TOWN COUNCIL MINUTES

SPECIAL MEETING **Monday, June 17, 2019 @ 12:00 p.m.**

The Kure Beach Town Council held a special meeting on Monday, June 7th, 2021 beginning at 12:00 pm. There was a quorum of Council.

COUNCIL MEMBERS PRESENT	COUNCIL MEMBERS ABSENT
Mayor Craig Bloszinsky	None
(MPT) David Heglar	
Commissioner Joseph Whitley	
Commissioner Allen Oliver	
Commissioner John Ellen	

STAFF PRESENT
Town Clerk – Mandy Sanders
Deputy Town Clerk- Beth Chase

Mayor Bloszinsky called the meeting to order at 6:30 p.m.

The purpose of this special meeting is to have discussion regarding the MOTSU-stormwater drainage feasibility study received from LDSI.

Jonathan Hinkle, PE with LDSI, Inc gave a presentation on the MOTSU-stormwater drainage feasibility study hereby incorporated into the minutes.

Highlights of the Presentation:

- LDSI was hired by the Town of Kure Beach to perform a feasibility analysis for installing stormwater drains within the MOTSU fire lane
- Residents have reported observing standing water in fire lane and their backyards
- LDSI observed standing water on February 19th 2021
- LDSI gathered topographic data throughout MOTSU firelane
- Ponded water information gathered with handheld GPS
- Buried forcemain located at two points
- 4 options for Town Council to consider
- Recommendation from LDSI is to do Alternative #4 at a cost of $264,245 due to the following reasons:
    - Lowest cost
    - Ease of implementation (no tie to existing network)
    - Minimal public disturbance (limited fence removal and replacement)
- Next Steps would be to do the following steps:
    - Alternative selection
    - MOTSU Approval/Sign-Off
    - Stakeholder and resident feedback

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- Design and permitting
- Erosion & Sediment Control
- State Stormwater
- 401/404

MOTION- MPT Heglar made a motion that LDSI be directed to clean up Alternatives #3 and #4 to provide them to Commissioner Whitley to take to MOTSU to find out the interest of MOTSU allowing the Town to complete this project
SECOND- Commissioner Oliver
VOTE- Unanimous

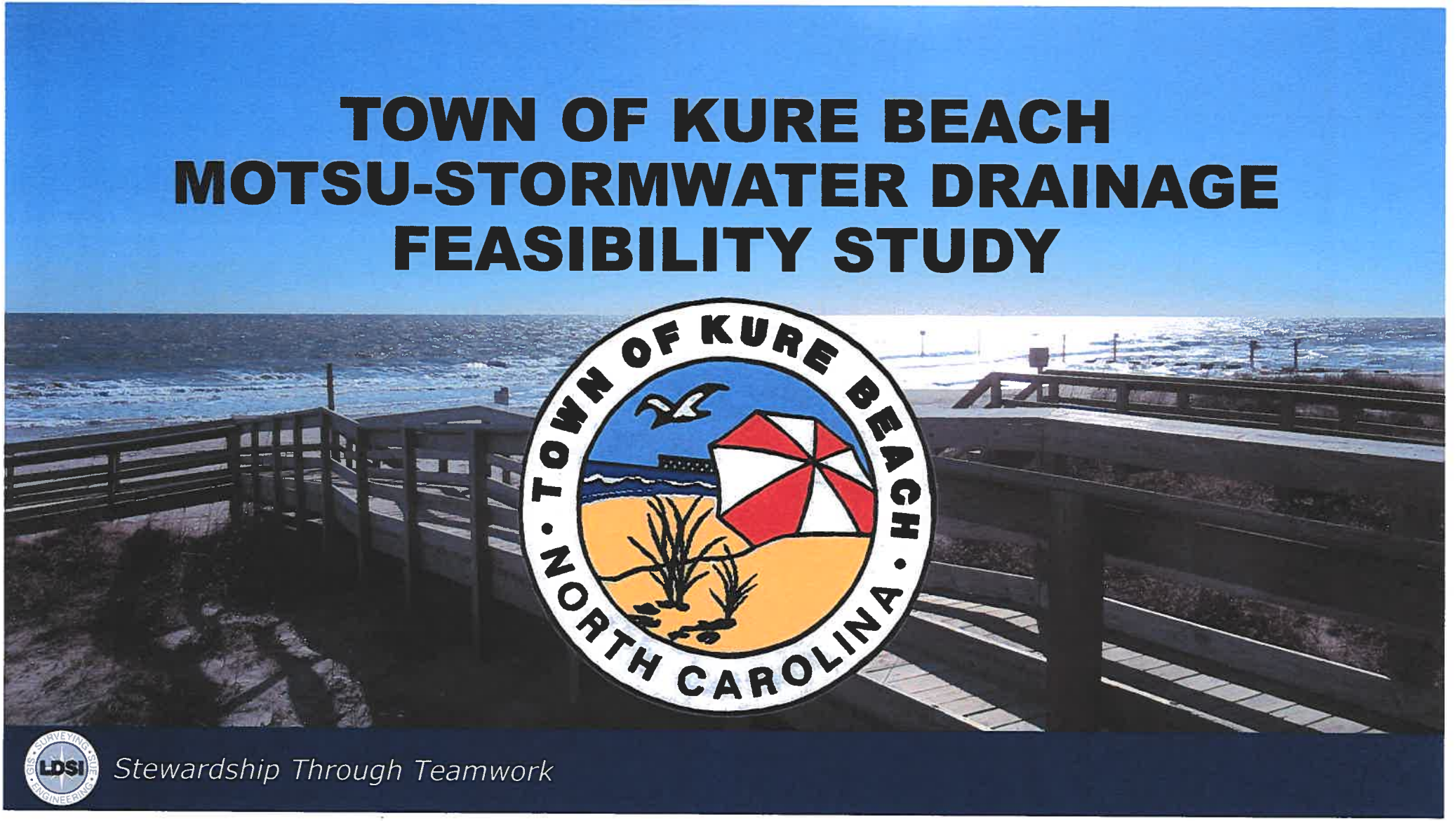
MOTION- Commissioner Oliver made a motion to adjourn the meeting at 7:13 p.m.
SECOND- Commissioner Whitley
VOTE- Unanimous

ATTEST: Mandy Sanders
Mandy Sanders, Town Clerk

Craig Bloszinsky
Craig Bloszinsky, Mayor

NOTE: These are action minutes reflecting items considered and actions taken by Council. These minutes are not a transcript of the meeting. A recording of the meeting is available on the town's website under government>council.

TOWN OF KURE BEACH
MOTSU-STORMWATER DRAINAGE FEASIBILITY STUDY



LDSI

Stewardship Through Teamwork

Background

- LDSI was hired by the Town of Kure Beach to perform a feasibility analysis for installing stormwater drains within the MOTSU fire lane
- LDSI previously completed an analysis of "Area B" for the Town
- The MOTSU fire lane borders the West side of the Town and the section included within the analysis runs from K Avenue to the south end of Largo Way

Background

- Residents have reported observing standing water in fire lane and their backyards
- LDSI observed standing water on February 19th 2021

Project Goals

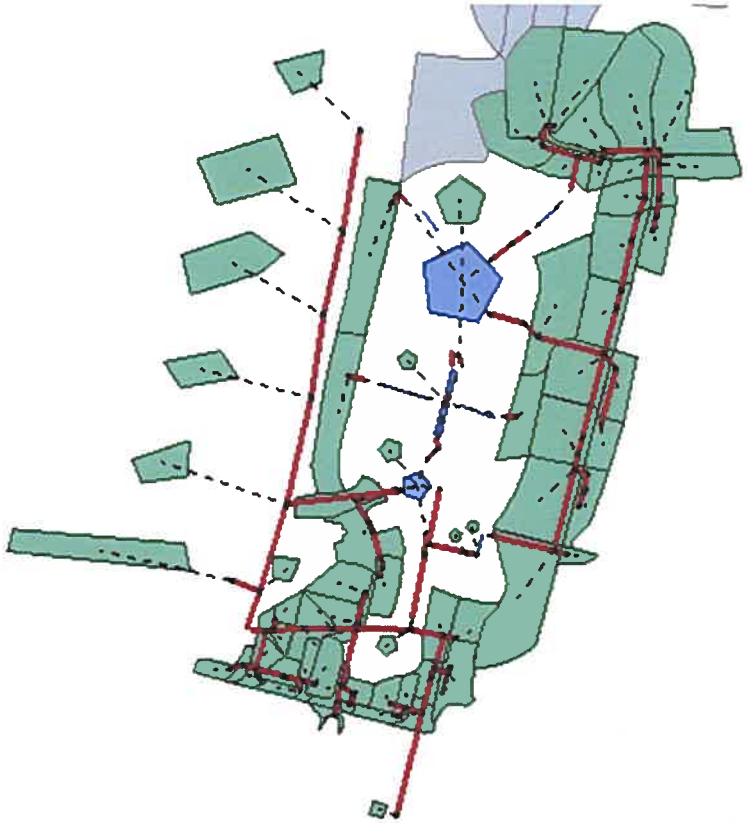
- Determine a feasible design concept to minimize nuisance flooding within the project area
- Provide a stable outlet to the canal along K-Avenue
- Compatible with MOTSU landuse

Survey Efforts

- LDSI gathered topographic data throughout MOTSU firelane
- Ponded water information gathered with handheld GPS
- Buried forcemain located at two points
- Watersheds delineated

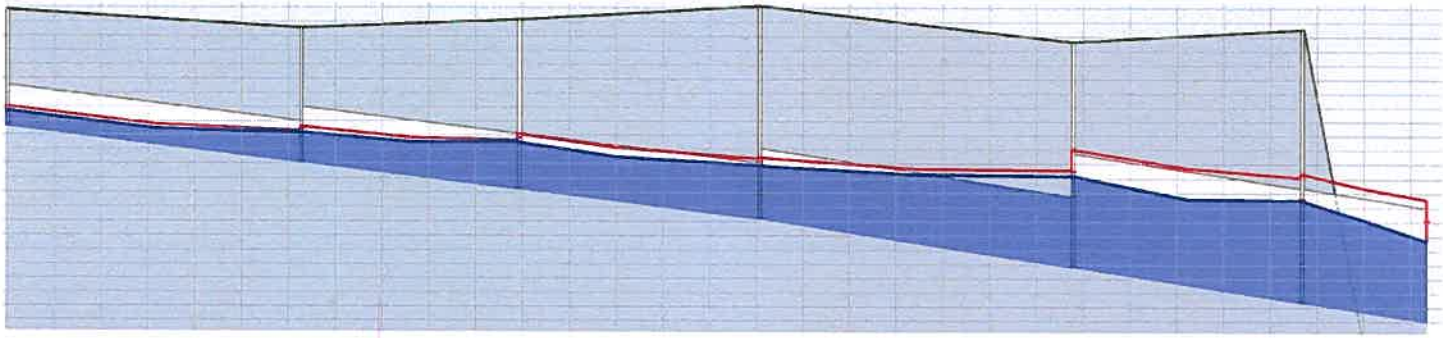
Hydrology & Hydraulics

- LDSI utilized Bentley CivilStorm so that the proposed pipe could be incorporated into the existing “Area B” model



Hydrology & Hydraulics

- 25-yr design storm (per New Hanover County Stormwater Manual) routed through proposed pipes to ensure a non-surcharged condition
- 100-yr storm analyzed for flooding



Assumptions

- Rational Method for peak flow (preliminary pipe sizing)
- Modified Rational Method for Volume (interconnected pond modeling)
- NOAA Atlas 14 rainfall data

Alternative #1

Alternative #1 opinion of probable cost

Alternative #1					
Description	**Spec #**	**Qty**	**Unit**	**Unit Price**	**Total Price**
48" HDPE		380	LF	$ 170	$ 64,600
42" HDPE		350	LF	$ 140	$ 49,000
30" HDPE		430	LF	$ 75	$ 32,250
24" HDPE		490	LF	$ 70	$ 34,300
18" HDPE		315	LF	$ 62	$ 19,530
6x6 box with DI		2	EA	$ 4,000	$ 8,000
4x4 box with DI		5	EA	$ 2,500	$ 12,500
POND RISER		1	EA	$ 10,000	$ 10,000
Tennis Court		1	EA	$ 80,000	$ 80,000
Fencing		25	LF	$ 1,000	$ 25,000
Excavation		2900	CUYD	$ 30	$ 87,000
Flexamat		890	SY	$ 30	$ 26,700
Seeding		0.5	AC	$ 1,500	$ 750
				Total	**$ 449,630**

Alternative #2

Alternative #2 opinion of probable cost

Alternative #2					
Description	**Spec #**	**Qty**	**Unit**	**Unit Price**	**Total Price**
48" HDPE		400	LF	$ 170	$ 68,000
42" HDPE		350	LF	$ 140	$ 49,000
30" HDPE		430	LF	$ 75	$ 32,250
24" HDPE		535	LF	$ 70	$ 37,450
18" HDPE		345	LF	$ 62	$ 21,390
6x6 box with DI		2	EA	$ 4,000	$ 8,000
4x4 box with DI		5	EA	$ 2,500	$ 12,500
Ø6' with Manhole		1	EA	$ 4,000	$ 4,000
Ø4' with Manhole		4	EA	$ 2,500	$ 10,000
POND RISER		1	EA	$ 10,000	$ 10,000
Tennis Court		1	EA	$ 80,000	$ 80,000
Excavation		2900	CUYD	$ 30	$ 87,000
Flexamat		890	SY	$ 30	$ 26,700
Seeding		0.5	AC	$ 1,500	$ 750
				Total	**$ 447,040**

Alternative #3

Alternative #3 opinion of probable cost

Alternative #3					
Description	**Spec #**	**Qty**	**Unit**	**Unit Price**	**Total Price**
30" HDPE		715	LF	$ 75	$ 53,625
24" HDPE		500	LF	$ 70	$ 35,000
18" HDPE		410	LF	$ 62	$ 25,420
4x4 box with DI		7	EA	$ 2,500	$ 17,500
Fencing		1000	LF	$ 25	$ 25,000
Excavation		2900	CUYD	$ 30	$ 87,000
Flexamat		890	SY	$ 30	$ 26,700
Seeding		0.5	AC	$ 1,500	$ 750
				Total	**$ 270,995**

Alternative #4

Alternative #4 opinion of probable cost

Alternative #4					
Description	**Spec #**	**Qty**	**Unit**	**Unit Price**	**Total Price**
30" HDPE		715	LF	$ 75	$ 53,625
24" HDPE		560	LF	$ 70	$ 39,200
18" HDPE		435	LF	$ 62	$ 26,970
4x4 box with DI		7	EA	$ 2,500	$ 17,500
Ø4' with Manhole		5	EA	$ 2,500	$ 12,500
Excavation		2900	CUYD	$ 30	$ 87,000
Flexamat		890	SY	$ 30	$ 26,700
Seeding		0.5	AC	$ 1,500	$ 750
				Total	**$ 264,245**

Alternative Comparison

	Drop Inlets Directly Over Main Pipe	Drop Inlets Connected to Laterals	Connection to Previously Studied Area 'B'	Price
Alternative #1	✓		✓	$449,630
Alternative #2		✓	✓	$447,040
Alternative #3	✓			$270,995
Alternative #4		✓		$264,245

Recommendation

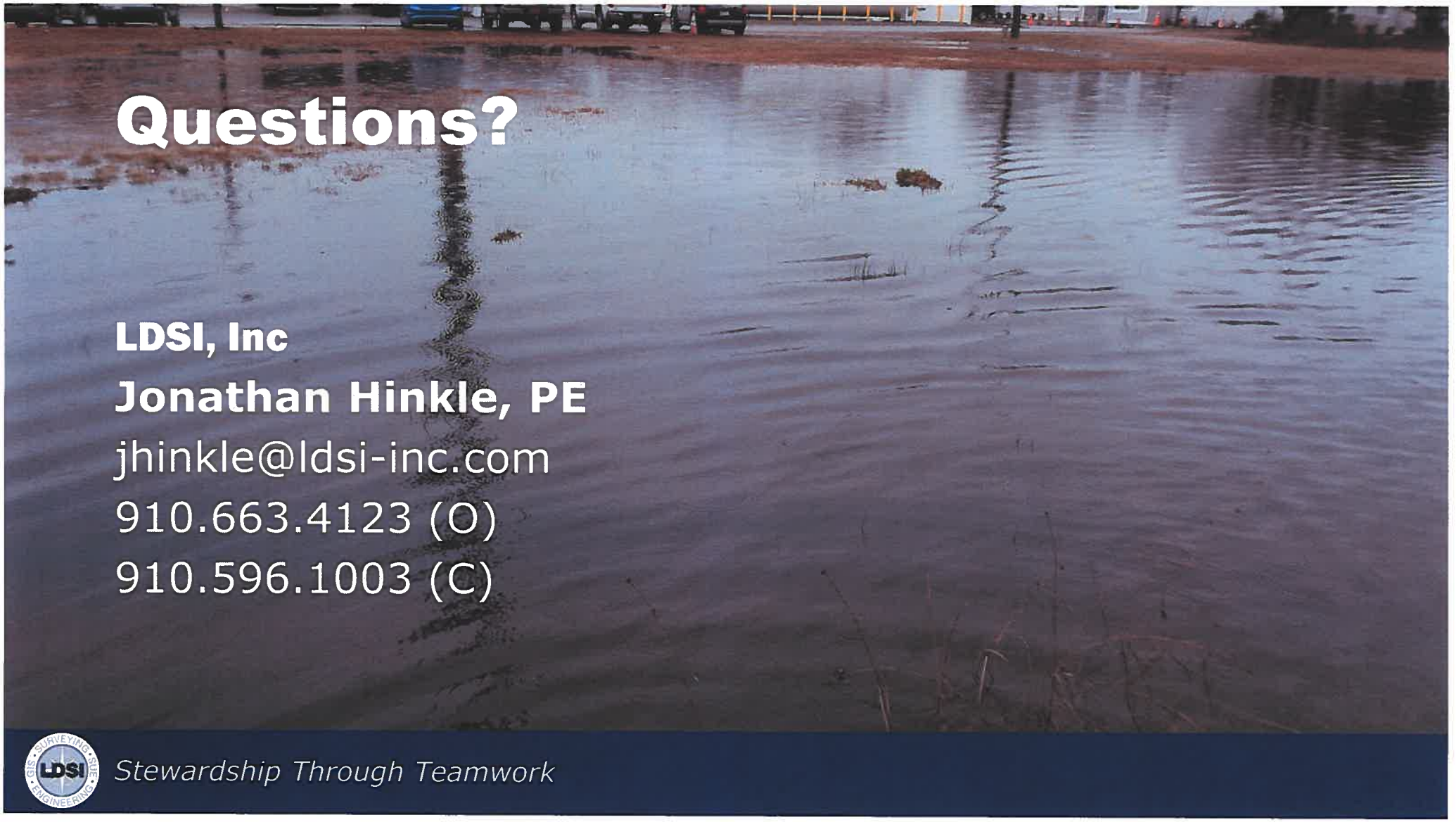
	Drop Inlets Directly Over Main Pipe	Drop Inlets Connected to Laterals	Connection to Previously Studied Area 'B'	Price
Alternative #1	✓		✓	$449,630
Alternative #2		✓	✓	$447,040
Alternative #3	✓			$270,995
Alternative #4		✓		$264,245

Recommendation

- We recommend Alternative #4
  - Lowest cost
  - Ease of implementation (no tie to existing network)
  - Minimal public disturbance (limited fence removal and replacement)

Next Steps

- Alternative selection
- MOTSU Approval/Sign-Off
- Stakeholder and resident feedback
- Design and permitting
  - Erosion & Sediment Control
  - State Stormwater
  - 401/404



Questions?

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Stewardship Through Teamwork