EVALUATION OF TOWN-OWNED PROPERTIES
TOWN OF MARBLETOWN, NY

PREPARED FOR:
Town of Marbletown
1925 Lucas Ave.
Cottekill, NY 12419

PREPARED BY:

Peak Engineering, PLLC
3751 Main Street – PO Box 540
Stone Ridge, NY 12484

July 9, 2019

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Peak Engineering, PLLC conducted an evaluation of the properties owned by the Town of Marbletown in order to document their condition and provide recommendations for repairs and upgrades that will be the basis for developing a long-term maintenance plan. The properties were evaluated based on visual observation and any available file information. Our recommendations are categorized as immediate, short-term (3-5 years), and long-term (5+ years) for budgetary planning purposes. Details of our findings and recommendations can be found in Sections 1 thru 8 of this report. In addition to our evaluation, it is noted that the Town of Marbletown does not have a Building and Grounds Department and there is no annual maintenance program. Consideration should be given to addressing this issue.

The following facilities/properties were evaluated:

1.	Old Town Hall	3775 Main St, Stone Ridge
2.	Highway Garage	3775 Main St, Stone Ridge
3.	Community Center	3564 Main St, Stone Ridge
4.	Community Center Annex	3564 Main St, Stone Ridge
5.	Transfer Station	135 Canal Rd, High Falls
6.	Peak Road Shale Quarry	376 Peak Rd, Stone Ridge
7.	Tongore Park	350 Tongore Rd, Stone Ridge
8.	Rail Trail Bridges	O&W Rail Trail, Marbletown Section

Based on our site visits, we found six issues that are in need of immediate attention by the Town. These issues are shown below in order of highest to lowest priority, with additional information in each property's respective section of this report:

- **HIGHWAY GARAGE** – The buildings have served their life expectancy and are deteriorated beyond repair in some areas. Several of the out-buildings are considered unsafe at this time. Long-term planning should consider replacement/upgrades to this facility.

- **TRANSFER STATION** – The canopy was not built per plan and was modified with cables and turn buckles, which were found to be slacked and not functioning. There are missing railings and safety concerns that need attention.

- **RAIL TRAIL BRIDGE** – Bridge # 3 of the Rail Trail System is showing heavy deterioration of the main steel beams and repair/replacement planning should be considered. The bridge should not be used by vehicles (including maintenance and emergency vehicles).

- **COMMUNITY CENTER ANNEX –** The structure is not used for any meaningful purpose at this time and is significantly deteriorated. The cost to upgrade to a meaningful purpose would be significant; however, a long-term plan would be required. At the present time, the building stands vacant with continued deterioration.

- **COMMUNITY CENTER** – The gutters and roof drains need to be configured to get water away from the building and the ground adjacent to the building should be graded to drain water away from the building. This would help with the moisture situation in the basement.

- **OLD TOWN HALL** – The gutters and roof drains need to be configured to get water away from the building and the ground adjacent to the building should be graded to drain water away from the building.

While the purpose of this report is to provide information regarding the current condition of the Town-owned properties that will assist in long term planning, the condition of the properties will change over time and this report may need to be revisited and updated periodically to reflect changing conditions.

SECTION 1

1 - Old Town Hall

The Old Town Hall, located at 3775 Main Street, Stone Ridge, is a municipal property with parking and the town hall building. The town hall building shares an address with the Town of Marbletown Highway Department Garage. The building housed the Town of Marbletown offices until 2016, when those offices were relocated to the Rosendale Elementary School located at 1925 Lucas Ave. The building is currently being used as a food pantry.

The building is a single-story structure, approximately 90ft x 30ft, with a partial basement. The low-slope roof is wood framed on wood stud walls that are clad in brick veneer. There are parapets on three sides of the roof. The floor throughout the majority of the building is slab on grade with the exception of the floor over the basement area, which is framed with wood joists. The mortar of the brick masonry veneer is deteriorating and eroded in places, most notably on the southeast wall of the building. The chimney on the eastern wall does not appear to function and has been left unsupported where some of the bricks have disintegrated (Sketch Location 2, Photo 4). An emergency exit door on the southeast wall is improperly hung, causing it to jam against its frame (Sketch Location 1). The exterior wood-framed canopy over this door lacks support and has a temporary support frame that is installed during winter months to protect against snow-load damage (Photos 2, 3).

The basement walls are concrete masonry, and the basement floor is slab on grade. The basement has been retrofitted with both wood and steel columns installed tight to the walls. These columns are anchored to the floor system above and concrete slab below, consistent with a strategy to brace the walls against soil pressure (Photos 7, 8). Moisture in the basement walls was observed, as was standing water on the slab floor along the basement perimeter walls (Photos 10, 11, 12). The paint on the basement walls is bubbling in places and peeling off in others, which is consistent with excessive moisture entering the basement (Photo 9).

The offices and interior appear to be in good overall condition (this observation is limited to non-structural components), although there appears to be condensation on some plumbing above the bathroom ceiling, causing water to pool on the ceiling (Sketch Location 3). There is an integrated fire alarm system on the property, a water treatment system, air conditioning system, and forced hot air heat.

The parking area around the building is paved and there are narrow planting beds on three sides of the building. The site is fairly level without positive drainage away from the building. The rear, southeast facing wall is less than ten feet from the main Highway Department garage building. The strip of ground between the two structures is paved and has a drain located midway between the buildings (Sketch Location 4, Photo 2).

Our recommendations for this property are as follows:

Immediate:

1. Re-hang emergency exit door to ensure proper operation and weather barrier.

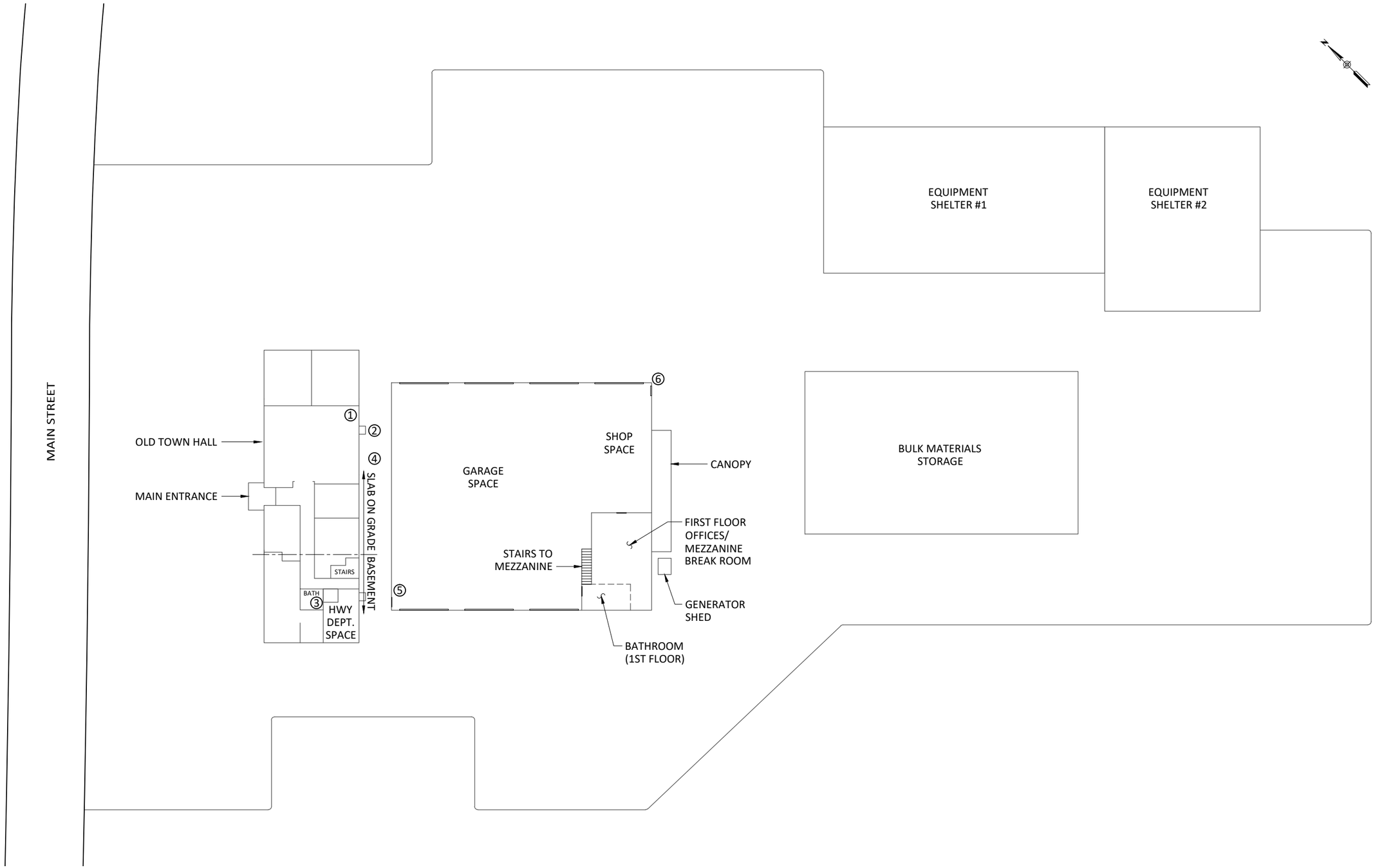
2. Ensure drain between the southeast wall and adjacent building is clear and functioning.
3. Insulate plumbing above bathroom to prevent further condensation.

Short-term:

1. Pour concrete below eastern chimney to provide full support. Alternately, remove non-functioning chimney.
2. Reinstall temporary support for canopy on southwest wall or provide permanent support for same.
3. Re-grade pavement around building to drain away from building.
4. Grade the planted areas to provide better drainage to the parking lot, especially on the southwest and southeast walls.
5. Install dehumidifier system capable of running continuously in the basement.
6. Re-set tilted front step.

Long-term:

1. Re-lay settled flagstone near staircase.
2. Apply waterproofing compound to basement wall to reduce water intrusion.
3. Repoint brick masonry veneer.



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Client: *Town of Marbletown, PO Box 217, Stone Ridge, NY 12484*	Project: Evaluation of Town-Owned Properties	Project # 18164	Designed By:	Revised:	3751 Main Street, PO Box 540, Stone Ridge, NY 12484, (845) 687-4500 — PEAK ENGINEERING
		Date: 7-9-2019	Drawn By: CL	Revised:	Sheet # --
	Title: Old Town Hall & Highway Garage Site	Scale: NTS	Checked By: SD	Revised:	

OLD TOWN HALL

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

OLD TOWN HALL

Photo 5

Photo 6

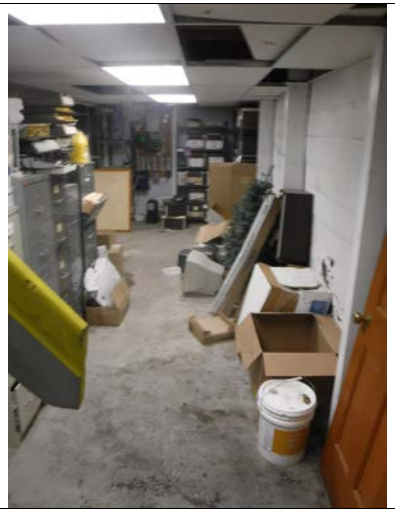


Photo 7

Photo 8

OLD TOWN HALL

Photo 9

Photo 10

Photo 11

Photo 12

PEAK ENGINEERING

SECTION 2

2-Highway Garage

The Town of Marbletown Highway Department Garage, located at 3775 Main Street, Stone Ridge, is a municipal property with paved areas and four buildings, including an office/garage building, two equipment shelters, and a salt/sand stockpile shelter (Photos 1, 10, 23). The Garage shares an address with the Old Town Hall on a 3-acre parcel. The property is used for storage of equipment and supplies for the Town of Marbletown Highway Department.

Main Garage/Office Building

The main garage/office building is a timber pole-type building with asphalt shingles fastened to plywood over wood trusses and metal siding fastened to wood wall girts. There is a wood-framed mezzanine used for storage; offices and a bathroom below. This building houses the majority of the mechanical and repair equipment for the Highway Department. There is a wood-framed canopy off the southeast wall of this building that shelters fuel tanks. Ribbed steel roofing panels are applied to the rafters of the canopy, which is otherwise open on all three sides.

The metal siding is in generally good condition, except for corrosion near the bottom (Photo 4). The wall next to a door in the building can be pushed out several inches with only hand pressure (Sketch Location 5, Photo 3). The soffits have been damaged by insects and no longer function to prevent insects from entering. The pressure treated sill plates that the metal wall siding is fastened to is heavily deteriorated (Photo 4). There is a floor drain in the building, which reputedly has not functioned in many years. The wood framing of the canopy is visibly water damaged, with the ledger showing signs of significant deterioration. Flashing at a building corner is damaged to the point of non-functionality (Sketch Location 6, Photo 8), and flashing around a window appears to be absent (Photo 7). A steel door is significantly corroded and deteriorated (Photo 9), and the glass window in the door is damaged. There is moderate water damage in the plywood roofing.

This building has electric service, running water, an oil furnace for forced hot air heat, and an exhaust fan on the southeast wall. There is a generator in a shed behind this building. The shingles on the shed roof are deteriorated.

Equipment Shelter #1

The first of the equipment shelters is a timber pole-type structure with a mix of corrugated metal and plastic panels for roofing fastened to wood purlins, supported by trusses (Photos 10,11,12). The walls are covered with corrugated metal panels fastened to wall girts supported by the vertical poles that are driven into the soil. There is electric service in this building, which houses tractors, plows, and other miscellaneous equipment used by the Department.

The roof panels appear to be in generally good condition, but show daylight at regular intervals allowing the ingress of water. Moderate water damage is present on the majority of trusses and their supporting framing (Photos 11,12). Several of the poles supporting the structure were observed to be extensively damaged, with one example more than 50% of its section rotted away (Photo 13). Another deteriorated post was observed to be hollow, with around 33% of its section rotted away (Photo 16). A third example has been cut at its base and re-supported on a timber plate (Photo 17), which compromises the

post's ability to transfer lateral loads to the soil. The sill plates along the base of the walls are typically deteriorated, with the sill plate at the rear of the building nearly disintegrated. Also at the rear of the shelter, there is what appears to be an animal burrow, several feet in diameter and deep (Photo 14). The ground surface of the shelter is approximately even with the pavement outside.

Truck sanders are stored in this shelter when they are not in use. One of the sanders is supported on both a free-standing steel frame, and a roof support beam (Photos 18, 19). This beam is not designed to support the weight of a sander. An additional sander is supported by a roof support beam and a free-standing timber frame. The embedded timber posts in the vicinity of the sanders have a fuzzy surface that is indicative of deterioration due to salt (Photo 20).

Equipment Shelter #2

The second equipment shelter is directly to the southeast of the first and shares a wall with it. This shelter is framed similar to the first equipment shelter, but the building is shorter along the ridge and deeper perpendicular to the ridge. This shelter houses additional sanders, Highway Department trucks, and stockpiles of salt and hot mix asphalt. There is electric service in this building.

Many of the embedded timber posts exhibit the same fuzzy deterioration due to salt as observed in the first shelter. Portions of the flashing and wall siding have completely corroded away on the southeast wall, exposing the timber sill to the elements. The walls at the rear of this shelter are bulging out and have completely failed, spilling the stockpiled material into the space behind the building. There is a light pole just outside this building that has lost 75% of its sectional area to rot (Photos 21, 22). The ground surface of the shelter is higher than the elevation of the pavement outside.

Bulk Materials Stockpile Shelter

This shelter houses the Department's stockpile of salt/sand mixture before it is loaded into sanders and applied to town roads. The structure is a cast-in place concrete building with metal roof panels applied to purlins spanning between timber trusses that are supported by the concrete walls. Steel tie-rods connect the tops of the two longer concrete walls. There is separation of several inches between sections of concrete wall along the northwest wall of the building. Mild deterioration of the concrete walls is evident, due to the high chloride environment and impacts from equipment. There is an overhead garage door on one wall that is no longer operable due to damaged and severely corroded tracks (Photos 26, 27).

Our recommendations for this property are as follows:

Immediate:

1. Provide an alternate support for sanders in equipment shelter instead of hanging from the roof structure.
2. Remove or replace light pole near second equipment shelter.
3. Fill in animal burrow in equipment shelter.

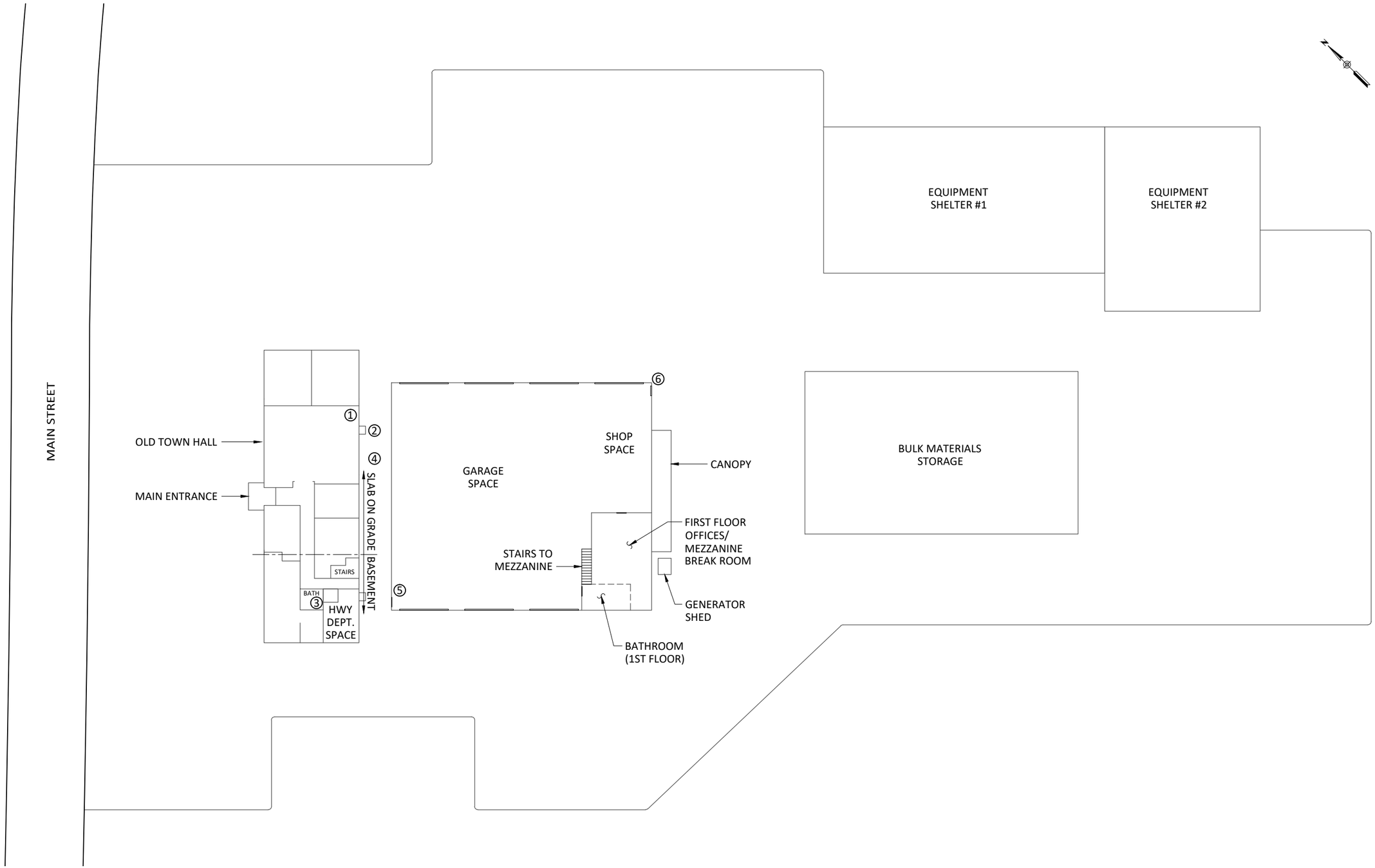
Short-term:

1. Repair damaged wall siding and flashing on the main building and second equipment shelter.
2. Replace or repair damaged door of main garage building.

3. Replace damaged corner flashing of main building.
4. Replace or otherwise repair rotten timber posts supporting the equipment shelters.
5. Replace strip of corroded wall paneling on exterior of main building near the base of the wall.
6. Provide positive anchorage for the loose wall in main building next to door.
7. Provide sealant or other weather barrier at gap between concrete wall sections in the salt/sand stockpile building.
8. Re-roof shed housing the generator.
9. Replace failed wall sections at the rear of the second equipment shelter.
10. Repair or replace the garage door steel tracks for the salt/sand stockpile building.
11. Replace insect-damaged soffit on main building.
12. Replace roof of main building.

Long-term:

1. Rebuild a new Highway Department garage facility to house equipment and provide a safe atmosphere for employees to work in. A new facility should include storage of bulk materials, fuel, equipment, and appropriate office facilities.



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		Date: 7-9-2019	Drawn By: CL	Revised:	Sheet # --
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HIGHWAY GARAGE

Photo 1

Photo 2

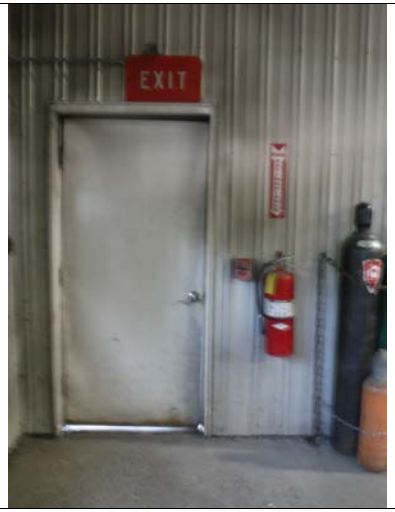


Photo 3

Photo 4

PEAK ENGINEERING

HIGHWAY GARAGE

Photo 5

Photo 6

Photo 7

Photo 8

PEAK ENGINEERING

HIGHWAY GARAGE

Photo 9

Photo 10

Photo 11

Photo 12

PEAK ENGINEERING

HIGHWAY GARAGE

Photo 13

Photo 14

Photo 15

Photo 16

HIGHWAY GARAGE

Photo 17

Photo 18

Photo 19

Photo 20

HIGHWAY GARAGE

Photo 21

Photo 22

Photo 23

Photo 24

PEAK ENGINEERING

HIGHWAY GARAGE

Photo 25

Photo 26

Photo 27

Photo 28

SECTION 3

3-Community Center

The Community Center, located at 3554 Main Street, Stone Ridge, is a municipal property on 0.36 acres, with one building and a paved parking area situated behind and to the right side of the building. The building and grounds are used to host the local American Legion Post 1512, the Youth & Recreation Department, and community events.

Structure

The structure is a combination of historic buildings and modern additions, with maximum dimensions of approximately 100' long and 55' wide (Photos 1, 2, 3). The building is single-story with two sections of full-height basement, one in the historic section and one in the newer additions. The historic basement has mortared stone masonry foundation walls while the newer basement has concrete masonry walls. The rest of this building has a crawlspace consisting of concrete masonry frost walls. Poured concrete footings were visible in the crawlspace of the new section. Concrete slabs are present in both basements.

A concrete masonry wall in the newer basement has been retrofitted with a dimensional lumber stud wall anchored to the slab and to the floor system above (Photo 14). Excessive moisture was observed in this area of the basement. A dehumidifier was present, but it had shut off when it became full of water and was in need of emptying. Several wood posts in this area are supported on the slab, and the post ends were saturated from being in contact with the wet slab (Photo 15). The basement wall opposite the masonry wall is poured concrete and shows a high level of separation due to insufficient vibration to settle the concrete during the pouring process (Photo 16). This is not a structural concern. The historic section of basement also has excessive moisture in and on the floor (Photo 20).

The roof framing varies from timber frame in the historic section to plated wood trusses over the additions, with asphalt shingles covering the entire roof. The roof shingles appear to be in fair condition. The roof over both the older section and newer additions is sagging. The roof framing in the older section is timber scissor trusses, but the roof framing in the newer portions were not accessible. Wall framing was not observable, but is assumed to be stud walls. Floor framing is timber joists.

Exterior

Sections of the siding and soffit are missing or not properly attached on the southwest wall (Photos 6, 7, 11). A concrete masonry chimney is leaning away from the building compromising the weather barrier of the building (Photo 4).

Wood trim boards around columns at the front of the historic building are rotting (Photo 8). The condition of the columns themselves were not observable due to the trim covering them.

The paint coatings over many of the exterior windows and on portions of the siding are failing. Several sections of flashing around windows was observed to be improperly implemented, allowing water ingress (Photo 5). The majority of gutter downspouts were observed to be obstructed by vegetation or soil, and some downspouts were disconnected (Photo 10).

Grounds

There is a dead tree behind and leaning towards the building that appears to be tall enough to strike the building, should the tree fall (Photo 2).

A step leading up from the front yard to the building's front door is settled and rotated. Stone masonry has been laid atop most of this step to provide a level surface (Photo 8). A step in the stairway leading from the Main Street sidewalk to the front yard is also settled and rotated, resulting in a significant trip hazard (Photo 9). The stair riser height of the step at the rear entrance is 9½", which exceeds the maximum height allowable by the building code (Photo 18).

Grading and Drainage

The adjacent properties to the northwest and southwest of the Community Center slope toward the building. The side yard between the building's southwest wall and the adjacent property is level, allowing water to pool next to the basement wall. The parking lot runs right up to the deck on the northwest wall of the building, depositing rainwater runoff against the building. The parking lot continues along the northeast wall of the building where the natural crown sheds rainwater to the strip of grass adjacent to the building.

Mechanical/Electrical/Plumbing

There is a water treatment system located in the historic basement (Photo 19), and electric service is present throughout the building. There is a kitchen in the building with a commercial-grade ventilation hood. A furnace is located in the new basement and the building also has central air conditioning.

Our recommendations for this property are as follows:

Immediate:

1. Repair damaged wall siding.
2. Reconnect and clear downspout outfalls to ensure unobstructed flow.
3. Extend downspout outfalls to 6' min. from building.
4. Flag or paint the trip hazards, or otherwise warn the public of the hazards.
5. Repair/replace flashing around windows.
6. Ensure uninterrupted operation of basement dehumidifier by providing permanent condensate drainage or policy of systematic emptying.

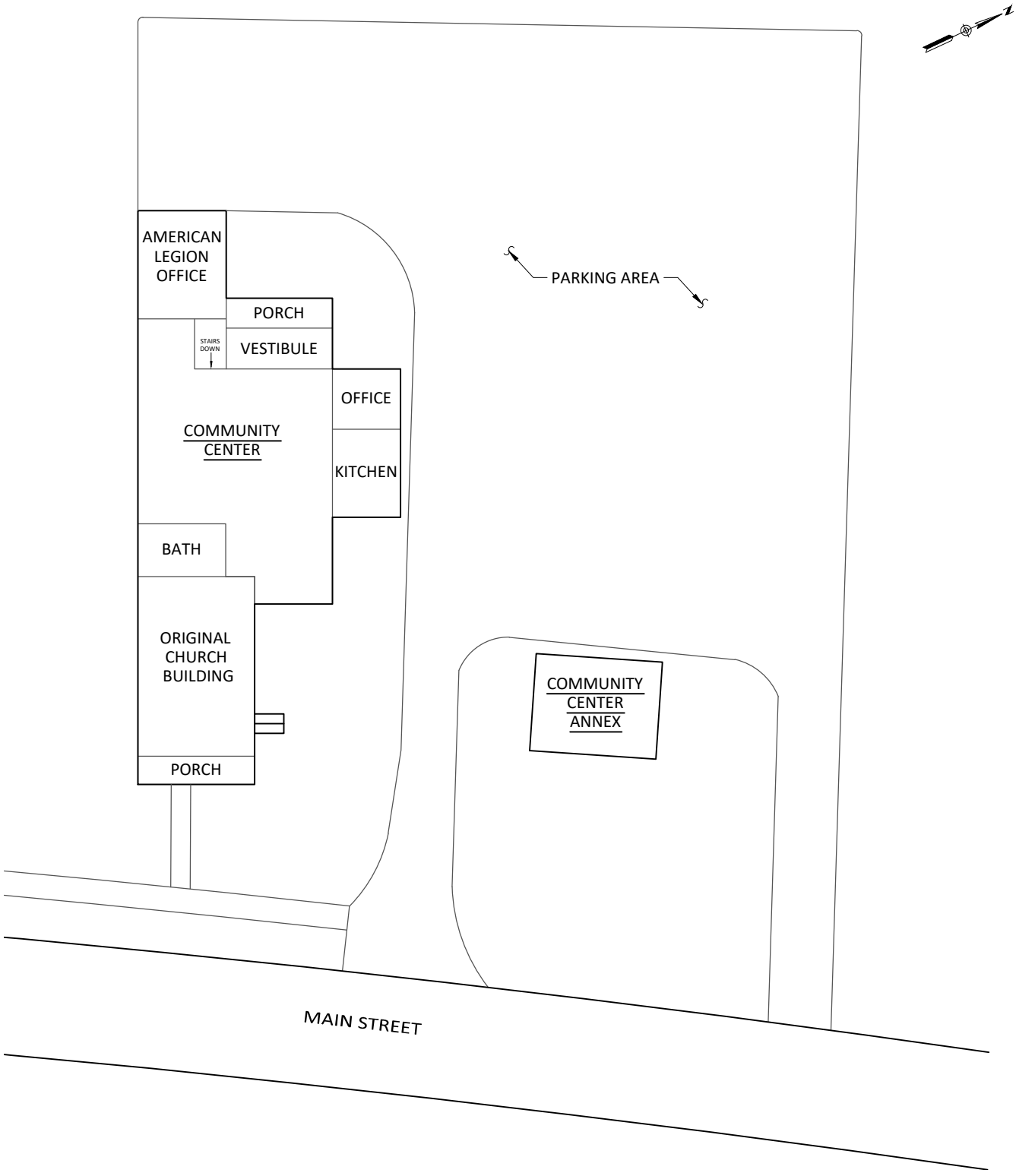
Short-term:

1. Grade the side lot on the southwest to divert runoff to a ditch at the base of the adjacent property and away from the building wall.
2. Grade the pavement on the northwest side of the building to divert runoff away from the building.
3. Grade the strip of soil on the northeast side of the building to drain water away from the building.
4. Paint the exterior wood components of the building.
5. Replace rotten wooden components on the building's exterior, especially the trim around the columns at the front of the building. The condition of the columns should be evaluated when the trim boards are removed and the columns replaced if rot is present.

6. Remove dead tree at rear of property.

Long-term:

1. Re-set tilted front step and re-lay settled flagstone near staircase.
2. Replace or reconfigure step at rear entrance to meet current code requirements.
3. Re-roof building & at the same time address sagging rooflines.



Project: Evaluation of Town-Owned Properties		Title: Community Center & Annex	Sheet # --
Client: *Town of Marbletown* *PO Box 217* *Stone Ridge, NY 12484*		Project # 18164	Scale: NTS
		Design By:	3751 Main Street PO Box 540 Stone Ridge, NY 12484 (845) 687-4500 PEAK ENGINEERING
Date: 7-9-2019	Revised:	Drawn By: CL	
Revised:	Revised:	Chkd By: SD	

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COMMUNITY CENTER

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

COMMUNITY CENTER

Photo 5

Photo 6

Photo 7

Photo 8

PEAK ENGINEERING

COMMUNITY CENTER

Photo 9

Photo 10

Photo 11

Photo 12

PEAK ENGINEERING

COMMUNITY CENTER

Photo 13

Photo 14

Photo 15

Photo 16

COMMUNITY CENTER

Photo 17

Photo 18

Photo 19

Photo 20

SECTION 4

4-Community Center Annex

The Community Center Annex is a building located next to the community on a municipal property of 0.25 acres with a paved parking area. The parking area is used by the community center next door, and the Annex building is currently used to store records and miscellaneous supplies.

Structure

The Annex building is a 26'x20' two-story wood-frame building with a full basement (Photo 1). Overall the condition of the structure is poor. The roof ridge is sagging when viewed from the exterior, and the tops of the second-floor walls appear to splay outward. Asphalt roof shingles are applied to plywood over skip sheathing spanning between timber rafters. The older timber rafters are reinforced with modern dimensional lumber (Photo 2), and dimensional lumber ceiling ties are provided every 4 rafter bays. Perimeter walls are full dimension 2x4 stud walls running between floors and from the second floor to the roof. The original second floor framing is full-sawn joists spanning between exterior walls, augmented by a retrofit wood beam with steel flitch plates at the second floor midspan (Photo 4). The first-floor framing is identical to the second-floor framing, with the exception that the retrofit central beam is not reinforced with steel flitch plates, but is supported by multiple posts along its length (Photo 12). The first-floor joists show significant moisture and deterioration (Photo 6). There is a wooden deck on the front of the building supported on concrete piers (Photo 10).

The basement walls are mortared stone masonry with heavily deteriorated mortar (Photo 11). Footings below the basement walls were not observable beyond the concrete basement slab. Posts from the first-floor beam down to the concrete slab are supported by concrete pads placed atop the slab.

Exterior

There are holes in the roof fascia and soffit that allow pests into the second floor (Photo 3). Water damage was observed on the gable end wall near the chimney. An opening in the second-floor wall has been covered with what appears to be plywood siding panels (Photo 7). Similarly, the rear door to the annex building is a barn-style sliding door (Photo 7). Neither of these coverings creates a weather barrier, nor prevent pests from accessing the building. The areas around the sill plate show areas of significant rot and damage, allowing ingress of water and rodents (Photo 8).

Vegetation is growing in the stairwell near the electrical panel (Photo 5). Windows are single-pane, and several windows are broken. Penetrations into the foundation, made to allow electrical cables to pass to the vehicle charging station, allow ingress for rodents (Photo 9).

Based on visual observations, the roof shingles appear to be in fair condition, but the rest of the weather barrier is in degraded condition due to damage or material deterioration. Of special concern are the plywood siding panels covering the second story opening. The top of this covering is pulled away from the building.

Mechanical/Electrical/Plumbing

There is electric service in the annex building, and on the corner of the building there is an electric vehicle charging station. A water system was observed in the basement, connecting to an exterior water spigot. Sump pumps and sump pits were observed in the basement. The brick masonry chimney is not connected to any furnaces or fireplace.

Grading and Drainage

There are no gutters or downspouts for this building, allowing rainwater to run off the roof and collect near the foundation. The impervious parking lot slopes toward and runs right up to the foundation at the rear of the building with no drainage swale to divert water away. There are boarded up basement windows at grade level that do not prevent water ingress.

Our recommendations for this property are as follows:

Immediate:

1. Repair damaged roof fascia and soffit.
2. Remove vegetation growing in or on the building.

Short-term:

1. Provide adequate gutter and downspout system for the roof, to drain away from the building.
2. Augment coverings for second and first floor openings to provide a competent weather barrier.
3. Provide flashing, framing, or other repairs to walls and sill plates to complete the weather barrier.
4. Provide rodent barriers at wall penetrations.
5. Re-point Stone Masonry Foundation.
6. Divert parking lot surface runoff away from the building.
7. Replace broken windows.
8. Provide window wells in front of at-grade basement windows.
9. Replace rotten sill plate timbers and rotten first floor timber joists.

Long-term:

1. Select a use for the building and finish the interior in manner appropriate for that use.
2. Paint building's exterior.
3. Re-roof building.

COMMUNITY CENTER ANNEX

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

COMMUNITY CENTER ANNEX

Photo 5

Photo 6

Photo 7

Photo 8

PEAK ENGINEERING

COMMUNITY CENTER ANNEX

Photo 9

Photo 10

Photo 11

Photo 12

SECTION 5

5-Transfer Station

The Lou Gross Memorial Transfer Station and Recycling Center, located at 135 Canal Road, High Falls, is a municipal property with 10.8 acres. The area contains asphalt pavement along with gravel roads, stockpiles of fill and wood chips, woodland, and a large, high shelter to keep precipitation off dumpsters below. These dumpsters form the primary function of the transfer station.

The shelter is a steel frame with metal roofing applied to wood purlins spanning between timber trusses that are supported by a steel frame. This steel frame consists of steel columns, beams, and wire rope cross-bracing. The frame is founded on a mixture of concrete footings and concrete retaining walls. The majority of the retaining walls are concrete, but two lengths of retaining wall are dry-laid boulder masonry. Some dumpsters require residents to stand upon the boulder masonry retaining wall to throw refuse down into dumpsters.

The roofing appears to have holes punched in it, allowing water onto the trusses below. The trusses, steel frames, and concrete retaining walls appear to be in good condition. The cross-bracing for the steel frame is slack. The dry-laid boulder masonry segments of the retaining wall are uneven and allow soil to pass from behind the wall, resulting in settlement of the pavement behind the wall. (*The Town is currently in the process of repairing the dry-laid masonry walls to eliminate the uneven nature of the wall, which is a trip hazard.)*

The grading of the pavement at the top of the wall prevents rainwater from draining away. This results in water pooling around the top of the wall where people stand to deposit materials into the collection containers below. In winter these pools of water freeze, creating a slip hazard to residents.

A letter to the Town of Marbletown dated June 25, 2015 regarding this transfer station's steel canopy outlined several deficiencies. Among them was the fact that the construction of the steel canopy does not match what is shown in the original construction plans.

Our recommendations for this property are as follows:

Immediate:

1. Tighten turnbuckles on the wire rope cross-bracing.
2. Provide painted warnings or other means of drawing the attention of residents to the trip/slip hazards.
3. Fix broken fence adjacent to dumpsters.

Short-term:

1. Grade the pavement under the shelter to drain towards the Southwest side of the building.
2. Replace existing boulder masonry retaining walls with a different retaining wall system that can address the deficiencies of the existing system (the Town is in the process of addressing this issue).

Long-term:

1. Paint the steel frame to provide continued protection from the elements.
2. Replace roofing to eliminate leaks due to holes.
3. Implement any recommendation outlined in the June 25, 2015 letter that have not been addressed.

TRANSFER STATION

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

SECTION 6

6-Marbletown Shale Quarry Evaluation

The Shale Quarry located on Peak Road consists of a large rock outcrop covering approximately 14.5 acres. Despite its name, the area is no longer used as a quarry; it is currently being used as a storage site for various Town-owned equipment and assets, including stockpiles of gravel and culvert pipes (Photos 1, 2, 3, 4). There are no buildings on-site. The site has electric service and one pole-mounted light fixture without shades or blinders (Photos 3, 4). Access to the site is restricted through the use of swinging gates and concrete bollards (Photo 4).

Based on visual observations, the access control gate and bollards are in good condition. Major depressions were not observed along the quarry driving path.

Our recommendations for this property are as follows:

Immediate:

1. None.

Short-Term:

1. Install shade on pole-mounted light fixture to reduce environmental impact of light pollution.
2. Barricade top of deep excavations with safety fence.

Long-Term:

1. Maintain level driving surface.
2. Maintain electric service components in safe, functioning condition.
3. Maintain/replace access control structures as needed to ensure continued function.

Peak Road Shale Quarry

Photo 1

Photo 2

Photo 3

Photo 4

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SECTION 7

7-Tongore Park

Tongore Park, located at 350 Tongore Road, Stone Ridge, is a municipal park with a basketball court, children's play area, picnic equipment, and access to the Esopus Creek. There are multiple structures on the property including a pavilion with both an open section and a walled-in section, a building containing bathrooms, and a couple of sheds. There is a paved driveway and parking lot, and fencing is present along one side of the driveway. Access to the 10.5 acre site is controlled by a gate.

It is our understanding that the sheds are owned and maintained by outside entities: A lifeguard organization currently operates a shed close to the water, and a local soccer organization operates a shed on the edge of the site closest to an existing soccer field.

Open Pavilion

The open pavilion is a pole-barn type structure, approximately 26'x70' (Photo 1). Corrugated metal roofing is applied to purlins spanning between nailed-together roof trusses (Photo 2). The trusses span the 26' between perimeter beams that are supported by vertical timber columns. There are angled braces between the timber columns and trusses for lateral stability. A concrete slab on grade forms the floor of the pavilion. Based on visual observations, the timber columns are embedded into the soil below the pavilion slab.

The columns close to the enclosed section of the pavilion are round and weathered, but towards the opposite end they are square and not visibly weathered. Similarly, the concrete slab on grade appears to be split into a weathered area with control joints near the enclosed section, and a newer, less-weathered area without control joints on the opposite end. Based on these observations, the pavilion appears to have been expanded in the past. Small cracks are present throughout the newer area of slab on grade.

Enclosed Pavilion Area

The enclosed portion of the pavilion appears to be identical in construction to the open portion of the pavilion with the exception that exterior wood-framed walls have been erected to keep the weather out (Photo 1). It is noted that this part of the building has electrical service and used to have running water, which has been removed. The wood siding panels on the exterior walls appear to be in good condition. There are small holes in the roofing material permitting water to accumulate on the trusses and on the ceiling material.

Along one of the exterior walls, there is a planting bed with mulch and soil piled against the wall siding (Photo 1). Additionally, the base of the walls is close to grade level. Gutters are not present on much of the roof, and the gutters that are there do not have downspouts. Based on visual observations, drainage is not an issue.

Bathroom Structure

The bathroom structure is a masonry building, approximately 21'x 17' (Photo 4). Asphalt shingle roofing is applied to a conventional wood framed roof. The roof shingles are in fair condition, with

some moss and general deterioration present. The roof is supported by concrete masonry walls. The foundation system was not visible. The interior floors are slab on grade.

There is running water and electric service in the bathrooms (Photo 3), however, the electric outlets are not GFI. There was propane-fueled on-demand hot water in this building at some point in the past, and there is still a buried propane tank in the ground to accommodate the installation of a water heater in the future. There is evidence of a septic system on-site.

The building sits on higher grade than the area around it. Gutters are present and appear to be functioning on the northeast side of the building, but the gutter on the southwest side does not run the full length of the building and is not connected to a downspout.

Our recommendations for this property are as follows:

Immediate:

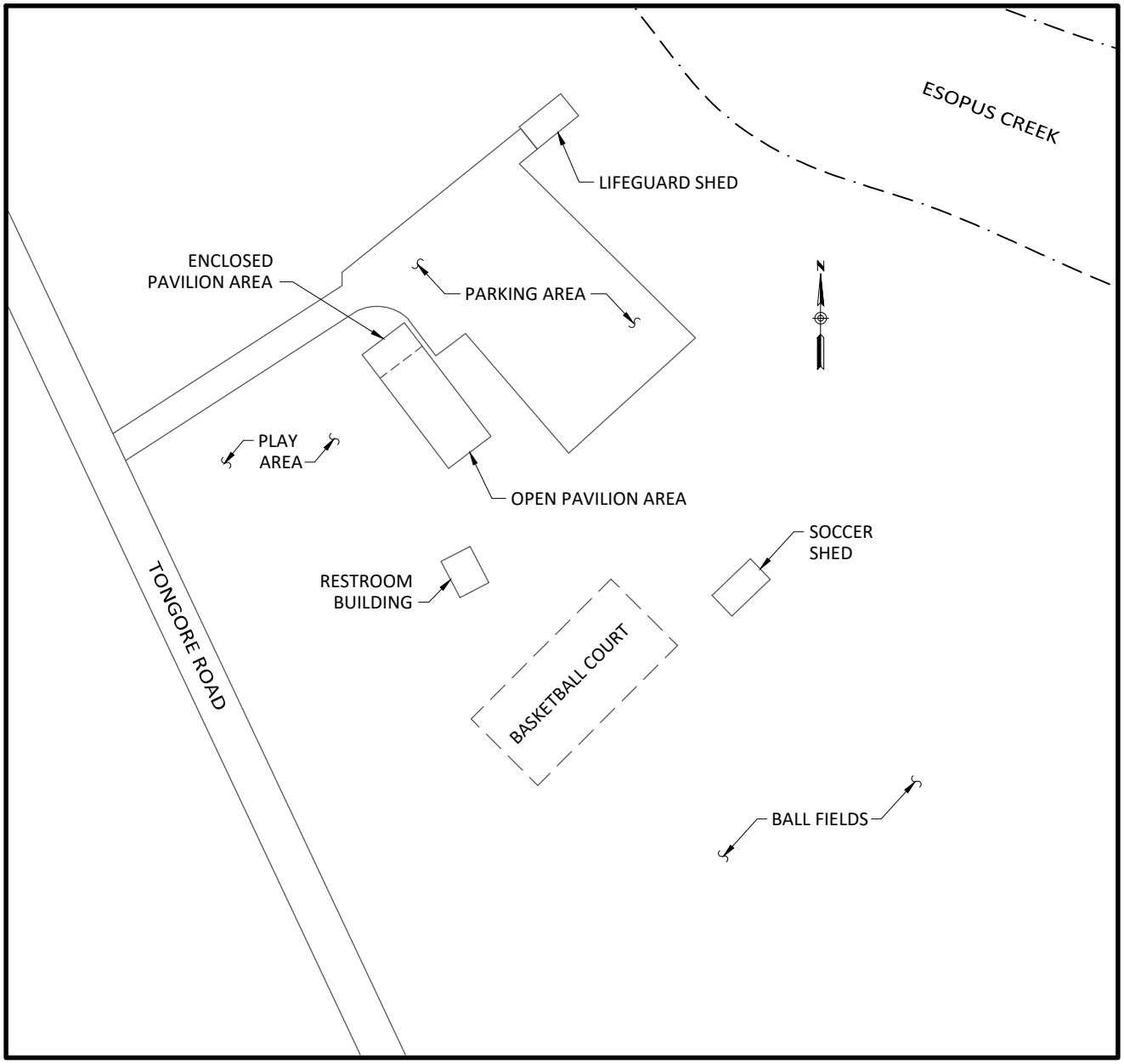
1. Replace existing electric outlets in the bathrooms with GFI outlets.
2. Remove soil up against enclosed portion of pavilion.

Short-term:

1. Provide adequate gutter system on southwest side of bathroom structure.
2. Replace shingles on bathroom roof.
3. Replace roofing or otherwise eliminate holes in pavilion roof.

Long-term:

1. Seal concrete slab under pavilion.
2. Regrade sport fields to ensure level playing surface.
3. Upgrade beach area for recreational swimming.



Project: Evaluation of Town-Owned Properties		Title: Tongore Park		Sheet # --
Client: *Town of Marbletown* *PO Box 217* *Stone Ridge, NY 12484*		Project # 18164	Scale: NTS	
		Design By:	3751 Main Street PO Box 540 Stone Ridge, NY 12484 (845) 687-4500 PEAK ENGINEERING	
Date: 7-9-2019	Revised:	Drawn By: CL		
Revised:	Revised:	Chkd By: SD		

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Tongore Park

Photo 1

Photo 2

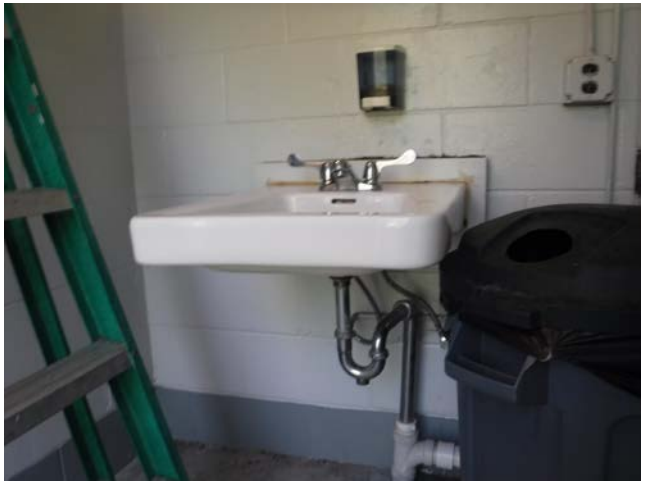

Photo 3

Photo 4

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SECTION 8

8-Rail Trail Bridges

The Marbletown Rail Trail is part of the O&W Rail Trail that is owned by the Town and maintained by the Marbletown Trails Committee. The Marbletown section runs approximately nine miles, from the Hurley town line to the Rochester town line. There are eight bridges along this section of the trail (see Rail Trail map for locations).

Bridge #1
Bridge #1 is located approximately ¼ mile north of the Cottekill firehouse (see Bridge #1 photos). This bridge spans 13'-10" over a small stream. Construction is steel girders on laid-up stone abutments with a timber deck and railing. The condition of this bridge is good and we have no recommended repairs or maintenance at this time.

Bridge #2
Bridge #2 is located approximately ¼ mile south of a silo that's near the Cottekill Road parking lot. This bridge has a total span of 45'-0" over Cottekill Brook. Construction is steel girders supported on steel beams atop laid-up stone abutments with a timber deck and railing. There is also a steel beam/laid-up stone center support (Bridge #2, Photos 4,6). One end of the bridge is not in contact with the supporting abutment, resulting in a cantilevered condition off of the center pier (Bridge #2, Photo 3). There is erosion occurring on the north side of the bridge, including part of the embankment behind the stone abutment (Bridge #2, Photo 3). The condition of this bridge is fair and we have no recommended repairs or maintenance at this time.

Bridge #3
Bridge #3 is located approximately ½ mile north of Leggett Road (see Bridge #3 photos). Construction is steel girders on laid-up stone abutments with a timber deck and railing. This bridge spans 13'-4" over a small stream. The overall condition of this bridge is fair, but the four steel beams are showing heavy perforations (Bridge #3, Photos 4-6). Our recommendation at this time is to closely monitor the progression of the steel beam deterioration and look at options for main carrying member replacement.

Bridge #4
Bridge #4 is located approximately ¼ mile south of Leggett Road (see Bridge #4 photos). Construction is steel girders on a laid-up stone abutment with railroad ties for the deck and a timber railing. This bridge spans 13'-0" over a small stream. The condition of this bridge is good and we have no recommended repairs or maintenance at this time.

Bridge #5
Bridge #5 is known as "Boices Crossing" and is located approximately 500ft north of Route 213 (see Bridge #5 photos). Construction is (8) 2x12 joists with timber decking on laid-up stone abutments and a timber railing. This bridge spans 13'-0" over a small seasonal stream. The condition of this bridge is good and we have no recommended repairs or maintenance at this time.

Bridge #6

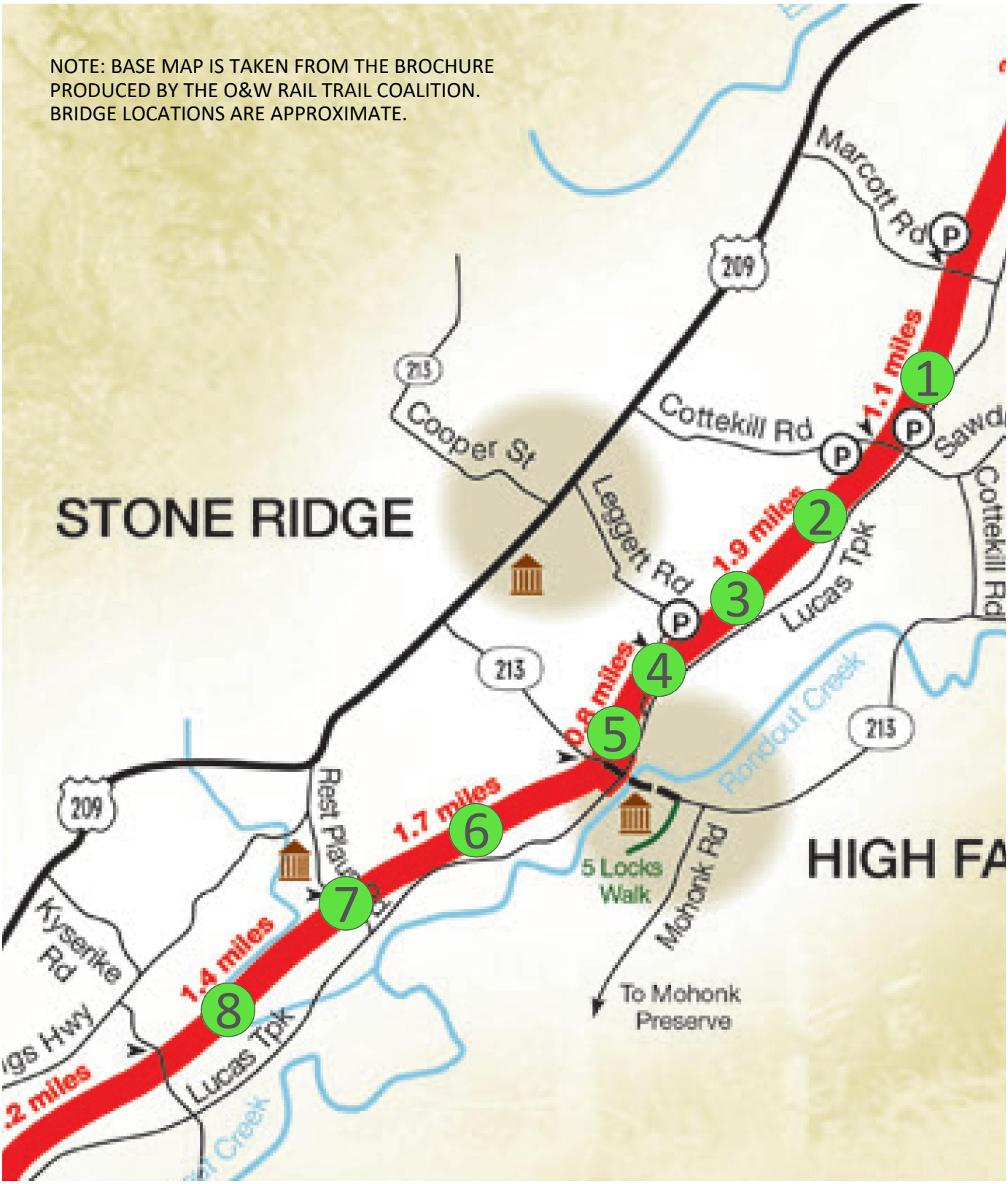
Bridge #6 is located approximately ½ mile south of Route 213 (see Bridge #6 photos). Construction is steel girders on laid-up stone abutments with railroad ties for the deck and a timber railing. There is a new wood railing on the bridge. The condition of this bridge is good and we have no recommended repairs or maintenance at this time.

Bridge #7

Bridge #7 spans 49'-0" over Rest Plaus Road (see Bridge #7 photos). Construction is a Contech prefab steel truss bridge installed in 2013. Abutments are Stone Strong units with cast-in-place concrete seat and backwall. This bridge is in new condition and we have no recommended repairs or maintenance at this time.

Bridge #8

Bridge #8 is located approximately ½ mile north of Williams Lumber & Home Center (see Bridge #8 photos). Construction is steel girders with a timber deck and railing. The steel beams used for the structure were refurbished and installed in 2013 on a concrete pedestal atop existing laid-up stone abutments. This bridge spans 48'-9" over Kripplebush Creek. The condition of this bridge is good and we have no recommended repairs or maintenance at this time.



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Bridge #1

Photo 1

Photo 2

Photo 3

Photo 4

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Bridge #2

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

Bridge #2

Photo 5

Photo 6

Bridge #3

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

Bridge #3

Photo 5

Photo 6

Photo 7

Bridge #4

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

Bridge #5

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

Bridge #6

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

Bridge #7

Photo 1

Photo 2

Photo 3

Photo 4

PEAK ENGINEERING

Bridge #8

Photo 1

Photo 2

Photo 3

Photo 4

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