Item #4

TOWN OF BRANFORD
OFFICE OF THE JOWN ENGINEER
1019 MAIN STREET
POST OFFICE BOX 150
BRANFORD, CT 06405

2020 MAR 27 P 3: 58
TOYANGLES AND TOTAL SERVERS

Fax: 203-315-2188

JOHN M. HOEFFERLE, PE, CFM TOWN ENGINEER

March 27th, 2020

Re: Drainage and Stony Creek Wharf Bond Authorization

I'm writing in support of Finance Director Jim Finch's request for bond authorizations for the Stony Creek Wharf Reconstruction and Town Wide Drainage Infrastructure Improvement capital requests. Capital funding for these projects has been included in the Engineering Department's FY21 budget request.

The Stony Creek Wharf is located at the floating Town docks at the end of Indian Point Road. The concrete wharf and ramp sections of the wharf have deteriorated due to age and undermining and are in need of replacement. Due to the complexity of the structure, a structural engineer will be retained to design the new wharf. Also included in this project is the replacement of deteriorated bearing piles for the 'Summer House', a historical gazebo-type structure appurtenant to the wharf. Photos of both the wharf and Summer House are attached. Initial estimates for these improvements are \$340,000.

There are a number of capital drainage projects required throughout town. The Engineering Department staff and Public Works Department have proved a great asset in responding to and identifying needed drainage improvements. While Public Works has corrected many of these issues in-house, and will continue to do so when able, there remains a list of capital drainage projects that are currently unfunded. Attached is documentation for these projects, which include:

- Weir Street runoff currently flows down the street to a set of catch basins in the cul-desac of Weir Street, which are conveyed through a piping system that dead ends below grade in the rear yard of 28 Weir Street. During moderate rainfalls, the storm sewer system will quickly fill, causing runoff to flow down the resident's driveway and flooding their rear yard and septic field. Per the resident, this has been a long-standing issue. The estimate for engineering and construction is approximately \$40,000.
- Thimble Island Underpass the underpass under the Amtrak railroad floods when heavy rain and high tides coincide. The existing storm sewer conveys drainage from the low point of Thimble Island Road out to the marsh. The existing pipe is corrugated metal which has deteriorated through contact with salt water and requires replacement. Replacement drainage pipe will utilize proper materials (ie plastic).

As part of this project we are proposing a water detection warning system to notify drivers of water over the road. The system uses a level sensor to activate flashing beacons, and will be programmed to notify the Police, Fire, and Public Works Departments of water over the road. The system can also be programmed to dial residents of Stony Creek to notify them of the conditions. The estimate for engineering and construction is approximately \$80,000.

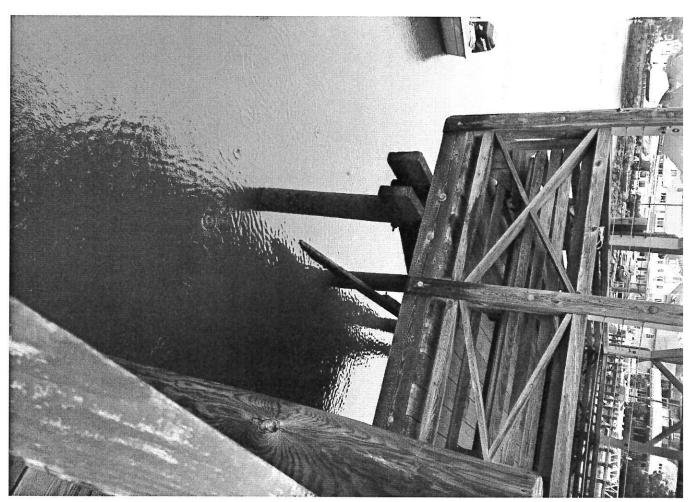
• Blackstone Avenue – drainage from the watershed flows down the Town's portion of Blackstone Avenue to a low spot on the privately owned section of Blackstone Avenue. During heavy rainfall, the lower areas are inundated with runoff, ponding at the driveway to 1 Blackstone Avenue. While attempts to correct this issue have been made in the past, flooding has continued. There is currently no storm sewer system in the vicinity of Blackstone Avenue, requiring a major project to install storm sewer from this area to the system on Club Parkway. The estimate for engineering and construction is approximately \$170,000.

The three projects listed above were brought to my attention in 2019, and we anticipate additional stormwater projects will be required. The Engineering and Public Works Departments are recognizing there are many areas of town with deteriorated or inadequate storm sewer infrastructure. It is for this reason I have requested \$500,000 in capital in order to proactively fund capital projects as they present themselves. Our departments are hoping to address these issues as they are realized and are requesting the funding resources to do so.

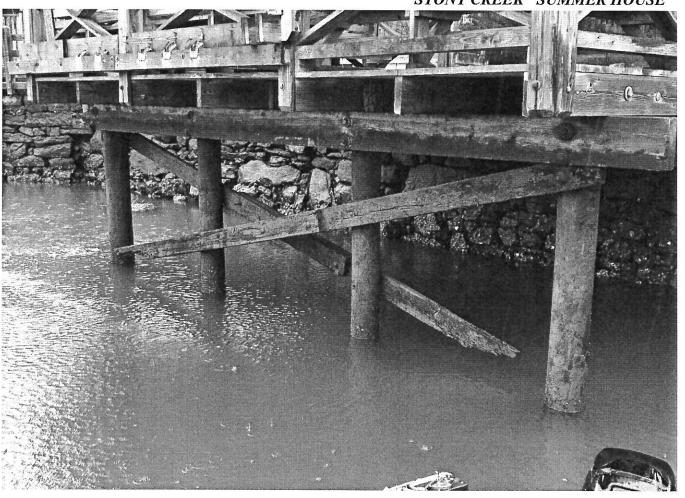
Thank you, be well,

John M. Hoefferle, PE, CFM

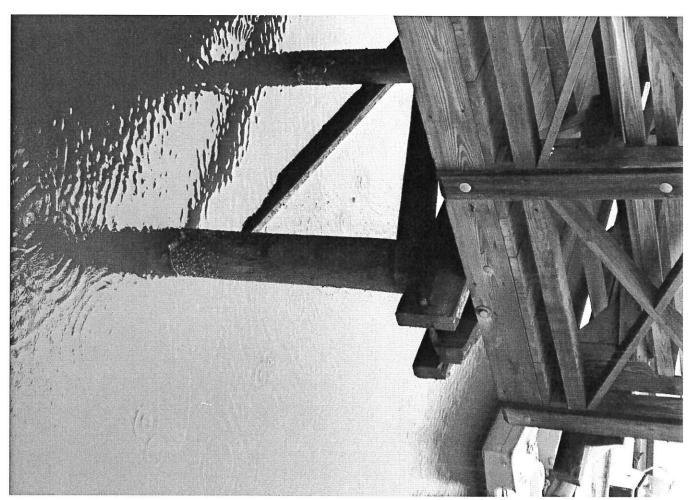
Town Engineer



STONY CREEK "SUMMER HOUSE"



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STONY CREEK "SUMMER HOUSE"



STONY CREEK WHARF



STONY CREEK WHARF- CONCRETE PIER



STONY CREEK WHARF- CONCRETE RAMP



STONY CREEK WHARF



STONY CREEK WHARF- CONCRETE PIER



SUBJECT: Weir Street Drainage

(Street Name)

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>	UNIT <u>PRICE</u>	EXTENDED <u>PRICE</u>	
1	24" PVC PIPE	220	Lin. Feet	46.44	\$ 10,216.80	
2	24" TIDEFLEX	1	Each	\$6,700.00	\$ 6,700.00	
3	STORM MANHOLES	3	Each	\$4,000.00	\$ 12,000.00	
4	STONE	60	Cu. Yard	\$50.00	\$ 3,000.00	
5	EXCAVATION	200	Cu. Yard	\$21.40	\$ 4,280.00	

Engineering & Permits Contingency

Subtotal	\$36,196.80
15% Misc.	\$5,429.52
10% Misc.	\$3,619.68
TOTAL	\$39,816.48

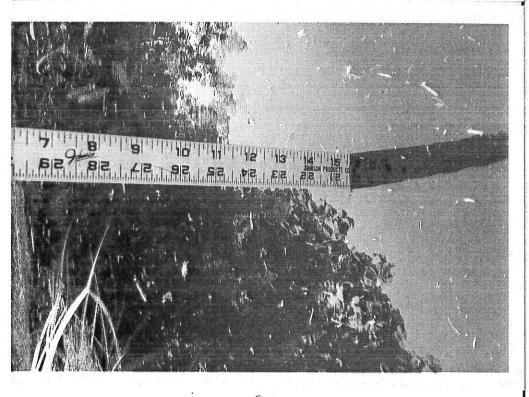












28 Weir Street Branford CT, 06405

March 19, 2020

Re: 2020 Budgeting for "the fix" to allow for functional drains on Weir St.

To: All influencing Branford town Committees C/O Jamie Cosgrove, First Selectman John Heofferle, Town Engineer Town of Branford CT, Office of the First Selectman/Town Engineer Branford Town Hall 1019 Main Street Branford, CT 06405

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MAR 1 9 2020

TOWN OF BRANFORD ENGINEERING DEPARTMENT

Dear Budget Influencing Representatives:

My Name is Ed Ammerer, my wife Terri and I purchased the property on 28 Weir St. on 3/20/10. So, we have been here on Weir Street 10 years. I am a lifelong resident of Branford. Shortly after purchasing this property, we experienced severe water in the yard issues during and after rainfall. We found out from neighbors that this is not unusual, but it was not disclosed to us when we bought.

The town has a 15' easement on the Eastern side of my property for drainage. This easement serves no purpose for me, only for the town, specifically for the drainage of Weir Street. There are two catch basins at the end of the street. The catch basins pipe into an approximate 4' X 4' X 8' deep settling tank on my property, (10 feet beyond the 15' easement). This then is piped into my back yard, and terminates about 34" below, and 22' from the rear of my 155' deep property. It terminates into silted gravel.

Consequently, the drains in the street are dysfunctional and do NOT drain.

My property itself perks properly, so my issue is with the town dumping street drainage water on me. This is SERIOUS, as during a heavy storm/rain, we are talking about 20,000 gallons of (calculated) water (for reference, a typical swimming pool is 30,0000 gallons). This is water that gathers on top of my property all at once, as the property is already saturated. The water can and does flood my garage and damages personal property. Also, this water floods my leaching field, causing hidden damage, as well as health concerns. Furthermore, the ice created in the winter creates bodily harm/footing/slipping hazards. The surface water also occurs in lesser rainfalls as well.

It is obvious that the town has been aware of this issue for many years yet has chosen to ignore the issue. The settling tank was substantially filled with silt, above the 16" (approximate) pipe, so the pipe clogged. So, the town never gave any maintenance, yet the easement and or approval is the town's doing. It is apparent that the drains do not, and likely never did work, as even a novice like me wouldn't create such a sub-standardly designed drain, and yet the town approved this.

If we sold, we legally are required to disclose that this property gets 20,000 gallons of water from the dysfunctional street drains, hammering down on it during heavy rains. Also, it still gets standing water in lesser rains. Because of this flooding, our property, 28 Weir Street is obviously unsellable. Would any of you buy a property like this?

Unk DaRos had promised me on September 2010, that this issue will be "taken care of", I shook his hand and thanked him. Former Town Engineer Janice Plaziak stated that elevation mapping showed that the

adjacent property had been built up 3', because "We don't track people with vast amounts of land". So, the water really has no place to go, as I am now in a hole which current elevation maps show. The Weir street asphalt was cut 8 years ago (between drains, and at the end of the street), and an engineering drawing was made to daylight the storm drains to the Branford River, by way of the Sansone property. And then.....nothing!

Jamie, met with me in person on the afternoon of October 5, 2018 regarding the dysfunctional storm drains on Weir Street. During our meeting, he agreed that the town needs to fix this. There was a short period of activity, however, it was determined that the easement/drainage could not work to correct the issue. I even lent a hand by using my mini backhoe to determine that the drain-pipe actually ended approximately 22' before the end of my property.

I am growing ever more impatient, as this water issue is devastating, my home resale value is zero, and frankly I'm tired of raking up the debris and dealing with this whole issue. I cannot and will not further tolerate this water from the street, due to the Town of Branford falling asleep at the switch and NOT doing due diligence to fix it.

Here is CT case law:

Reference, 2019 edition, Surface Water in CT General statutes, Section 13a-138 (a)

Spring v. Constantino. 168.563.570.362A.2D871 (1975). Related synopsis:

As I can't just arbitrarily dump ground water onto a neighbor's land, the town also can't dump water on me.

Reference, 49 Conn. App. 781 (1988) John C. Hutchinson Et Al v. town of Andover (AC 16859) Appellate Court of CT. Paraphrased synopsis:

Town cannot base the drainage solution relative to the cost to the town.

I expect that this drainage "fix" will be permanent, and NOT rely upon street grading or other non-permanent and ill-conceived corrections.

I also expect the town will remove the nuisance manhole placed on the settling tank (off the easement), and legally release the non-functional easement on my property.

Attached are pictures relating to our flooding situation. Naturally, we've got lots of pictures, but pictures never show enough. The Town of Branford has an obligation to do the lawfully correct thing and fix this festering problem, which is clearly defined by CT case law. My documentation proves that the town has clearly been aware of this unreasonable issue for too many years already.

I hear that "the fix" is relative to budgeting, really?

I expect this to be fully resolved in 2020, as do not want to pursue this issue further.

Sincerely,

Edwin Ammerer

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MAR 1 9 2020

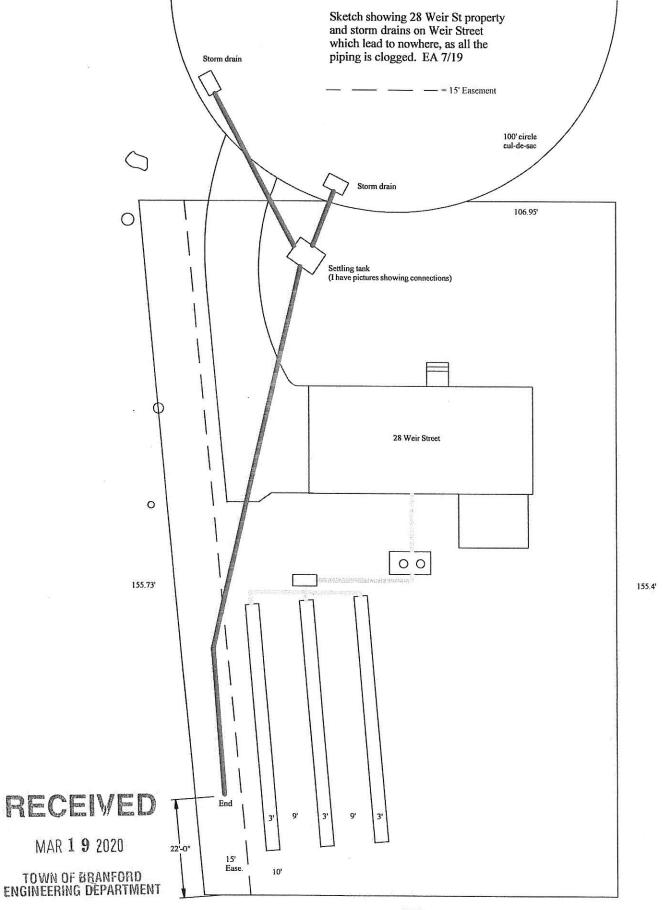
Attachments

TOWN OF BRANFORD ENGINEER TO PARTMENT

Town of Branford, Connecticut - Assessment Parcel Map Parcel: E08-000-015-00036 Address: 28 WEIR ST 1 15.7 AC 36 3&C RECEIVED 37 .3 AC MAR 1 9 2020 TOWN OF BRANFORD ENGINEERING DEPARTMENT 35 .4 AC 38 AC 34 .3 AQ 34 .3 AC .3 AC 12 1 AC 13 .1 AC 28 6 AC 000 5 AC 27 Approximate Scale: 1 inch = 100 feet



Flooding issue due to inoperative storm drains on Weir Street





Return to: Edwin E. & Teresa L. Ammerer 28 Weir Street Branford, CT 06405

WARRANTY DEED

To All People to Whom these Presents shall Come, Greeting:

Know Ye, That I, ANNE D. KELLY, whose mailing address is 145 Peddlers Road, Cuilford. Connecticut, for the consideration of TWO HUNDRED EIGHTY NINE THOUSAND AND NO/100 (\$289,000.00) DOLLARS, received to her full satisfaction of EDWIN E. AMMERER and TERESA L. AMMERER, whose mailing address will be 28 Weir Street, Branford, Connecticut, and does give, grant, bargain, sell and confirm unto the said EDWIN E. AMMERER and TERESA L. AMMERER, and unto the survivor of them, and unto such survivor's heirs and assigns forever.

All that certain piece or parcel of land with all the buildings and improvements thereon, situated in the Town of Branford, County of New Haven and State of Connecticut, known as 28 Weir Street and shown as Lot No. 3 on a map entitled "Weir St. Extension Subdivision Map Branford, Conn.", Scale 1"=40', dated March 11, 1977, Certified Substantially Correct by Bernard E. Godfrey, Registered Professional Land Surveyor, on file as Map No. 1378 in the Town Clerk's Office of Branford, bounded and described as follows:

SOUTHEASTERLY:

by Weir Street, 106.95 feet;

SOUTHWESTERLY:

by Lot No. 2 on said map, 155.34 feet;

NORTHWESTERLY:

by land now or formerly of Sansone, 90.08 feet;

NORTHEASTERLY:

by land now or formerly of Sansone, 155.73 feet.

Said premises are conveyed subject to:

- Building lines, if established, all laws, ordinances or governmental regulations, including building and zoning ordinances, affecting said premises.
- 2) Taxes to the Town of Branford on the Grand List of October 1, 2008, paid in full, and subsequent lists, which taxes grantee herein assumes and agrees to pay as part consideration for this deed.
- 3) A 15 foot drainage easement running along the northeasterly boundary line of said lot as shown on Map #1374 on file in the Branford Land Records.
- 4) A right-of-way in favor of the heirs of Frances Danforth as it appears in a deed dated January 9, 1929 and recorded in Volume 89 at Page 61 of the Branford Land Records.
- 5) A right-of-way in favor of Cornelius Sansone and Regina Sansone as it appears of record in a deed from John A. Carlson dated October 8. 1970 and recorded in Volume 231 at Page 441 of the Branford Land Records.
- Notes and conditions contained on Map No. 1374 on file in the Branford Town Clerk's Office.

To Have and to Hold the above granted and bargained premises, with the appurtenances thereof, unto them the said grantees, and unto the survivor of them, and unto such survivor's heirs and assigns forever: to them and their own proper use and behoof. And also, the said granter does for his heirs, executors and administrators, covenant with the said grantees and with the survivor of them, and with such survivor's heirs and assigns, that at the enscaling of these presents, she is well seized of the premises, as a good indefeasible estate in FEE SIMPLE; and she has good right to bargain and sell the same in manner and form as is above written; and that the same is free from all encumbrances whatsoever, except as stated.

And Furthernore, the said grantor does by these presents bind herself and her heirs forever to WARRANT AND DEFEND the above granted and bargained premises to them the said grantees, and to the survivor of them and to such survivor's heirs and assigns, against all claims and demands whatsoever, except as above stated.

1.445 OD State Convoyance Tex Received

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MAR 1 9 2020

TOWN OF BRANFORD INGINEERING DEPARTMENT

\$ 1,445.00 State Convoyance Tax Received Conveyance Tax Received

Town Charle of Branfor

In Witness Whereof, I have hereunto set my hand and seal this 4th day of March. 2010.

Signed, Sealed and Delivered in the presence of

State of Connecticut, County of New Haven

ss: New Haven

On this the 4th day of March, 2010, before me, the undersigned officer, personally appeared Anne D. Keily, known to me (or satisfactorily) proven to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same for the purposes therein contained.

In Witness Whereof, I hereunto set my hand.

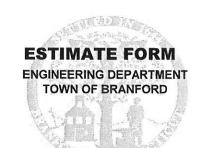
Commissioner of the Superior Court

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MAR 1 9 2020

TOWN OF BRANFORD ENGINEERING DEPARTMENT

Received for Record at Branford, CT On 03/05/2010 At 12:17:02 pm



SUBJECT: Thimble Island Rd/Stony Creek Underpass

(Street Name)

<u>ITEM</u>	<u>DESCRIPTION</u>	QTY	<u>UNIT</u>	UNIT <u>PRICE</u>	EXTENDE <u>PRICE</u>	
1	24" PVC PIPE	375	Lin. Feet	46.44	\$ 17,4	15.00
2	24" TIDEFLEX	1	Each	\$6,700.00	\$ 6,70	00.00
3	STORM MANHOLES	3	Each	\$4,000.00	\$ 12,00	00.00
4	STONE	94	Cu. Yard	\$50.00	\$ 4,70	00.00
5	EXCAVATION	350	Cu. Yard	\$21.40	\$ 7,49	90.00
6	4" TOPSOIL	944	Sq. Yard	\$6.80	\$ 6,4	19.20
7	SEED	944	Sq. Yard	\$1.50	\$ 1,4	16.00
8	SIGNAGE	1	Lump Sum	\$17,000.00	\$ 17,00	00.00

Engineering & Permits
Contingency

	Subtotal	\$73,140.20			
s	15% Misc.	\$10,971.03			
	10% Misc.	\$7,314.02			
	TOTAL	\$80,454.22			



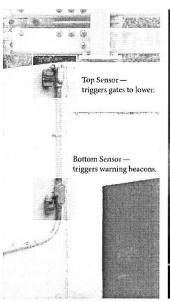
Water Detection Warning Systems

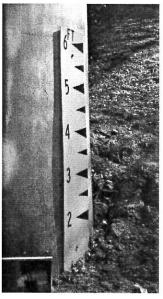
Wet, slippery, and/or flooded roads are killers. Every municipality has areas or roads that experience occasional flooding or become dangerous when wet. ELTEC's low maintenance sensor detects both conditions forewarning motorists.

FLOOD DETECTION AND WARNING SYSTEM

ELTEC'S system utilizes a bronze-housed sensor positioned at the desired high water detection point. When water touches the two stainless steel electrodes, an amplified signal activates the transmitter, which in turn activates the flashing road beacons. If optional communication devices are used, messages are sent. The LEDs flash continuously as long as flood waters are detected.

Multiple sensors can be mounted on the detector pole or a bridge, triggering specific events with each level of flooding. For example, the lowest sensor turns ON the flashing signals; the higher mounted sensor would lower the gates.





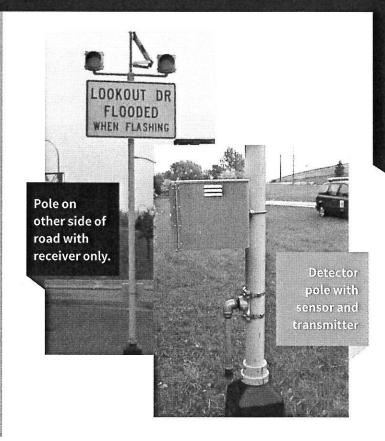


FEATURES AND BENEFITS

- No moving parts: mechanical float switches can jam
- Immune to trash and debris
- Doesn't wear out: no mechanical float switches
- Immune to corrosion: won't rust
- Operates in salt/sea, brackish and fresh waters
- Intrinsically safe: no sparks
- Waterproof housing: wires not exposed to water
- Activated as long as flood water is detected
- Available in either AC or DC/Solar powered
- Customizable: alerts, cameras, gates, weekly diagnostics

Each system is customized to fit flood conditions so motorists and authorities are informed. Additional devices such as a camera or radio can be added enhancing the system's effectiveness. Cellular or radio communication can:

- Send alerting texts, e-mails
- Report flooding to a central office
- Make phone calls with a pre-recorded message announcing the specific site



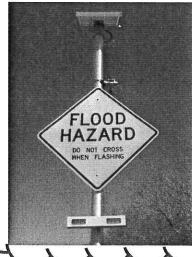
WET ROAD DETECTION AND WARNING SYSTEM

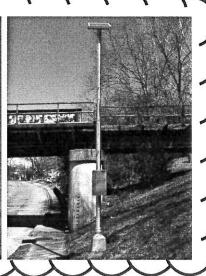
Some curves on roads are extremely slippery when wet. A road side embedded sensor warns motorist to SLOW DOWN or SLIPPERY WHEN WET prior to reaching the area.

ELTEC's sensor is embedded in the pavement near the outside edge of the roadway shoulder, or if impractical, installed in a concrete core alongside the road. The top surface of the sensor is level and flush with the surrounding pavement. A wire connect the sensor to the flashing beacon pole for distances up to 2000 feet.

Should an intersection experience frequent accidents with the first sign of rain, the sensor can be connected to the controller triggering a longer YELLOW light duration. This allows have time for case of get (slide) brough the intersection before the cross traffic enters.









SUBJECT: Blackstone Ave Drainage (Pine Orchard)

(Street Name)

<u>ITEM</u>	DESCRIPTION	QTY	<u>UNIT</u>	UNIT <u>PRICE</u>	EXTENDED PRICE	
1	12" PVC PIPE	750	Lin. Feet	\$ 9.69	\$ 7,267.50	
2	STORM MANHOLES	5	Each	\$4,000.00	\$ 20,000.00	
3	CATCHBASIN	8	Each	\$3,600.00	\$ 28,800.00	
4	STONE	115	Cu. Yard	\$50.00	\$ 5,750.00	
5	EXCAVATION	525	Cu. Yard	\$21.40	\$ 11,235.00	
6	GRANULAR BACKFILL	210	Cu. Yard	\$60.00	\$ 12,600.00	
7	SURFACE	195	Ton	\$120.00	\$ 23,400.00	
8	BINDER	290	Ton	\$120.00	\$ 34,800.00	
9	PROC AGG BASE	140	Cu. Yard	\$65.60	\$ 9,184.00	

Engineering & Permits Contingency

Subtotal	\$153,036.50			
15% Misc.	\$22,955.48			
15% Misc.	\$15,303.65			
TOTAL	\$168,340.15			



Town of Branford, CT

