APPENDIX PW-1

VILLAGE OF WALDO
PUBLIC WORKS CONSTRUCTION STANDARDS

Adopted by Village Board
October 16, 2001
As amended March 7, 2005
Codified as Appendix PW-1 by Ordinance No. 2025-15
Effective Upon Passage & Posting: November 10, 2025

ADDITIONAL INFORMATION

1. **"Assessment Policy" and "Standard Fees" apply to all efforts associated with project and are available from the Village Clerk (copy attached).**
    - Developer is responsible for all costs associated with the respective projects including but not limited to Village Administration and Staff, Permits and Submittals, Reviews, and Professional Services (Legal, Engineering, Construction Services).
2. **"Final Assessment"** shall be prepared by the Engineer and delivered to the Village within 90 days of Project reaching "Substantial Completion".
3. **Performance Guarantees and Construction Process**
    - **Approval Required:** Village approval of all plans and specifications is required for projects which modify existing or extend utility services.
    - Additions and modifications to existing systems **must** be approved by designated Village representative (Engineer, or Director of Public Works). All public work improvements **shall** be designed **and** bear the seal of a Wisconsin registered engineer.
    - Developer is responsible for requesting infrastructure services which include location, duration, and description of the work.
4. **Warranty:** Contractor/ Developer shall **warrant/ guarantee Work from the date of substantial completion for a minimum of 2 years** for all defects, workmanship, etc. as provided in the Engineering Joint Contract Documents Committee (EJCDC) General

Conditions (most recent edition).

5. **Surety:** Contractor/ Developer shall provide performance and payment bonds for the complete value of the work, naming the Village of Waldo.
6. **Record Drawings:** Contractor Developer shall provide "As-built" record drawings (one mylar original and six paper copies) at the completion of the improvements and shall include all alignments, grade, and service information.
7. **Public Acceptance:** Village may accept public improvements constructed by private Developers/ Contractors after Village determines the Work is completed to all applicable codes, ordinances, permits and standards; and all necessary documentation is provided and approved.
8. **Construction Services:**
    - Developer is responsible for all costs associated with Construction Services necessary to install the improvements.
        - Construction Services include, but are not limited to, contract administration, staking (and reference lines), and site observations.
        - All public works improvements (public sanitary sewer and watermain) shall be observed under the supervision of a licensed Wisconsin Professional Engineer (as required by Wisconsin Statute and Administrative Code).
9. **Operation of Water and Sanitary Systems:**
    - **Only** Village public works staff may operate the water distribution and sanitary systems.
    - The Village **must** be provided a **minimum of 48 hours' notice** requesting operation of the systems.
10. **Pre-Construction Conference Required:**
    a. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by Contractor, Developer, and Village Representatives, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the respective parties general responsibilities, schedules, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.
    b. The conference will be held at a location selected by the Village and Developer. The conference shall be attended by:
        - Developer(s)
        - Developer's Agent(s)

- Contractor's
  - Office Representative(s)
  - Resident Superintendent(s)
  - Safety Representative(s)
    - "Project Coordinator" designated by Contractor to process and submit Shop Drawings and other submittals to Engineer.
    - Any Subcontractors' or Suppliers' representatives that the Contractor or Village may request.
- Village Representative(s)
- Village Engineer
- Local Utilities' Representatives.

c. A **suggested format** would include, but not be limited to, the following subjects:
   - Project safety
   - Presentation of the preliminary progress schedule and preliminary schedule of Shop Drawings and sample submissions in accordance with the Specifications or General Requirements.
   - Liquidated damages (if applicable).
   - Procedures for handling submittals such as Shop Drawings and other submittals.
   - Direction of correspondence and coordinating responsibility between Contractors.
   - Project meetings.
   - Laboratory testing of material requirements.
   - Procedures for inventory of material and equipment stored on-site or off-site if off-site storage is authorized.
   - Review schedule of values, application for progress payment, and progress payment procedures (if applicable).
   - Change order procedures."

11. **Development Guidelines** (including developer's agreements and description of necessary steps), Codes and Ordinances are available from the Village Clerk - Treasurer - as the developer presents planning concepts.

12. **Ownership of Laterals/ Services.** Property owners are responsible for all laterals and services on private property. The Village is responsible for maintaining laterals and services within public road right of ways or utility easements.

AVAILABLE MAPPING

Official Zoning	Village adopted (June 1964)
Shoreland / Wetlands	Wisconsin Department of Natural Resources Wetland Inventory (stamped "final")
Water Distribution	• Miscellaneous Water System Maps (existing and future service areas) • Comprehensive system maps **"Record Drawings"** dated February 14, 1964, prepared by Foth and Porath, Inc. Consulting Engineers (Green Bay, Wisconsin), "Water Distribution System, Waldo - Wisconsin" (job number 1680, sheets 1 to 11)
Sanitary Sewer System	• Miscellaneous Sewer Maps (existing and future service areas) • Comprehensive system maps **"Record Drawings"** dated February 14, 1964, prepared by Foth and Porath, Inc. Consulting Engineers (Green Bay, Wisconsin), **"Sanitary Sewage System,** Waldo - Wisconsin" (job number 1680, sheets 1 to 12)
Storm Water Drainage	No comprehensive system maps
Other	1. **Sheboygan County:** • Land Parcels/ Tax Maps (Paper Copies) • USPLS Government Section Comer Tie Sheets • Developed Property Addresses • Major Drainageways • Digital Orthophoto (1' ground resolution) • Contours (2')

	2. **USGS** (digital) - **1** meter pixel resolution (Sheboygan County digital orthophoto with soils classifications) 3. **FEMA** (federal emergency mapping agency) • Flood Insurance Study (n/a) • Community Panel Number n/a (effective n/a) • Mapping available for rural Town of Lyndon areas (Community Panel Numbers 550424 0075-A, 0080-B and 0090-A, post September 1992)

MATERIAL SPECIFICATIONS and CONSTRUCTION STANDARDS

GENERAL

- **Reference Standards** (most recent edition applies completely with applicable addenda)
  - **ASTM** (American Society of Testing Materials)
  - **AWWA** (American Water works Association)
  - **Village and County Codes and Ordinances**
  - **Standard Specifications for Sewer and Water Construction in Wisconsin** (referred to as "Standard Specifications"), including all addenda.
  - **Specifications for Road and Structure Construction** (Wisconsin Department t of Transportation) including all supplements.
  - **Wisconsin Administrative Code:**
    - Chapter NR 110 (sewerage systems)
    - Chapter NR 809, 811, 812 (respectively "safe drinking water", "requirements for operation and design", and "well construction and pump installation")
    - Chapter COMM 82 (plumbing)
- Manufacturer and Suppliers shall be **North American only.**

WATER DISTRIBUTION

Water Main - General

- **Looping Required:** All watermains shall be "looped" to provide increased flow and fire protection. Situations requiring temporary "dead ends" shall be constructed to accommodate future looping. Lands requiring temporary dead-ends shall extend water main and appurtenances to the property line to facilitate future extensions.
- **Sizing:** Mains and services shall be sized according to 1) the Village Comprehensive Water Distribution System Plan or 2) accepted engineering practice.
- Water mains shall be a minimum 8" interior diameter.
- Water main **valves and boxes** shall be designed and constructed to provide logical operation that isolates maximum 800' sections of watermain. The number of valves shall be no less than the difference of the number of intersection pipes minus **1** (e.g., 4 intersecting pipes at an intersection require a minimum of 4-1=3 valves). Valves shall be oriented to allow isolating maximum 800' sections. Adjacent pipe sections shall remain in service.

Wellhouse No. 1 (Fire Station) 810 West 2nd Street400 gpm pump - discharge to 50,000- gallon elevated tower.

Elevated Tower	•	Low Water Elevation	956.5 +/- (90' above ground at base)
		High Water Elevation	956.5 +/- (90' above ground at base)
		Ground Elevation at Water Tower	966.5 +/- (100' above ground at base)
		Standard Operating Range:	866.5 +/- USGS topographic quad map 10 feet

WATER MAIN PIPE

Size	Type	Class	Other
6" hydrant leads	Anchoring pipe, DI Thickness Class 50, DI Pressure Class 150, or PVC C900 (fully restrained)	Pipe restraints and buttressing required	PVC shall be installed with tracer wire (12 gage) at spring

8", and 10" main	PVC or DI	PVC - 150, DI - 50 (polywrapped)	line taped every 5'.
12" - 16" main	PVC or DI	PVC - 150, DI - 52 (polywrapped)	
Fittings	Long bodied ductile iron (North American only)		

Installation	• **Minimum bury:** 6-1/2'
	• **Bedding and backfill:** 18" inches of¾" crushed aggregate, minimum 12" over pipe crown.
	• **Concrete buttresses required** at "dead ends", hydrants, and "bends" (vertical and horizontal)
	• **Pipe Restraints**
	  • Galvanized threaded steel rodding.
	  • "Mega-lug"
	  • "Anchoring" or "locking" pipe
	  • Other Village pre-approved devices		

PVC C-900 acceptable	Yes [8] No □ Standard □ except hydrant leads		
Polyethylene wrap required	Yes [8] DI pipe and fittings, and all CI fittings No PVC IBJ		
Electrical Continuity	Yes [8] DI, pipe, and fittings No IBJ PVC		
Bolts	"Blue Brute" Corrosion Resistant or equal		
Testing	• Hydrostatic Pressure and Leakage (AWWA) including services. • Safe Water (AWWA) • Flushing and • Operate all valves and hydrants in presence of Village representatives		

VALVES and BOXES

No.	Type	Mfg./Model	Sizes

AWWAC-509	Resilient-Seated Gate Valves	• American Flow Control "Series 500"- Waterous (Village standard)
		• Alternates (require pre-approval)
		  • U.S. Pipe
		  • Dresser Style 3067
			through 16"

Place Valve Box in Manhole: Yes□ No IBJ			
Location	• As close to fittings as possible • Hydrant valves 3' from hydrant face (turf) or at tee (paved)		

Valve Box	• Three-piece cast iron with base, screw type center (5¼ -inch shaft diameter) and top section with cover marked "WATER."
	• Valve stem extension required to allow use of an 8' wrench.
	• **Manufacturers:**
	  • Tyler 6860 series
	  • Clow 2450		

Valve Box Adapter : Yes, IBJ by "Adaptor, Inc." No□			

HYDRANTS (AWWA C-502)

Compression type, 5¼-inch bottom valve, 6-inch **MJ** inlet, "O"-ring packing, Safety flange construction, Two 2 V2-inch hose nozzles, One 4-1/2 inch pumper nozzle, National Standard hose coupling screw threads and nut type nozzle caps with gaskets and chains, Operating nut: 1V2-inch pentagon nut operating left (CCW).

Manufacturer/ Model No.	Waterous Pacer WB-67 with drain ports
Color	**Hydrant Yellow** (having 4 *Yi"* pumper and two 2" hose nozzles) **Vermillion Red** (having two 2" hose nozzles)
Hydrant Location	3' from right of way (maximum)
Minimum Depth of Cover	7 - 1/2'
Hydrant Lead	• Anchoring pipe, DI Thickness Class 50, or DI Pressure Class 150 • Requires "restraint" per watermain installation standards (above)
Operating Nut	1-1/2" pentagon nut with integral weather cap opening left (CCW)
Isolation Valve	See "Valves and Boxes"
Installation	• **Bedding and Backfill:** 1 8 inches of ¾" crushed aggregate. • **Placement:** hydrant set on precast concrete block (5" thick x 18" square) • **Restraint:** buttresses and restraint required per Standard Specifications

WATER SERVICES

Item	Description
Standard Residential	1" standard copper, Type "K", soft annealed
• **Corporation Stop** (1" - 2")	• McDonald 4701-22 "Mac Pac" compression (with Corporation saddles) • Ford Ballcorp FB100 compression • or other pre-approved equal (compression fittings only) _.

• **Curb Valve** (1" - 2")	• McDonald 6100-22 "Mac Pac" Minneapolis pattern compression ball valve • Ford ball valve B44-333M compression • or other pre-approved equal (compression fittings only)
• **Curb Box**	• McDonald 5614 (1/2" - **1"** or McDonald 5615 (1-1/2" and 2") with Minneapolis pattern base (6.5' bury) • Ford 1-1/4" with 2" base EM2 series • Require 2" threaded base (1-1/2" to 2" bushing adapter acceptable). • Arch curb box base is **not** acceptable.
• **Foot Piece**	Yes, Precast concrete block pad (5" thick x 18" square minimum)
• **Stationary Rod**	Yes, Standard rod for 7' of bury (7.5' maximum extended length)
• **Curb Valve Location**	• At property line • Duplexes - each dwelling unit shall have its own service
Commercial	• Property Owner is responsible for sizing service to accommodate private needs and applicable regulations.
	• Services 2" or less shall meet requirements for section titled "Standard Residential"
	• Services larger than 2" shall meet requirements for sections titled "Water Main' and "Valves and Boxes"

SANITARY SEWER

Item	Description
Manholes	• Pre-cast reinforced concrete with pre-formed benches smooth finished • Neenah R-1710 frame and casting with Type "B" self-sealing non-rocking lids with concealed pick hole. • Maximum 4" adjustment rings (total) • Internal chimney seal (Cretex Specialty Products) completely spanning from precast manhole to frame. • Joint seal (external) - ¼" butyl rubber sealant, "EZ-Stik" or "Kent-Seal • Granular Backfill • Eccentric cone wrapped with 8 mil polyethylene film • Pipe connections "Kore N Seal" integral rubber boot or approved equal.

Lateral	• Each lot provided with service at lot center installed to property line.
	  • 4" minimum single family residential
	  • 6" minimum duplex family residential (or sized per COMM 82)
	  • Commercial/ Business / Other - Property Owner responsible for sizing based on design requirements and plumbing code.
	• PVC pressure pipe - SDR26, schedule 40
	• **Granular Backfill** required throughout lateral trench

Sewer Materials and Installation	• **PVC, ASTM D3034, SDR-35, (depths less than 20')**
	  • Class "B" Bedding
	  • Granular backfill required in service trench from main to right of way.
	• **Ductile Iron** (class 50 cement lined with protective coating) or PVC C-900 **(depths exceeding 20')**
	  • Class "C" Bedding
	  • Granular backfill required in service trench from main to right of way.
	  • Polywrap encasement required
	• Cut - in connections require saddles. Integral saddles/ in-line fittings required for new construction

Lift / Pump Stations	• Design, material, and performance requirements subject to Village review.

Low Pressure Sewer	• **Public low-pressure sewer not allowed.** • Private low-pressure sewers must be designed and installed per State of Wisconsin and other applicable requirements. Sewer cannot be installed within public right of way. Sewer designs must be reviewed by the Village Engineer before construction. • Gravity sanitary sewer drainage must be provided.

Force Main	• **Ductile Iron** (Class 50 cement lined with protective coating)
	  • Class "C" Bedding
	  • Granular backfill required in service trench from main to right of way.
	  • Polywrap encasement required
	• **PVC C-900 (depth less than 20 feet)**
	  • Class "B" Bedding
	• Granular backfill required in service trench from main to right of way.

Testing	• **Gravity Sewer**
	  • Low-pressure air (gravity, PVC)
	  • Lamp for alignment
	  • Mandrel all flexible pipes (with "go - no-go" device)
	  • Clean all sewers before being placed in service and televising.
	  • Televise mains (8" and Larger) including videotape and written report.
	• **Force main**
	  • Hydrostatic Pressure and Leakage (AWWA) including laterals.
	  • Flush main
	  • Operate all valves in presence of Village representatives

STORM WATER DRAINAGE and SEWERS

Sheboygan County Ordinance Design Criteria, Regulations and Village Ordinances I Regulations apply.

Wisconsin Administrative Code NR 151 and 216 are strictly enforced.

Post Development (JO-year events) release rates may not exceed predevelopment (2-year events) release rates.

Manholes	• Pre-cast reinforced concrete with pre-formed benches smooth finished • Neenah R-1710 frame and casting with Type "B" self-sealing non-rocking lids with concealed pick hole. • Maximum 4" adjustment rings • Internal chimney seal (Cretex Specialty Products) completely spanning from precast manhole to frame. • Joint seal (external) - ¼" butyl rubber sealant, "EZ-Stik" or "Kent-Seal • Granular Backfill • Eccentric cone wrapped with 8 mil polyethylene film • Pipe connections "Kore N Seal" integral rubber boot or approved equal.
Inlets and Area Drains	• Pre-cast reinforced concrete with smooth finished benches • Inlet capacity subject to review and approval • Neenah R-3246-A or R-3067 with non-rocking grate (Type "B") • Joint seal (external) - ¼" butyl rubber sealant, "EZ-Stik" or "Kent-Seal" • Maximum 4" adjustment rings • "Korbeling" of inlet frame and grates limited to 2" horizontal (maximum total) • Granular Backfill

Sewer Materials and Installation	• **Each lot** provided with lateral at lot center installed to property line **(where** storm sewer is required) a. 6" minimum - single family residential b. 8" minimum - duplex family residential c. Commercial / Business / Other - Property Owner responsible for sizing based on applicable design requirements. d. Granular backfill required in service trench from main to right of way. • HDPE ("Hancor Advanced Drainage Systems -ADS" or approved equal (bury less than 15') • Exposed pipe requires ultra-violet resistance. • Class "B" Bedding • **PVC** • Class "B" Bedding • **RCP Class III** • Class "C" Bedding • Gaskets: Silt and watertight • Minimum 15" sewer mains and leads. • Cut - in connections require saddles. Integral saddles / in-line fittings required for new construction. • All pipe outlets require apron end wall with geotextile fabric and rip rap or designed stabilization device.
Testing	• **Flexible Pipes (PVC or HDPE)** • Low-pressure air (gravity, PVC) • Lamp for alignment • Mandrel all flexible pipes (with "go - no-go" device) • Clean all sewers before being placed in service and televising.

	• Televise mains (15" and larger) include videotape and written report. • **Rigid Pipes (RCP)** • Lamp for alignment • Clean all sewers before being placed in service and televising. • Televise mains (15" and larger) including videotape and written report
Drainage Ditches	• **Roadside drainage ditches** must be provided on all rural streets and roadways (i.e., without curb and gutter. • Ditches must be a minimum of 2.5' below finished road centerline grades. • **Drainage Easements and Improvements** are required where existing conditions do not provide positive drainage. • Drainage easements are required within subdivisions *I* land divisions where several lots (more than two) drain along a common line.
Driveway Culverts (rural and urban)	(1) **Permit Required.** Private property owners are required to complete Village Driveway Permit "Application." (2) **General Requirements** (a) Driveway paved widths at the property line shall be as follows: 1) Residential - minimum 12', maximum 20' 2) Business/ Commercial- minimum 16', maximum 35' 3) Agricultural Field Entrance - minimum 16', maximum 24' (b) Driveway shall intersect the public road at right angles from the property line. (c) No improvements shall be constructed within the road right of way in the proximity of the driveway that would block driver vision (from driveway or roadway) or impair drainage. (d) Rural Roadways 1) The minimum culvert length shall be 24 feet.

2) All properties accessing public road right of way shall have roadside drainage ditches and drainage structures to ensure positive drainage from surrounding properties. Improvements shall be made as directed on the issued permit.

3) New developments and land divisions (2 lots or more) shall provide a list of necessary culvert sizes, elevations, and grades for each lot.

(3) **Culvert Standards and Installation (Rural roadways)**

(4) **Size. No culvert smaller than fifteen (15) inches interior diameter, or the hydraulic equivalent, will be allowed.** Facilities designed under this section shall be of a type, size, and grade to hydraulically accommodate the maximum potential volumes of flow as specified in Village codes and ordinances.

(5) **Materials.** All culverts shall be constructed of corrugated steel or reinforced concrete, unless specifically excepted by the authorized representative of the Village. Driveways serving business, industrial, or commercial properties having regular heavy vehicles shall be evaluated case by case for special considerations. Stronger materials and installation requirements may be required.

(a) **Corrugated Steel.**

1) Corrugated steel and pipe arch shall conform to AASHTO M 36M.

2) Pipe shall be bituminous (inside and out), galvanized, or aluminized coated.

3) Average inside diameter of circular pipe shall not vary from the nominal diameter by more than 1% or+/-½ inch, whichever is greater.

4) Pipe shall conform to the following gauges and dimensions:

- 15 through 24 inches 0.064 inches (minimum sheet thickness)
- 30 through 36 0.079 inches
- 42 through 48 0.109 inches

5) Horizontal elliptical culverts, or combinations thereof, may be used when there is insufficient bury.

6) Coupling bands shall conform to AASHTO M36, 7-inch minimum width with two ½ inch galvanized bolts.

(b) **Reinforced Concrete.**

1) Reinforced concrete pipes, class III shall be used for driveway culvert pipes.

2) Class II, Wall B, reinforced concrete pipe shall be used for enwalls.

(6) **Installation.**

(a) Culverts shall be installed prior to initiating other site improvements.

(b) Culverts shall be installed within the public road right of way. Ditch slopes may be graded to a maximum slope of 3' horizontal to 1' vertical (3:1).

(c) **Minimum cover,** measured from the top of the pipe to the top of the aggregate base course, shall be six (6) inches.

(d) **Granular backfill:** Pipe shall be bedded and backfilled with granular materials. Native materials shall not be used for bedding and backfilling.

(e) **Connections:** Drainage ditch improvements, grades, side slopes 3:1 maximum

1) Pre-manufactured or shop fabricated connections shall be used wherever possible.

2) Saw-cut connections cut in field and

3) Recoat corrugated metal pipe saw cuts with bituminous coating.

(f) **Drainage.** The culverts shall be placed in the ditch line at elevations that will ensure proper drainage. Ditches shall be constructed to be a minimum 2 feet below the edge of paved road.

(g) **End walls.** Culverts 15" and larger shall be provided with a minimum of one apron end wall at the upstream culvert end. End walls may also be required if so, directed by the Village's authorized representative. Adjacent ground shall be graded and landscaped flush with the end wall.

	(7) **Cleaning.** Debris shall be cleaned from all culverts before Village approval. (8) **Erosion Control** measures shall be implemented as necessary to control erosion, as shown on the building permit, or as directed by the Town's authorized representative. (a) All pipe outlets require apron end wall with geotextile fabric and rip rap or designed stabilization device
Testing	• **HDPE and PVC** • Low-pressure air • **All pipe.** • Lamp for alignment • Mandrel all flexible mains 15" and larger (with "go - no-go" device) (9) Televise mains 15" and larger including videotape and written report

ROAD, DRIVEWAY, AND SIDEWALK CONSTRUCTION

\See standard roadway typical section **A. Rural roadway** 1. residential **B. Urban roadway** 2. commercial 3. intersections 4. named streets	1. **Concrete curb and gutter**, (Type "D", 30") 3,500 psi, 28-day strength, Type "A" 2. **Asphaltic pavement** (Wisconsin Department of Transportation, Type "LV") • **Residential street** - 3" (1-3/4" binder, 1-1/4" surface) minimum 24' wide • **Commercial** - 4" (2 ½" binder, 1 ½" surface) • **Binder course** and concrete curb and gutter installed with initial development. • **Surface course** installed the earlier of two years from the date of project completion or upon 60% of properties being developed. 3. **Crushed aggregate base course**. • **Roadway geotextile fabric** installed at roadway subgrade below all aggregate base course including shoulders. Acceptable manufacturers include Mirafi 600X, Trevira 1135, Amoco 2006, Exxon GTF-300, Phillips "Supac 14NP", Nicolon "HP 500", or pre-approved equal • **Residential -** 9" minimum • **Commercial** (or roads classified as arterial or collector)- 12" minimum. • 3' shoulders from edge of pavement plus in-slope runout required. 4. **Turf Restoration** • Disturbed areas shall be finish graded per master site grading plans, engineering design drawings, or to match pre-construction conditions. Restored areas shall adequately drain surface water with no negative impacts to adjoining properties. • Areas shall be restored with a minimum 4" topsoil ("State of Wisconsin" sections 625.2.1 and 625.2.2), seed ("Madison Parks" blend 6 pounds and additional perennial rye 2 pounds per 1,000 square feet), fertilizer ("State of Wisconsin" section 629)and straw mulch ("State of Wisconsin" section 629) disk crimped in place. 5. **Street Signs** • Developer shall provide and install all signs, including street names, parking, stop, yield, and safety

	signs. 6. **Street Lighting** • Streetlights are to be located at intersections and spaced at a maximum of 300'. • Luminaire styles are specified by the Village. • Decorative luminaires shall be installed on arterial/ collector streets in areas identified for sidewalk on the Village Sidewalk Master Plan. Luminaires shall be spaced at a maximum of 200'. • Developer shall provide and install all street lighting and appurtenances.
Utility connections, saw cuts, removals, and patching	• Utilities and services shall meet the Village material specifications. • Excavations shall be backfilled with compacted granular materials. • **Full depth saw cuts required.** • Disturbed paved surfaces shall be sawcut full depth. • Saw cuts shall be neat, parallel, and perpendicular to the roadway centerline. • Removal limits shall accommodate minimum 8' wide asphalt pavement equipment. Removal limits shall include all disturbed areas. Removal limits for concrete pavement shall be to the nearest construction joint or as approved by the Village. • Disturbed areas shall be restored to an "equal" or "better than" pre-construction condition. • Paved surfaces shall be restored in-kind to the minimum specified dimensions. Concrete surfaces shall be "doweled".

Driveways	1. **Concrete** • Residential and business (6" - 3,500 psi, 28-day strength, Type "A") with 6" crushed aggregate base course. • Commercial (8" - 3,500 psi, 28-day strength, Type "A") with 6" crushed aggregate base course. 2. **Asphaltic** • Residential and business (2" - one lift, Type "LV") with 6" crushed aggregate base course. • Commercial (4" - two lifts, Type "LV") with 9" crushed aggregate base course. 3. **Driveways replaced in kind.** 4. **Dimensions** (minimum and maximum widths at the right of way) • **Residential** 10' minimum at right of way, 16' minimum/ 30' maximum curb opening, 24' maximum width at right of way **Business** 16' minimum at right of way, 28' maximum at right of way, 35' maximum width within right of way • **Commercial** 16' minimum at right of way, 28' maximum at right of way, 35' maximum width within right of way • **Agricultural** 16' minimum at right of way, 24' maximum at right of way 5. **Curb and Gutter** • Removals required for driveways require saw cutting and removal at joints or locations approved by Village. 6. The type of driveway surface is subject to review and consideration of the Village's sidewalk master plan. All driveway aprons (within right of way) shall be concrete in areas currently served, or to be served with concrete sidewalks. 7. Driveways surfaces shall be replaced in kind or improved (at the Owner's expense). 8. Concrete driveway aprons will be installed in the public road right of way to existing residences within new developments when concrete curb and gutter are installed. All associated costs shall be paid for by • the respective property owners through special assessments.

Sidewalk	1. Minimum 5' wide 2. Standard (4" - 3,000 psi, 28-day strength, Type "A") with 4" crushed aggregate base course. 3. Through Driveways (6" and 8" - 3,500 psi, 28-day strength, Type "A") with 6" crushed aggregate base course. 4. Curb and gutter at intersections require access ramp openings as identified on the Village "Sidewalk Master Plan". 5. **Maintenance:** Property owners responsible for maintenance and replacement of sidewalks.
Erosion Control and Site Stabilization	1. Completely install before commencing construction activities 2. Maintain throughout construction and until disturbed lands are stabilized with natural vegetation. 3. Methods and materials: • Residential • Commercial • Notice of Intent (Wisconsin Department of Natural Resources)

ASSESSMENT PROCEDURE / POLICY

General	• Special police powers to provide for assessments after construction completed. • Policy identifies percentage contributions from participating benefiting landowners (see Village policy) • Sanitary Sewer • Water Main • Storm Water Drainage and Sewers • Streets/ Curb and Gutter • Restoration • Village administration, legal and professional services.