDANCE WITH THE PROJECT SUBSURFACE INVESTIGATION.

3. ALL FILLING OPERATIONS SHOULD BE OBSERVED BY A QUALIFIED SOILS TECHNICIAN WITH FIELD DENSITY TESTS MADE, TO ASSURE COMPACTION TO SPECIFICATION. TOPSOIL SHOULD NOT BE USED FOR CONSTRUCTION OF EMBANKMENTS. EXCEPT FOR VEGETATED SURFACES. IN ADDITION, CLEAN GRANULAR SOILS SHOULD NOT BE USED, INCLUDING THOSE SOILS CLASSIFIED AS SW, SP, SM, GW, GP, AND GM.

REFER TO THE SUBSURFACE INVESTIGATION REPORT AS PREPARED BY PSI, INC. UNSUITABLE SOILS UNIT PRICES TO BE INCLUDED

1. THE CONTRACTOR SHALL PROVIDE A UNIT PRICE WITH THEIR BID FOR THE FOLLOWING: 1.1. <u>UNIT PRICE #1</u>

1.1.1)1. UNIT PRICE #1 SHALL INCLUDE THE FOLLOWING: 1.1.1)1.1. EXCAVATION AND REMOVAL OF UNSUITABLE SUBGRADE SOIL TO A DEPTH OF NOT GREATER THAN THREE FEET (3') BELOW FINISH GRADE;

1.1.1)1.5. ALL LABOR, MATERIAL, AND EQUIPMENT COMPLETE IN PLACE;

1.1.1)1.2. PROVIDING #1 AND #2 CRUSHED AGGREGATE; 1.1.1)1.3. INSTALLING AND COMPACTING #1 AND #2 AGGREGATE; 1.1.1)1.4. CHOKING THE SURFACE OF THE #1 AND #2 AGGREGATE WITH FOUR INCH (4") THICK LAYER OF #304 CRUSHED AGGREGATE ROLLED FOR COMPACTION;

1.1.1)1.6. DISPOSAL OF UNSUITABLE SOIL, SURPLUS MATERIAL AND DEBRIS TO OFF-SITE 1.1.1)1.7. THE VOLUME IN CUBIC YARDS OF UNSUITABLE SUBGRADE SOIL SHALL BE DETERMINED BY AND APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER

1.1.1)1.8. UNIT PRICE SHALL BE PER CUBIC YARD AS DETERMINED BY PROJECT GEOTECHNICAL ENGINEER AND/OR ARCHITECT. 1.1.1)2. UNIT PRICE BID SHALL BE <u>PER CUBIC YARD</u>. AN ESTIMATED VOLUME OF 500 CUBIC YARDS SHALL BE USED ON THE BID FORM. PAYMENT OF THIS ITEM SHALL BE AT THE UNIT PRICE BID TIMES THE ACTUAL VOLUME IN CUBIC YARDS OF UNSUITABLE SUBGRADE SOIL.

1.2.0)1. UNIT PRICE #2 SHALL INCLUDE THE FOLLOWING: 1.2.0)1.1. EXPORTING OF EXCESS SOILS AND DISPOSAL TO AN OFF SITE LOCATION; 1.2.0)1.2. ANY PERMITTING AND PLANNING REQUIRED TO PLACE THE EXCESS SOILS OFF SITE; 1.2.0)1.8. UNIT PRICE SHALL BE PER CUBIC YARD AS DETERMINED BY PROJECT

GEOTECHNICAL ENGINEER AND/OR ARCHITECT. 1.2.0)2. UNIT PRICE BID SHALL BE <u>PER CUBIC YARD.</u> AN ESTIMATED VOLUME OF 500 CUBI YARDS SHALL BE USED ON THE BID FORM. PAYMENT OF THIS ITEM SHALL BE AT THE UNIT PRICE BID TIMES THE ACTUAL VOLUME IN CUBIC YARDS OF EXCESS SOIL.

1.3. <u>UNIT PRICE #3</u> 1.3.0)1. UNIT PRICE #3 SHALL INCLUDE THE FOLLOWING:

1.3.0)1.1. EXCAVATION AND REMOVAL OF UNSUITABLE SUBGRADE SOIL TO A DEPTH OF NOT GREATER THAN THREE FEET (3') BELOW FINISH GRADE; 1.3.0)1.2. PROVIDING ON SITE SUITABLE SOILS FROM A BORROW AREA; 1.3.0)1.3. INSTALLING AND COMPACTING SUITABLE ON SITE SOILS IN ACCORDANCE WITH THE

PROJECT GEOTECHNICAL REPORT; 1.3.0)1.4. PROOF ROLLED FOR COMPACTION; 1.3.0)1.5. ALL LABOR, MATERIAL, AND EQUIPMENT COMPLETE IN PLACE;

1.3.0)1.6. THE VOLUME IN CUBIC YARDS OF UNSUITABLE SUBGRADE SOIL SHALL BE DETERMINED BY AND APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER AND/OR ARCHITECT; 1.3.0)1.7. UNIT PRICE SHALL BE PER CUBIC YARD AS DETERMINED BY PROJECT

GEOTECHNICAL ENGINEER AND/OR ARCHITECT. 1.3.0)2.1.1.1)2. UNIT PRICE BID SHALL BE <u>PER CUBIC YARD</u>. AN ESTIMATED VOLUME OF 500 CUBIC YARDS SHALL BE USED ON THE BID FORM. PAYMENT OF THIS ITEM SHALL BE AT THE UNIT PRICE BID TIMES THE ACTUAL VOLUME IN CUBIC YARDS OF UNSUITABLE SUBGRADE SOIL.

REMEDIATION. A CALL SHOULD BE MADE WITH BOTH THE CMAR, GEOTECHNICAL TESTING COMPANY, FMD AND LEWIS LAND PROFESSIONALS THE DAY THE UNDERCUT IS IDENTIFIED. 3. ALL UNDERCUTS SHALL BE SUMMARIZED FOR THE WEEK AND EMAILED TO THE AE TEAM ON FRIDAY BY 5PM WITH UPDATED COSTS, NOTING NEW COSTS FOR THE WEEK AND THE TOTAL FOR

ALL UNDERCUTS OVER (25) C.Y. SHALL BE REVIEWED BY CIVIL ENGINEER PRIOR TO

4. NO UNDERCUTTING WILL BE PERMITTED WITHOUT DIRECT OBSERVATION BY THE GETECHNICAL TESTING COMPANY. VOLUME OF UNDERCUT SHALL BE RECORDED BY THE GEOTECHNICAL TESTING COMPANY AND IDENTIFIED ON EACH DAY'S REPORT, INCLUDING A SUMMARY OF TOTAL UNDERCUT FOR THE DAY AND TOTAL UNDERCUT FOR THE PROJECT.

5. CMR TO NOTIFY DESIGN TEAM OF PROOF ROLLS WITH A 48 HOUR MIN. NOTICE.

<u>DISPOSAL OF EXCESS OR UNSUITABLE MATERIALS</u> THE SITE CONTRACTOR SHALL DISPOSE OF ANY EXCESS. UNSUITABLE AND/OR UNUSABLE MATERIALS RESULTING FROM THE COMPLETION OF THIS PROJECT AND/OR ANY RESPECTIVE PHASES OF THIS PROJECT (INCLUDING ANY AND ALL DEMOLITION ITEMS). EACH CONTRACTOR SHALL PROVIDE THE ENGINEER WITH WRITTEN VERIFICATION IDENTIFYING THE LOCATION AND ASSOCIATED APPROVALS FOR THE PLACEMENT OF THE MATERIAL FROM THIS PROJECT. EACH CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL CLAIMS RESULTING FROM THE PLACEMENT/DISPOSAL OF EXCESS, UNSUITABLE, AND/OR UNUSABLE MATERIALS ONTO OTHER PROPERTIES, INCLUDING BUT NOT LIMITED TO ENVIRONMENTAL ISSUES. DISPOSAL OF UNSUITABLE OR EXCESS TOPSOIL, SOIL, OR ROCK, TO AN APPROVED OFF—SITE LOCATION SHALL BE INCLUDED INCLUDED IN THE MASS GRADING/EARTHWORK SCOPE OF WORK.

THE OWNER'S REPRESENTATIVE. THE SITE CONTRACTOR WILL BE EXPECTED TO PROVIDE TICKET OUANTITY INFORMATION. IN A FORMAT AGREED UPON BY THE OWNER'S REPRESENTATIVE. AND PROVIDE THE LOCATION OF RECYCLING OR DISPOSAL. REGULAR MONTHLY MEETINGS SHOULD REVIEW SUBMITTALS, RECORDS, TICKET ITEMS, AND DISCREPANCIES IN A TIMELY MANNER.

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO PROPERLY CONTROL DUST FROM THE PROJECT SITE AS NECESSARY/REQUIRED TO MAINTAIN SAFE VISIBILITY WITHIN AND/OR ADJACENT TRANSPORTATION (ODOT) AND THE CITY OF MASSILLON STANDARDS AND REGULATIONS. THE CITY TO THE SITE AND AVOID IMPÁCT ON DAILY OPERATIONS. METHODS FOR DUST CONTROL MUST BE 💎 OF MASSILLON SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE FOR SCHEDULING OF APPROVED BY THE ENGINEER AND OWNER. DUST CONTROL MEASURES SHALL BE INCLUDED IN THE MASS GRADING & EARTHWORK SCOPE OF WORK.

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO CLOSELY EXAMINE THE PROJECT SITE AND ALL ADJACENT AREAS AND APPRAISE HIMSELF OF ANY ITEMS AND/OR CONDITIONS THAT COULD AFFECT HIS/HER BID AND/OR ABILITY TO COMPLETE THE PROPOSED IMPROVEMENTS. EACH CONTRACTOR SHALL COMPLETE A SITE VISIT/INSPECTION PRIOR TO SUBMITTING A PROPOSAL OR

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED BY SEEDING. FERTILIZING. MULCHING, ETC. IN ACCORDANCE WITH THE LANDSCAPE PLAN AND SPECIFICATIONS.

THE SITE CONTRACTOR SHALL SAFELY AND PROPERLY MAINTAIN TRAFFIC ADJACENT TO, THROUGH, OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. EXCEPT AS NOTED BELOW: AND ALONG THE PROJECT ROUTES/SITE. EACH CONTRACTOR SHALL FURNISH AND MAINTAIN ALL SIGNS, FLAGS, FLAG MEN, BARRICADES, CONES, BARRELS AND INCIDENTALS NECESSARY TO SAFELY MAINTAIN TRAFFIC. ALL OPEN TRENCHES AND EXCAVATIONS SHALL BE PROTECTED WITH STORM SEWER: 18" VERTICAL 10' HORIZONTAL. DRUMS. BARRICADES. BARRIERS. ETC. ACCESS SHALL BE MAINTAINED AT ALL TIMES.

PROHIBITED CONNECTIONS TO SANITARY SEWERS ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO SANITARY SEWER LINES ARE STRICTLY PROHIBITED.

<u> 'ERIFICATION OF UNDERGROUND UTILITIES</u> THE SITE CONTRACTOR SHALL VERIFY THE EXISTENCE AND ACTUAL LOCATION (ALIGNMENT AND FLEVATION) OF THE EXISTING UTILITIES FOR THE PROJECT PRIOR TO ORDERING MATERIALS OR BEGINNING WORK. CONTRACTOR SHALL VERIFY CRITICAL UTILITY CROSSINGS WHICH COULD EFFECT ACCORDANCE WITH STANDARD CONSTRUCTION PRACTICE (REFER TO SWPPP). THE COMPLETION OF THE IMPROVEMENTS. THIS WILL LIKELY REQUIRE EXPLORATORY EXCAVATIONS TO BE PERFORMED BY EACH CONTRACTOR FOR WHICH HE WILL NOT BE DIRECTLY REIMBURSED. WHERE A PROPOSED CONDUIT TO BE CONNECTED TO OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, EACH CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES (LINE AND GRADE) BEFORE STARTING TO INSTALL THE PROPOSED CONDUIT. ANY CONFLICTS AND/OR DISCREPANCIES FROM THE PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THE APPROPRIATE ADJUSTMENTS IN ALIGNMENT AND/OR GRADE MAY BE MADE PRIOR TO THE START OF CONSTRUCTION.

<u>UTILITY NOTIFICATION</u> AT LEAST 72 HOURS PRIOR TO COMMENCING WORK ON THIS PROJECT THE CONTRACTOR(S) SHALL NOTIFY THE CITY OF MASSILLON UTILITY DEPARTMENT AND THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE TO BEGIN CONSTRUCTION ACTIVITY ON THIS PROJECT. PROOF OF SUCH NOTIFICATION SHALL BE FILED WITH THE PROJECT ENGINEER. THE MARKING AND/OR LOCATION OF EXISTING UTILITIES SHALL BE COORDINATED TO STAY APPROXIMATELY TWO WORKING DAYS AHEAD OF THE PLANNED CONSTRUCTION. OHIO UTILITIES PROTECTION SERVICE: 1-800-362-2764 (CONTACT NON-MEMBERS DIRECTLY).

<u>'ESTING OF UNDERGROUND UTILITIES</u> ALL SANITARY SEWER AND WATER LINE UTILITIES SHALL BE TESTED IN ACCORDANCE WITH THE

CITY OF MASSILLON SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO TEST. DOCUMENT, AND REPAIR ANY FAILING PORTIONS OF PIPE NOT MEETING THE TESTING REQUIREMENTS.

ALL PROPOSED STORM SEWER SHALL MEET THE REQUIREMENTS OF THE WRITTEN SPECIFICATIONS. STORM SEWER PIPE MATERIALS SHALL MEET THE REQUIREMENTS OF ODOT 707.33 (SMOOTH LINED (CORRUGATED POLYETHYLENE) OR REINFORCED CONCRETE CIRCULAR PIPE PER ODOT 706.02 UNLESS OTHERWISE DENOTED ON PLANS. ALL BUILDING DOWNSPOUT LINES SHALL BE POLYVINYL CHLORIDE PIPE (PVC) SDR—35 MEETING

THE REQUIREMENTS OF ODOT 707.45. STANDARD BENDS AND FITTINGS SHALL BE USED FOR

CHANGES IN DIRECTION AND/OR ELEVATION. AT THE END OF THE PROJECT, AFTER FINAL SITE STABILIZATION IS COMPLE (70+% VEGETATIVE COVER ESTABLISHED). THE CONTRACTOR SHALL SUBMIT VIDEO EVIDENCE OF ALL STORM SEWERS TO PROVE THE STORM SEWERS ARE CLEAR OF ANY SEDIMENT. TRASH OR DEBRIS. EACH STORM RUN MUCH BE INSPECTED. IN ACCORDANCE WITH ODOT 611.12 REQUIREMENTS AND A PERFORMANCE REPORT SHALL BE SUBMITTED ALONG WITH THE VIDEO FILES FOR REVIEW IN ACCORDANCE WITH ODOT 611.04 D. IF ANY SEDIMENT, TRASH OR DEBRIS IS PRESENT, THE CONTRACTOR SHALL CLEAN THE STORM SEWERS USING THE JET-VAC PROCESS RECOMMENDED

BY THE MANUFACTURE AND RESUBMIT NEW VIDEO EVIDENCE AND PERFORMANCE REPORT OF THE

STORM SEWERS. AT TO ADDITIONAL COST TO THE PROJECT. ANY STRUCTURAL DEFICIENCIES

NOTED IN THE PERFORMANCE REPORTS MUST BE REMEDIATED IN ACCORDANCE WITH THE

MANUFACTURER RECOMMENDATIONS PRIOR TO ACCEPTANCE.

ALL SANITARY SEWER LINES SHALL BE PVC SDR—35 MEETING THE REQUIREMENTS OF ASTM D-3034 WITH JOINTS MEETING ASTM-3212. MINIMUM COVER OVER THE SANITARY SEWER LINE SHALL BE 4 FEET. MINIMUM SERVICE LATERALS SHALL BE 6" MIN. ALL SANITARY SEWER LINES SHALL MEET THE REQUIREMENTS OF THE WRITTEN SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING SANITARY FLOW DURING CONSTRUCTION AND TESTING OF THE PROPOSED SANITARY SERVICE. THE CONTRACTOR SHALL COORDINATE THE METHOD FOR MAINTAINING THE EXISTING FLOW WITH THE GOVERNING AGENCY AND THE ENGINEER. BEDDING MATERIAL SHALL MEET THE REQUIREMENTS OF THE PIPE MANUFACTURER.

BACKFILLING OF THE PIPE OR AS OTHERWISE DIRECTED BY THE ENGINEER. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED FIVE (5%) PERCENT. ALL TESTING SHALL BE PER CITY OF MASSILLON STANDARDS.

EXFILTRATION TESTING (OR INFILTRATION IF APPLICABLE) SHALL NOT EXCEED A MAXIMUM ALLOWABLE LEAKAGE OF 100 GALLON/INCH OF PIPE DIAMETER/MILE/DAY. IN LIEU OF SAID WATER TESTS, A LOW PRESSURE AIR TEST MAY BE CONDUCTED PER RECOMMENDED STANDARDS FOR SEWAGE WORKS (TEN STATE STANDARDS). THE PROPOSED SANITARY SEWER SYSTEMS SHALL BE TESTED, APPROVED, AND ACCEPTED PRIOR TO BEING PUT INTO SERVICE. ALL TESTING SHALL BE PER ODOT 611 REQUIREMENTS.

MANHOLE CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ASTM C-478 AND C-443. MANHOLES SHALL BE LEAKAGE TESTED IN ACCORDANCE WITH ASTM C-1244. ALL SANITARY MANHOLES SHALL BE VIDEO TAPED IN ACCORDANCE WITH ODOT 611

RESTORATION OF DISTRUBED AREAS EXISTING DRIVES, PAVEMENT, SIGNS, LIGHT POLES AND OTHER APPURTENANCES DISTURBED DURING CONSTRUCTION BUT NOT SPECIFICALLY DESIGNATED FOR REMOVAL/REPLACEMENT SHALL ? DOCUMENTS. BE RESTORED TO A CONDITION EQUAL TO THAT WHICH EXISTED PRIOR TO CONSTRUCTION AND TO COMPLETE SATISFACTION OF THE CITY ENGINEER.

THE SITE CONTRACTOR MUST PROTECT AND SUPPORT ANY EXISTING UTILITIES WITHIN OR ADJACENT TO THE PROJECT AREA. UTILITIES MUST BE KEPT IN SERVICE AT ALL TIMES.

PROOF ROLLING SHALL BE PERFORMED ON THE PREPARED COMPACTED SUBGRADE OF THE PROPOSED PARKING AREAS AND DRIVE AREAS PRIOR TO PLACEMENT OF ANY PAVEMENT BASE MATERIAL OR STAGING AGGREGATE. THE PROOF ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE SITE GEOTECHNICAL ENGINEER USING A FULLY LOADED TANDEM AXLE DUMP TRUCK OR VIA OTHER APPROVED MEANS. THE PROOF ROLLING OPERATION SHALL COVER THE ENTIRE WIDTH AND LENGTH OF THE PROPOSED AREAS. THE PURPOSE OF THIS PROCEDURE IS TO DETECT SOFT, YIELDING, CONTAMINATED AND/OR UNSTABLE ZONES WITHIN THE SUBGRADE. ANY SUCH ZONES THAT ARE FOUND SHALL BE CORRECTED. THE UNSATISFACTORY AREAS SHALL BE UNDERCUT AND REPLACED WITH CLEAN APPROVED MATERIAL, OR OTHERWISE STABILIZED/CORRECTED AS APPROVED/DIRECTED BY THE GEOTECHNICAL ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR FOR CORRECTION OF UNSUITABLE

PROOF ROLLING SHALL ALSO BE PERFORMED AS SPECIFIED ABOVE ON ALL AREAS/SURFACES UPON WHICH EMBANKMENTS ARE TO BE CONSTRUCTED PRIOR TO THE PLACEMENT OF ANY EMBANKMENT/FILL.

EACH CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT THE PROJECT SITE AT ALL TIMES. THE CONTRACTOR SHALL FOLLOW ALL THE O.S.H.A. REGULATIONS REGARDING OPEN TRENCHES AND EXCAVATIONS (TRENCH SAFETY). ADEQUATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING, ETC. SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING ALL NON—WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE. ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORK DAY OR PROCEDURES. IN NO CASE SHOULD SLOPE HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, PROPERLY SECURED AS APPROVED BY THE ENGINEER. AT NO TIME SHALL ANY PERSONNEL ENTER EXISTING STRUCTURES/CHAMBERS WITHOUT PROPER SAFETY EQUIPMENT, INCLUDING BUT NOT LIMITED TO AIR PACKS, AIR MONITORS, AND/OR AIR SENSORS, BODY HARNESS WITH POSITIVE MEANS OF REMOVING A PERSON FROM THE STRUCTURE/CHAMBER. ALL WORK SHALL BE SITE SAFETY OR THE CONTRACTOR'S ACTIVITIES; SUCH RESPONSIBILITY IS NOT BEING IMPLIED PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. REQUIREMENTS INCLUDING THOSE SPECIFIED FOR ENTERING CONFINED SPACES.

HE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF THE SUBJECT PROPERTY AT ALL TIMES. NO MATERIAL SHALL BE STORED NOR ANY WORK PERFORMED OUTSIDE THE LIMITS OF THE SUBJECT PROPERTY. A PERMIT IS REQUIRED FROM THE CITY OF MASSILLON FOR WORK IN THE PUBLIC RIGHT-OF-WAY. MAINTAIN ACCESS TO THE PRIVATE RESIDENTIAL PROPERTIES ON STATE STREET AT ALL TIMES.

ALL KNOWN UTILITIES HAVE BEEN SHOWN ON THE PLANS. EACH CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO IT IS THE RESPONSIBILITY OF THE SITE CONTRACTOR TO COORDINATE ALL DEMOLITION ITEMS WITH CONSTRUCTION. ALERT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 AT LEAST 48 HOURS BEFORE ANY EXCAVATING IS INITIATED. THÈ CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND ADJACENT PROPERTIES FOR INDICATIONS OF POSSIBLE EXISTING UNDERGROUND NATURAL GAS PIPE LINES WHICH MAY CROSS THROUGH THE SUBJECT SITE. THE CONTRACTOR SHALL NOTIFY THE ENGINEERS IF ANY SUCH EVIDENCE OF EXISTING PIPELINES ARE

> 2. ALL UTILITIES INCLUDING WATER LINES AND SANITARY AND STORM SEWERS, SHALL BE CONSTRUCTED. INSPECTED. AND TESTED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

4. TRENCHES FOR THE UTILITIES UNDER PAVEMENT SHALL BE BACKFILLED TO THE PAVEMENT SUBBASE WITH ODOT ITEM 304 LIMESTONE AGGREGATE TO REDUCE SETTLEMENT. THE EXISTING PAVEMENT SHALL BE NEATLY SAW-CUT PRIOR TO REMOVAL, AND BE REPLACED IN ACCORDANCE WITH THE DRAWING DETAILS.

5. ALL OPEN TRENCHES SHALL BE TEMPORARILY BACKFILLED OVERNIGHT. OR INSTALL TEMPORARY FENCING AND/OR STEEL PLATES WITH THE APPROVAL OF THE OWNER OR HIS REPRESENTATIVE.

S. LENGTHS OF PIPE SHOWN ON THIS DRAWING ARE APPROXIMATE. FIELD VERIFY AND PROVIDE EXACT LENGTHS REQUIRED. 7. THE MINIMUM VERTICAL CLEARANCE BETWEEN UTILITIES AT ALL CROSSINGS IS 6" FROM

MAINTAIN THE FOLLOWING CLEARANCES AT SEWER/WATER CROSSINGS. SANITARY SEWER: 18" VERTICAL, 10' HORIZONTAL. R. TRANSITIONS BETWEEN DISSIMILAR SEWER PIPE MATERIALS SHALL BE WITH APPROPRIATE

COMPRESSION STYLE FERNCO FITTINGS.

9. SANITARY AND STORM SEWER PRESSURE TEST IN ACCORDANCE WITH ASTM F-1417 AND MANUFACTURER'S RECOMMENDATIONS, DEPENDING ON SIZE OF PIPE. 10. SANITARY AND STORM SEWER DEFLECTION TEST IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MAXIMUM PERMISSIBLE DEFLECTION 5.0%.

11. FIELD VERIFY AND REFER TO THE ELECTRICAL DRAWINGS FOR UNDERGROUND CONDUIT

THE SITE CONTRACTOR IS FULLY RESPONSIBLE FOR SOIL SEDIMENT POLLUTION FROM THE SITE AND THE PROPER PLACEMENT AND MAINTENANCE OF EROSION CONTROL ITEMS IN

OWNER AND CONTRACTOR SHALL COMPLY WITH CITY OF MASSILLON CONSTRUCTION STANDARDS AND SPECIFICATIONS DURING CONSTRUCTION. ADDITIONAL CONTROLS SHALL BE PROVIDED AS NECESSARY, OR AS DIRECTED BY THE PROJECT ENGINEER AT NO ADDITIONAL COST TO THE PROJECT. CITY INSPECTION IS REQUIRED FOR ALL WORK WITHIN THE STREET RIGHT OF WAY. CITY

INSPECTION IS REQUIRED FOR WORK RELATED TO SANITARY SEWER, STORM SEWER, WATERMAIN &

STORM WATER POLLUTION PROTECTION. 4. THE CONTRACTOR SHALL NOTIFY THE CITY OF MASSILLON 72 HOURS PRIOR TO WORK REQUIRING CITY INSPECTION.

ALL CULVERTS, DITCHES, PAVEMENT, DRIVEWAYS, SHRUBS, SIGNS, FENCES, AND ANY OTHER PROPERTY OR EXISTING IMPROVEMENTS, EITHER PUBLIC OR PRIVATE, WHICH IS DAMAGED AS A RESULT OF THE WORK BY ANY CONTRACTOR SHALL BE RESTORED AND/OR REPLACED BY THE RESPECTIVE CONTRACTOR IN ACCORDANCE WITH CITY AND COUNTY SPECIFICATIONS. ANY DAMAGE TO EXISTING PROPERTY MARKERS AND MONUMENTS DURING CONSTRUCTION SHALL BE RE-ESTABLISHED BY A REGISTERED SURVEYOR AT THE COST OF THE RESPECTIVE CONTRACTOR.

AS-BUILT DRAWING REQUIREMENTS

THE SITE CONTRACTOR SHALL PROVIDE AS—BUILT DRAWINGS FOR ALL SITE WORK IMPROVEMENTS UPON COMPLETION OF THE SITE WORK. FIELD MEASUREMENTS SHALL BE PFRFORMED BY AND STAMPED A LICENSED SURVEYOR. AS-BUILT DRAWINGS SHALL INCLUDE STORM SEWERS. SITE UTILITIES. WATER DISTRIBUTION SYSTEM, SANITARY SEWER SYSTEM, GRADING, ADDITIONAL NOTES: BUILDING PAD, FINISH FLOOR, DETENTION BASIN, VOLUME CERTIFICATION, OVERLAND FLOOD ROUTES & OTHER CRITICAL FEATURES.

GENERAL REQUIREMENTS — ANY STRUCTURE — MANHOLE, VALVE, HYDRANT, ETC. THAT VARIES MORE THAN 1' HORIZONTALLY OR MORE THAN 1" VERTICALLY SHALL BE RE-DRAWN ON THE DRAWINGS AT THE AS-BUILT LOCATIONS. FINAL AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE CITY, STARK SOIL & WATER

CONSERVATION DISTRICT AND MASSILLON LOCAL SCHOOLS ON PAPER SHOWING THE PROJECT

TITLE. REVISED DATED. SURVEYOR/ENGINEER COMPANY NAME AND BEING LABELED "RECORD DRAWING" IN BOLD PRINT ON EACH SHEET. ALL AS—BUILT DRAWINGS SHALL BE COMPLETED ON EACH ENGINEERING PLAN SHEET. THE CREATION OF NEW SHEETS SOLELY FOR THE PURPOSE OF AN AS-BUILT SURVEY WILL NOT BE ACCEPTED. FINAL AS-BUILD DRAWINGS SHALL ALSO BE SUBMITTED TO MASSILLON LOCAL SCHOOLS AND

SHALL INCLUDE ALL SURFACES, CONTOURS, AS—BUILT STRUCTURES AND PIPES, AND ALL

AS-BUILT SURVEY POINTS LOCATED. SANITARY SEWER — SHOW AS—BUILT LOCATIONS OF ALL MANHOLES, CLEANOUTS, AND LATERAL ENDS, RE-DRAW WHERE NECESSARY ON PLAN AND/OR PROFILE SHEETS. SHOW NEW LENGTHS AND GRADE PERCENTAGES — CROSS OUT THE ORIGINAL NUMBERS. MANHOLES SHALL SHOW THE AS-BUILT RIM AND INVERT ELEVATIONS INCLUDING ELEVATIONS OF DROPS INSIDE THE MANHOLE. RIM ELEVATIONS MUST BE DONE AFTER FINAL FIELD ADJUSTMENTS HAVE BEEN MADE. VERIFY THAT SANITARY SEWER LOCATIONS WILL FIT WITH ANY PROPOSED EASEMENTS IN AREAS OUTSIDE OF STREET R/W'S.

PROJECT ENGINEER IN AN ELECTRONIC AUTODESK AUTOCAD CIVIL 3D COMPATIBLE FILE, WHICH

DETENTION BASINS — SHOW AS—BUILT LOCATIONS OF ALL DETENTION BASIN STRUCTURES ' INCLUDING ALL INLET AND OUTLET PIPE AND ORIFICE SIZES AND INVERT ELEVATIONS, DETENTION . BASIN GRADING INCLUDING FOREBAYS, MICROPOOLS, EMERGENCY SPILLWAY, TOP OF EMBANKMENT AND BASIN SIDE SLOPES SHALL BE AS-BUILT SURVEYED TO VERIFY CONFORMANCE TO PLAN DOCUMENTS. THE AS-BUILT SURVEY SHALL BE SUBMITTED TO THE DESIGN ENGINEER TO VERIFY AND CONFIRM THAT ALL STORM WATER MANAGEMENT SYSTEM DESIGN REQUIREMENTS PER PLAN (OUTFLOWS, STORAGE VOLUMES AND WATER SURFACE FLEVATIONS) ARE SATISFIED BEFORE FINAL ACCEPTANCE. CONTRACTOR SHALL PROVIDE COMPLETE ASBUILT VOLUME CALCULATIONS. IF THE DESIGN ENGINEER DETERMINES THAT THE BASIN OUTFLOW DISCHARGE RATES. AND OR DETENTION VOLUME ARE NOT IN CONFORMANCE WITH THE APPROVED DESIGN DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE CORRECTIONS TO THE GRADING, OUTLET STRUCTURE(S), STORM SEWER(S), OVERFLOW WEIR(S), FOREBAY(S), MICROPOOL(S) AND ANY OTHER RELATED ITEMS INCLUDING ADDITIONAL ASBUILT DATA. ÀT NO ADDITIONAL COST TO THE PROJECT. UNTIL SAID

DESIGN ENGINEER APPROVES THE CONSTRUCTED STORM WATER MANAGEMENT SYSTEM.

AT THE END OF THE PROJECT, AFTER FINAL SITE STABILIZATION IS COMPLE (70+% VEGETATIVE COVER ESTABLISHED), THE CONTRACTOR SHALL SUBMIT VIDEO EVIDENCE OF ALL STORM SEWERS TO PROVE THE STORM SEWERS ARE CLEAR OF ANY SEDIMENT, TRASH OR DEBRIS EACH STORM RUN SHALL BE INSPECTED. IN ACCORDANCE WITH ODOT 611.12 REQUIREMENTS AND A PERFORMANCE REPORT SHALL BE SUBMITTED ALONG WITH THE VIDEO FILES FOR REVIEW IN ACCORDANCE WITH ODOT 611.04 D. IF ANY SEDIMENT, TRASH OR DEBRIS IS PRESENT, THE CONTRACTOR SHALL CLEAN THE STORM SEWERS USING THE JET-VAC PROCESS RECOMMENDED BY THE MANUFACTURE AND RESUBMIT NEW VIDEO EVIDENCE AND PERFORMANCE REPORT OF THE STORM SEWERS, AT TO ADDITIONAL COST TO THE PROJECT.

8. IN THE EVENT THE CONTRACTOR FAILS TO PRODUCE ADEQUATE CLOSE OUT DOCUMENTS INCLUDING ASBUILTS AND VIDEO INSPECTION, THE DESIGN TEAM RESERVES THE RIGHT TO PERFORM AND/OR SUBCONTRACT THE REQUIRED SERVICES REQUIRED TO PRODUCE THE REQUIRED ASBUILT DOCUMENTS AND VIDEO INSPECTIONS. THE CONTRACTOR WILL THEN BE BACK CHARGED FOR THE COST PLUS TEN PERCENT (10%) THE FEES ASSOCIATED WITH ACQUIRING THE REQUIRED

<u>AGGREGATE BASE AND BACKFILL</u> AGGREGATE SIZE, GRADATION, THICKNESS AND COMPACTION SHALL BE IN ACCORDANCE WITH

THE DRAWINGS AND PROJECT GEOTECHNICAL ENGINEER'S REPORTS. REQUIREMENTS. AND RECOMMENDATIONS. RECYCLED #304 CONCRETE AGGREGATE IS NOT PERMITTED FOR USE ON THIS PROJECT. INCASE OF CONFLICT BETWEEN THE SPECIFICATIONS AND THE GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS THE GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS SHALL GOVERN.

EXCAVATION AND TRENCHING SAFETY

1. IN FEDERAL REGISTER, VOLUME 54, NO. 209 (OCTOBER, 1989), THE UNITED STATES DEPARTMENT OF LABOR. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED ITS "CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR, PART 1926, SUBPART P" TO MANDATE THAT ALL EXCAVATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW OSHA GUIDELINES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, BASEMENT EXCAVATIONS OR FOUNDATIONS EXCAVATIONS. THE OSHA GUIDELINES SHALL BE FOLLOWED CLOSELY, AND STRICTLY ENFORCED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE, TEMPORARY EXCAVATIONS AND SHOULD SHORE, SLOPE OR BENCH THE SIDES OF THE

EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND

THE CONTRACTOR'S "RESPONSIBLE PERSON" AS DEFINED IN "CFR PART 1926" SHOULD EVALUATE THE SOIL EXPOSED IN THE EXCAVATIONS AS PART OF THE CONTRACTOR'S SAFETY INCLUDING UTILITY TRENCH EXCAVATION DEPTH, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL SAFETY REGULATIONS. LEWIS LAND PROFESSIONALS, INC. DOES NOT ASSUME RESPONSIBILITY FOR CONSTRUCTION AND SHOULD NOT BE INFERRED. SOILS ENCOUNTERED MAY BE SENSITIVE TO DISTURBANCES CAUSED BY CONSTRUCTION TRAFFIC AND TO CHANGES IN MOISTURE CONTENT. WET WEATHER PERIODS CAN INCREASE THE MOISTURE CONTENT AND CAUSE A SIGNIFICANT REDUCTION IN THE STRENGTH AND SUPPORT CAPABILITIES OF THE SOILS. THE CONTRACTOR SHALL USE CARE DURING THE GRADING OPERATIONS. THE CONTRACTOR SHALL SLOPE ALL BUILDING PADS AND PAVEMENT SUBGRADES TO MAINTAIN POSITIVE DRAINAGE AND PREVENT LOCAL PONDING OF RUNOFF WATER.

EARTHWORK NOTES

THE TRAFFIC OF HEAVY EQUIPMENT, INCLUDING COMPACTION EQUIPMENT, MAY CREATE

PUMPING AND DETERIORATION OF THE SOIL STRUCTURE IN THE PRESENCE OF WATER. THE

CONTRACTOR SHALL USE CAUTION WHILE GRADING IN THE WET SEASON, AND IF POSSIBLE,

PERFORM ALL GRADING OPERATIONS DURING A DRY SEASON.

3700A CASTING AND FRAME, OR APPROVED EQUAL.

CONTRACTOR SHALL PERFORM AN EARTHWORK CUT/FILL ANALYSIS DURING THE BIDDING PROCESS & SHALL NOTE ANY IMPORT AND OR EXPORTING OF SOIL NECESSARY TO ACHIEVE THE PROPOSED ELEVATIONS SHOWN ON THE PLANS AND ALL ASSOCIATED COSTS FOR IMPORTING AND/OR EXPORTING SOILS, PRIOR TO ANY SITE GRADING.

CONTRACTOR SHALL IMPORT/EXPORT SUITABLE SOIL TO ACHIEVE THE PROPOSED ELEVATIONS SHOWN ON GRADING PLANS. CHANGE ORDERS WILL NOT BE PERMITTED FOR ANY CONTRACTORS THAT DO NOT PERFORM THEIR OWN EARTHWORK CALCULATIONS PRIOR TO SUBMITTING A BID.

STORM SEWER NOTES: INLET MANHOLES IN PAVEMENT SHALL BE SLAB TOP ODOT PRECAST MANHOLES WITH EAST JORDAN IRON WORKS 3700M2 CASTING AND FRAME, OR APPROVED EQUAL. INLET MANHOLES IN THE LAWN SHALL BE ODOT PRECAST MANHOLES WITH EAST JORDAN

IRON WORKS 3700M CASTING AND FRAME, OR APPROVED EQUAL. 3. INLET MANHOLES AT CURBS SHALL BE ODOT PRECAST MANHOLES WITH EAST JORDAN IRON WORKS 7360 CASTING AND FRAME, OR APPROVED EQUAL.

4. STORM MANHOLES SHALL BE ODOT PRECAST MANHOLES WITH EAST JORDAN IRON WORKS

6. ODOT 2-3 AND 2-4 CATCH BASINS IN THE PAVEMENT SHALL HAVE SLAB TOPS WITH EAST JORDAN IRON WORKS 5235 FRAME AND EAST JORDAN IRON WORKS V-5622-80 GRATE, OR APPROVED EQUAL. 7. ODOT 2-2B CATCH BASINS IN THE LAWN SHALL HAVE EAST JORDAN IRON WORKS 5110M3 CASTING AND FRAME, OR APPROVED EQUAL. 8. ODOT 2—2B CATCH BASINS IN THE PAVEMENT SHALL HAVE EAST JORDAN IRON WORKS 5235 FRAME AND EAST JORDAN IRON WORKS V-5622-80 GRATE, OR APPROVED EQUAL. 9. ODOT 3A INLET BASINS SHALL HAVE EAT JORDAN IRON WORKS 7350M5 CASTING AND FRAME, OR APPROVED EQUAL. 10. CONTRACTOR MAY SUBSTITUTE PRECAST CATCH BASIN WITH 24"x36" INSIDE DIMENSIONS AND EAST JORDAN IRON WORKS 7030M2 CASTING AND GRATE AND EAST JORDAN IRON WORKS 7030T1 CURB HOOD FOR ODOT 3A INLET BASINS THROUGHOUT THE SITE. <u>SANITARY SEWER NOTES:</u> SANITARY SEWER MANHOLES SHALL BE PRECAST WITH EAST JORDAN IRON WORKS CASTING AND FRAME. CASTING SHALL CLEARLY NOTE SANITARY SEWER. 1)CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS, FENCES AND ' SECURITY DEVICES THROUGH THE DURATION OF THE PROJECT AS REQUIRED. 2)THE EXISTING SCHOOL UTILITY SERVICES SHALL REMAIN IN SERVICE AT ALL TIMES.

THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MAINTAIN A MINIMUM 18" OF VERTICAL

CLEARANCE AT CROSSINGS AND A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN THE

PROPOSED WATER MAIN AND ANY PREVIOUSLY INDETERMINATELY LOCATED SEWERS FOUND UPON

ODOT 2-3 AND 2-4 CATCH BASINS IN THE LAWN SHALL HAVE SLAB TOPS WITH EAST

JORDAN IRON WORKS 5110M3 CASTING AND FRAME, OR APPROVED EQUAL

<u>ADDITIONAL WATERLINE NOTE:</u>

	WATER SCHEDULE		
TER NUMBER	SCHEDULE	NORTHING	EASTING
W100	BUILD 8" GATE VALVE	409781.19	2228427.12
W101	BUILD 8" - 45° BEND	409786.17	2228427.39
W102	BUILD 8" - 45° BEND	409794.75	2228436.57
W103	BUILD 8" X 8" TEE	409901.49	2228440.15
W104	BUILD 8" X 6" REDUCER	409932.62	2228441.20
W105	BUILD HYDRANT ASSEMBLY WITH WATCH VALVE	409957.61	2228442.04
W106	BUILD 8" - 45° BEND	409905.49	2228321.08
W107	BUILD 8" - 45° BEND	409851.92	2228263.78
W108	BUILD 8" GATE VALVE	409851.92	2228258.80
W109	BUILD 8" GATE VALVE	410160.86	2228221.43
W110	BUILD 8" - 45° BEND	410157.00	2228336.12
W111	BUILD 8" - 45° BEND	410184.41	2228365.44
W112	BUILD 8" X 6" TEE	410183.91	2228380.43
W113	BUILD HYDRANT ASSEMBLY WITH WATCH VALVE	410160.46	2228379.64
W114	BUILD HYDRANT ASSEMBLY WITH WATCH VALVE	410170.58	2228579.38
W115	BUILD 8" X 6" TEE	410177.22	2228579.60
W116	BUILD 8" GATE VALVE	410175.05	2228644.27
W117	BUILD 2.5" DOMESTIC SERVICE CONNECTION	410174.71	2228654.17
W118	BUILD 6" FIRE CONNECTION	410174.13	2228671.44
W119	BUILD 8" GATE VALVE	410173.79	2228681.47
W120	BUILD 8" — 45° TEE	410171.33	2228754.96
W121	BUILD 8" - 45° TEE	410155.83	2228769.45
W122	BUILD 8" X 6"TEE	410153.55	2228769.37
W123	BUILD HYDRANT ASSEMBLY WITH WATCH VALVE	410153.31	2228776.69
W124	BUILD 8" — 45° BEND	409983.13	2228763.65
W125	BUILD 8" X 6" TEE	409963.60	2228742.76
W126	BUILD FIRE HYDRANT ASSEMBLY WITH WATCH VALVE	409954.52	2228751.25
W127	BUILD 8" - 45° BEND	409954.16	2228732.66
W128	BUILD 8" - 45° BEND	409911.76	2228731.23
W129	BUILD 8" X 6" TEE	409805.14	2228617.20
W130	BUILD FIRE HYDRANT ASSEMBLY WITH WATCH VALVE	409814.37	2228608.56
W131	BUILD RELOCATED WATER SERVICE CONNECTION	409771.02	2228580.70
W132	BUILD RELOCATED SERVICE METER	409767.36	2228584.12
W133	BUILD 8" - 45° BEND	409747.04	2228555.06
W134	BUILD 8" GATE VALVE	409751.07	2228435.57
W137	BUILD 8" X 8" TEE	409751.39	2228425.57
W138	BUILD 4" X 45° BEND	410164.41	2228663.13
W139	BUILD 4" X 45° BEND	410169.24	2228668.29
W140	BUILD REMOTE FIRE CONNECTION WITH STORTZ CONNECTION	410163.63	2228835.03

NOTE: CONTRACTOR SHALL TAKE NOTE OF ALL SUBSURFACE CONDITIONS AND MUST RESPONSIBILITY FOR ANY ROCK PRESENT THAT MAY OR MAY NOT BE SHOWN ON THE PLANS AND/OR PROFILES. SEE GEOTECHNICAL REPORT FOR MORE INFORMATION.

ST22 BUILD CURB MET MANHOLE No. 409772.00 File F		BUILD ODOT HALF HEADWALL		RIM = 1070.14			
STY	<i>ST7</i>		'		 	4 l	
17		<i>'</i>			30" FL.=1064.00 (N)	К	
100 100	ST8	BUILD STORM MANHOLE		RIM = 1085.68	· · ·		
2710	<i>ST9</i>	BUILD CURB INLET MANHOLE			30" FL.=1070.70 (S) 18" FL.=1074.70 (E) 12" FL.=1082.11 (NE)		
1000 1000	<i>ST10</i>	BUILD INLET MANHOLE		RIM = 1086.00	30" FL.=1071.51 (SE)		
### 1995 OF 12 - 1	<i>ST11</i>	BUILD INLET MANHOLE		RIM = 1086.00		ر	
STILL HURL DESIGN REF MANNELL No. 407001-13 AM = 108-3.0 AF 1075-26 State	ST12	BUILD CURB INLET MANHOLE		RIM = 1085.00	24" FL.=1073.49 (SE)		
STIP	S713	BUILD CURB INLET MANHOLE		RIM = 1085.50	24" FL.=1074.56 (SW) 24" FL.=1074.56 (SW) 12" FL.=1082.50 (N)		
\$175 BUILD CURB MET MANNEE N. \$00000 P. 100	ST14	BUILD CURB INLET MANHOLE		RIM = 1085.00	24" FL.=1074.89 (NE)		
### ### ### ### ### ### ### ### ### ##	ST15	BUILD CURB INLET MANHOLE		RIM = 1084.17	18" FL.=1075.57 (W)	Н	
\$119 BUILD CORP BRET CATCH BASH	S716	BUILD STORM MANHOLE		RIM = 1087.27	18" FL.=1079.22 (S) 12" FL.=1082.45 (W) 6" FL.=1083.00 (E)		
\$118 BUILD OURS BEET CATCH BASIN \$10004.35 \$80 = 1085.50 \$75.4.1082.60 \$75 \$1.1082.60 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60 \$75 \$1.1082.60	ST17	BUILD CURB INLET CATCH BASIN		RIM = 1085.50	6" FL.=1084.00 (NE)	Н	
ST20 SURLO CURB INLET CATCH BASIN S. 2228514.73 SM = 1086.50 ST 121080.00 ON	ST18	BUILD CURB INLET CATCH BASIN		RIM = 1085.50	15" FL.=1080.28 (SW) 12" FL.=1082.40 (N)		
ST20 BUILD CURB INLET CATCH BASIN C. 2023671.13 Film = 1086.50 12" PL - 1032.16 (S) 12" PL - 1032.16 (5719	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1085.50	6" FL.=1084.00 (E)	G	
ST22 BUILD CURE RILET MANHOLE 1220002312 Rill 1083.00 RT 12-1078.20 (W) ST2.00 ST2.0	ST20	BUILD CURB INLET CATCH BASIN		RIM = 1086.50	12" FL.=1082.18 (E) 12" FL.=1083.50 (S)		SEAL:
ST22 BUILD CURE RILET MANHOLE 1220002312 Rill 1083.00 RT 12-1078.20 (W) ST2.00 ST2.0	ST21	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1086.75	6" FL.=1084.00 (E)		FESSIONAL
ST23 BURLD STORM MANHOLE E 222861219 RM = 1082.90 12" FL = 1078.80 (No) 12" FL = 1078.90 (ST22	BUILD CURB INLET MANHOLE		RIM = 1083.00	18" FL.=1076.29 (W)		PRO
ST24 BURLD CURB INLET CATCH BASIN 1. 409849 87 12	ST23	BUILD STORM MANHOLE		RIM = 1082.90	18" FL.=1076.88 (S) 12" FL.=1079.90 (NW)	F	
### \$125 BUILD OLOT 2-2-B CATCH BASIN \$\frac{A09999 64}{E}\$ \frac{22860212}{22860212} \text{RIM} = 1088.40 \text{6"} \frac{F.}{F.} = 1085.50 \text{(NE)} \text{6"} \text{7.6.7.505.50} \text{(NE)} \text{6.7.6.7.505.50} 6.7.6.7.505.5	ST24	BUILD CURB INLET CATCH BASIN		RIM = 1081.50	12" FL.=1078.50 (NW) 18" FL.=1078.01 (SW) 6" FL.=1079.00 (SE)		NSULTANT:
ST26 BUILD STORM MANHOLE N. 409978.45 RIM = 1085.15 12" FL = 108.10 (SE) 15" FL = 108.00 (SE) 15" FL = 108.00 (NW) 6" FL = 108.30 (NW) 6" FL = 108.30 (NW) 6" FL = 108.30 (NW) 6" FL = 108.200 (NE) E 12" FL = 108.50 (NW) 6" FL = 108.200 (NE) E 12" FL = 108.50 (NW) E 12" FL = 108.50 (ST25	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1088.40	6" FL.=1085.50 (NE)		00
ST28 BUILD ODOT 2-2-B CATCH BASIN E: 2228845,46 NM = 1084.50 12" FL = 1081.30 (S) 12" FL = 1081.30 (N) 12" FL = 1082.50 (S) 6" FL = 1082.50 (S) 6" FL = 1082.50 (S) 6" FL = 1083.00 (N) 8" FL = 1083.00 (N) 8	<i>ST26</i>	BUILD STORM MANHOLE		RIM = 1085.15	12" FL.=1081.10 (SE) 15" FL.=1080.42 (SW)		
ST28 BUILD ODOT 2-2-B CATCH BASIN N: 41008.317 RIM = 1086.30 12" FL = 1081.30 (N) 6" FL = 1082.50 (S) 6" FL = 1084.00 (SW) 6" FL = 1083.00 (W) 6" FL = 10	ST27	BUILD CURB INLET CATCH BASIN		RIM = 1084.50	6" FL.=1082.00 (SE)	Е	
ST29 BUILD ODOT 2-2-B CATCH BASIN E: 2228860.55 RIM = 1085.50 6" FL.=1083.00 (S)	ST28	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1086.30	12" FL.=1081.30 (N) 12" FL.=1082.05 (W)		
ST30 BUILD ODOT 2-2-B CATCH BASIN E: 2228518.54 RIM = 1087.10 6" FL.=1085.53 (S) F. I=1085.53 (S) F. I=1085.59 (W) F. I=1084.90 (E) ST31 BUILD ODOT 2-2-B CATCH BASIN N: 410051.27 E: 2228363.17 RIM = 1087.75 6" FL.=1084.90 (E) 12" FL.=1084.50 (S) F. I=1085.70 (W) F. I=	ST29	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1085.50	6" FL.=1083.00 (S)	H	
ST31 BUILD ODOT 2-2-B CATCH BASIN P: 2228363.17 RIM = 1087.75 6" FL.=1085.70 (N) 6" FL.=1085.64 (NE) 6" FL.=1085.63 (N) 8" FL.=1082.63 (N) 8" FL.=1083.93 (S) 8" FL.=1083.93 (S) 8" FL.=1085.58 (E) 12" FL.=1083.93 (S) 8" FL.=1085.58 (E) 12" FL.=1083.93 (S) 8" FL.=1085.58 (E) 12" FL.=1083.93 (S) 8" FL.=1085.54 (N) 6" FL.=1085.34 (N) 6" FL.=1083.33 (S) 8" FL.=1085.57 (S) 8" FL.=1085.57 (S) 8" FL.=1085.66 (N) 6" FL.=1085.89 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.89 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.89 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.89 (N) 6" FL.=1085.89 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.75 (N) 6" FL.=1085.89 (N) 6" FL.=1085.89 (N) 6" FL.=1085.75 (N) 6" FL.=1085.89 (N) 6" FL.=1085.89 (N) 6" FL.=1085.75	S730	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1087.10	8" FL.=1085.53 (S) 6" FL.=1085.49 (W) 6" FL.=1084.90 (E)		
ST32 BUILD ODOT 2-2-B CATCH BASIN E: 2228476.07 RIM = 1087.90 12" FL.=1082.64 (SW) 8" FL.=1082.63 (N) ST33 BUILD ODOT 2-2-B CATCH BASIN N: 409879.60 E: 2228468.46 RIM = 1088.75 12" FL.=1083.93 (N) ST34 BUILD ODOT 2-2-B CATCH BASIN N: 409936.24 E: 2228468.01 RIM = 1088.75 6" FL.=1085.58 (N) ST35 BUILD ODOT 2-2-B CATCH BASIN N: 409795.05 E: 2228573.59 RIM = 1088.75 6" FL.=1083.99 (SE) ST36 BUILD ODOT 2-2-B CATCH BASIN N: 410118.34 E: 2228731.28 RIM = 1088.30 12" FL.=1083.12 (E) ST37 BUILD ODOT 2-2-B CATCH BASIN N: 41017.17 E: 2228730.96 RIM = 1088.40 12" FL.=1083.75 (S) ST37 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 E: 2228730.96 12" FL.=1083.75 (N) ST38 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 RIM = 1088.40 12" FL.=1083.75 (S) ST37 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 E: 2228730.96 12" FL.=1083.64 (N) ST38 BUILD ODOT 2-2-B CATCH BASIN N: 409977.17 RIM = 1088.60 12" FL.=1083.75 (N)	ST31	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1087.75	6" FL.=1085.70 (N) 6" FL.=1085.64 (NE)	D	
ST33 BUILD ODOT 2-2-B CATCH BASIN E: 2228468.46 ST34 BUILD ODOT 2-2-B CATCH BASIN E: 2228468.46 ST34 BUILD ODOT 2-2-B CATCH BASIN N: 409936.24 E: 2228468.01 ST35 BUILD ODOT 2-2-B CATCH BASIN N: 409795.05 E: 2228573.59 ST36 BUILD ODOT 2-2-B CATCH BASIN N: 410118.34 E: 2228731.28 ST37 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 E: 2228730.96 ST37 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 E: 2228730.96 ST38 BUILD ODOT 2-2-B CATCH BASIN N: 409977.17 ST39 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 E: 2228730.96 ST39 BUILD ODOT 2-2-B CATCH BASIN N: 409977.17	S732	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1087.90	12" FL.=1082.64 (SW)		
ST34 BUILD ODOT 2-2-B CATCH BASIN N: 409936.24 E: 2228468.01 RIM = 1088.75 6" FL.=1085.88 (E) 12" FL.=1084.50 (S) RIM = 1088.75 BUILD ODOT 2-2-B CATCH BASIN N: 409795.05 E: 2228573.59 RIM = 1088.75 6" FL.=1085.99 (SE) 6" FL.=1085.34 (N) 6" FL.=1082.92 (W) 12" FL.=1083.23 (S) 12" FL.=1083.12 (E) 6" FL.=1083.12 (E) 6" FL.=1085.57 (SW) RIM = 1088.40 12" FL.=1083.75 (S)	S733	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1088.75	8" FL.=1085.88 (E)		
ST35 BUILD ODOT 2-2-B CATCH BASIN N: 409795.05 E: 2228573.59 RIM = 1088.75 6" FL.=1085.34 (N) 6" FL.=1082.92 (W) 12" FL.=1083.23 (S) 12" FL.=1083.12 (E) 6" FL.=1083.25 (S) 12" FL.=1083.12 (E) 6" FL.=1085.57 (SW) 8" FL.=1085.57 (SW) ST37 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 E: 2228730.96 RIM = 1088.40 12" FL.=1083.75 (S) 12" FL.=1083.64 (N) 6" FL.=1083.89 (W) ST38 RIM = 1088.40 12" FL.=1083.75 (S) 12" FL.=1083.89 (W) ST39 RIM = 1088.40 12" FL.=1083.75 (S) 12" FL.=1083.89 (W)	S734	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1088.75	6" FL.=1085.88 (E)		
ST36 BUILD ODOT 2-2-B CATCH BASIN N: 410118.34 E: 2228731.28 RIM = 1088.30 12" FL.=1083.12 (É) 6" FL.=1085.66 (W) 8" FL.=1085.57 (SW) N: 410077.17 E: 2228730.96 RIM = 1088.40 12" FL.=1083.75 (S) 12" FL.=1083.64 (N) 6" FL.=1085.89 (W) N: 409977.17 RIM = 1088.50 12" FL.=1083.75 (N)	S735	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1088.75	6" FL.=1085.34 (N)	С	
ST37 BUILD ODOT 2-2-B CATCH BASIN N: 410077.17 E: 2228730.96 RIM = 1088.40 12" FL.=1083.64 (N) 6" FL.=1085.89 (W) N: 409977.17 DIM = 1088.60 12" FL.=1084.75 (N)	ST36	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1088.30	12" FL.=1083.12 (É) 6" FL.=1085.66 (W) 8" FL.=1085.57 (SW)		
ST38 BUILD ODOT 2-2-B CATCH BASIN N: 409977.17 F: 2228737.95 RIM = 1088.50 12" FL.=1084.75 (N) 6" FL =1085.89 (W)	<i>ST37</i>	BUILD ODOT 2-2-B CATCH BASIN		RIM = 1088.40	12" FL.=1083.64 (N)	$\ $	
E. 2220737.33	ST38	BUILD ODOT 2-2-B CATCH BASIN	N: 409977.17 E: 2228737.95	RIM = 1088.50	12" FL.=1084.75 (N) 6" FL.=1085.89 (W)		

STORM SEWER SCHEDULE

STRUCTURE LOCATION

408993.94

E: 2228461.62

E: 2228452.14

409314.14

E: 2228515.06

V: *409325.87*

E: 2228524.49

!: 409313.63

E: 2228391.98

RIM

CONNECTED PIPES

24" FL.=1062.00 (N)

24" FL.=1064.00 (NE

24" FL.=1065.58 (SW)

24" FL.=1067.58 (N)

24" FL.=1064.00 (NW)

RIM = 1066.91 | 24" FL.=1063.75 (S)

STRUCTURE TYPE

BUILD OUTLET CONTROL STRUCTURE | N: 409084.84

BUILD ODOT HALF HEADWALL

W/TYPE "C" ROCK RIP-RAP

BUILD ODOT HALF HEADWALL

W/TYPE "B" ROCK RIP-RAP

BUILD ODOT HALF HEADWALL

W/TYPE "C" ROCK RIP-RAP

(4'W X 11'L X 30"D)

(4'W X 9'L X 18"D)

BUILD STORM MANHOLE

SEE DETAILS ON SHEET C-701

(4'W X 8'L X 18"D)

STRUCTURE NAME

ANTICIPATE AND INCLUDE PROPER EQUIPMENT FOR ROCK EXCAVATION. NO ADDITIONAL PAYMENTS WILL BE MADE FOR ROCK EXCAVATION OR EXTRA CONSTRUCTION TIME DUE TO IMPROPER PLANNING BY THE CONTRACTOR. LEWIS LAND PROFESSIONALS TAKES NO

SANITARY SEWER MANHOLE SCHEDULE STRUCTURE LOCA TION NAME TYPE PIPES ADJUSTED 8" FL.=1077.45 (E N: 410110.93 EXISTING SANITARY MANHOLE E: 2228296.84 8" FL.=1076.95 (W BUILD SANITARY MANHOLE N: 410102.83 WITH EXTERNAL DROP E: 2228356.46 RIM=1088.90

09.14.2022 UTILITY SCHEDULE AND

DRAWN BY

CHECKED BY

SCALE: N.T.S. SHEET NO

90 50 60

PROJECT NO

2203-1

LEWIS LAND PROFESSIONALS INC. CIVIL ENGINEERING LAND SURVEYING LEWIS LAND 8691 WADSWORTH ROAD SUITE 100 WADSWORTH, OH 44281 (330) 335-8232

– PLAN PREPARED BY –



