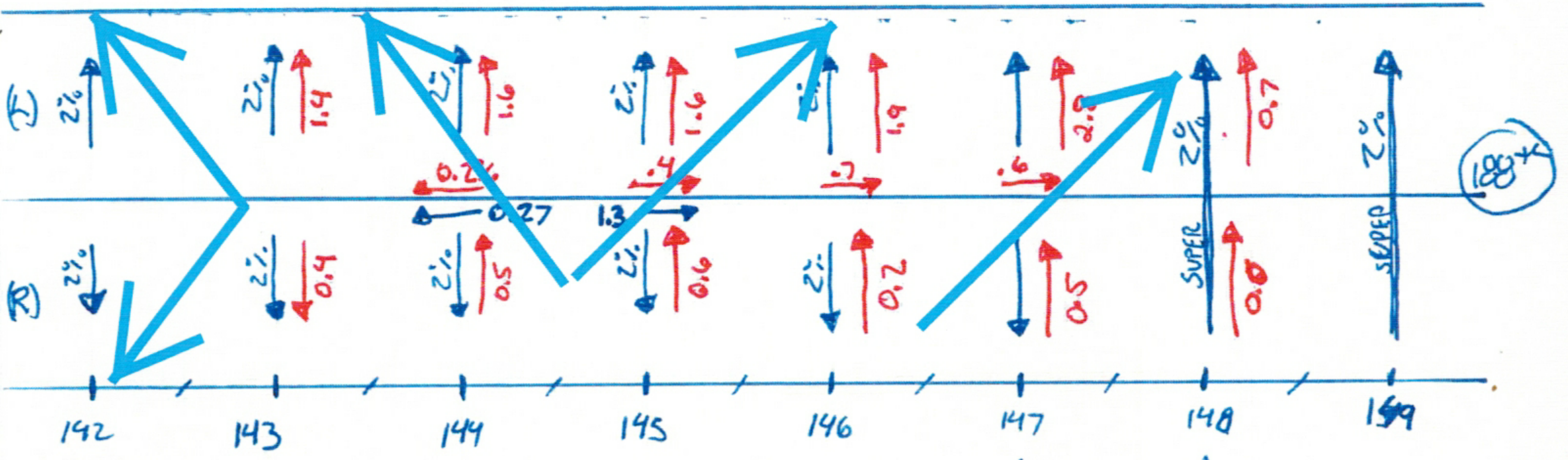




Project: 188th Ave Cross Slope Analysis
Subject: 47765 Run off concern
Date: 9/14/18 By: GN SEH #: _____
Checked by: _____ Date: _____ Office: _____ File #: _____
Sheet No: _____ Of: _____

LAKE SIDE

47765



DITCH SIDE

PLANNED TRANSITION POINT/AREA

xx% → PLAN CROSS SLOPE + DIRECTION

xx% → ACTUAL CROSS SLOPE + DIRECTION
(MEASURED WITH SMALL SMART LEVEL)

*

SHAMROCK 188TH AVE

Cross Slope out of Tolerance	
Start Station	143+00
End Station	147+00
Bit Depth [in]	2.5
Removal Length [ft]	400
Road Width [ft]	20
Road Area [SY]	888.9
Bit Tonnage	122.2
\$\$/ton	\$ 70.00
Cost	\$ 8,555.56

Water Area Per 50' Lot	1000	sf
Gallons / 1" rain	623	gal
Planned amount	312	gal

PRE-CONSTRUCTION ROAD ELEVATIONS - PER SURVEY DATA						
Station	West (lake)	Center	East (ditch)	West Lane Slope	East Lane Slope	DIRECTION
142	1233.82	1234.24	1234.39	4%	2%	LAKE
143	1234	1234.46	1234.43	5%	-0.3%	SLIGHT CROWN
144	1234.32	1234.8	1234.84	5%	0.4%	LAKE
145	1233.87	1234.26	1234.48	4%	2%	LAKE
146	1232.79	1233.08	1233.19	3%	1%	LAKE
147	1231.32	1231.89	1232.14	6%	3%	LAKE
148	1230.38	1230.92	1230.71	5%	-2%	SLIGHT CROWN



MEMORANDUM

TO: Shamrock Township Board Members

FROM: Jayson Newman, PE

DATE: September 18, 2018

RE: Shamrock Township
Construction Update
SEH No. SHAMT 144470 14

188th Avenue Improvements -

Resident at 47765 has raised a concern that they are receiving too much water from the new road profile. The attached drawing shows the actual slopes on the road vs the planned slope. The proposed profile was to be a typical 2% crown from stations 133+00 to Station 147+00 where it transitions to a 2% super for the corner. The actual shows a 2% cross slope from Station 144 to 147 directing water that lands on the road to the lake side. This in theory sends additional water to the resident's property than planned. It is noted as well that the property location is near the point of vertical inflection (top of hill) and therefor is not gathering water from far locations. The constructed ditch on the opposite side collects the majority of water before it can reach the road.

The specifications for the Asphalt Pavement are as follows:

- A. Thickness and Surface Requirements:
1. After compaction, each course shall be within 1/4 inch of the required thickness.
 2. Remove and replace any areas that are not within tolerance.
 3. After rolling, each surface shall be free of open and torn sections.
 4. Each course shall be smooth and true to the planned grade and cross-section within the following tolerances:
 - a. Wearing course surfaces shall not vary more than 1/8 inch from the edge of a 10-foot straightedge placed parallel or perpendicular to centerline.
 - b. Transverse slopes of each surface shall not vary from the proposed slope by more than 1/2 inch in 12 feet.
 - c. The distance from centerline to edge of each course shall be not less than the proposed distance nor greater than 3 inches more than the proposed distance.
 5. Remove and reconstruct all portions of any course not in compliance with the above tolerances.
 6. Perform acceptance in accordance with MnDOT 2399.

The specifications for the Aggregate Base are as follows:

- B. Tolerances: Construct each course to within 0.05 foot of the planned grades and staked elevations at all locations.