PUBLIC ROADS ADVISORY COMMITTEE (PRAC)
PORTER PUBLIC ROADS RECOMMENDATIONS
November ___, 2018

TO: PORTER SELECTMEN

1. Assumptions:

The input provided by "P R A C" is understood to be non-binding and the ultimate decisions on the recommendations will rest with the Select Board and the Porter Road Commissioner.

2. Committee Overview:

- *PRAC has previously presented its report to the Select Board, within the report included a forty-one (41) page report for their use.*
- *Twenty-two (22) pages include our review and priorities for the roads of Porter, ME.*
- *Nineteen (19) pages of the report included a road traffic count provided by Southern Maine Planning and Development Commission.*

3. Recommendation for Roads:

- *All "New" road construction should adopt the Porter Planning Board standards for Sub-Divisions already in effect.*
- *"Existing" road construction for asphalt paving use the Typical Cross Section presented in the report.*
- *Roads recently paved should be monitored and a Crack-sealing Program initiated to extend roadway life (3 to 5 years).*
- *Trees within the Right of Way (ROW) needs to be cut to assume public safety and to allow sunlight in to help the natural melting of snow in the winter months (four (4) hours of sunlight).*
- *All roads recently paved should have its edge of pavement backed up with three (3) inches of crushed gravel.*

4. Priorities for Construction:

- *Of the forty-five (45) roads evaluated by our committee, the committee recommends attention for construction in priority of the order listed for the following 4 roads:*

1. *Spec Pond Road*
   - *Finish 1.6 miles from Jeff Carpenter's to Fred Chapman homestead*
2. *Pine Street*
   - *From the Ridlon Bridge to the end of the existing pavement*
   - *From end of the existing pavement to the end of road at Bob Thorne's homestead will remain gravel*
3. *Old Meeting House Road*
   - *From Black Bog to Neal Farewell's old homestead*
4. *First County Road*
   - *From existing pavement to Colcord Pond Road.*

5. Revert Town Maintained Roads to Landowner:

1. *Ridlon Lane*
   - *From Rte. #160 to end of traveled way*
2. *Norton Hill Road*
   - *From Moody Road to Lester Norton's farm.*
3. *Short Street*
   - *From Rte. #25 to Leavitt's house*
4. *Garner Street*
   - *From Bridge Street to River Street.*
5. *Chapel Street*
   - *From where existing new pavement ends to end of travel way*

Porter Road Review 2018

Assumptions:

- Asphalt thickness is variable and no standard has been consistently applied over the years

- Subbase and Structural Gravels are variable and no standard has been consistently applied over the years.

- The existing substrate and subgrade conditions are unknown, likely containing significant boulders and cobbles over 6" given the region (foothills of the White Mountains) and patch segments with variable gravels and inconsistent compaction.

- The locations where the technique of integral in-situ gravel mixing with asphalt millings is largely unknown (a recommended restoration method), but a section on Colcord Pond Road was confirmed to have used this method and exhibited and continues to exhibit solid performance.

- AADT estimates utilize ITE Trip Generation modeling estimates of ***8-11 trips per day**** for residential (*This is a conservative and realistic assumption based on limited industry in the town and the large industries that are here are located near state-maintained collectors and arterials. State highways are not included in this study*).

- A large percentage of the town is in tree growth and the present major industry is timber harvesting and processing, indicating that the majority of truck/equipment loading is timber-related traffic and will be timber related traffic for the foreseeable future.

- The CEO and Select Board will work in parallel with the municipality and the road commissioner to enforce private property stormwater and erosion control management (via *Article IV and VI* of the Land Use Ordinance) that negatively impacts public roads (*existing and remediated*).

- The legal centerline of ROW is between existing stone or fence boundaries/monuments, and that roadway alignments vary within the stone or fence ROW boundaries, sometimes moving from one side or the other, not consistently aligning with the actual boundary ROW.

- Roadway design-life estimates based on 20 years, and given 41 miles of Town Ways, it is assumed that significant investment is needed on approximately **11 miles** of the 41 miles of Town Way in order to *revert from a state of restoration, repair, and emergency to a more cost effective 20+ year maintenance plan*. An acceleration of **3-4 miles per year** in restoration for the roughly **11 miles** of town ways s in severe disrepair is assumed (typical production is 1 mile per year).

- $200k per mile restoration cost estimate which includes prep (removing bolders), ditching, in-place milling with soils, compaction, and surfacing (*Note: Estimates for a completely NEW road*

mile = $1M/mile 18"-22" deep roadbox construction, all new excavation, screening, product, and recommended state material depths) **Actual Town of Porter costs per mile are needed for comparison.**

- $300k-$320k annual road budget appropriations

- $2.5-$4 per square foot placed pavement costs

- Alternative options may be required to negotiate severe substrate conditions (which drive up costs) while providing structural continuity, and to minimize road restoration and maintenance costs.

- Seven (7) locations have inconclusive AADT historical data and six (6) of the seven (7) are currently under a 7-day traffic count study by the SMPDC *(Bickford Pond Rd. at Bickford Pond (Between Dam and Dana Weeks), Kennard Hill at Brownfield Line, Old Meetinghouse at Town Pound Rd., Spec Pond at Porterfield Rd., Ossipee Trail onto Gilman Rd., and Colcord Pond at Bickford Pond (before Dana Weeks)*

- All town ways are defined as low volume by the state and federal government (under 500 AADT), 93% of town ways (39 of 42) are under 400 AADT and defined as "very-low-volume", 75% of these roads are under 250 AADT. Low volume ranges from 2,000 AADT on the high-end to 500 AADT on the low end.

- A minimum of ***4 hours winter sun melt per day*** is needed to maintain roadway design life.

- ***Not all roads require 18 feet of driving surface and 2 foot shoulders and many of these dead-end. These town ways should have localized speed signage at the entrance indicative of the safe, passable, and comfortable travel its design is capable of allowing.***

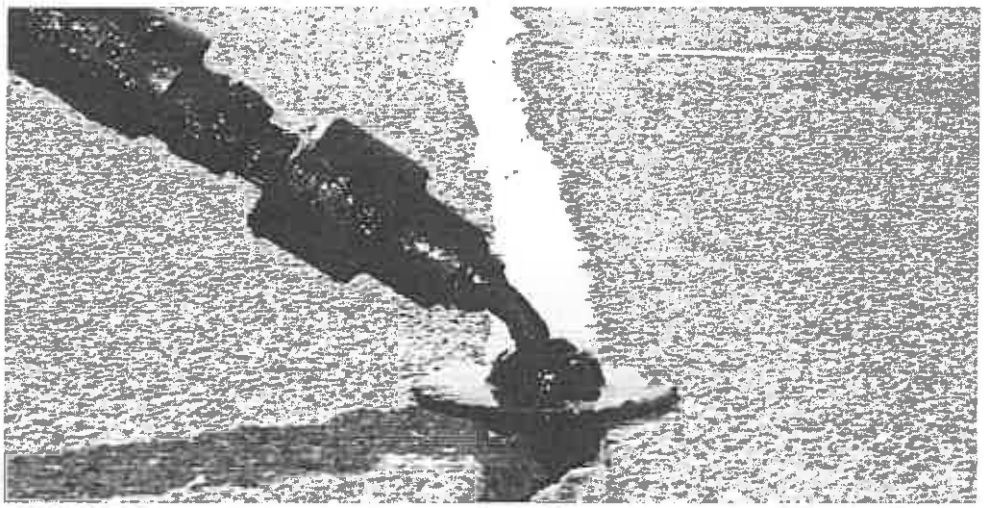
Alternative Options:

- Re-naturalizing Town Ways back to gravel that have historical or theoretical AADT's of approximately 50 or less (*a high-end traffic standard for the cost effectiveness of gravel roads*). There was the potential for eight (8) town way candidates to be re-naturalized, with six currently existing where this method could be used **(Winter St., Short St., Dana Weeks Rd, Gilman Rd, upper end of Bickford Pond Rd, and upper end of Colcord Pond Rd (*Mills Extension and Dam Road* are under 50 AADT but were *both recently paved)***.

- Soil mixing with millings at the maximum bit depth of industry standard milling equipment (**12"-14"**) provides a more homogeneous subbase and structural fill material. Milled asphalt mixed with gravel adds significant strength and durability to subgrade, and asphalt beyond design and performance life is a valuable material that the townspeople paid for and should be reclaimed/reused for town way use. Compacted milled asphalt/gravels in lifts of 12" or less.

Multiple roads can be milled, mixed, graded, and compacted to improve immediate safety and performance, be maintained for several seasons until a more significant paving package can be put out for bid or affordable to the town (*driving down overall costs to townspeople*), and be graded to provide shoulders and shoulder back-up. *Reference the solid performance of the milled/mixed section of Colcord Pond Rd.*

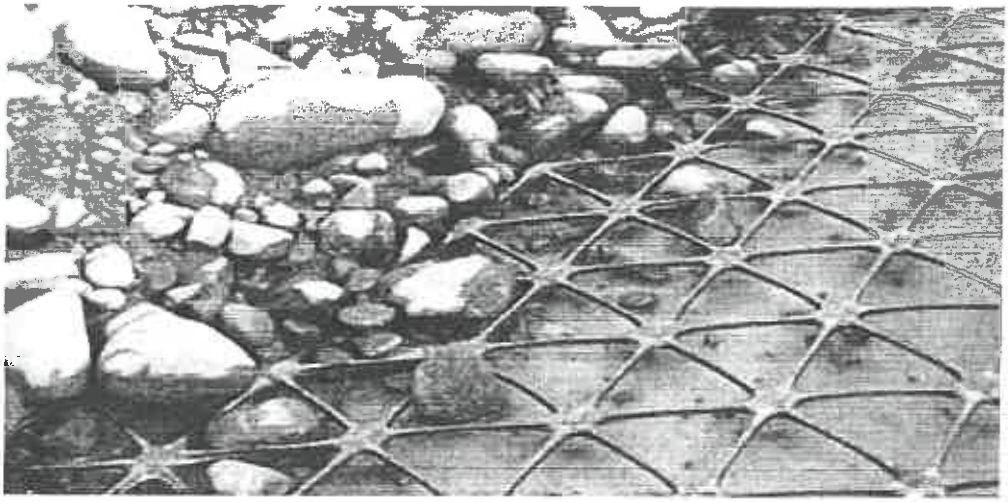
- **Cracksealing**: An inexpensive method of maintenance to extend road-life while the municipality is phasing and preparing work, re-adjusting a road plan from reconstruction to maintenance, and acquiring the financial resources needed for substantial projects over a 20+ year period. It is utilized by the MEDOT and many municipalities in the state to more effectively manage their long-term plans and to protect infrastructure assets.



- **Geogrid** ($1.27/SY) has been used in severe cold weather climates (such as New York, Minnesota, etc.) to provide consistent structural improvement over challenging substrates. The installation of this membrane between subbase gravel and an upper course structural gravel prior to paving (or gravel road compaction) enhances road life and provides strength for truck loading traffic of the major industry in this town and anticipated traffic growth, while mitigating the cost of overexcavating rocky terrain, screen cobbles, and the importation of additional fill. It allows for a more neutral cut-fill by supporting grading of the existing millings and soil mixture to create the necessary two foot shoulders and shoulder back-up that do not currently exist. It also allows for a reduced base depth of structural gravel (this product can reduce the needed cross-sectional depth of structural gravel and base course by as much as 30%). ***NOTE:*** *This will result in marginally altered roadway slopes, grades, and elevations and should be a consideration at the 40+ stream crossings (culverts).* Tensar BX1100 Biaxial Geogrid - 13.12' x 246' Roll would require approximately $25,000.00 in material costs per mile.

- If geogrid is not found cost effective for significant lengths of town way rehabilitation, it is an ideal product for localized remediation to former "corduroy road" conditions where the

roadways still do not meet industry standard for drainage and strength (*eg. Old Meetinghouse Road gulley*).



- Purchasing and installing roadway signage that considers the dimensional width of driving surface, properly compacted shoulders, traffic volume, and rolling topography that inherently limit speed and infrastructure need. The minimum road standard in Maine that permits 45 M.P.H. travel is 18 feet of driving surface with 2 foot shoulders on level terrain. Design speeds for low-low to low volume rural roads that are located in rolling hills and that exist in this municipality can range from **10 to 40 MPH** *(if constructed and maintained properly).*

- Lower the speed rating and physically post signage at roads that cannot physically be expanded to minimum standards (based on monuments and boundaries) and that do not warrant expanding (based on limited traffic use and topography). These roads should be maintained to afford safe and comfortable travel at the speeds that the design can provide.

- Post physical warning signage (*yellow with black lettering*) that recommends reduced speeds at specific sharp curves and dangerous intersections.

- A **20 Year $3.0M roadway bond** to **accelerate** restoration of the roughly **11 miles ($1.4M)** of severely deficient roadways, to cycle the town into a more maintenance-driven road 20+ year plan from a repair, restoration, and emergency status, and to anticipate major work that is

SAND/SALT SHED

anticipated within the next **11 to 16 years** (*forecasting 11-16 years out, it is anticipated that an additional **14 miles ($1.6M)** of current roads will need to be restored in a short 5-year span*). At the current rate, the town will continue to expend 15-25 times what would normally be needed for regularly scheduled maintenance *(Note: Increasing road fund requests by $50,000 annually should reduce the bond needed down to $1.9M.)* ALSO NEED TO REPAY BOND

Permitting:

A conservative approach for the *limit of disturbance* created by roadway construction in a town with low population, low growth, and one that is located in rolling hills is 22'-8" in width out-to-out (a minimum if there exists functional drainage) to 50' in width out-to-out (maximum if extensive drainage has to be created and obstructions exist). This would result in potentially 100 acres of disturbed ROW, significant topsoil/soil/vegetation removal, and encountering approximately 11 acres of protected resources.

The Land Use Ordinance and Shoreland Zoning Regulations indicate that the following permits *are required by the municipality*:

- **Excavation Permit over 10 CY (*Town CEO*)** – It is unknown if there is a fee as there are no published documents indicating one, but it is assumed this requirement is to keep the townspeople informed and for the town to keep a record of where soil is being moved throughout the municipality (transparency to taxpayers). It also reduces legal risks of violating state law, risks in receiving or propagating potentially contaminated soils, and is a CEO responsibility and service that is paid for by the taxpayers. ***Note:** This role (regarding municipal road construction and maintenance) could be delegated back to the Road Commissioner if standards and reporting policies are put in place and the MEDEP is notified of the overall plan.*

- **Roadway Construction Permit (*public*) – (*Town CEO*)** - It is unknown if there is a fee as there are no published documents indicating one, but it is assumed this requirement is to keep the town informed and for the town to keep a record of roadway progress and compliance with town construction and soil stabilization standards, whether in or out of Shoreland (transparency to taxpayers). It reduces legal risks of violating state and federal law and is a CEO responsibility and service that is paid for by the taxpayers. ***Note:** This role (regarding municipal road construction and maintenance) could be delegated back to the Road Commissioner if standards and reporting policies are put in place and the MEDEP is notified of the overall plan.*

- **Vegetation Removal (*Town CEO*)** – It is unknown if there is a fee as there are no published documents indicating that there is a fee, but it is assumed this requirement is to keep the town informed, for the town to keep a record of where vegetation within shoreland is being disturbed and removed, and to make sure it is being performed in accordance with State Law (transparency to taxpayers). It reduces legal risks of violating state and federal law and is a CEO responsibility and service that is paid for by the taxpayers. ***Note:** This role (regarding municipal road construction and maintenance) could be delegated back to the Road Commissioner if standards and reporting policies are put in place and the MEDEP is notified of the overall plan.*

- **Permit-By-Rule/Maine General Construction Permit (*MEDEP*)** – Over 1 acre of disturbance in general or within Shoreland Protection. Given approximately **nine (9) acres** of Shoreland Protection will be disturbed, it would be advisable to provide a zoning map of the town with all town ways highlighted, intended plan or scope over time (phases), indicate the road standard and soil stabilization measures used, and provide certification of excavation training (*MEDEP Regulation Chapter 1000 2015 requirement*) to the MEDEP for record.

- **NRPA Permit** – Wetland resources not located within the two hundred fifty (250) foot Resource Protection or within seventy five (75) feet of a stream fall under NRPA oversight. A permit is required with the NRPA for soil disturbance over 4300 SF in these areas (*Town Way estimate for ditching impact at these NRPA locations is currently **70,000 SF – 1.6 Acres***).

- **Land Use Ordinance Violations** – CEO and Select Board enforcement of ***Article IV Section 4.2 A,L,Q,R, and S*** in regard to the responsibility of private parcel owners to mitigate storm water runoff and erosion is necessary to effectively implement a long term road rehabilitation and maintenance plan. A number of private ways are contributing to the damage of public town ways due to the absence of stormwater management and erosion control measures.

Design:

Depth: Rural roads with moderate subbase in the 250 AADT range (75% of Porter roads are under 250 AADT) that receive consistent heavy truck traffic should have at a minimum 6"- 6.5" of a compacted structural surface (Structural gravel , asphalt (base/top course), or a combination). Existing subgrade properties (*11.5" to 12" below the compacted structural surface*) is a significant unknown and would be an unsustainable cost to the municipality to start over with 100% new construction. This introduces a need for in-place milling of asphalt and soils to a 12"-14" depth, test-pits, geogrid, or a combination of these elements, with follow-on 3" surface course overlays to increase overall depth.

Article 12 Subdivision Design Guideline- 12.2.B.3 indicates a 15"-18" roadbox depth for a private way, and an 18"-21" roadbox depth for a minor roadway with an additional 3" of asphalt. Both private and public road Material Gradation requirements on soil and asphalt products are included in this regulation. These design standards were put in place by the State of Maine to protect municipalities, by assuring proper construction standards prior to a municipality taking over control and ownership of a developer-created road.

The full depth excavation noted in the Subdivision Regulations is ***too cost prohibitive*** for town way restoration at this time (*given the extent of rehabilitation needed*), warranting test-pits and the full-depth milling and mixing of existing asphalts and gravels. The maximum depth of milling equipment is typically **12"-14"** and should be performed to cull out cobbles over 6" and assure a homogenously mixed subbase depth. Mixed gravel from milling operations should be graded and spread to create two foot shoulders and shoulder material for backup of new asphalt.

Width: The optimal and most cost effective design width for a low-low to low volume rural roadway located in rolling hills is 18 feet of driving surface with 2 feet shoulders on each side, and pavement backed up with gravel to prevent. It may be beneficial when placing additional courses of asphalt or when reducing oversized roads (old county roads) to place safety edges when paving. A number of roads have extremely limited traffic and narrow ROW boundaries (stone walls, fences, etc.). These narrow ways are more cost effective to prepare in a safe and passable manner to avoid expending significant financial resources on legal, labor, and material to alter existing stone walls and boundaries, and should have physically post sign(s) for speed(s) that the narrow road(s) can accommodate. Data indicates that only 3 of the 42 town ways in the municipality warrant a design capability of the road to reach 40 MPH.

Driving Surface: **3"** of Base Course asphalt or compact surface gravel are feasible wearing surfaces based on the demand needs of the town. An asphalt top wearing course does not add to the strength of a road, nor is it a cost effective expenditure for town ways with very-very or very low daily traffic (50-500 AADT). Pavement should have shoulder back-up or a safety edge (if reducing paving width on pre-existing paved roads) as noted above.

Note: *Subsequent resurfacing of a 15"-17" roadbox (which would not currently meet the 18"-22" depth standards recommended by the state) can include milled material and an additional 3" base course (gravel or asphalt), which will build upon the existing* ***known*** *structural depth of the road and ultimately meet and exceed state standards. This technique and phasing should allow the municipality time to more gradually acquire the necessary funding.*

Signage: Based on topography, traffic volume, town way design, and existing constrained ROWs, the range of speed (MPH) on town ways in the municipality is justified from **10 MPH to 35 MPH.** There are three (3) candidate town ways that if built to minimum safe standards, could be evaluated for **40 MPH**. Sharp turns and notoriously dangerous curves (if geometry cannot be altered) are recommended to have warning signage (*yellow with black lettering*) physically installed at these locations. New subdivisions should be held to the current roadway design standard of 45 MPH to assure quality of roads turned over to the town.

Types of Roads: Roads can be gravel, seal-chipped, paved, and subgrade gravels can be imported or milled and reclaimed (mixed into the soil subbase under the road).

- Gravel roads require moderate maintenance and should have calcium chloride applications put down every 2-3 years. These roads are effective for traffic volume of around 50 trips per day. Maintenance consists of reshaping crown and grade, scraping shoulders, resurfacing with driving course gravels, and ditching maintenance.

- Chip-seal roads do not have the design life of properly constructed paved roads, but reduce the calcium chloride applications and maintenance requirements of gravel roads. The material is known to degrade over time and fines from this process are more likely to migrate into stormwater runoff ditches.

- Paved roads require moderate maintenance (cracksealing, pothole patches, shoulder backup). These are typically for traffic volumes over 50 trips per day and are at the discretion of the townspeople whether they are desired in lieu of increased gravel road maintenance costs (equipment, material, labor, ditch/culvert cleaning).

- Asphalt millings mixed with existing gravels used for structural fill/shoulders: The aggregate coated in asphalt is inert and creates a tight interlock, a cohesive bond, with the soil once compacted, and provides a very strong and durable subbase. The subbase is the foundation for a future driving surface, which is either gravel, chip-seal, or pavement.

Stormwater/Erosion Protection:

Utilize the Gravel Road Guide (https://www.maine.gov/dep/land/watershed/camp/road/gravel_road_manual.pdf) for stormwater and soil erosion management guidance on gravel and very-very to very low volume paved town ways.

Following inspection of the 42 town-maintained roads, it is apparent that a number of private parcels have inadequate stormwater and erosion protection measures in place, and that the runoff and erosion from these private ways are damaging public town roads that taxpayers pay for to be maintained. Parcel owners whose private ways are negatively impacting town ways need to be contacted by the Code Enforcement Officer and reminded of the Land Use Ordinance regulations (**Article IV Section 4.2 A,L,Q,R, and S**) that are in place to prevent roadway and runoff damage by controlling stormwater and erosion and enforce restoring proper run-off and erosion control. This is a responsibility and service that the taxpayers pay for and is needed in parallel with the efforts of the Road Commissioner and Conservation Commission to successfully implement any long term roadway plan.

Items of Note:

- Topography along a roadside may already support drainage run-off, warranting roadway impact of **11'-4"** from centerline of roadway. (*Note: Take into account roadway alignment within the ROW boundaries of stone walls and fences, as the roadway alignment may have to be shifted away from the ROW boundary to not damage boundaries and monuments.*)

- Topography on one side may trap or impede drainage, warranting a roadway impact of **21'-4"** from centerline of roadway. (*Note: Take into account roadway alignment within the ROW boundaries of stone walls and fences, as the roadway alignment may have to be shifted away from the ROW boundary to not damage boundaries and monuments.*)

- Topography (slopes and trees) located partially within a **42'-8"** limit of work (out-to-out) for road and ditching may warrant impact of up to twenty-five (**25'**) feet from centerline of roadway (**50 foot out-to-out total**). (*Note: Take into account roadway alignment within*

the ROW boundaries of stone walls and fences, as the roadway alignment may have to be shifted away from the ROW boundary to not damage boundaries and monuments.)

- Mulching with hay, cut in, seed (within 24 hours)
- Ditch turnouts, Check Dams, Culverts, Rip-Rap, rock aprons (***periodic inspection Spring-Fall***)
- Reflector poles at culvert outlets-inlets recommended (***for maintenance – winter and summer***)
- Remove plow berms, sand, and re-establish crown for gravel roads (***each spring***)
- Calcium Chloride – every **2-3 years** on gravel roads
- Grade quarterly, compact with fully loaded pick-up truck after raking/grading (***spring and rain events***)
- Taxpayer costs to clean out culverts in town will be reduced if ditching and roadwork is properly stabilized and check dams are put in place, as it reduces the silts and sands that migrate into and that fill up these culverts.
- **Less costs/impacts** = Work with nature for less run-off and more balanced cut-fills.
- **Less costs/impacts** = Stabilize excavations, install check dams in rolling hills terrain, use vegetated buffers and sheet drainage, and right-size roads

Recommendations:

Design & Permitting:

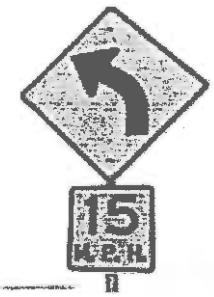
- To mitigate the regulatory burden of MEDEP and NRPA regulated resources and a limited town budget, a well-built roadway with a reduced limit of disturbance ***width*** is beneficial (eg. Low-Volume Yield Roadways – 18' traveling surface, 2 foot shoulders = 22'-4'' out-to-out, excluding ditching)
- To mitigate the regulatory burden of MEDEP and NRPA regulated resources and a limited town budget, a well-built roadway with a reduced ***depth*** of excavation may be beneficial (22'-4'' wide overall roadway with a subbase consisting of mixed asphalt millings and gravel 12''-14'' in depth, and a 3'' wearing course (either compacted gravel or base course asphalt). Geogrid can also reduce the needed cross-sectional depth of structural gravel and base course by as much as 30%, and is of particular benefit at previous corduroy roadway sections (eg. Old Meetinghouse Road gully).

- The town ***does not know*** with any certainty the composition of material under the surface that is 22 feet wide and 18"-22" in depth. The maximum depth of milling equipment is typically **12"-14"** and should be established as a standard to better assure a known homogenously mixed subbase. Cobbles and stones over 6" will be culled out and removed during the milling/mixing process and the asphalt millings will be mixed in with the gravels, significantly improving existing subbase conditions upon which place **3"** of a driving course (either gravel or base course), and allowing in-situ materials to be graded to create shoulders and shoulder back-up requiring less material import. This technique acknowledges the challenges of existing historical roadways, the subsurface obstructions frequently encountered in the rolling foothills of the White Mountains (stones, varying patch gravels, etc.), budget, and impact. Typical new construction recommends 18"-22" in new material depth (Porter's Subdivision Regulations indicate 18"-21" in new material depth), which is extremely cost prohibitive at this time, given the extent of road deterioration identified. ***It is anticipated that future millings and 3" overlays will increase the overall structural roadbox to minimum state standards (18"+), allowing more time for planning and gradual revenue collection to be achieved.***

- A number of roads have minimal traffic and significant constraints, warranting no increases in width and only a properly prepared subgrade or substrate (through milling and mixing asphalt grindings and soil, and an asphalt or driving gravel overlay). These roads that will not meet minimum state standards (or that do not need to) for a minimum road (22' outside shoulder to outside shoulder) **should have road signage installed** to indicate the speed that the road design can safely support (*based on width and topography*). Unnecessary expansion of these existing roads beyond the ROW would cause the town to incur extensive construction costs that have not been anticipated, and would likely introduce legal exposure to the townspeople with respect to ROW boundary and monument removals.

- The municipalities rural town ways are largely located in rolling hills with limited AADT (traffic flow) and are typically designed as low-volume yield roadways (22' wide overall roadway) for safe and comfortable travel speeds ranging from **10-35 MPH.** Three (3) roads, likely due to local industry heavy traffic loading, may warrant a 24' wide overall roadway (*20 foot driving surface*) at a safe and comfortable travel speed of **40 MPH**, and can be effectively constructed within a maximum **50 foot limit** of disturbance (regardless if there exists a 66 foot ROW). Proper physical signage is recommended and a full-scale town ways study and map presented to the MEDOT (once rehabilitation is completed and the maintenance cycle has superseded emergency and repair activities).

SPEC POND ROAD – WE REQUESTED A 25 MPH LIMIT
MAINE DOT SET IT AT 30 MPH AT CURVES



Several sharp turns and notoriously dangerous curves in the municipality are recommended to have warning and advisory signage (*yellow with black lettering*) physically installed at these locations. New subdivisions should be held to the current roadway design standard of 45 MPH to assure quality of roads turned over to the town.

Benefits:

- A low-volume yield roadway (18' roadway surface and 2' shoulders) is beneficial in terms of town budgeting as it reduces import gravels, earthwork, paving, sand-salt usage, topsoil/overburden spoils and trucking, culvert lengths, life-cycle maintenance costs, excessive disturbance of trees that pose no danger or impact roadway and drainage performance, the costs to remove and transport wood and stump spoils, coordination with the Conservation Commission (*as the roads are being built within legal minimum and necessary limits*), and complies with the approved Long Term Comprehensive Plan of the municipality.
- Building a road and its associated drainage to the minimum necessary standards of this state and to what is also reasonably and competently supported by the typography, population, economics, and growth of the town (22'-8" in overall width (min) to 50' in overall width (max) of disturbance for road restoration and ditching) eliminates the regulatory burdens of coordination in MEDEP and NRPA regulated areas, and reduces the scale of (but does not eliminate) permitting, storm, erosion, and road construction measures (by right-sizing town ways).

- Low-volume yield roadways that are safe, passable, and can be driven comfortably at competent and reasonable design speeds ultimately reduce:

  1. Cost-of-living burdens (wear-and-tear on resident and visitor vehicles),
  2. Accidents (*Accidents on rural roads are **3.5x's** what occurs on state-federal highways as a result of speeding and surface dangers*),
  3. Speeding (*Accidents on rural roads are **3.5x's** what occurs on state-federal highways as a result of speeding and surface dangers*),
  4. Wasted resources on continual cold-patching,
  5. Cold-patching infiltration into municipal wetlands and waterbodies,
  6. Excessive salts and sand usage migrating into wetlands and waterbodies, and the taxpayer cost of the salts and sands used, and
  7. Air quality impacts.

Coordination:

- It is recommended that when the limits of disturbance exceeds **twenty-five (25) feet** from centerline of roadway, the area is to be reviewed and coordinated with the Conservation Commission (*unless the condition below exists*). **Twenty-five (25) feet** is the worst case *maximum area of disturbance* (roadway, shoulder, and ditching combined) necessary for the minimum standards of a roadway and full ditching. A significant amount of town ways have existing sideslopes that drain and that are not constrained, reducing the disturbance need from twenty-five (25) feet to **11'-4"** from roadway centerline.

- It is recommended that if the roadwork disturbance is anticipated to negatively impact boundaries, monuments, or trees integrated within boundaries and monuments, the area is to be reviewed and coordinated with the Conservation Commission and that roadway re-alignment (geometry) toward the boundary ROW centerline be considered. This typically occurs when the roadway alignment does not match the ROW alignment, or when road boundaries are significantly narrow.

- Private ways with inadequate stormwater and erosion management have caused and continue to cause damage to public town ways, also contributing to water pollution in the municipality. Violations of the Porter Land Use Ordinance with respect to private landowner adherence to **Article IV (Section 4.2 A,L,Q,R, and S)** should be enforced by the Code Enforcement officer (*via Article VI*). This is a CEO responsibility and service that is paid for by the townspeople and is needed for the Road Commissioner, Select Board, and the Conservation Commission to effectively execute and monitor any long term road plan.

Financing, Cost Reduction, and Future Planning:

- A **20+ year $3.0M roadway bond** (*Increasing road fund requests by 50,000 each year should reduce the bond needed to $1.9M.*) to accelerate approximately **11 miles** of severely deficient roadways, would assist in cycling the town back into a maintenance-driven 20+ year road plan rather than the current "repair, restoration, emergency" status, and anticipate the need to restore **14 miles** of roadway 11 to 16 years from now in a short 5-year span. One dollar in planned maintenance typically saves $15-$25 in capital repairs. It is not feasible for one mile of restoration per year to surpass **11 miles** of critically needed restoration, while still maintaining roughly 30 miles of already been improved or currently satisfactory town ways. Production needs to be increased to *3-4 miles per year* through investment or innovation until the infrastructure deficits have been properly recovered. An estimated 1.3 million dollars is needed over a 3-year production period to remove this deficit *($200k per mile for prep, ditching, milling, compaction, and paving*). ***NOTE:*** *A $100,000.00 budget number for any engineered projects to bridge the wetlands of Black Bog was included in the 20+ year plan*

*forecasting. $1.7M in the bond is allocated to additional project cost load that will be occurring during the balance of the 20+ year road plan (**in 11-16 years there will another extensive road reconstruction need requiring significant financing**).*

NOTE: The ACTUAL per mile rehabilitation costs expended in Porter is needed (prep, remove boulders, ditch, mill-in-place, top driving course (compacted gravel or pavement). The $200,000.00 per mile estimate may be found to be conservative (an overestimate).

- Sealcoating transverse, horizontal, and freeze thaw cracks in existing asphalt is inexpensive maintenance that extends road-life, allowing the municipality time to develop and execute long long-term planning and budgeting. This is strongly recommended.

- There are a number of roads that based on use (AADT), population, and population density should be milled and re-naturalized to gravel roads. (*See chart*)

- A number of roads should be re-evaluated as to the reasoning and relevance of expending townspeople's property taxes on road summer and winter maintenance, given the absence of full-time residency and/or significant use. (*See chart*)

- It may be warranted to evaluate upgrading **.31 miles** of Chapel St. to restore a passable and safe gravel road connection to Colcord Pond Rd. This road is in **Village District Zoning** and would provide the ability for the town to better anticipate, manage, and direct expansion and residential sprawl in Porter over the course of the next generation (*25 years*). Connecting **.75 miles** of unimproved Gilman Road and upgrading the gravel road on the **1.24 miles** of Sarah Bridge Road may also be candidates to consider in effectively anticipating, managing, and directing long-term projected future growth toward major arterials and collectors.

- Upper dead end section of Colcord Pond Road should be re-naturalized to gravel (in-place asphalt milling and mixing with soil).

- Upper end section of Bickford Pond Road should be re-naturalized to gravel (in-place asphalt milling and mixing with soil).

- Old Meeting House former "corduroy road" section(s) at the bog and wetlands is recommended to have the elevations raised with fill for strength and proper performance. Approximate fill 2-5 feet in depth, depending on location, with the potential for utilizing geogrid stabilization. *(Note: $100,000.00 in budget was estimated in the 20+ year plan for this effort)*

Policy:

- Establish standards (*coordination, permitting, stormwater/erosion/sedimentation control, construction, and maintenance*) that can be referenced and deployed by Road Commissioner, Select Board, Code Enforcement Officer, and Conservation Commission.

- Change the term of the Road Commissioner from *1 year to 3 years*, to improve continuity and ownership. One cycle of four seasons experienced by a road commissioner is insufficient to grasp current conditions or effectively execute a long term road plan.

- Change the selection of the Road Commissioner from *elected to appointed*, to increase accountability of the Road Commissioner to the Select Board and the taxpayers.

- With a policy in place, fold the CEO permitting (roads, vegetation removal in shoreland, and excavation over 10 CY) under the Road Commissioner duties to report. This should only be pursued if a town-wide 20+ year plan and construction intentions (road design and stabilization) is provided to the MEDEP/NRPA "For Record".

Conclusion:

These advisory recommendations should address **Article III Sections 3.1, 3.3E, 3.4, Article IV Sections 4.1, 4.2A, 4.2B, 4.2F, 4.2H, 4.2L, 4.2Q.2.d, 4.2R, and 4.2S** of the Town of Porter Land Use Ordinance, and meet **AASHTO and State of Maine** recommended standards for rural road construction (*excluding depth of new roadway materials, as all town ways under review are existing and full depth structural material is anticipated within the next 25 years, following a full cycle of the roadway plan*).

Understanding actual rehabilitation costs to compare with a $200k per mile estimate, re-evaluating the extent of winter and summer maintenance of dead-end low-use roads, following a 20+ year guideline for road inspection/rehabilitation, using the design guidelines, standards, and a combination of the alternatives proposed, re-defining and signing town ways to reasonable design speeds (**10-40 MPH**), establishing a road policy for municipal use, and acquiring a 20+ year roadway bond for **$3.0M** (*or $1.9M if appropriations increased $50k/year annually*) should effectively upgrade the town's infrastructure with the least amount of impact on Porter's property taxation and sense of place (*rural feel, canopy, water resources, heritage, etc.*).

The following tables provide an overall priority list (*based on current condition, trip generation, population density, and SAD55 bus routes*), a 20+ year potential road maintenance sequence, candidates to review for cost-savings measures for the town (summer maintenance, winter maintenance, reclaim asphalt to revert to gravel), and candidates to review safe and comfortable design speeds (signage).

References:

https://www.maine.gov/dep/land/watershed/camp/road/gravel_road_manual.pdf

http://agcmaine.org/2017/07/maines-rural-roads-and-bridges-have-high-rates-of-deficiencies/

https://www.memun.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=4841&Command=Core_Download&language=en-US&PortalId=0&TabId=119

https://www.memun.org/SchoolsProject/Resources/Roads/Fundamentals.htm

http://ruraldesignguide.com/mixed-traffic/yield-roadway

https://www1.maine.gov/mdot/mlrc/technical/

Quotes from various Maine municipalities regarding municipal roads:

"It's trying to get better life out of the dollars a municipality receives."

"Innovation is likely to rule the day."

"We are constantly looking for ways to get more bang for their dollar."

"It's really money-driven, accountability driven."

Sheet1 Sheet2 Sheet3

Rank by Need	Road	Status	Surface	Approx. Length of Road (Feet)	Approx. Length (Miles)	Miles of POOR Critical Work	Notes	Cost (Est.) ($)	Revenue ($)/Year	Running Total ($)	Year	$/per mile existing reconstruct est. (with inflation indexed 1.5%)
1	Spec Pond Rd (2.49 upgraded, 1.6M not remediated)	Town Maintained	Paved	21595	4.09			320000	300000		1 thru 3	
2	Colcord Pond Rd (Upper Section at camps)	Town Maintained	Paved	6494	1.23		Candidate to turn to gravel	246000			1 thru 3	
3	Bickford Pond Rd (partial - Upper)	Town Maintained	Paved	23866	4.52		Candidate to turn to gravel	350000			1 thru 3	
4	Pine St	Town Maintained	Paved	4330	0.82			166460	300000		1 thru 3	203000
5	River St	Town Maintained	Paved	862	0.16			32480			1 thru 3	
6	Old Meetinghouse Rd	Town Maintained	Paved	12514	2.37		2 potentially substantial designs				1 thru 3	
7	Chapel St (east)	Town Maintained	Paved	5019	0.95			48720			1 thru 3	
8	Dana Weeks Rd	Town Maintained	Paved	6072	1.15		Candidate to turn to gravel	236952	300000		1 thru 3	206045
9	First County Rd (Old County) - 66% (1st 3rd, last 3rd)	Town Maintained	Paved	5165	0.98			201924			1 thru 3	
10	Maple St	Town Maintained	Paved	835	0.16		BOND, TAN, RAISE	32967			1 thru 3	
11	Mountainview Ave	Town Maintained	Paved	1495	0.28			59215	300000	240785	4	209136
12	Enfield St	Town Maintained	Paved	1457	0.28			57710		183074	4	
13	Circle Dr	Town Maintained	Paved	826	0.16			32717		150357	4	
14	Seth Day Rd	Town Maintained	Gravel	1636	0.31			64800		85557	4	
15	Gilman Rd	Town Maintained	Paved	5207	0.99		Candidate to upgrade/connect	209338	300000	176219	5	212273
16	Oak St	Town Maintained	Paved	336	0.06			13508		162711	5	
17	Rounds Rd	Town Maintained	Gravel	2363	0.45			95000		67710	5	
18	Moody Rd	Town Maintained	Gravel	2901	0.55			118379	300000	249332	6	215457
19	Sara Bridge Rd (Gravel-Ditch widening candidate)	Summer Maint.	Gravel	6547	1.24		BOND, TAN, RAISE	267166			6	
20	Main St	Town Maintained	Paved	3027	0.57			125373	300000	174627	7	218689
21	Summer St	Town Maintained	Paved	2391	0.45			99031		75596	7	
22	Porterfield Rd	Town Maintained	Paved	19166	3.63			805747	900000	169848	8 through 10	221969
23	School St	Town Maintained	Paved	1919	0.36			81884		87964	8 through 10	225299
24	Colcord Pond Rd (Lower)	Town Maintained	Paved	31944			BOND, TAN, RAISE	1383502	300000		11	228678
25	First County Rd (Old County) - 33%	Town Maintained	Paved	2570	0.49			112962	300000	187038	12	232108
26	Bickford Pond Rd (Lower Improved Section)	Town Maintained	Paved	14626			BOND, TAN, RAISE	652584	300000		13	235590
27	Spec Pond Rd (2/3rd's improved, 1st and last 3rd)	Town Maintained	Paved	12777.6			BOND, TAN, RAISE	578679	300000		14	239124
	Kennard Hill Rd	Town Maintained	Paved	15101			BOND, TAN, RAISE	704410	600000		15 and 16	246297
	Winter St	Town Maintained	Paved	403	0.08		Candidate to turn to gravel	19081	300000	280919	17	249992
	Town Pound Rd (east)	Town Maintained	Gravel	1085	0.21			51371		229548	17	
31	Mason Rd	Town Maintained	Gravel	3165	0.60			149853		79695	17	
32	French Rd	Town Maintained	Gravel	1341	0.25			64445	300000	315250	18	253742
33	Town Farm Rd	Town Maintained	Gravel	694	0.13			33352		281898	18	
34	Pendexter Rd	Town Maintained	Gravel	1634	0.31			78525		236725	18	
35	Norton Hill Rd	Town Maintained	Gravel	10032	1.9			489341	300000	-47384	19	257548
36	Short St	Town Maintained	Paved	676	0.13		Candidate to turn to gravel	33469	300000	313915	20	261411
37	Ten Mile Brook Rd	Town Maintained	Gravel	1900	0.36			94068		219847	20	
38	Day Rd	Town Maintained	Gravel	692	0.13			34261		185586	20	
39	Waddell Rd	Town Maintained	Gravel	943	0.18			46688		138899	20	
40	Ridlon Lane	Town Maintained	Gravel	784	0.15			38816		100083	20	
41	Eastman Hill Rd	Town Maintained	Gravel	2398	0.45			120505	300000	279578	21	265332
42	Cross Rd	Town Maintained	Paved	1517	0.29			76233		203345	21	
43	Dam Rd	Town Maintained	Paved	3399	0.64			170808		32538	21	
44	Mills Extension	Town Maintained	Paved	1763	0.33			89924	300000	242614	22	269312
45	High St	Town Maintained	Paved	345	0.07			17597		225017	22	
46	Chapel St (west) - 278 feet active		Gravel	1941	0.37	0.31	Candidate to upgrade/connect	99003		126014	22	
47			Gravel	5159	0.98		BOND, TAN, RAISE, NOTHING	263140			22	
na			Gravel	4385	0.83			na	na	na	na	
na			Gravel	2483	0.47			na	na	na	na	
na			Gravel	438	0.08			na	na	na	na	
na			Gravel	304	0.06			na	na	na	na	
na			Gravel	7020	1.33			na	na	na	na	
			Gravel	4422	0.84			na	na	na	na	
			Gravel	4729	0.90			na	na	na	na	

Sheet1 Sheet2 Sheet3

Rank by Need	Road	Status	Surface	Approx. Length of Road (Feet)	Approx. Length (Miles)	Miles of POOR Critical Work	Notes	Cost (Est.) ($)	Revenue ($)/Year	Running Total ($)	Year	$/per mile existing reconstruct est. (with inflation indexed 1.5%)
1	Spec Pond Rd (2.49 upgraded. 1.6M not remediated)	Town Maintained	Paved	21595	4.09			320000	300000		1 thru 3	
2	Colcord Pond Rd (Upper Section at camps)	Town Maintained	Paved	6494	1.23		Candidate to turn to gravel	246000			1 thru 3	
3	Bickford Pond Rd (partial - Upper)	Town Maintained	Paved	23866	4.52		Candidate to turn to gravel	350000			1 thru 3	
4	Pine St	Town Maintained	Paved	4330	0.82			166460	300000		1 thru 3	203000
5	River St	Town Maintained	Paved	862	0.16			32480			1 thru 3	
6	Old Meetinghouse Rd	Town Maintained	Paved	12514	2.37		2 potentially substantial designs				1 thru 3	
7	Chapel St (east)	Town Maintained	Paved	5019	0.95			48720			1 thru 3	
8	Dana Weeks Rd	Town Maintained	Paved	6072	1.15		Candidate to turn to gravel	236952	300000		1 thru 3	206045
9	First County Rd (Old County) - 66% (1st 3rd, last 3rd)	Town Maintained	Paved	5165	0.98			201924			1 thru 3	
10	Maple St	Town Maintained	Paved	835	0.16		BOND, TAN, RAISE	32967			1 thru 3	
11	Mountainview Ave	Town Maintained	Paved	1495	0.28			59215	300000	240785	4	209136
12	Enfield St	Town Maintained	Paved	1457	0.28			57710		183074	4	
13	Circle Dr	Town Maintained	Paved	826	0.16			32717		150357	4	
14	Seth Day Rd	Town Maintained	Gravel	1636	0.31			64800		85557	4	
15	Gilman Rd	Town Maintained	Paved	5207	0.99		Candidate to upgrade/connect	209338	300000	176219	5	212273
16	Oak St	Town Maintained	Paved	336	0.06			13508		162711	5	
17	Rounds Rd	Town Maintained	Gravel	2363	0.45			95000		67710	5	
18	Moody Rd	Town Maintained	Gravel	2901	0.55			118379	300000	249332	6	215457
19	Saco Bridge Rd (Gravel)-Ditch widening candidate)	Summer Maint.	Gravel	6547	1.24		BOND, TAN, RAISE	267166			6	
20	Main St	Town Maintained	Paved	3027	0.57			125373	300000	174627	7	218689
21	Summer St	Town Maintained	Paved	2391	0.45			99031		75596	7	
22	Porterfield Rd	Town Maintained	Paved	19166	3.63			805747	900000	169848	8 through 10	221969
23	School St	Town Maintained	Paved	1919	0.36			81884		87964	8 through 10	225299
24	Colcord Pond Rd (Lower)	Town Maintained	Paved	31944			BOND, TAN, RAISE	1383502	300000		11	228678
25	First County Rd (Old County) - 33%	Town Maintained	Paved	2570	0.49			112962	300000	187038	12	232108
26	Bickford Pond Rd (Lower Improved Section)	Town Maintained	Paved	14626			BOND, TAN, RAISE	652584	300000		13	235590
27	Spec Pond Rd (2/3rd's improved, 1st and last 3rd)	Town Maintained	Paved	12777.6			BOND, TAN, RAISE	578679	300000		14	239124
[illegible]	Kennard Hill Rd	Town Maintained	Paved	15101			BOND, TAN, RAISE	704410	600000		15 and 16	246297
	Winter St	Town Maintained	Paved	403	0.08		Candidate to turn to gravel	19081	300000	280919	17	249992
	Town Pound Rd (east)	Town Maintained	Gravel	1085	0.21			51371		229548	17	
31	Mason Rd	Town Maintained	Gravel	3165	0.60			149853		79695	17	
32	French Rd	Town Maintained	Gravel	1341	0.25			64445	300000	315250	18	253742
33	Town Farm Rd	Town Maintained	Gravel	694	0.13			33352		281898	18	
34	Pendexter Rd	Town Maintained	Gravel	1634	0.31			78525		236725	18	
35	Norton Hill Rd	Town Maintained	Gravel	10032	1.9			489341	300000	47384	19	257548
36	Short St	Town Maintained	Paved	676	0.13		Candidate to turn to gravel	33469	300000	313915	20	261411
37	Ten Mile Brook Rd	Town Maintained	Gravel	1900	0.36			94068		219847	20	
38	Day Rd	Town Maintained	Gravel	692	0.13			34261		185586	20	
39	Waddell Rd	Town Maintained	Gravel	943	0.18			46668		138899	20	
40	Ridlon Lane	Town Maintained	Gravel	784	0.15			38816		100083	20	
41	Eastman Hill Rd	Town Maintained	Gravel	2398	0.45			120505	300000	279578	21	265332
42	Cross Rd	Town Maintained	Paved	1517	0.29			76233		203345	21	
43	Dam Rd	Town Maintained	Paved	3399	0.64			170808		32538	21	
44	Mills Extension	Town Maintained	Paved	1763	0.33			89924	300000	242614	22	269312
45	High St	Town Maintained	Paved	345	0.07			17597		225017	22	
46	Chapel St (west) - 278 feet active		Gravel	1941	0.37	0.31	Candidate to upgrade/connect	99003		126014	22	
47			Gravel	5159	0.98		BOND, TAN, RAISE. NOTHING	263140			22	
na			Gravel	4385	0.83			na	na	na	na	
na			Gravel	2483	0.47			na	na	na	na	
na			Gravel	438	0.08			na	na	na	na	
na			Gravel	304	0.06			na	na	na	na	
na			Gravel	7020	1.33			na	na	na	na	
			Gravel	4422	0.84			na	na	na	na	
			Gravel	4729	0.90			na	na	na	na	

Road Priority and Need Ranking *(Weighted average that includes current condition (as of 9.7.18), AADT historical data collected by the MEDOT, population density, min-max AADT by parcel (ITE Trip Generation*), min-max AADT by structure (ITE Trip Generation*), and SAD55 bus routes)*

**8 to 11 trips per day used to calculate min-max theoretical traffic modeling based on residential use.*

***The estimate assumption for one mile of existing road rehabilitation is $200,000.00 (2018), adjusted annually at an estimated 1.5% rate of inflation.*

***Note:** Anomalies and acute defects (potholes, cracking, ruts, heaving) issues may be required at various times throughout the town based on need, complaints, and inspection. This is included under the general maintenance duties of the Road Commissioner and are not identified in this overall general planning and phasing plan.*

1 to 5 Rating (Field Inspection)	Weighted Priority List	Rank by Weighted Priority and Current Road Condition	Road	Status	Surface	Approx. Length of Road (Feet)	Approx. Length (Miles)	Miles of POOR Critical Work	Year Forcast
1	1	1	Spec Pond Rd (Partial)	Town Maintained	Paved	8448	1.6	1.6	1 thru 3
1	2	2	Colcord Pond Rd (Upper Section at camps)	Town Maintained	Paved	6494	1.23	1.23	1 thru 3
1	3	3	Bickford Pond Rd (Partial - Upper Section)	Town Maintained	Paved	9240	1.75	1.75	1 thru 3
1	4	4	Pine St	Town Maintained	Paved	4330	0.82	0.82	1 thru 3
1	5	5	River St	Town Maintained	Paved	862	0.16	0.16	1 thru 3
1	7	6	Old Meetinghouse Rd	Town Maintained	Paved	12514	2.37	2.37	1 thru 3
1	8	7	Chapel St (east)	Town Maintained	Paved	5019	0.95	0.24	1 thru 3
1	12	8	Dana Weeks Rd	Town Maintained	Paved	6072	1.15	1.15	1 thru 3
2	11	9	First County Rd (Old County) - 66% (1st 3rd, last 3rd)	Town Maintained	Paved	5165	0.98	0.98	1 thru 3
2	18	10	Maple St	Town Maintained	Paved	835	0.16	0.16	1 thru 3
3	14	11	Mountainview Ave	Town Maintained	Paved	1495	0.28		4
3	19	12	Enfield St	Town Maintained	Paved	1457	0.28		4
3	22	13	Circle Dr	Town Maintained	Paved	826	0.16		4
3	23	14	Seth Day Rd	Town Maintained	Gravel	1636	0.31		4
3	24	15	Gilman Rd	Town Maintained	Paved	5207	0.99		5
3	27	16	Oak St	Town Maintained	Paved	336	0.06		5
3	31	17	Rounds Rd	Town Maintained	Gravel	2363	0.45		5
3	32	18	Moody Rd	Town Maintained	Gravel	2901	0.55		6
3	35	19	Sara Bridge Rd	Summer Maint.	Gravel	6547	1.24		6
4	6	20	Main St	Town Maintained	Paved	3027	0.57		7
4	9	21	Summer St	Town Maintained	Paved	2391	0.45		7

4	10	22	Porterfield Rd	Town Maintained	Paved	19166	3.63		8 through 10
4	13	23	School St	Town Maintained	Paved	1919	0.36		8 through 10
4	15	24	Colcord Pond Rd	Town Maintained	Paved	31944	6.05		11
4	16	25	First County Rd (Old County) - Middle 33%	Town Maintained	Paved	2570	0.49		12
4	17	26	Bickford Pond Rd (Lower Improved Section)	Town Maintained	Paved	14626	2.77		13
4	20	27	Spec Pond Rd (2/3rd's improved, 1st and last 3rd)	Town Maintained	Paved	13147	2.49		14
4	21	28	Kennard Hill Rd	Town Maintained	Paved	15101	2.86		15 and 16
4	25	29	Winter St	Town Maintained	Paved	403	0.08		17
4	28	30	Town Pound Rd (east)	Town Maintained	Gravel	1085	0.21		17
4	29	31	Mason Rd	Town Maintained	Gravel	3165	0.60		17
4	33	32	French Rd	Town Maintained	Gravel	1341	0.25		18
4	34	33	Town Farm Rd	Town Maintained	Gravel	694	0.13		18
4	36	34	Pendexter Rd	Town Maintained	Gravel	1634	0.31		18
4	37	35	Norton Hill Rd	Town Maintained	Gravel	10032	1.9		19
4	38	36	Short St	Town Maintained	Paved	676	0.13		20
4	39	37	Ten Mile Brook Rd	Town Maintained	Gravel	1900	0.36		20
4	40	38	Day Rd	Town Maintained	Gravel	692	0.13		20
4	41	39	Waddell Rd	Town Maintained	Gravel	943	0.18		20
4	43	40	Ridlon Lane	Town Maintained	Gravel	784	0.15		20
5	26	41	Eastman Hill Rd	Town Maintained	Gravel	2398	0.45		21
5	30	42	Cross Rd	Town Maintained	Paved	1517	0.29		21
5	42	43	Dam Rd	Town Maintained	Paved	3399	0.64		21
5	44	44	Mills Extension	Town Maintained	Paved	1763	0.33		22
5	45	45	High St	Town Maintained	Paved	345	0.07		22
6	47	46	Chapel St (west) - 278 feet active	Not Maintained	Gravel	1941	0.37	0.31	22
3	46	47	Town Pound Rd (west)	Summer Maint.	Gravel	5159	0.98		22
6	na	na	Moody Rd	Not Maintained	Gravel	4385	0.83	na	na
6	na	na	Seth Day Rd	Not Maintained	Gravel	438	0.08	na	na
6	na	na	Pendexter Rd	Not Maintained	Gravel	2483	0.47	na	na
6	na	na	Ten Mile Brook Rd.	Not Maintained	Gravel	304	0.06	na	na
6	na	na	Town Farm Rd	Not Maintained	Gravel	7020	1.33	na	na
6	na	na	Town Pound Rd (center)	Not Maintained	Gravel	4422	0.84	na	na
6	na	na	Waddell Rd	Not Maintained	Gravel	4729	0.90	na	na

nnard Hill Rd	Town Maintained	Paved	15101	2.86				Yes	
Winter St	Town Maintained	Paved	403	0.08			Yes	Yes	
Town Pound Rd (east)	Town Maintained	Gravel	1085	0.21		Yes	Yes	Yes	
Mason Rd	Town Maintained	Gravel	3165	0.60				Yes	
French Rd	Town Maintained	Gravel	1341	0.25				Yes	
Town Farm Rd	Town Maintained	Gravel	694	0.13		Yes	Yes	Yes	
Pendexter Rd	Town Maintained	Gravel	1634	0.31				Yes	
Norton Hill Rd	Town Maintained	Gravel	10032	1.9		Yes	Yes	Yes	
Short St	Town Maintained	Paved	676	0.13				Yes	
Ten Mile Brook Rd	Town Maintained	Gravel	1900	0.36		Yes		Yes	
Day Rd	Town Maintained	Gravel	692	0.13		Yes	Yes	Yes	
Waddell Rd	Town Maintained	Gravel	943	0.18				Yes	
Ridlon Lane	Town Maintained	Gravel	784	0.15		Yes	Yes	Yes	
Eastman Hill Rd	Town Maintained	Gravel	2398	0.45				Yes	
Cross Rd	Town Maintained	Paved	1517	0.29				Yes	
Dam Rd	Town Maintained	Paved	3399	0.64	[redacted]			Yes	
ills Extension	Town Maintained	Paved	1763	0.33	[redacted]		Yes	Yes	
High St	Town Maintained	Paved	345	0.07				Yes	
Chapel St (west) - 278 feet active	Not Maintained	Gravel	1941	0.37		Yes	Yes	Yes	Yes
Town Pound Rd (west)	Summer Maint.	Gravel	5159	0.98		Yes	Yes		
Moody Rd	Not Maintained	Gravel	4385	0.83	na	na	na	na	na
Seth Day Rd	Not Maintained	Gravel	438	0.08	na	na	na	na	na
Pendexter Rd	Not Maintained	Gravel	2483	0.47	na	na	na	na	na
Ten Mile Brook Rd.	Not Maintained	Gravel	304	0.06	na	na	na	na	na
Town Farm Rd	Not Maintained	Gravel	7020	1.33	na	na	na	na	na
Town Pound Rd (center)	Not Maintained	Gravel	4422	0.84	na	na	na	na	na
Waddell Rd	Not Maintained	Gravel	4729	0.90	na	na	na	na	na

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00716846
Spec Pond Road
Southwest of Porterfield Rd
Station ID:
Date Printed: 12-Sep-18

Start Time	Mon 03-Sep-18	Tue 04-Sep-18	Wed 05-Sep-18	Thu 06-Sep-18	Fri 07-Sep-18	Average Day	Sat 08-Sep-18	Sun 09-Sep-18	Week Average
12:00 AM	*	*	1	1	1	1	3	2	2
01:00	*	*	1	0	1	1	1	3	1
02:00	*	*	1	2	0	1	0	0	1
03:00	*	*	1	0	0	0	2	0	1
04:00	*	*	2	3	3	3	2	0	2
05:00	*	*	3	3	3	3	0	1	2
06:00	*	*	2	3	2	2	2	1	2
07:00	*	*	10	9	8	9	6	4	7
08:00	*	*	**12**	**11**	**10**	**11**	7	5	**9**
09:00	*	*	5	7	7	6	**10**	3	6
10:00	*	*	11	8	9	9	9	**7**	9
11:00	*	*	4	6	10	7	6	7	7
12:00 PM	*	*	8	2	10	7	4	**14**	8
01:00	*	*	6	6	9	7	8	14	9
02:00	*	*	11	10	6	9	**13**	14	11
03:00	*	*	**14**	13	**20**	**16**	7	10	**13**
04:00	*	*	14	**16**	10	13	11	9	12
05:00	*	*	13	13	16	14	10	14	13
06:00	*	*	8	11	12	10	3	8	8
07:00	*	*	11	7	9	9	6	4	7
08:00	*	*	5	7	8	7	6	5	6
09:00	*	*	4	2	4	3	4	2	3
10:00	*	*	1	0	7	3	3	1	2
11:00	*	*	0	1	5	2	2	1	2
Day Total	0	0	148	141	170	153	125	129	143
% Avg. WkDay	0.0%	0.0%	96.7%	92.2%	111.1%				
% Avg. Week	0.0%	0.0%	103.5%	98.6%	118.9%	107.0%	87.4%	90.2%	
AM Peak	-	-	08:00	08:00	08:00	- 08:00	- 09:00	10:00	- 08:00 - -
Vol.	-	-	12	11	10	- 11	- 10	7	- 9 - -
PM Peak	-	-	15:00	16:00	15:00	- 15:00	- 14:00	12:00	- 15:00 - -
Vol.	-	-	14	16	20	- 16	- 13	14	- 13 - -

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00716846
Spec Pond Road
Southwest of Porterfield Rd
Station ID:
Date Printed: 12-Sep-18

Start Time	Mon 10-Sep-18	Tue 11-Sep-18	Wed 12-Sep-18	Thu 13-Sep-18	Fri 14-Sep-18	Average Day	Sat 15-Sep-18	Sun 16-Sep-18	Week Average
12:00 AM	0	1	*	*	*	0	*	*	0
01:00	0	0	*	*	*	0	*	*	0
02:00	1	2	*	*	*	2	*	*	2
03:00	2	0	*	*	*	1	*	*	1
04:00	2	1	*	*	*	2	*	*	2
05:00	4	5	*	*	*	4	*	*	4
06:00	3	5	*	*	*	4	*	*	4
07:00	7	9	*	*	*	8	*	*	8
08:00	9	**12**	*	*	*	**10**	*	*	**10**
09:00	2	7	*	*	*	4	*	*	4
10:00	**12**	9	*	*	*	10	*	*	10
11:00	4	6	*	*	*	5	*	*	5
12:00 PM	11	**14**	*	*	*	**12**	*	*	**12**
01:00	9	4	*	*	*	6	*	*	6
02:00	6	2	*	*	*	4	*	*	4
03:00	10	11	*	*	*	10	*	*	10
04:00	8	8	*	*	*	8	*	*	8
05:00	**12**	13	*	*	*	12	*	*	12
06:00	11	5	*	*	*	8	*	*	8
07:00	4	5	*	*	*	4	*	*	4
08:00	2	6	*	*	*	4	*	*	4
09:00	4	1	*	*	*	2	*	*	2
10:00	1	2	*	*	*	2	*	*	2
11:00	0	1	*	*	*	0	*	*	0
Day Total	124	129	0	0	0	122	0	0	122
% Avg. WkDay	101.6%	105.7%	0.0%	0.0%	0.0%				
% Avg. Week	101.6%	105.7%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	10:00	08:00	-	-	-	08:00	-	-	08:00
Vol.	12	12	-	-	-	10	-	-	10
PM Peak	17:00	12:00	-	-	-	12:00	-	-	12:00
Vol.	12	14	-	-	-	12	-	-	12

Grand Total	124	129	148	141	170	275	125	129	265		

ADT ADT 138 AADT 138

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00514847
Old Meeting House Road
North of Town Pound
Station ID:
Date Printed: 12-Sep-18

Start Time	Mon 03-Sep-18	Tue 04-Sep-18	Wed 05-Sep-18	Thu 06-Sep-18	Fri 07-Sep-18	Average Day	Sat 08-Sep-18	Sun 09-Sep-18	Week Average
12:00 AM	*	*	1	0	0	0	0	1	0
01:00	*	*	0	0	0	0	0	1	0
02:00	*	*	0	0	0	0	2	0	0
03:00	*	*	0	1	1	1	0	0	0
04:00	*	*	1	1	3	2	0	0	1
05:00	*	*	4	2	1	2	1	0	2
06:00	*	*	3	1	2	2	2	3	2
07:00	*	*	6	**10**	**12**	**9**	5	3	7
08:00	*	*	7	5	4	5	7	4	5
09:00	*	*	**12**	5	9	9	7	**8**	**8**
10:00	*	*	10	6	11	9	6	7	8
11:00	*	*	8	7	5	7	**10**	6	7
12:00 PM	*	*	17	4	6	9	12	**9**	10
01:00	*	*	6	1	4	4	11	6	6
02:00	*	*	**18**	10	12	**13**	10	8	**12**
03:00	*	*	16	**12**	12	13	**14**	5	12
04:00	*	*	9	10	5	8	6	7	7
05:00	*	*	10	2	4	5	5	5	5
06:00	*	*	9	11	**17**	12	10	8	11
07:00	*	*	6	10	6	7	7	4	7
08:00	*	*	7	1	6	5	5	0	4
09:00	*	*	1	3	3	2	2	2	2
10:00	*	*	2	1	0	1	2	0	1
11:00	*	*	0	0	2	1	1	0	1
Day Total	0	0	153	103	125	126	125	87	118
% Avg. WkDay	0.0%	0.0%	121.4%	81.7%	99.2%				
% Avg. Week	0.0%	0.0%	129.7%	87.3%	105.9%	106.8%	105.9%	73.7%	
AM Peak	-	-	09:00	07:00	07:00	- 07:00	- 11:00	09:00	- 09:00 - -
Vol.	-	-	12	10	12	- 9	- 10	8	- 8 - -
PM Peak	-	-	14:00	15:00	18:00	- 14:00	- 15:00	12:00	- 14:00 - -
Vol.	-	-	18	12	17	- 13	- 14	9	- 12 - -

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00514847
Old Meeting House Road
North of Town Pound
Station ID:
Date Printed: 12-Sep-18

Start Time	Mon 10-Sep-18	Tue 11-Sep-18	Wed 12-Sep-18	Thu 13-Sep-18	Fri 14-Sep-18	Average Day	Sat 15-Sep-18	Sun 16-Sep-18	Week Average
12:00 AM	0	0	*	*	*	0	*	*	0
01:00	0	0	*	*	*	0	*	*	0
02:00	0	0	*	*	*	0	*	*	0
03:00	0	0	*	*	*	0	*	*	0
04:00	1	1	*	*	*	1	*	*	1
05:00	2	3	*	*	*	2	*	*	2
06:00	4	1	*	*	*	2	*	*	2
07:00	6	7	*	*	*	6	*	*	6
08:00	6	4	*	*	*	5	*	*	5
09:00	7	1	*	*	*	4	*	*	4
10:00	8	5	*	*	*	6	*	*	6
11:00	3	3	*	*	*	3	*	*	3
12:00 PM	7	7	*	*	*	7	*	*	7
01:00	6	3	*	*	*	4	*	*	4
02:00	7	9	*	*	*	8	*	*	8
03:00	10	7	*	*	*	8	*	*	8
04:00	5	9	*	*	*	7	*	*	7
05:00	10	6	*	*	*	8	*	*	8
06:00	3	7	*	*	*	5	*	*	5
07:00	2	4	*	*	*	3	*	*	3
08:00	1	1	*	*	*	1	*	*	1
09:00	3	3	*	*	*	3	*	*	3
10:00	0	*	*	*	*	0	*	*	0
11:00	0	*	*	*	*	0	*	*	0
Day Total	91	81	0	0	0	83	0	0	83
% Avg. WkDay	109.6%	97.6%	0.0%	0.0%	0.0%				
% Avg. Week	109.6%	97.6%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	10:00	07:00	-	-	-	07:00	-	-	07:00
Vol.	8	7	-	-	-	6	-	-	6
PM Peak	15:00	14:00	-	-	-	14:00	-	-	14:00
Vol.	10	9	-	-	-	8	-	-	8

Grand Total	91	81	153	103	125	209	125	87	201		

ADT ADT 109 AADT 109

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00810
Kennard Hill Road
South of Brownfield Town Line
Station ID:
Date Printed: 17-Sep-18

Start Time	Mon 27-Aug-18	Tue 28-Aug-18	Wed 29-Aug-18	Thu 30-Aug-18	Fri 31-Aug-18	Average Day	Sat 01-Sep-18	Sun 02-Sep-18	Week Average
12:00 AM	*	0	0	1	0	0	4	3	1
01:00	*	2	1	0	1	1	3	1	1
02:00	*	0	1	0	0	0	0	0	0
03:00	*	0	0	0	0	0	0	0	0
04:00	*	1	1	2	1	1	0	0	1
05:00	*	2	1	1	6	2	2	2	2
06:00	*	8	10	8	4	8	7	9	8
07:00	*	3	7	6	4	5	5	10	6
08:00	*	6	5	5	14	8	14	8	9
09:00	*	10	12	10	14	12	15	22	14
10:00	*	14	5	10	13	10	12	10	11
11:00	*	10	10	7	10	9	15	21	12
12:00 PM	*	10	11	8	13	10	15	33	15
01:00	*	15	14	13	13	14	13	18	14
02:00	*	19	16	14	10	15	15	9	14
03:00	*	14	8	22	13	14	14	20	15
04:00	*	13	10	8	17	12	15	20	14
05:00	*	11	13	25	20	17	12	13	16
06:00	*	11	10	15	22	14	10	12	13
07:00	*	2	7	6	10	6	13	13	8
08:00	*	4	8	6	6	6	8	5	6
09:00	*	5	6	2	12	6	3	7	6
10:00	*	3	2	3	2	2	5	1	3
11:00	*	0	1	3	3	2	4	3	2
Day Total	0	163	159	175	208	174	204	240	191
% Avg. WkDay	0.0%	93.7%	91.4%	100.6%	119.5%				
% Avg. Week	0.0%	85.3%	83.2%	91.6%	108.9%	91.1%	106.8%	125.7%	
AM Peak	-	10:00	09:00	09:00	08:00	- 09:00	- 09:00	09:00	- 09:00 - -
Vol.	-	14	12	10	14	- 12	- 15	22	- 14 - -
PM Peak	-	14:00	14:00	17:00	18:00	- 17:00	- 12:00	12:00	- 17:00 - -
Vol.	-	19	16	25	22	- 17	- 15	33	- 16 - -

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00810
Kennard Hill Road
South of Brownfield Town Line
Station ID:
Date Printed: 17-Sep-18

Start Time	Mon 03-Sep-18	Tue 04-Sep-18	Wed 05-Sep-18	Thu 06-Sep-18	Fri 07-Sep-18	Average Day	Sat 08-Sep-18	Sun 09-Sep-18	Week Average
12:00 AM	4	*	*	*	*	4	*	*	4
01:00	0	*	*	*	*	0	*	*	0
02:00	1	*	*	*	*	1	*	*	1
03:00	0	*	*	*	*	0	*	*	0
04:00	0	*	*	*	*	0	*	*	0
05:00	1	*	*	*	*	1	*	*	1
06:00	8	*	*	*	*	8	*	*	8
07:00	4	*	*	*	*	4	*	*	4
08:00	4	*	*	*	*	4	*	*	4
09:00	**18**	*	*	*	*	**18**	*	*	**18**
10:00	12	*	*	*	*	12	*	*	12
11:00	12	*	*	*	*	12	*	*	12
12:00 PM	**14**	*	*	*	*	**14**	*	*	**14**
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Day Total	78	0	0	0	0	78	0	0	78
% Avg. WkDay	100.0%	0.0%	0.0%	0.0%	0.0%				
% Avg. Week	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	09:00	-	-	-	-	09:00	-	-	09:00
Vol.	18	-	-	-	-	18	-	-	18
PM Peak	12:00	-	-	-	-	12:00	-	-	12:00
Vol.	14	-	-	-	-	14	-	-	14

Grand Total	78	163	159	175	208	252	204	240	269	

ADT ADT 190 AADT 190

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00514
Colcord Pond Road
South of Dana Weeks
Station ID:
Date Printed: 17-Sep-18

Start Time	Mon 27-Aug-18	Tue 28-Aug-18	Wed 29-Aug-18	Thu 30-Aug-18	Fri 31-Aug-18	Average Day	Sat 01-Sep-18	Sun 02-Sep-18	Week Average
12:00 AM	*	0	0	1	1	0	4	2	1
01:00	*	2	1	0	1	1	3	1	1
02:00	*	0	1	0	0	0	2	0	0
03:00	*	0	0	0	0	0	1	0	0
04:00	*	3	3	3	1	2	1	1	2
05:00	*	6	2	1	3	3	1	2	2
06:00	*	12	14	14	6	12	8	7	10
07:00	*	11	12	13	10	12	8	9	10
08:00	*	11	7	10	17	11	22	16	14
09:00	*	12	12	16	**26**	16	22	32	20
10:00	*	**19**	7	19	24	17	24	26	20
11:00	*	10	**15**	**21**	26	**18**	**30**	**42**	**24**
12:00 PM	*	10	16	12	31	17	22	**42**	22
01:00	*	18	**22**	17	24	20	21	34	23
02:00	*	**26**	22	16	15	20	20	19	20
03:00	*	17	16	**28**	24	21	25	23	22
04:00	*	**22**	16	18	16	18	**28**	34	22
05:00	*	13	22	20	25	20	20	28	21
06:00	*	17	16	21	**37**	**23**	23	29	**24**
07:00	*	8	10	13	22	13	15	20	15
08:00	*	8	10	14	11	11	12	10	11
09:00	*	3	7	4	11	6	1	8	6
10:00	*	3	3	6	4	4	8	2	4
11:00	*	1	4	2	5	3	5	3	3
Day Total	0	232	238	269	340	268	326	390	297
% Avg. WkDay	0.0%	86.6%	88.8%	100.4%	126.9%				
% Avg. Week	0.0%	78.1%	80.1%	90.6%	114.5%	90.2%	109.8%	131.3%	
AM Peak	-	10:00	11:00	11:00	09:00	- 11:00	- 11:00	11:00	- 11:00 - -
Vol.	-	19	15	21	26	- 18	- 30	42	- 24 - -
PM Peak	-	14:00	13:00	15:00	18:00	- 18:00	- 16:00	12:00	- 18:00 - -
Vol.	-	26	22	28	37	- 23	- 28	42	- 24 - -

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00514
Colcord Pond Road
South of Dana Weeks
Station ID:
Date Printed: 17-Sep-18

Start Time	Mon 03-Sep-18	Tue 04-Sep-18	Wed 05-Sep-18	Thu 06-Sep-18	Fri 07-Sep-18	Average Day	Sat 08-Sep-18	Sun 09-Sep-18	Week Average
12:00 AM	4	*	*	*	*	4	*	*	4
01:00	1	*	*	*	*	1	*	*	1
02:00	1	*	*	*	*	1	*	*	1
03:00	0	*	*	*	*	0	*	*	0
04:00	1	*	*	*	*	1	*	*	1
05:00	1	*	*	*	*	1	*	*	1
06:00	8	*	*	*	*	8	*	*	8
07:00	11	*	*	*	*	11	*	*	11
08:00	8	*	*	*	*	8	*	*	8
09:00	26	*	*	*	*	26	*	*	26
10:00	20	*	*	*	*	20	*	*	20
11:00	22	*	*	*	*	22	*	*	22
12:00 PM	23	*	*	*	*	23	*	*	23
01:00	20	*	*	*	*	20	*	*	20
02:00	24	*	*	*	*	24	*	*	24
03:00	28	*	*	*	*	28	*	*	28
04:00	22	*	*	*	*	22	*	*	22
05:00	18	*	*	*	*	18	*	*	18
06:00	20	*	*	*	*	20	*	*	20
07:00	11	*	*	*	*	11	*	*	11
08:00	6	*	*	*	*	6	*	*	6
09:00	4	*	*	*	*	4	*	*	4
10:00	2	*	*	*	*	2	*	*	2
11:00	2	*	*	*	*	2	*	*	2
Day Total	283	0	0	0	0	283	0	0	283
% Avg. WkDay	100.0%	0.0%	0.0%	0.0%	0.0%				
% Avg. Week	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	09:00	-	-	-	-	09:00	-	-	09:00
Vol.	26	-	-	-	-	26	-	-	26
PM Peak	15:00	-	-	-	-	15:00	-	-	15:00
Vol.	28	-	-	-	-	28	-	-	28

Grand Total	283	232	238	269	340	551	326	390	580		

ADT ADT 293 AADT 293

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00810848
Gilman Road
North of Route 25
Station ID:
Date Printed: 12-Sep-18

Start Time	Mon 03-Sep-18	Tue 04-Sep-18	Wed 05-Sep-18	Thu 06-Sep-18	Fri 07-Sep-18	Average Day	Sat 08-Sep-18	Sun 09-Sep-18	Week Average
12:00 AM	*	*	0	0	0	0	1	0	0
01:00	*	*	0	0	0	0	0	0	0
02:00	*	*	0	0	0	0	0	0	0
03:00	*	*	2	0	2	1	2	0	1
04:00	*	*	0	2	0	1	0	2	1
05:00	*	*	5	3	6	5	2	0	3
06:00	*	*	5	6	4	5	0	1	3
07:00	*	*	3	4	7	5	5	1	4
08:00	*	*	4	4	3	4	2	2	3
09:00	*	*	5	1	6	4	5	3	4
10:00	*	*	2	5	2	3	5	6	4
11:00	*	*	0	2	6	3	7	9	5
12:00 PM	*	*	1	5	5	4	2	14	5
01:00	*	*	3	5	2	3	2	3	3
02:00	*	*	5	6	1	4	11	3	5
03:00	*	*	2	8	1	4	6	5	4
04:00	*	*	3	2	2	2	3	9	4
05:00	*	*	8	3	8	6	6	9	7
06:00	*	*	5	4	2	4	2	3	3
07:00	*	*	2	2	1	2	2	1	2
08:00	*	*	4	0	1	2	3	1	2
09:00	*	*	0	2	1	1	0	0	1
10:00	*	*	0	1	2	1	0	0	1
11:00	*	*	0	0	0	0	0	0	0
Day Total	0	0	59	65	62	64	66	72	65
% Avg. WkDay	0.0%	0.0%	92.2%	101.6%	96.9%				
% Avg. Week	0.0%	0.0%	90.8%	100.0%	95.4%	98.5%	101.5%	110.8%	
AM Peak	-	-	05:00	06:00	07:00	- 05:00	- 11:00	11:00	- 11:00 - -
Vol.	-	-	5	6	7	- 5	- 7	9	- 5 - -
PM Peak	-	-	17:00	15:00	17:00	- 17:00	- 14:00	12:00	- 17:00 - -
Vol.	-	-	8	8	8	- 6	- 11	14	- 7 - -

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00810848
Gilman Road
North of Route 25
Station ID:
Date Printed: 12-Sep-18

Start Time	Mon 10-Sep-18	Tue 11-Sep-18	Wed 12-Sep-18	Thu 13-Sep-18	Fri 14-Sep-18	Average Day	Sat 15-Sep-18	Sun 16-Sep-18	Week Average
12:00 AM	0	0	*	*	*	0	*	*	0
01:00	0	0	*	*	*	0	*	*	0
02:00	0	0	*	*	*	0	*	*	0
03:00	2	0	*	*	*	1	*	*	1
04:00	0	2	*	*	*	1	*	*	1
05:00	3	2	*	*	*	2	*	*	2
06:00	6	4	*	*	*	5	*	*	5
07:00	4	4	*	*	*	4	*	*	4
08:00	1	7	*	*	*	4	*	*	4
09:00	4	4	*	*	*	4	*	*	4
10:00	0	2	*	*	*	1	*	*	1
11:00	1	2	*	*	*	2	*	*	2
12:00 PM	1	2	*	*	*	2	*	*	2
01:00	4	3	*	*	*	4	*	*	4
02:00	2	5	*	*	*	4	*	*	4
03:00	4	3	*	*	*	4	*	*	4
04:00	3	2	*	*	*	2	*	*	2
05:00	4	4	*	*	*	4	*	*	4
06:00	2	6	*	*	*	4	*	*	4
07:00	0	5	*	*	*	2	*	*	2
08:00	1	0	*	*	*	0	*	*	0
09:00	0	1	*	*	*	0	*	*	0
10:00	0	1	*	*	*	0	*	*	0
11:00	1	*	*	*	*	1	*	*	1
Day Total	43	59	0	0	0	51	0	0	51
% Avg. WkDay	84.3%	115.7%	0.0%	0.0%	0.0%				
% Avg. Week	84.3%	115.7%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	06:00	08:00	-	-	-	06:00	-	-	06:00
Vol.	6	7	-	-	-	5	-	-	5
PM Peak	13:00	18:00	-	-	-	13:00	-	-	13:00
Vol.	4	6	-	-	-	4	-	-	4

Grand Total	43	59	59	65	62	115	66	72	116		

ADT ADT 61 AADT 61

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00716
Bickford Poond Road
Northwest of Dam Rd
Station ID:
Date Printed: 12-Sep-18

Start Time	Mon 27-Aug-18	Tue 28-Aug-18	Wed 29-Aug-18	Thu 30-Aug-18	Fri 31-Aug-18	Average Day	Sat 01-Sep-18	Sun 02-Sep-18	Week Average
12:00 AM	*	0	0	0	0	0	0	0	0
01:00	*	0	0	0	0	0	0	0	0
02:00	*	0	0	0	0	0	0	0	0
03:00	*	1	0	0	0	0	0	1	0
04:00	*	0	1	0	1	0	1	0	0
05:00	*	1	0	1	0	0	0	1	0
06:00	*	3	2	1	0	2	0	0	1
07:00	*	3	3	0	2	2	1	1	2
08:00	*	6	**5**	5	**6**	**6**	2	1	4
09:00	*	4	1	2	4	3	3	4	3
10:00	*	6	4	**6**	5	5	3	**8**	**5**
11:00	*	**8**	2	1	3	4	**6**	4	4
12:00 PM	*	**13**	3	4	**12**	**8**	8	7	**8**
01:00	*	9	4	4	9	6	6	4	6
02:00	*	12	4	6	5	7	**14**	9	8
03:00	*	9	3	3	6	5	5	**11**	6
04:00	*	4	2	6	3	4	5	8	5
05:00	*	6	**7**	**8**	4	6	9	5	6
06:00	*	1	3	2	5	3	3	2	3
07:00	*	1	5	1	6	3	1	6	3
08:00	*	2	1	4	1	2	3	0	2
09:00	*	1	3	2	1	2	2	0	2
10:00	*	0	0	0	1	0	1	1	0
11:00	*	0	0	0	2	0	0	0	0
Day Total	0	90	53	56	76	68	73	73	68
% Avg. WkDay	0.0%	132.4%	77.9%	82.4%	111.8%				
% Avg. Week	0.0%	132.4%	77.9%	82.4%	111.8%	100.0%	107.4%	107.4%	
AM Peak	-	11:00	08:00	10:00	08:00	- 08:00	- 11:00	10:00	- 10:00 - -
Vol.	-	8	5	6	6	- 6	- 6	8	- 5 - -
PM Peak	-	12:00	17:00	17:00	12:00	- 12:00	- 14:00	15:00	- 12:00 - -
Vol.	-	13	7	8	12	- 8	- 14	11	- 8 - -

Southern Maine Planning and Development Commission

110 Main Street Suite 1400
Saco ME 04072

Site Code: 2014 00716
Bickford Poond Road
Northwest of Dam Rd
Station ID:
Date Printed: 12-Sep-18

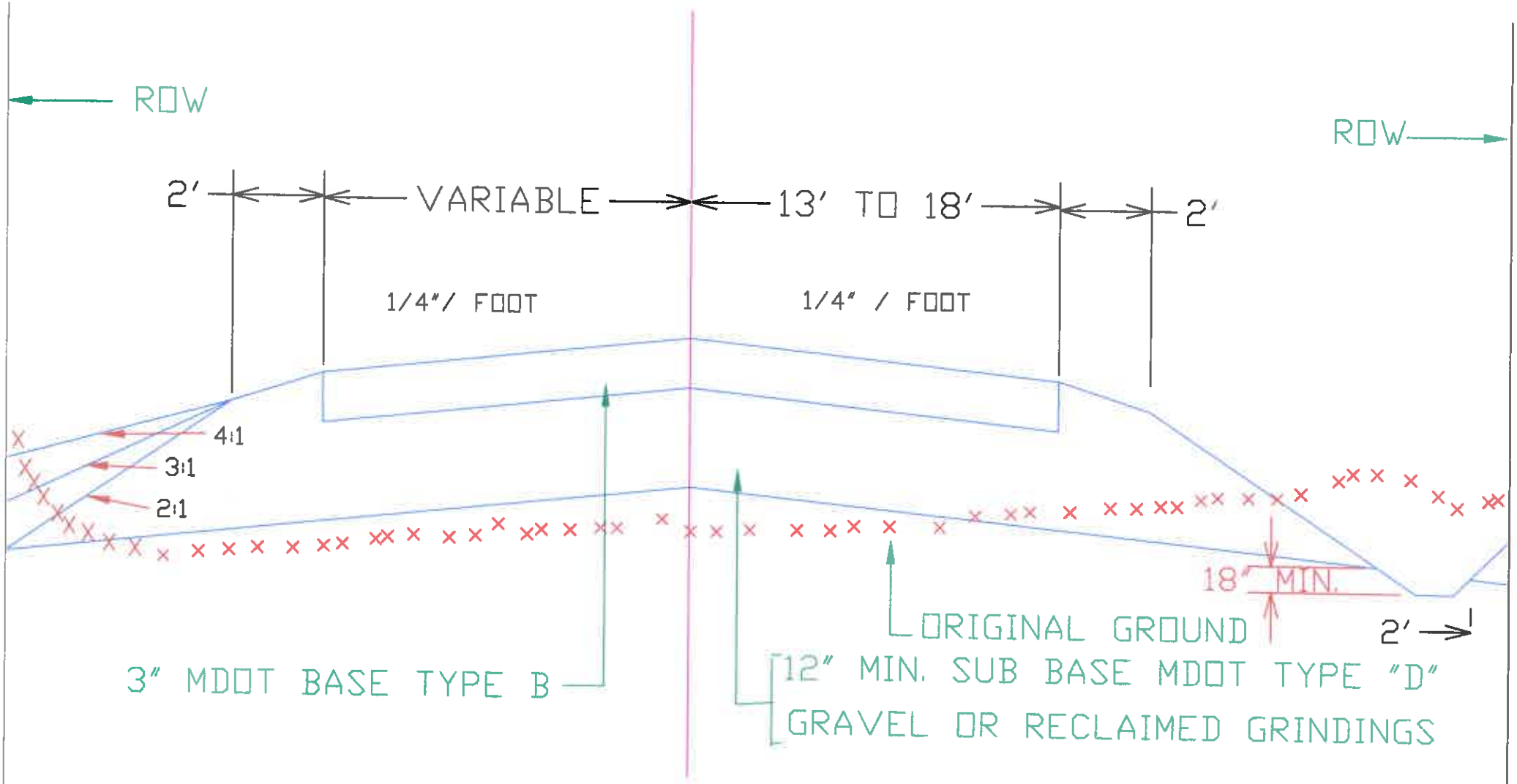
Start Time	Mon 03-Sep-18	Tue 04-Sep-18	Wed 05-Sep-18	Thu 06-Sep-18	Fri 07-Sep-18	Average Day	Sat 08-Sep-18	Sun 09-Sep-18	Week Average
12:00 AM	0	*	*	*	*	0	*	*	0
01:00	0	*	*	*	*	0	*	*	0
02:00	0	*	*	*	*	0	*	*	0
03:00	0	*	*	*	*	0	*	*	0
04:00	1	*	*	*	*	1	*	*	1
05:00	0	*	*	*	*	0	*	*	0
06:00	0	*	*	*	*	0	*	*	0
07:00	1	*	*	*	*	1	*	*	1
08:00	1	*	*	*	*	1	*	*	1
09:00	4	*	*	*	*	4	*	*	4
10:00	6	*	*	*	*	6	*	*	6
11:00	**8**	*	*	*	*	**8**	*	*	**8**
12:00 PM	5	*	*	*	*	5	*	*	5
01:00	5	*	*	*	*	5	*	*	5
02:00	**12**	*	*	*	*	**12**	*	*	**12**
03:00	6	*	*	*	*	6	*	*	6
04:00	6	*	*	*	*	6	*	*	6
05:00	8	*	*	*	*	8	*	*	8
06:00	5	*	*	*	*	5	*	*	5
07:00	4	*	*	*	*	4	*	*	4
08:00	2	*	*	*	*	2	*	*	2
09:00	0	*	*	*	*	0	*	*	0
10:00	0	*	*	*	*	0	*	*	0
11:00	1	*	*	*	*	1	*	*	1
Day Total	75	0	0	0	0	75	0	0	75
% Avg. WkDay	100.0%	0.0%	0.0%	0.0%	0.0%				
% Avg. Week	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	11:00	-	-	-	-	11:00	-	-	11:00
Vol.	8	-	-	-	-	8	-	-	8
PM Peak	14:00	-	-	-	-	14:00	-	-	14:00
Vol.	12	-	-	-	-	12	-	-	12

Grand Total	75	90	53	56	76	143	73	73	143

ADT

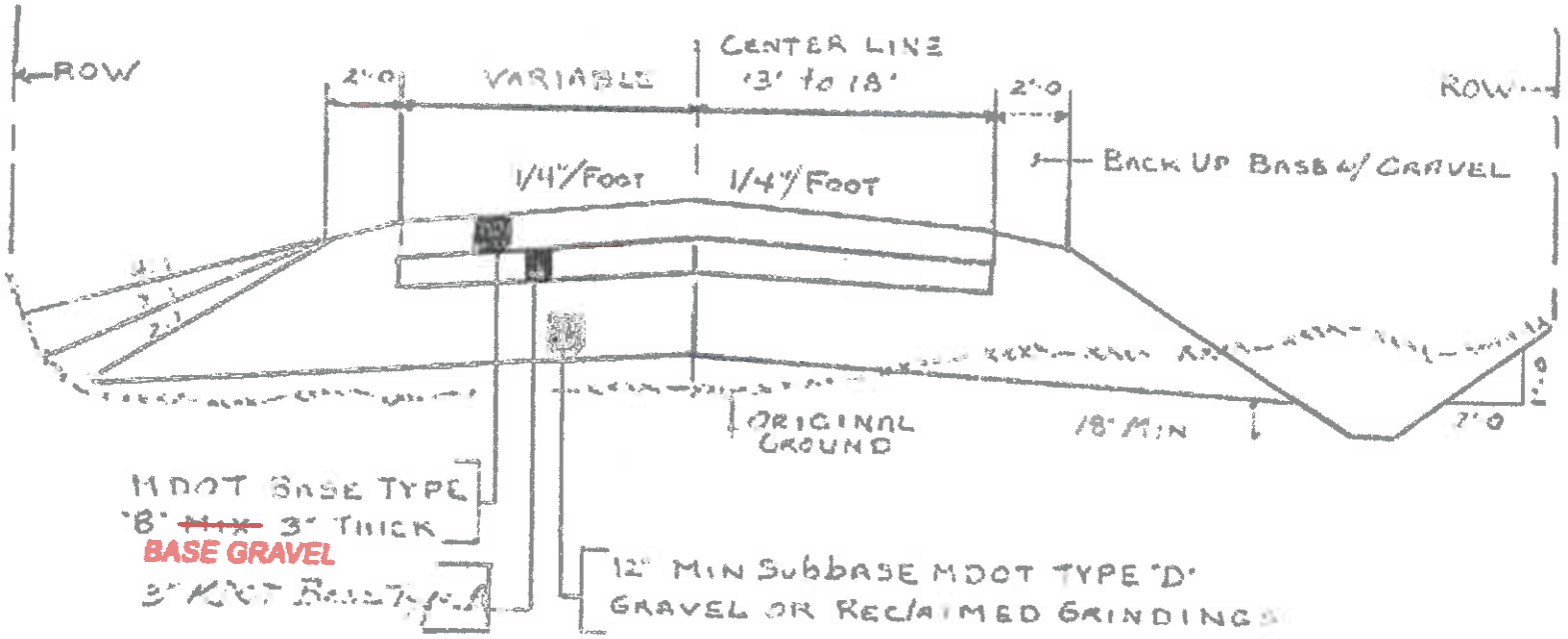
ADT 71

AADT 71



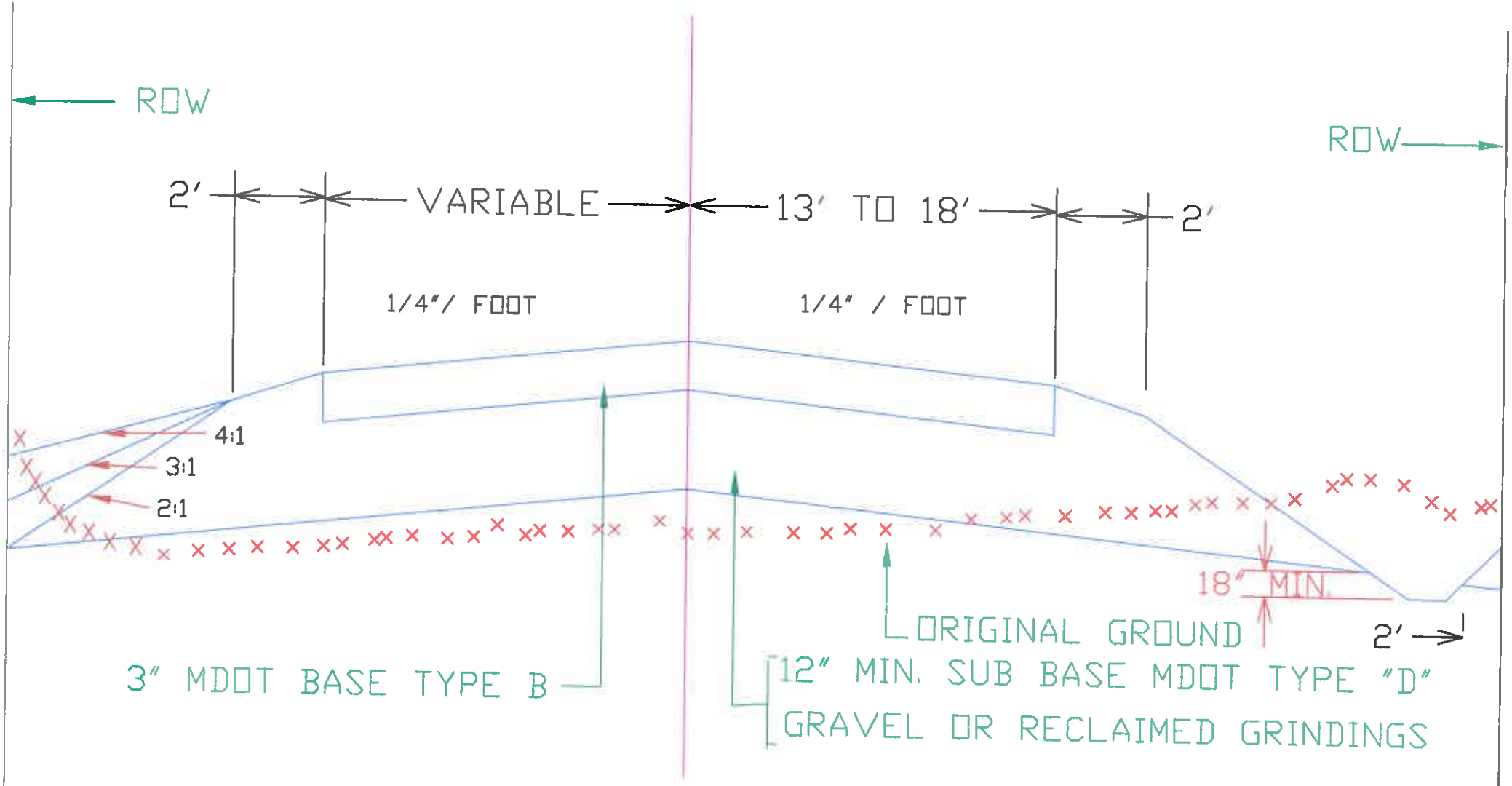
TYPICAL CROSS SECTION -- NO ASPHALT

(NOT TO SCALE)



TYPICAL CROSS SECTION

NTS



TYPICAL CROSS SECTION -- NO ASPHALT

(NOT TO SCALE)