Architecture - Residential / Commercial / Industrial

Village of Waverly

458 Waverly Street Demolition

CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS



Prepared by:

AJH Design 111 East 14th Street Elmira Heights, New York 14903

AJH Design Project No. 22-134 January 21, 2025

SECTION 00 01 10

TABLE OF CONTENTS

DIVISION 01 – GENERAL CONDITIONS

00 01 10	Table of Contents
00 11 13	Advertisement for Bids
00 41 13	Form of Proposal

DIVISION 02 - EXISTING CONDITIONS

02 41 00 I	Demolition
------------	------------

02 41 16 Structure Demolition

DIVISION 31 - EARTHWORK

31 10 00	Site Cleaning
31 22 00	Grading
31 23 16	Excavation
31 23 23	Fill

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 92 00 Turf and Grass

LIST OF DRAWINGS

SK-1 SITE PLAN

SECTION 00 11 13 ADVERTISEMENT FOR BIDS

NOTICE IS HEREBY GIVEN, that sealed proposals are sought and requested by Village of Waverly, (hereinafter called "owner"), 32 Ithaca Street, Waverly, New York 14892 for the provision and Demolition of the following Project:

Building Demolition 458 Waverly Street, Waverly, New York

Bids are requested for a single prime contract for Site work, in accordance with Drawings, Project Manual, and other Bidding and Contract Documents prepared by AJH Design, 111 East 14th Street, Elmira Heights, NY 14903.

Sealed bids will be received by the Owner until Tuesday, Febuary 11, 2025 at 4:00 P.M., at Waverly Village Hall, ATTN: Michele Wood, 32 Ithaca Street, Waverly, NY 14892.

The Bidding Documents and Forms of Proposals may be examined at the following:

AJH Design, 111 East 14th Street, Elmira Heights, NY 14903.

Village of Waverly at www.villagofwaverly.com.

Printed copies of said documents may be obtained from AJH Design, 111 East 14th Street, Elmira Heights, NY 14903, phone (607) 737-4638, fax (607) 767-6115 for a refundable fee of \$50.00 made payable to AJH Design. Digital (PDF) copies of the documents may be obtained at no cost by contacting AJH Design by calling or emailing: (607) 737-4638 or info@ajh-design.com. Each plan holder shall provide an email address and phone number for receipt of addenda.

All checks for deposit of Contract Documents and shipping shall be made payable to AJH Design. AJH-Design.

A 10% bid bond is required. The project also requires a 100% performance and payment bond from the selected contractor.

All questions prior to bid opening must be received by the close of business on Friday, February 7, 2025. Questions shall be directed to Andrew Harding at AJH Design, (607) 737-4638, email aharding@ajhdesign.com.

The Owner requires that all bids shall comply with the bidding requirements specified in the Instructions to Bidders. The Owner, at his discretion, may waive informalities in bids, but is not obligated to do so, nor does this represent that he will do so. The Owner also reserves the right to reject any and all bids. Under no circumstances will the Owner waive any informality which, by such waiver, would give one Bidder a substantial advantage or benefit not enjoyed by all other Bidders. No Bidder may withdraw his Bid before forty-five (45) days after the actual date of the opening thereof, unless a mistake due to error is claimed by the Bidder in accordance with the Instructions to Bidders.

DOCUMENT 00 41 13

FORM OF PROPOSAL

Proposal for:	Project: 458 Building Demolition	
From: Name:		
	Address:	
	City/Zip:	
	Phone No.	Fax No.
То:	Waverly Village Hall ATTN: Michele Wood 32 Ithaca Street Waverly, New York 14892	
Date:	Tuesday, Febuary 11, 2025	
Time:	4:00 PM	
together with a conditions affec complete all bu The contractor' The fee and gu	I addenda thereto, all as prepared by a cting the work, agrees to furnish all ma ilding addition construction work in acc s fee shall be based on the cost of the aranteed maximum price for the work	D FEE) GUARANTEED MAXIMUM PRICE FOR D STABILIZING LOT:
		Dollars
(A	In W	ords
(\$	In Fig	
proposals, or to withdrawn for a pure the undersigned behalf of any perfor solicited any because for himse.	vaive any informalities or technicalities in s period of sixty (60) days from the opening the hereby certifies that this proposal is genuited son, firm or corporation not herein named;	ne, and not sham or collusive, or made in the interest, or in that the undersigned has not directly or indirectly induced undersigned has not in any manner, sought by collusion to
	etin No.	Dated
Addendum/Rul	etin No	Dated

Village of Waverly Project No. 22-134 458 Waverly Street Demolition Section 00 41 13

Addendum/Bulletin No.		Dated	
The date of this proposal is:		, 2025.	
EXECUTION OF CONTRACT			
If written notice of the acceptance of this BID is undersigned within (45) days after the date of ordays after the date of such delivery, execute and Architect.	pening of	f the Bids, the undersigned will, within ten (10)	
The BID may be withdrawn at any time prior to t authorized postponement thereof	he sche	duled time for the opening of Bids, or any	
	s as to it bidder i	s own organization, under penalty of perjury, that s not on the list created pursuant to paragraph (b	
SIGNATURES:			
When the bidder is an individual:			
Witness	_	Bidder (se	al)
When the bidder is a partnership:			
Witness	_	(se	al)
When the bidder is a Corporation:			
	by:		
Attest:	_	President	
Secretary	_		

(Corporate Seal)

SECTION 02 24 00 DEMOLITION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Selective demolition of built site elements.
- B. Abandonment and removal of existing utilities and utility structures.

12 RELATED REQUIREMENTS

- A. Section 015000 Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- B. Section 311000 Site Clearing: Vegetation and existing debris removal.
- C. Section 312200 Grading: Topsoil removal.
- D. Section 312200 Grading: Fill material for filling holes, pits, and excavations generated as a result of removal operations.
- E. Section 312316 Fill: Fill material for filling holes, pits, and excavations generated as a result of removal operations.

1.3 REFERENCE STANDARDS

- A. 29 CFR 1926 U.S. Occupational Safety and Health Standards current edition.
- B. NFPA 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations 2013.

1.4 SUBMITTALS

- A. See Section 013000 Administrative Requirements, for submittal procedures.
- B. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

PART 2 PRODUCTS

2.1 MATERIALS

A. Fill Material: As specified in Section 312323 - Fill.

PART 3 EXECUTION

3.1 SCOPE

- A. Remove paving and curbs as required to accomplish demolition work.
- B. Sidewalk along Waverly street to remain. Side walk running perpendicular to Waverly Street to be removed.
- C. Break up concrete slabs on grade within site boundaries to permit natural moisture drainage; leave pieces not larger than 1 square yard (1 square meter).
- D. Remove other items indicated, for salvage, relocation, recycling and burying.
- E. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as specified in Section 312200.

32 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.

- Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
- 3. Provide, erect, and maintain temporary barriers and security devices.
- 4. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
- 5. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
- 6. Do not close or obstruct roadways or sidewalks without permit.
- Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
- 8. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Protect existing structures and other elements that are not to be removed.
 - Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- D. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- E. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
- F. Perform demolition in a manner that maximizes salvage and recycling of materials.
 - 1. Comply with requirements of Section 017419 Waste Management.
 - 2. Dismantle existing construction and separate materials.
 - 3. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.
- G. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.

3.3 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

- G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.
- H. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.

3.4 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Remove from site all materials not to be reused on site; comply with requirements of Section 017419 - Waste Management.
- C. Leave site in clean condition, ready for subsequent work.
- D. Clean up spillage and wind-blown debris from public and private lands.

SECTION 02 41 16 STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Demolishing designated structures.
- 2. Demolishing designated foundations.
- 3. Demolishing designated slabs-on-grade.
- 4. Demolishing or Disconnecting and capping designated utilities.
- 5. Demolishing or Filling designated underground tanks.
- 6. Removing designated items for reuse and Owner's retention.
- 7. Protecting items designated to remain.
- 8. Removing demolished materials.

B. Related Sections:

- 1. Section 02 41 00 Selective Structure Demolition: Demolishing designated components.
- 2. Section 31 10 00 Site Clearing: Clearing outside periphery of structures.
- 3. Section 31 22 00 Grading.
- Section 31 23 23 Fill.

1.2 CLOSEOUT SUBMITTALS

- A. Execution and Closeout Requirements: Requirements for submittals.
- Project Record Documents: Accurately record actual locations of capped utilities, and subsurface obstructions.

1.3 QUALITY ASSURANCE

- A. Conform to applicable code for demolition of structures, safety of adjacent structures, dust control, runoff control and disposal.
- B. Conform to applicable code for procedures when hazardous or contaminated materials are discovered. Notify Architect/Engineer if materials suspected to be hazardous are discovered.
- C. Obtain required permits from authorities having jurisdiction.

1.4 QUALIFICATIONS

- A. Demolition Firm: Company specializing in performing work of this section with minimum ten years documented experience.
- B. Design shoring, bracing, underpinning under direct supervision of Professional Engineer experienced in design of this Work and licensed in State of New York.

1.5 PRE-INSTALLATION MEETINGS

A. Convene minimum one week prior to commencing work of this section.

1.6 SCHEDULING

A. Describe demolition removal procedures and schedule.

1.7 PROJECT CONDITIONS

A. The Building indicated to be demolished will be vacated before start of Work.

Structure Demolition Section 02 41 16 Page 1

- B. Owner assumes no responsibility for actual condition of buildings to be demolished.
- C. Hazardous Materials: Notify Architect/Engineer upon discovery of a hazardous material.
- D. Do not sell demolished materials on-site.

PART 2 - PRODUCTS

2.1 NOT USED.

PART 3 - EXECUTION

3.1 EXISTING BUILDING DOCUMENTATION

- A. Document condition of adjacent structures indicated to remain.
- B. Make arrangements with building owners and occupants to survey interior and exterior of existing building.

3.2 EXAMINATION

- A. Examine existing building indicated to be demolished before demolition.
- B. Determine where removals may result in structural deficiency or unplanned building collapse during demolition. Coordinate demolition sequence and procedures to prevent structures from becoming unstable.
- C. Determine where demolition may affect structural integrity.
 - 1. Identify remedial work including patching, repairing, bracing, and other work required to leave buildings indicated to remain in structurally sound condition.

3.3 PREPARATION

- Call Local Utility Line Information service not less than three working days before performing Work.
 - Request underground utilities to be located and marked within and surrounding construction areas.
- B. Notify affected utility companies before starting work and comply with utility's requirements.
- C. Do not close or obstruct roadways, sidewalks, or hydrants without permits.
- D. Erect, and maintain temporary barriers and security devices at locations indicated, including warning signs and lights, and similar measures, for protection of the public and Owner.
- E. Protect existing landscaping materials, trees, appurtenances, and structures indicated to remain.
- F. Prevent movement or settlement of adjacent structures. Provide bracing and shoring.

3.4 DEMOLITION REQUIREMENTS

- A. Use of explosives is not permitted.
- B. Conduct demolition to minimize interference with adjacent structures.
- C. Cease operations immediately when adjacent structures appear to be in danger. Notify Engineer. Do not resume operations until directed.
- D. Conduct operations with minimum interference to public or private access to occupied adjacent structures. Maintain egress and access from adjacent structures at all times.

- E. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon or limit access to their property.
- F. Sprinkle Work with water to minimize dust. Provide hoses and water connections required for this purpose. Provide water supply where existing water source is not available.

3.5 DEMOLITION

- A. Disconnect, Remove, and cap designated utilities as indicated on Drawings. Identify utilities at termination of demolition. Record termination or capped location on Record Documents.
- B. Demolish foundation walls and footings to a minimum of (2) two feet below finished grade elevation.
- C. Foundations, stone, concrete, and concrete sidewalks may be utilized as fill. Demolition debris used as fill shall be installed two feet below finished grade or lower.
- D. Remove/demolish all concrete slabs-on-grade. Including basement floors. Maximum size of slab sections shall be three feet (3'-0").
- E. All demolition debris used as fill shall be crushed to a maximum dimension of three feet (3'-0").
- F. Structure Materials: In general, the structure consists of the following.
 - 1. 458 Waverly Street:
 - a. Two story wood structure.
 - b. Basement story below grade.
 - c. Foundation walls: stone and concrete masonry units.
 - d. Basement floor: Concrete.
 - e. Approximate elevations: Basement to First Floor 8'-0", First Floor to Second Floor 9'-0", Second Floor to Second Floor Ceiling 8'-0".

SECTION 31 10 00 SITE CLEARING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Clearing and protection of vegetation.
- B. Removal of existing debris.

12 RELATED REQUIREMENTS

- A. Section 015000 Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- B. Section 024100 Demolition: Removal of built elements and utilities.
- C. Section 312200 Grading: Fill material for filling holes, pits, and excavations generated as a result of removal operations.
- D. Section 312323 Fill: Fill material for filling holes, pits, and excavations generated as a result of removal operations.

1.3 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.1 SITE CLEARING

A. Minimize production of dust due to clearing operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

32 EXISTING UTILITIES AND BUILT ELEMENTS

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Protect existing structures and other elements that are not to be removed.

3.3 VEGETATION

- Do not remove or damage vegetation beyond the limits indicated on drawings.
- B. Install substantial, highly visible fences at least 3 feet high (at least 1 m high) to prevent inadvertent damage to vegetation to remain:
 - At vegetation removal limits.
- C. In areas where vegetation must be removed but no construction will occur other than pervious paving, remove vegetation with minimum disturbance of the subsoil.
- D. Vegetation Removed: Do not burn, bury, landfill, or leave on site, except as indicated.
 - 1. Chip, grind, crush, or shred vegetation for mulching, composting, or other purposes; remove from site.
 - 2. Sod: Re-use on site if possible; otherwise sell if marketable, and if not, treat as specified for other vegetation removed.

Site Clearing Section 31 10 00 Page 1 E. Restoration: If vegetation outside removal limits or within specified protective fences is damaged or destroyed due to subsequent construction operations, replace at no cost to Owner.

3.4 DEBRIS

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

SECTION 31 22 00 GRADING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Removal and storage of topsoil.
- B. Rough grading the site for finish grade prep.
- C. Finish grading.

12 RELATED REQUIREMENTS

- A. Section 311000 Site Clearing.
- B. Section 312316 Excavation.
- C. Section 312323 Fill: Filling and compaction.

1.3 SUBMITTALS

A. Project Record Documents: Accurately record actual locations of utilities remaining by horizontal dimensions, elevations or inverts, and slope gradients.

PART 2 PRODUCTS

21 MATERIALS

- A. Topsoil: See Section 312323.
- B. Other Fill Materials: See Section 312323.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that survey bench mark and intended elevations for the Work are as indicated.
- B. Verify the absence of standing or ponding water.

32 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Stake and flag locations of known utilities.
- C. Locate, identify, and protect from damage above- and below-grade utilities to remain.
- D. Notify utility company to remove and relocate utilities.
- E. Provide temporary means and methods to remove all standing or ponding water from areas prior to grading.
- F. Protect site features to remain, including but not limited to bench marks, survey control points, existing structures, fences, sidewalks, paving and curbs, from damage by grading equipment and vehicular traffic.
- G. Protect trees to remain by providing substantial fencing around entire tree at the outer tips of its branches; no grading is to be performed inside this line.
- H. Protect plants, lawns, rock outcroppings and other features to remain as a portion of final landscaping.

3.3 ROUGH GRADING

- A. Remove topsoil from areas to be further excavated, re-landscaped, or re-graded, without mixing with foreign materials.
- B. Do not remove topsoil when wet.
- C. Remove subsoil from areas to be further excavated, re-landscaped, or re-graded.
- D. Do not remove wet subsoil , unless it is subsequently processed to obtain optimum moisture content.
- E. When excavating through roots, perform work by hand and cut roots with sharp axe.
- F. See Section 312323 for filling procedures.
- G. Stability: Replace damaged or displaced subsoil to same requirements as for specified fill.
- H. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack surface water control.

3.4 SOIL REMOVAL

- A. Stockpile topsoil to be re-used on site; remove remainder from site.
- B. Stockpile subsoil to be re-used on site; remove remainder from site.
- C. Stockpiles: Use areas designated on site; pile depth not to exceed 8 feet (2.5 m); protect from erosion.

3.5 FINISH GRADING

- A. Before Finish Grading:
 - 1. Verify building and trench backfilling have been inspected.
 - 2. Verify subgrade has been contoured and compacted.
- B. Remove debris, roots, branches, stones, in excess of 1/2 inch (13 mm) in size. Remove soil contaminated with petroleum products.
- C. In areas where vehicles or equipment have compacted soil, scarify surface to depth of 3 inches (75 mm).
- D. Place topsoil in areas where seeding are indicated.
- E. Place topsoil where required to level finish grade.
- F. Place topsoil to nominal depth of 6 inches.
- G. Place topsoil during dry weather.
- H. Remove roots, weeds, rocks, and foreign material while spreading.
- I. Near plants spread topsoil manually to prevent damage.
- J. Fine grade topsoil to eliminate uneven areas and low spots. Maintain profiles and contour of subgrade.
- K. Lightly compact placed topsoil.
- L. Maintain stability of topsoil during inclement weather. Replace topsoil in areas where surface water has eroded thickness below specifications.

3.6 TOLERANCES

- A. Top Surface of Subgrade: Plus or minus 0.10 foot (1-3/16 inches) (30 mm) from required elevation.
- B. Top Surface of Finish Grade: Plus or minus 0.04 foot (1/2 inch) (13 mm).

3.7 REPAIR AND RESTORATION

- A. Existing Facilities, Utilities, and Site Features to Remain: None.
- B. Trees to Remain: If damaged due to this work, trim broken branches and repair bark wounds; if root damage has occurred, obtain instructions from Architect as to remedy.
- C. Other Existing Vegetation to Remain: If damaged due to this work, replace with vegetation of equivalent species and size.

3.8 FIELD QUALITY CONTROL

A. See Section 312323 for compaction density testing.

3.9 CLEANING

- A. Remove unused stockpiled topsoil and subsoil. Grade stockpile area to prevent standing water.
- B. Leave site clean and raked, ready to receive landscaping.

SECTION 31 23 16 EXCAVATION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Excavating for building volume below grade, footings, pile caps, slabs-on-grade, paving, site structures and utilities within the building.
- B. Temporary excavation support and protection systems.

12 RELATED REQUIREMENTS

- A. Section 311000 Site Clearing: Vegetation and existing debris removal.
- B. Section 312200 Grading: Soil removal from surface of site.
- C. Section 312200 Grading: Grading.
- D. Section 312323 Fill: Fill materials, backfilling, and compacting.

1.3 REFERENCE STANDARDS

A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards current edition.

1.4 SUBMITTALS

A. Project Record Documents: Show locations of installed support materials left in place, including referenced locations and depths, ondrawings.

PART 2 PRODUCTS

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that survey bench mark and intended elevations for the work are as indicated.
- B. Survey existing adjacent structures and improvements and establish exact elevations at fixed points to act as benchmarks.

32 PREPARATION

- A. Identify required lines, levels, contours, and datumlocations.
- B. See Section 311000 for clearing, grubbing, and removal of existing debris.
- C. See Section 312200 for topsoil removal.
- D. Locate, identify, and protect utilities that remain and protect from damage.
- E. Notify utility company to remove and relocate utilities.
- F. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving and curbs from excavating equipment and vehicular traffic.
- G. Protect plants, lawns, rock outcroppings and other features to remain.
- H. Grade top perimeter of excavation to prevent surface water from draining into excavation. Provide temporary means and methods, as required, to maintain surface water diversion until no longer needed, or as directed by Architect.

3.3 TEMPORARY EXCAVATION SUPPORT AND PROTECTION

A. Excavation Safety: Comply with OSHA's Excavation Standard, 29 CFR 1926, Subpart P.

- 1. Excavations in stable rock or in less than 5 feet (1.5 m) in depth in ground judged as having no cave-in potential do not require excavation support and protection systems.
- 2. Depending upon excavation depth, time that excavation is open, soil classification, configuration and slope of excavation sidewalls, design and provide an excavation support and protection system that meets the requirements of 29 CFR 1926, Subpart P:
 - a. Sloping and benching systems.
 - b. Support systems, shield systems, and other protective systems.
- B. Excavation support and protection systems not required to remain in place may be removed subject to approval of Owner or Owner's Representative.
 - 1. Remove temporary shoring and bracing in a manner to avoid harmful disturbance to underlying soils and damage to buildings, structures, pavements, facilities and utilities.

3.4 EXCAVATING

- A. Excavate to accommodate construction operations.
- B. Notify Architect of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- C. Provide temporary means and methods, as required, to remove all water from excavations until directed by Architect. Remove and replace soils deemed suitable by classification and which are excessively moist due to lack of dewatering or surface water control.

3.5 FILLING AND BACKFILLING

- A. See Section 312323 for fill, backfill, and compaction requirements at general excavations.
- B. See Section 312200 for rough and final grading and topsoil replacement requirements.

3.6 CLEANING

- A. Stockpile excavated material to be re-used in area designated on site in accordance with Section 312200.
- B. Remove excavated material that is unsuitable for re-use from site.
- Remove excess excavated material from site.

3.7 PROTECTION

- A. Divert surface flow from rains or water discharges from the excavation.
- B. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- C. Protect open excavations from rainfall, runoff, freezing groundwater, or excessive drying so as to maintain foundation subgrade in satisfactory, undisturbed condition.
- D. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- E. Keep excavations free of standing water and completely free of water during concrete placement.

SECTION 31 23 23 FILL

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Filling, backfilling, and compacting for building volume belowgrade.
- B. Filling holes, pits, and excavations generated as a result of removal (demolition) operations.

12 RELATED REQUIREMENTS

- A. Section 312200 Grading: Removal and handling of soil to be re-used.
- B. Section 312200 Grading: Site grading.
- C. Section 312316 Excavation: Removal and handling of soil to be re-used.

1.3 DEFINITIONS

A. Finish Grade Elevations: To conform to existing grade contours.

1.4 REFERENCE STANDARDS

- A. AASHTO M 147 Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base and Surface Courses 2017.
- B. AASHTO T 180 Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18 in.) Drop 2018.
- C. ASTM C136/C136M Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates 2014.
- D. ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)) 2012, with Editorial Revision (2015).
- E. ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method 2007.
- F. ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN m/m3)) 2012, with Editorial Revision (2015).
- G. ASTM D2167 Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method 2015.
- H. ASTM D2487 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System) 2011.
- ASTM D6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) 2017.

1.5 SUBMITTALS

A. Compaction Density Test Reports.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. When necessary, store materials on site in advance of need.
- B. When fill materials need to be stored on site, locate stockpiles where indicated.

- Separate differing materials with dividers or stockpile separately to prevent intermixing.
- 2. Prevent contamination.
- 3. Protect stockpiles from erosion and deterioration of materials.

PART 2 PRODUCTS

21 FILL MATERIALS

- A. General Fill: Subsoil excavated on-site.
 - 1. Graded.
- B. Topsoil: See Section 312200.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Identify required lines, levels, contours, and datumlocations.
- B. Verify areas to be filled are not compromised with surface or groundwater.

32 PREPARATION

- A. Scarify and proof roll subgrade surface to a depth of 6 inches (150 mm) to identify soft spots.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with general fill.
- C. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- D. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.

3.3 FILLING

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Employ a placement method that does not disturb or damage other work.
- C. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen or spongy subgrade surfaces.
- D. Maintain optimum moisture content of fill materials to attain required compaction density.
- E. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches (200 mm) compacted depth.
- F. Slope grade away from building minimum 2 inches in 10 feet (50 mm in 3 m), unless noted otherwise. Make gradual grade changes. Blend slope into level areas.
- G. Correct areas that are over-excavated.
 - Other areas: Use general fill, flush to required elevation, compacted to minimum 97 percent of maximum dry density.
- H. Reshape and re-compact fills subjected to vehicular traffic.

 Maintain temporary means and methods, as required, to remove all water while fill is being placed as required, or until directed by the Architect. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack of dewatering or surface water control.

3.4 FILL AT SPECIFIC LOCATIONS

A. Use general fill unless otherwise specified or indicated.

3.5 TOLERANCES

A. Top Surface of General Filling: Plus or minus 1 inch (25 mm) from required elevations.

3.6 CLEANING

- A. See Section 017419 Construction Waste Management and Disposal, for additional requirements.
- B. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.
- C. Leave borrow areas in a clean and neat condition. Grade to prevent standing surfacewater.

TURF AND GRASSES SECTION 32 92 00

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. Section Includes:
 - Seeding.
- 1.2 DEFINITIONS
 - A. Duff Layer: The surface layer of native topsoil that is composed of mostly decayed leaves, twigs, and detritus.
 - B. Finish Grade: Elevation of finished surface of planting soil.
 - C. Soils: as outlined in CU standard/specifications 32 91 00 Soils and Planting Preparation.
 - D. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
 - E. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
 - F. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or top surface of a fill or backfill before planting soil is placed.
 - G. Subsoil: All soil beneath the topsoil layer of the soil profile and typified by the lack of organic matter and soil organisms.
 - H. Owners Representative: Village of Waverly Code Official.
- 1.3 SUBMITTALS
 - A. Product Data: For each type of product indicated.
 - B. Certification: Submit certificates of inspection as required by governmental authorities. Submit manufacturers or vendors certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.
 - 1. Submit seed vendor's certified statement for each grass seed mixture required, stating botanical and common name, percentage by weight, and percentages of purity, germination, and weed seed for each grass seed species.
 - C. Product certificates.
 - D. Maintenance Instructions: Submit typewritten instructions recommending procedures to be established by Owner for future maintenance after acceptance and warranty expiration. Submit prior to expiration of required maintenance period(s).
 - F. Provide and pay for materials testing. Testing agency shall be acceptable to the Architect. Provide the following data:
 - 1. Test representative material samples proposed for use.
 - 2. Topsoil per CU specification 32 91 00.
 - Testing paid by contractor.

1.4 QUALITY ASSURANCE

- A. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 1. Pesticide Applicator: NY State licensed, commercial.
 - 2. NYSNLA Certified Nursery Professional or industry related degree

B. Source Quality Control

- 1. General: Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials.
- 2. Do not make substitutions: If specified, landscape material is not obtainable, submit proof of non-availability to Architect, together with proposal for use of equivalent material.
- 3. Analysis and Standards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.
- 4. Topsoil: Before delivery of topsoil, furnish the Owner's Representative with written statement giving location of properties from which topsoil is to be obtained, names and addresses of owners, depth to be stripped, and crops grown during past two years. TOPSOIL ACQUISITION AND AMENDMENTS TO TOPSOIL ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- C. Soil Analysis: For each unamended soil type, furnish soil analysis per 32 91 00 Soils and Planting Preparation.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws, as applicable.
- B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in Turfgrass Producers International's "Guideline Specifications to Turfgrass Sodding." Deliver sod in time for planting within 24 hours of harvesting. Protect sod from breakage and drying. If sod to be stored on site overnight, unstack pallets by 50% to reduce heat build up.

1.6 JOB CONDITIONS

- A. Proceed with and complete landscape work as portions of site become available, working within seasonal limitations for each kind of landscape work required.
- B. Utilities: Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned.
- C. Excavation: When conditions detrimental to plant growth are encountered such as rubble fill, adverse drainage conditions, or obstructions, notify Architect or Owner's Rep. No planting under such conditions will occur until approved by Architect.

1.7 SPECIAL PROJECT WARRANTY

A. Warranty lawns through specified lawn maintenance period, and until final acceptance.

1.8 MAINTENANCE SERVICE

A. Initial Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in Part 3.

- B. Maintain seeded and sodded areas until final acceptance.
 - 1. Maintenance period shall begin immediately after seeding is completed for each designated area on Plan, and shall continue until all lawn areas have been fully accepted, not less than 60 days after substantial completion.
 - 2. If seeded in Fall continue maintenance the following Spring until lawn is established and accepted, <u>IN WRITING</u>, by Owner's Representative.
 - 3. Maintenance of seeded lawn areas shall include watering, spot weeding, fertilizing, disease and insect pest control, mowing, reseeding, application of herbicides, fungicides, and insecticides until a full uniform stand of grass, free of weeds, undesirable grass species, disease and insects is achieved and accepted by the Owner's Representative.
 - 4. Contractor is to provide water daily, or as conditions dictate, to maintain adequate surface soil moisture for proper seed germination. Watering shall be done in the late afternoon or early evening hours and shall continue for a period not less than 30 days. Thereafter, apply 1/2" (one-half inch) of water twice weekly until acceptance. Water shall be from Owner's source. Contractor shall provide and maintain at his expense, adequate connections, hoses, sprinklers, etc., with minimum leakage. Where use of hoses is not practical, Contractor shall water with a tank truck filled at Owner's source. When Owner's water source is not available, Contractor shall include cost of water from off-site source in base bid.
 - 5. Grass shall not be allowed to grow more than 4" (four inches) in height during the maintenance period. Mowing height to be set at 3"- 3 1/2" (three inches to three and one half inches) unless otherwise directed with clean mower including freshly sharpened blades. Repeat mowing to maintain height appropriate for species without cutting more than 1/3 of grass height. Remove no more than 1/3 of grass-leaf growth in initial or subsequent mowings.
 - 6. Pick-up of grass clippings shall be required during or immediately after each mowing, if clippings are an average of 1" (one inch) or longer in length.
 - 7. Contractor to repair, rework, and reseed all areas that have washed out, are eroded or do not establish. Restore bare areas by top dressing with topsoil as specified. Apply seed at specified rate. Roll with a light roller and cover with a 1/2" (one-half inch) mulch of pre-moistened peat moss.
 - 8. Contractor will provide such barricades, temporary fencing signs or policing as may be necessary to eliminate or minimize damage to lawn. Contractor is responsible for all damage that occurs unless damage is beyond Contractor's control. Should damage occur beyond Contractor's control, Contractor will submit request for a Change Order and provide reasonable proof of damage.

PART 2 - PRODUCTS

2.1 GRASS MATERIALS

- A. Schedule of Grass Seed Requirements:
 - 1. All grass seed will be fresh, clean, new crop seed delivered in original unopened packages, bearing guaranteed analysis.
 - 2. Seed germination test results for each seed type and cultivar must be performed within 10 months prior to landscape installation of seed, and must have no less than ninety percent (85%) germination rate.
 - 3. All grass seed cultivar purity must be no less than ninety percent (95%) by weight.

- 4. All Grass Seed and Grass Seed Mixes used will consist of one of the following four (4) types:
 - a. <u>TYPE 1: Low-Grow Mix:</u> This grass seed will be used for areas where minimal maintenance is desired only when specified in writing by the Architect. This seed mix will consist of the following by weight:

50% Firefly Hard Fescue

30% Minotaur Blue Hard Fescue

20% Intrigue Chewings Fescue

- or that have performed in the top statistical grouping from the most recent NTEP trials conducted for the species.
- b. Seed may NOT be mixed on site. If seed mixed by a dealer, the contractor shall furnish the owner the dealer's guaranteed statement of the composition of the mixture. A sufficient number of <u>All</u> seed labels for seed used on campus will be furnished to the Owner's Representative for review, and then incorporated into the owner's project files.

2.3 TOPSOIL

- A. As specified in 32 91 00 Cornell Soils and Planting Preparation
- 2.4 MISCELLANEOUS LANDSCAPE MATERIALS
 - A. Anti-Erosion Mulch: Provide clean, seed-free salt hay or threshed straw of wheat, rye, oats or barley.
 - B. Filtration/Separation Fabric: Water permeable filtration fabric of fiberglass or polypropylene fabric.
 - C. Temporary Lawn Protection: Shall include 1" x 1" hardwood stakes, 4' (four feet) high a maximum of 10' (ten feet) apart with a single line of double stranded white polypropylene twine, flagged with 1" wide red weather resistant flag tape. The maximum length of the flagging tapes will be 4" (four inches).

PART 3 - EXECUTION

- 3.1 TURF AREA PREPARATION
 - A. Preparation of Planting Soil
 - 1. Per CU Standard/specification <u>32 91 00 Soils and Planting Preparation</u>.
 - 2. For lawns, provide fertilizer with percentage of nitrogen required to provide between 0.5 and not to exceed 0.7 of actual nitrogen per 1,000 sq ft of lawn area and not less than 4% phosphoric acid and 2% potassium. Provide nitrogen in a form that will be available to lawn during initial period of growth; at least 50% of nitrogen to be in slow-release form.
 - B. Preparation for Planting Lawns per CU Standard/specification 32 91 00:
 - Loosen subgrade of lawn areas to a minimum depth of 10" (ten inches). Remove stones over 1 1/2" (one and one-half inch) in any dimension and sticks, roots, rubbish and other extraneous matter. Limit preparation to areas which will be planted promptly after preparation.
 - a. Spread top soil to minimum depth required to meet lines, grades and elevations shown, after light rolling and natural settlement and at least 6 inches in depth.
 - b. Place approximately half of total amount of top soil required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil. Add specified soil amendments and mix thoroughly into upper 10" (ten inches) of topsoil.

C.

- D. Fine grade lawn areas to smooth, even surface with loose, uniformly fine texture. Rake and drag lawn areas, remove ridges and fill depressions, as required to meet finish grades. Limit fine grading to areas which can be planted immediately after grading. Allow for soil settlement.
- E. Moisten prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface moisture to dry before planting lawns. Do not create a muddy soil condition.
- F. Restore lawn areas to specified condition if eroded or otherwise disturbed after fine grading and prior to planting.

3.2 SEEDING NEW LAWNS

- A. Do not use wet seed or seed which is moldy or otherwise damaged in transit or storage.
- B. Sow grass seed at rate specified for seed mixture type. Increase by 20% for new seeding on slopes in excess of a 3:1 ratio. And when expecting significant seed loss.
- C. Method of Seeding
 - Mechanical drills or seeders shall place the seed to a depth not exceeding 1/4" (one quarter inch). Two passes of seeder shall be made over each area, the second pass being made at right angles to the direction of the first, one-half of the required amount of seed being sown in each pass. Broadcast seed shall be covered to a depth not exceeding 1/4" (one-quarter inch) by raking, brush or chain harrowing, or other approved method. Broadcast seeding shall not be done during windy weather. After sowing, the seeded areas shall be lightly rolled and the seed bed before and after seeding shall weigh not more than 65 pounds per foot of width. Cultipaker, or similar equipment, may be used in one operation to cover the seed and firm the seed bed after seeding.
- D. Protect seeded slopes against erosion with an organic erosion netting such as jute or other methods acceptable to the Owner's Representative for all slopes exceeding 1:3.
- E. Protect seeded areas against erosion by spreading chopped (certified weed free) straw mulch, or acceptable organic hydroseeding cellulose mulch within 24 hours after seeding. During the months of June, July and August, only straw mulch will be used. Place straw mulch uniformly in a continuous blanket at the rate of 2-2/2 tons per acre, or 2-50 pound bales per 1,000 sq ft of area. A mechanical blower may be used for straw mulch application when acceptable to the Landscape Architect.
- F. Time of Seeding (for conventional method):
 - Seed immediately after preparation of seed bed. Seeding shall be done between April 1 and June 1, or between August 15 and September 30. When delays in operations carry the work beyond the seasons specified, or when conditions of high winds (winds that exceed 5 mph velocity), drought, excessive moisture or ice are such that satisfactory results are not likely to be obtained at any stage of the work, the work will stop and it shall be resumed only when the desired results are likely to be obtained, or when approved corrective measures and procedures are adopted. Fungicide coated seed may be required for seeding between June 1 and August 15. Seeding outside of these periods to be reviewed with the Owner's Representative to review seed type and warranty provisions.
- G. Seed indicated areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations after proper soil preparation as specified in section 3.1.
- H. Work notification: Notify Architect at least seven (7) working days prior to start of seeding operations.
- I. Protect existing utilities, paving, and other facilities from damage caused by seeding operations.
- J. Perform seeding work only after planting and other work affecting ground surface has been completed or as otherwise approved by Architect.
- K. Restrict traffic from lawn areas until grass is established. Erect signs and barriers as required.
- L. Provide hose and lawn watering equipment as required.

3.3 RECONDITIONING EXISTING LAWNS

- A. Recondition existing lawn areas damaged by Contractor's operations, including storage of materials and equipment, and movement of vehicles. Also, recondition existing lawn areas where minor regrading is required.
- B. Provide fertilizer, seed or sod, and soil amendments as specified for new lawns, and as required, to provide a satisfactorily reconditioned lawn.
- C. Cultivate bare and compacted areas thoroughly to a depth of 8" (eight inches) to provide a satisfactory and pliable planting bed.
- D. Remove dead and unsatisfactory lawn areas; do not bury into soil. Remove topsoil containing foreign materials resulting from Contractor's operations, including oil drippings or other harmful chemicals, stone, gravel, and other loose building materials.
- E. Where greater than 60% of lawn remains, mow, de-compact, fertilize and over-seed. In areas where there is less than 60% of disturbed grass rake, fill low spots, remove humps, cultivate soil to create proper seed bed, fertilize, and seed. Remove weeds before seeding, if extensive, apply selective chemical weed killers as required. Apply a seedbed mulch, if required, to maintain moist condition.
- F. Water newly planted lawn areas and keep moist until new grass is established <u>AND ACCEPTED IN WRITING BY THE OWNER'S REPRESENTATIVE.</u>
- G. Begin maintenance immediately after planting.

3.4 TURF MAINTENANCE

- A. Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf as outlined in Section 1.8. Roll, regrade, and replant bare or eroded areas and re-mulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
- B. Apply pesticides and other chemical products and biological control agents in accordance with authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed. Environmentally friendly products to be considered if viable alternate.

3.5 SATISFACTORY TURF

- A. Turf installations shall meet the following criteria as determined by the Owner's Representative:
 - When landscape work is completed, including maintenance, the Owner's Representative will, upon request, make an inspection to determine acceptability.
 - a. Landscape work may be inspected for acceptance in parts agreeable to Architect, provided work offered for inspection is complete, including maintenance.
 - 2. Where inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until re-inspected by Architect and found to be acceptable. Legally remove rejected material promptly from project site.

3.7 CLEANUP AND PROTECTION

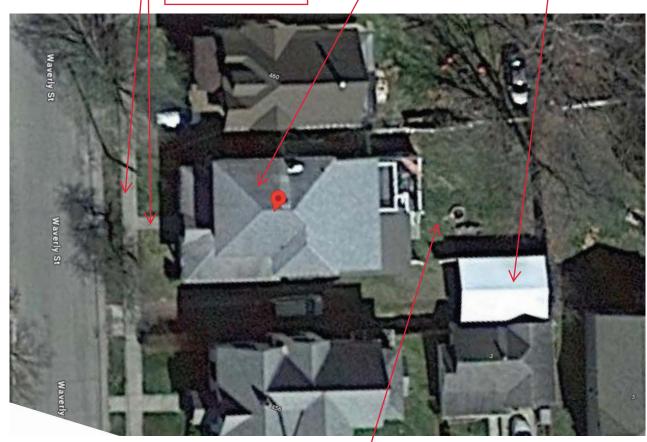
During landscape work, keep pavements clean and work area in an orderly condition.

Existing Sidewalk to Remain

Connecting Sidewalk to be Removed

Shed Structure to Remain

Existing Structure to be Removed



All Debris in Yard to be Removed

DRAWING SCALE AS NOTED ISSUE DATE: 12/4/2024 PROJECT NO. 22-134

DRAWING NO. SK-1

PROJECT Village of Waverly 458 Waverly Street Demolition

TITLE OF DRAWING Site Plan

