

SOIL TYPE(S)

UwB - URBAN LAND-UDORIENTS, LIMESTONE COMPLEX, 0 TO 8 PERCENT SLOPES
CIC - CONESTOGA SILT LOAM, 8 TO 15 PERCENT SLOPES
Ho - HOLLY SILT LOAM

SLOPE LEGEND

15% TO 25%
25% AND GREATER

LEGEND

EX. PROPERTY LINE
PROP. PROPERTY LINE
EX. RIGHT-OF-WAY
PROP. RIGHT-OF-WAY
EX. MONUMENT
PROP. MONUMENT
EX. IRON PIPE
PROP. IRON PIPE
EX. EASEMENT
PROP. EASEMENT
EX. WETLANDS
PROP. WETLANDS
EX. EXISTING CONTOUR
PROP. EXISTING CONTOUR
EX. NEW SPOT ELEV.
PROP. NEW SPOT ELEV.
EX. SOIL TYPE
PROP. SOIL TYPE
EX. CONC. CURB
PROP. CONC. CURB
EX. EDGE OF PAVING
PROP. EDGE OF PAVING
EX. LIGHT POLE
PROP. LIGHT POLE
EX. MAIL BOX
PROP. MAIL BOX
EX. SIGN
PROP. SIGN
EX. PARKING SPACES
PROP. PARKING SPACES
EX. TO BE REMOVED
PROP. TO BE REMOVED
EX. TELE. LINE
PROP. TELE. LINE
EX. PROP. ELEC. LINE
PROP. PROP. ELEC. LINE
EX. UTILITY POLE
PROP. UTILITY POLE
EX. GUY ANCHOR
PROP. GUY ANCHOR
EX. GAS LINE
PROP. GAS LINE
EX. GAS VALVE
PROP. GAS VALVE
EX. STORM SEWER LINE
PROP. STORM SEWER LINE
EX. STORM INLET
PROP. STORM INLET
EX. STORM INLET ID
PROP. STORM INLET ID
EX. SEEPAGE BED
PROP. SEEPAGE BED
EX. SANITARY SEWER LINE
PROP. SAN. SEWER LINE
EX. SAN. SEWER LATERAL
PROP. SAN. SEWER LATERAL
EX. SANITARY MH. ID
PROP. SANITARY MH. ID
EX. WATER LINE
PROP. WATER LINE
EX. FIRE WATER LINE
PROP. FIRE WATER LINE
EX. WATER VALVE
PROP. WATER VALVE
EX. HYDRANT
PROP. HYDRANT
EX. MANHOLE
PROP. MANHOLE

MATCH LINE - SEE THIS SHEET

MATCH LINE - SEE THIS SHEET

GENERAL NOTES:

1. PRIOR TO STARTING CONSTRUCTION, ALL UTILITY SERVICES IN THE AREA SHALL BE LOCATED AND MEASURES TAKEN TO PROTECT THE EXISTING FACILITIES. ANY DAMAGE TO EXISTING FACILITIES SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES IF NECESSARY.
3. LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM FIELD SURVEY AND EXISTING RECORDS. COMPLETENESS AND ACCURACY OF EXISTING UTILITY INFORMATION IS NOT GUARANTEED. PRIOR TO THE START OF ANY CONSTRUCTION, THE CONTRACTOR SHALL ACCURATELY FIELD MEASURE LOCATION AND ELEVATION OF EXISTING UTILITIES AT POINTS OF CONNECTION AND POTENTIAL CONFLICT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER IN WRITING OF ANY DEVIATION FROM INFORMATION SHOWN ON THESE PLANS. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL PERSONS AND VEHICLES WITHIN THE CONSTRUCTION AREAS FROM INJURY AND DAMAGE DURING THE COURSE OF WORK.
5. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 1:00 MIN. SLOPE ON ASPHALT AND 2:00 MIN. ON GRASS, TO PREVENT FORMING ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST. MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.
7. ALL SITE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL STATUTES AND REGULATIONS.
8. ALL TRENCHING, SHORING AND EXCAVATING OPERATIONS SHALL BE PERFORMED IN COMPLIANCE WITH THE REQUIREMENTS OF THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
9. SCALED DIMENSIONS FROM THIS PLAN SHALL NOT BE USED FOR CONSTRUCTION WITHOUT CONFIRMATION FROM D.L. HOWELL & ASSOC., INC.
10. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. IF ANY UNSUITABLE SOIL IS ENCOUNTERED DURING EXCAVATION, THE CONTRACTOR SHALL REMOVE IT AND REPLACE 90% OPTIMUM DENSITY (AS IT WITH APPROVED FILL MATERIAL COMPACTED TO 90% DETERMINED BY STANDARD PROCTOR METHOD).
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE LOCAL AUTHORITY OR GOVERNING AGENCY OF THE BEGINNING DATE OF CONSTRUCTION AND TO ENSURE THAT NO WORK IS PERFORMED WITHOUT THE REQUIRED PERMITS AND INSPECTIONS BY THE LOCAL AUTHORITY OR GOVERNING AGENCY.
12. IF CONDITIONS ON THE GROUND DIFFER FROM THOSE SHOWN ON THE PLAN, THE CONTRACTOR SHALL NOTIFY IMMEDIATELY IN WRITING THE ENGINEER OF RECORD.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED TRAFFIC CONTROL, SHEETING, SHORING AND BARREADINGS OF OPEN EXCAVATIONS.
14. ALL MATERIALS AND METHODS OF CONSTRUCTION FOR STORMWATER FACILITIES, ROADWAY, CURB AND SEEDING SHALL CONFORM TO PENNSYLVANIA 408 SPECIFICATIONS, LATEST EDITION.
15. ALL INLETS, MANHOLES AND ASSEMBLIES IF APPLICABLE SHALL BE PRECAST CONCRETE.
16. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, SAFETY PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK AND FOR COORDINATION OF ALL PORTIONS OF THE WORK UNDER CONTRACT.
17. CONTRACTOR SHALL REVIEW VARIOUS PHASES OF WORK WITH THE OWNER TO DETERMINE WHETHER ANY PHASE WILL CONFLICT WITH THE OWNER'S DAILY OPERATIONS. WHERE CONFLICT IS APPARENT THE CONTRACTOR SHALL COORDINATE WITH THE OWNER THE WORK TO BE PERFORMED SO AS TO BE THE LEAST DISRUPTIVE.
18. ALL INLETS IF APPLICABLE SHALL BE CONSTRUCTED FLUSH WITH THE BINDER COURSE.
19. ALL CURBING, CONCRETE OR PAVING TO BE REMOVED SHALL BE SAW CUT FIRST TO ENSURE A CLEAN SEPARATION FROM EXISTING.
20. ANY PAVING DAMAGED DURING CONSTRUCTION ACTIVITIES SHALL BE REMOVED TO SUBGRADE AND REPLACED WITH THE PAVING SECTION AT THE CONTRACTOR'S EXPENSE.
21. WHERE ALL NEW BITUMINOUS PAVING MEETS EXISTING BITUMINOUS, A HOT BITUMINOUS SEALANT SHALL BE POURED ALONG THE SAW CUT JOINT.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL, REPLACEMENT, AND MAINTENANCE OF ALL EXISTING LANDSCAPING DURING CONSTRUCTION. THIS INCLUDES PROPERLY STORING MATERIAL TO BE REUSED, PRUNING WHERE REQUIRED AND PROTECTING EXISTING ROOT STRUCTURES OF TREES WHERE CONSTRUCTION OCCURS WITHIN THE DRIP LINE.
23. IN ANY AREA SUBJECT TO VEHICULAR ACTIVITY DURING CONSTRUCTION, A MINIMUM OF 18 INCHES OF COVER SHALL BE MAINTAINED FOR ALL UNDERGROUND UTILITIES (STORMWATER, SANITARY SEWER, WATER, ELECTRIC, GAS, ETC.).
24. ALL PROPOSED UTILITIES TO BE LOCATED UNDERGROUND.

GRADING & UTILITIES PLAN

SCALE: 1" = 30'

30 0 15 30 60

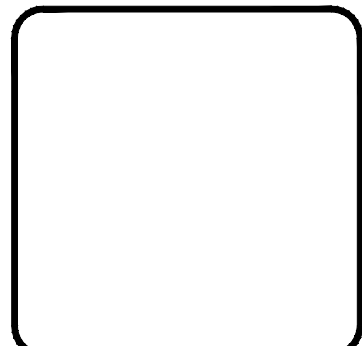
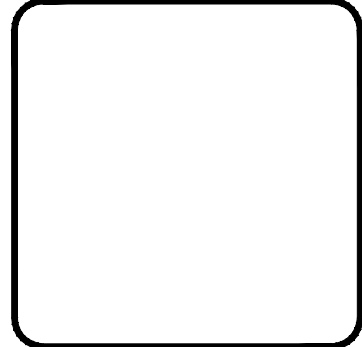
GRAPHIC SCALE
1 inch = 30 feet



DLHowell

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NO.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		

PRELIMINARY/FINAL
GRADING & UTILITIES PLAN

CLIENT: JMLE, LLC
PROJECT: CHESTER COUNTY SPORTS ARENA REDEVELOPMENT
LOCATION: 4533 W. LINCOLN HIGHWAY
CALN TOWNSHIP, CHESTER COUNTY, PA

DATE: 05/15/20
SCALE: 1"=30'
DRAWN BY: WSW
CHECKED BY: CWD
PROJECT NO.: 3310A
CADD FILE: GRADING & UTILITIES PLAN.dwg
PLOTTED: 05/15/20
DRAWING NO.: C04.1
SHEET 06 OF 17