

Anoka Ramsey Judicial Ditch (ARJD) 1 Repair



August 12, 2026

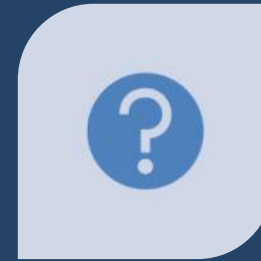
Why We Invited You Here



LEARN ABOUT PROPOSED
REPAIR



PROVIDE INPUT ON CONCERNS



ASK QUESTIONS ON
NECESSARY WORK / PROCESS

What We Plan to Discuss

Background on RCWD's Role

Timeline to Date

Drainage System Conditions

Proposed Plans to Repair Drainage System

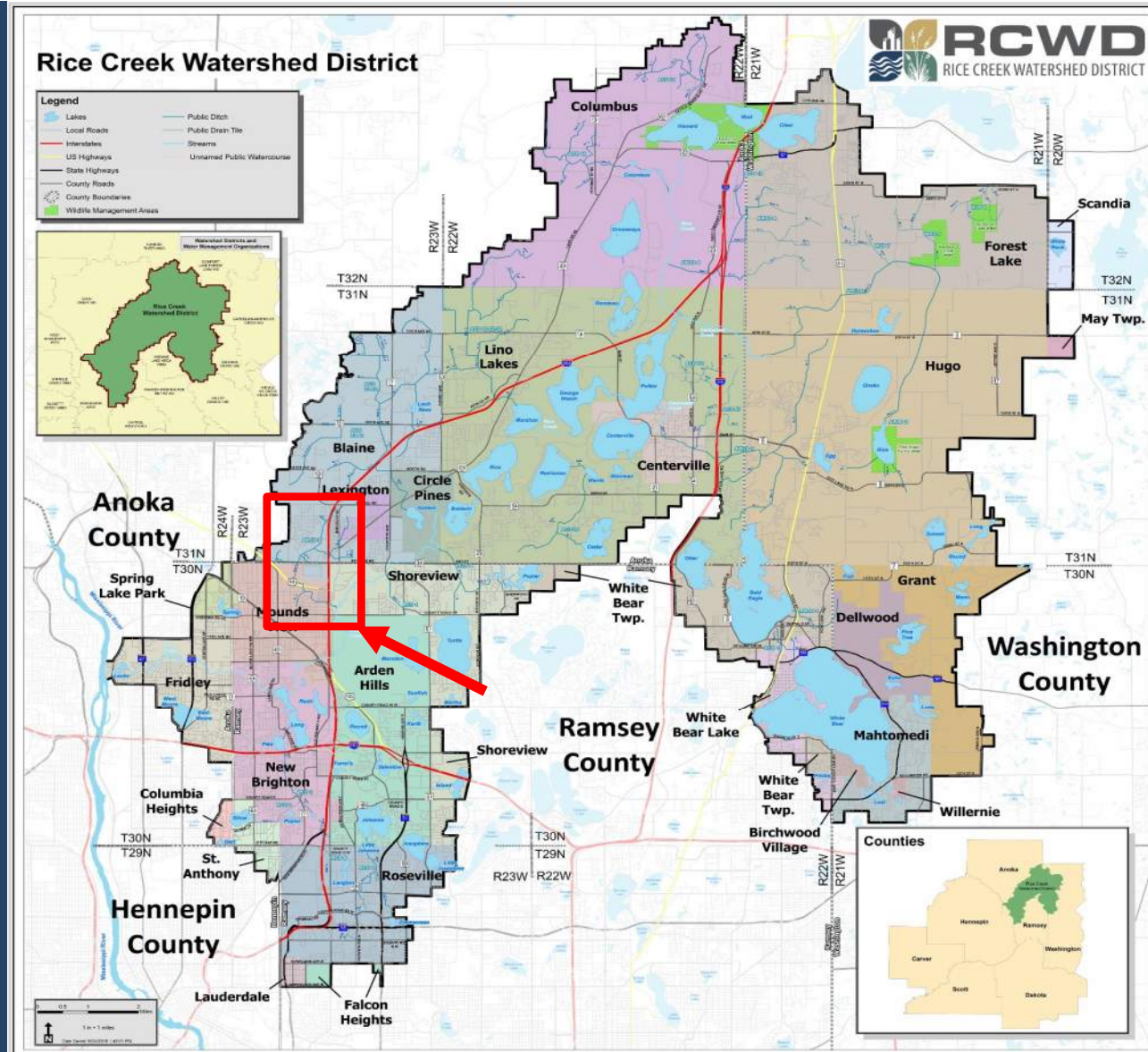
Total Project Cost & Allocations

Anticipated Schedule for Repairs

Comment

RCWD Facts

- Serves as the Public Drainage Authority for District
- Manages 116 miles of public ditch and tile systems on behalf of landowners
- Protects the landowners' right to drain water to public ditches
- Additional activities include water quality, flood control, and regulatory programs



What is a “Public Drainage System?”

- Also referred to as “County Ditch” or “Judicial Ditch”
- In Anoka & Ramsey Counties, generally established between 1890-1920
- Original purposes:
 - Outlet for agricultural production (surface water)
 - Decrease standing water (mosquitos)
- Purpose and demands on ditch changed with land development
- MN Statute 103E guides management of these systems

Two Legal Terms to clarify up front

- Mn Drainage Law, Statute Chapter 103E

Repair

Restoring drainage
function as originally
constructed or
subsequently improved
[ACSIC]

Improvement

Making the ditch
deeper or wider,
lowering culvert
inverts, increasing the
capacity

Why a “repair?”

- Majority of system is in disrepair
- Relatively high estimated cost
- Extent of work triggers regulatory considerations (DNR public waters, WCA, T&E species)

Maintenance

Isolated removal of blockages, generally requires no regulatory engagement

Repair

Extensive work on the system, often triggering regulatory requirements

Why is This Important to You?

- System repair is required for predictable drainage function
- Per MN Statute 103E, costs are borne by those who benefit from system
- Repairs require disrupting the “right-of-way” along the ditch



What do we mean by “Predictable drainage and stormwater management”?

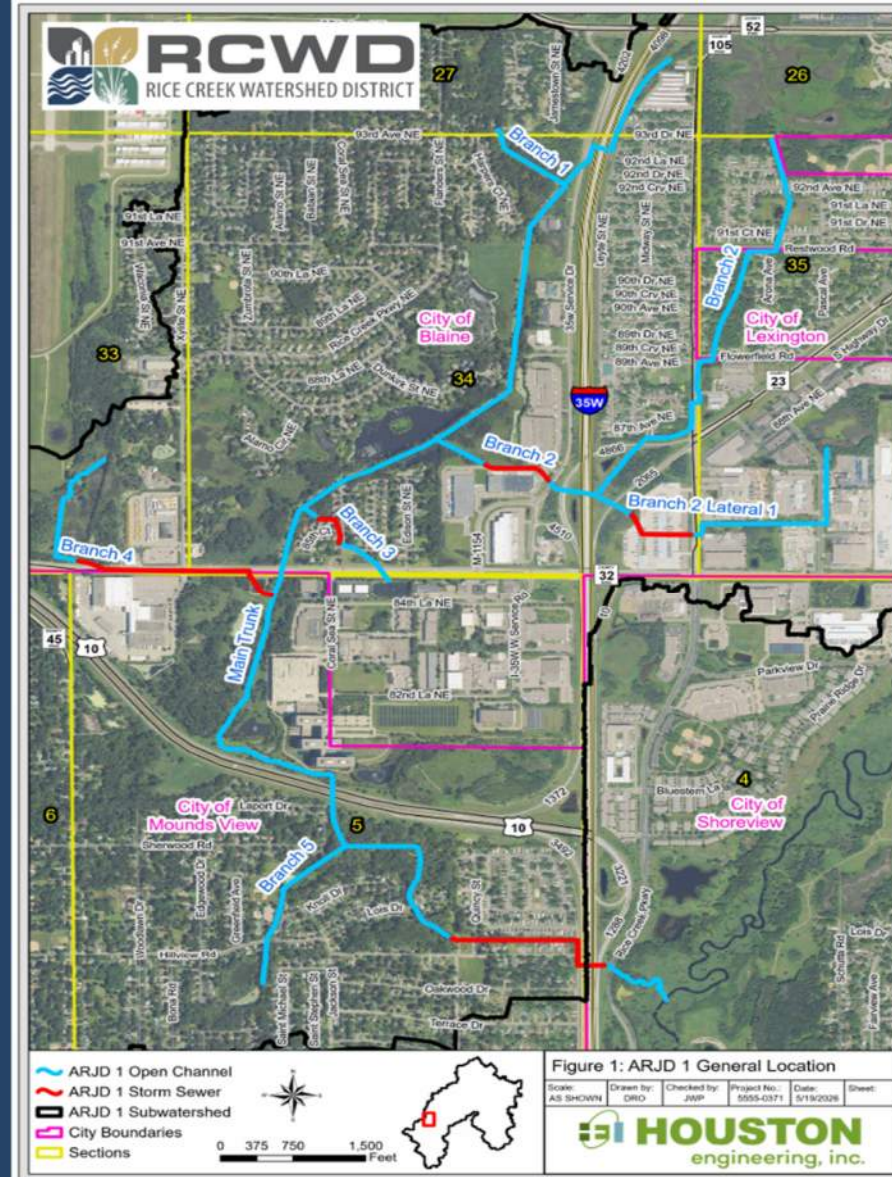
- Drainage: 2-year rainfall
(2.8 inches in 24-hours)
- Stormwater: 10-year rainfall
(4.2 inches in 24-hours)
- Floodplain: 100-year rainfall
(7.2 inches in 24-hours)



- Repairs will not likely have a substantial effect on floodplains
- Repairs will enable stakeholders to better predict peak water elevations for low, medium, and high rainfalls

ARJD 1 Facts

- Located in Cities of Blaine, Lexington, Shoreview, and Mounds View
- Approximately 4.7 miles of open channel Ditch
- 4 Segments of Storm Sewer
- 38 Culverts
- Flows into Rice Creek
- Serves residential, commercial and industrial uses



ARJD 1 Recent Events



Conditions Observed



Deadfall and heavy
vegetation in Ditch



Conditions Observed



Fences, paths, and
buildings in close
proximity to the ditch



Conditions Observed



Sheet pile weir and
overhead powerlines
alongside ditch



Recommended Repair



Purpose: Restore Ditch to designed and subsequently improved capacity and create a maintenance corridor



Components

Clear trees
from bank to
bank and
access corridor
on one side

Clean ditch of
built-up
sediment

Stabilize slopes
via seeding and
erosion control
blanket (where
appropriate)

Removal of
Weir

2 Crossing
Modifications

Realignment on
Branch 2,
Lateral 1

Regulatory Considerations

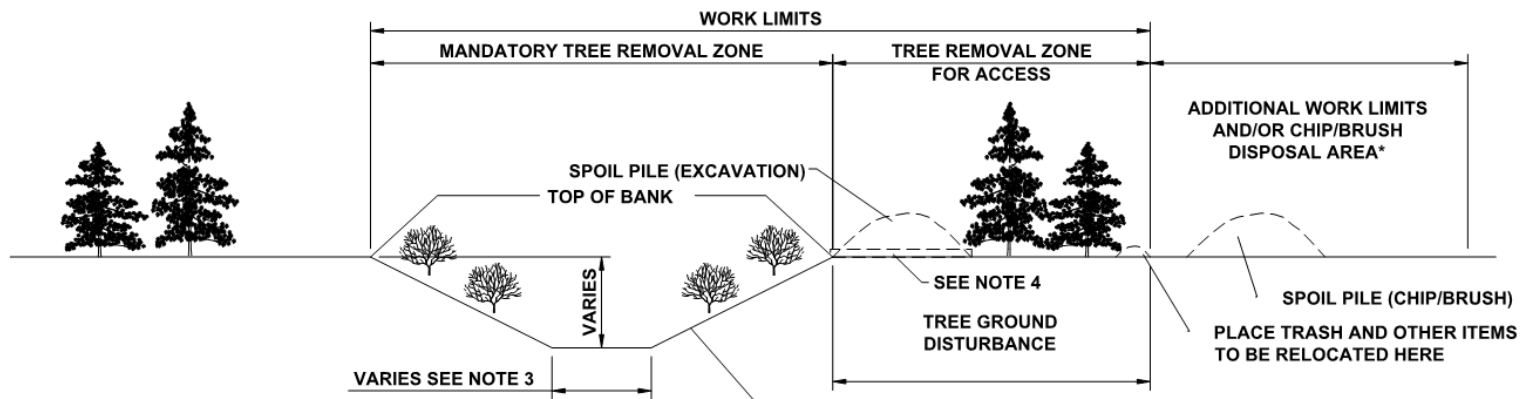
- Public Waters
 - 1 public water upstream of Branch 2, Lateral 1, PWW #02-046
 - Main Trunk from County Road J to Rice Creek is identified in DNR's inventory as a "public watercourse"
 - No impacts
 - Need to notify DNR of intent to repair
- No wetland impacts will result from proposed repairs
- NPDES Stormwater Permit for Construction will be required

T&E Species



- There are eight known state-listed threatened species near the project area
 - Jumping Spider
 - Blanding turtle
 - Swamp Blackberry
 - Lance-leaf violet
 - Tubercled Rein Orchid
 - Fuller's Bristle-beery
 - Blunt-lobed grapefern
 - Clinton's bulrush
- There are eight known state-listed endangered species near the project area
 - Missouri bristle-berry
 - Cross-leaved milkwort
 - Twisted Yellow-eyed grass
 - Henslow's Sparrow
 - Bristle-berry
 - Tall Nutrush
 - Slimspike Three-awn
 - Marginated Rush
- Ongoing Pre-Construction Plant Survey to understand potential impacts and inform mitigation requirements

Where are Trees being Removed?



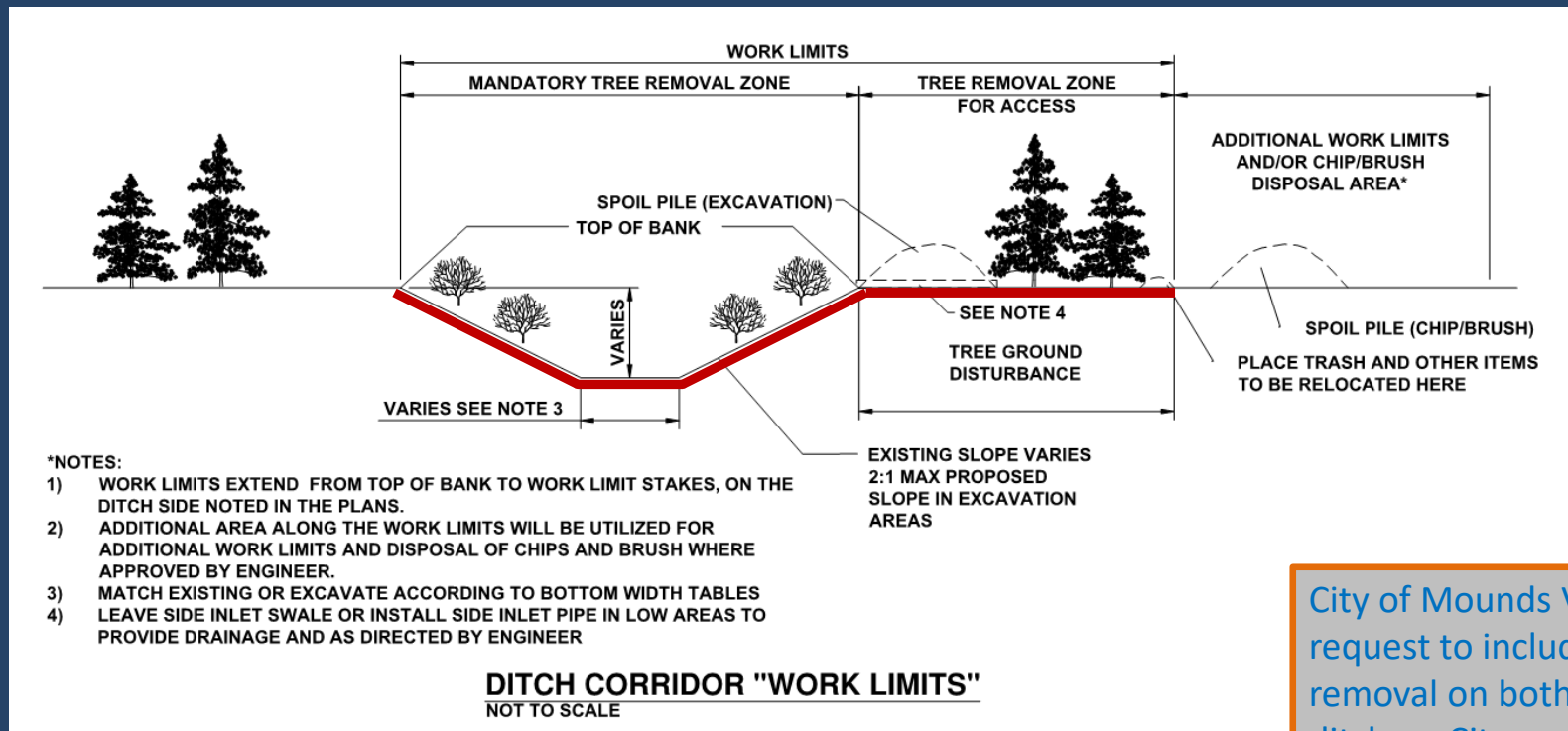
***NOTES:**

- 1) WORK LIMITS EXTEND FROM TOP OF BANK TO WORK LIMIT STAKES, ON THE DITCH SIDE NOTED IN THE PLANS.
- 2) ADDITIONAL AREA ALONG THE WORK LIMITS WILL BE UTILIZED FOR ADDITIONAL WORK LIMITS AND DISPOSAL OF CHIPS AND BRUSH WHERE APPROVED BY ENGINEER.
- 3) MATCH EXISTING OR EXCAVATE ACCORDING TO BOTTOM WIDTH TABLES
- 4) LEAVE SIDE INLET SWALE OR INSTALL SIDE INLET PIPE IN LOW AREAS TO PROVIDE DRAINAGE AND AS DIRECTED BY ENGINEER

DITCH CORRIDOR "WORK LIMITS"
NOT TO SCALE

Tree removal zones as displayed on plans

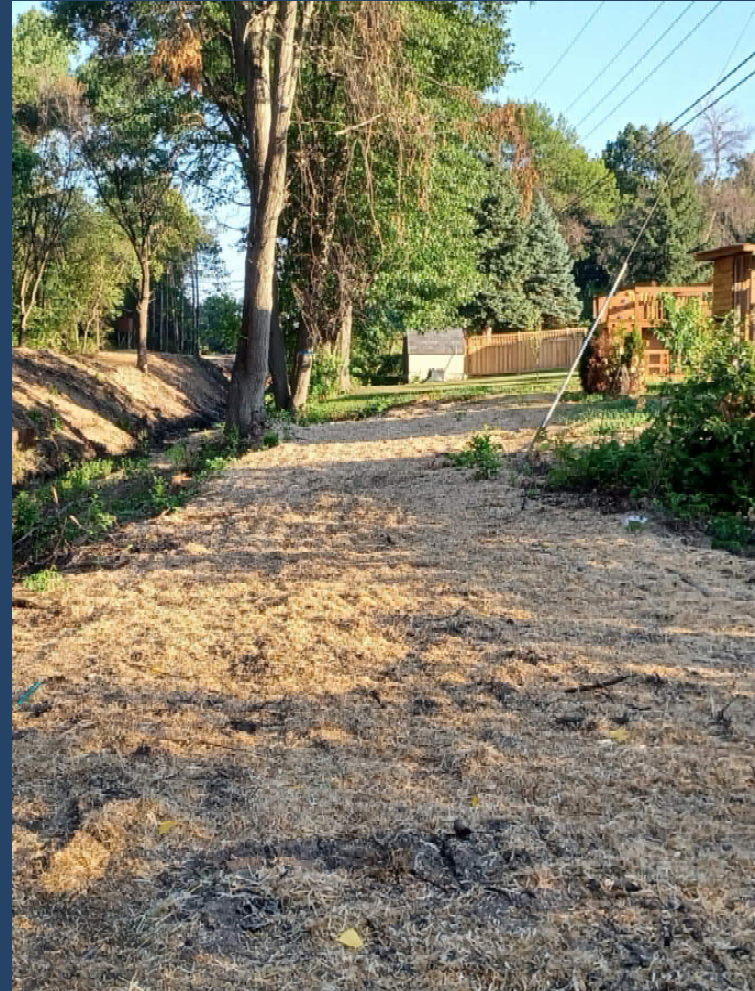
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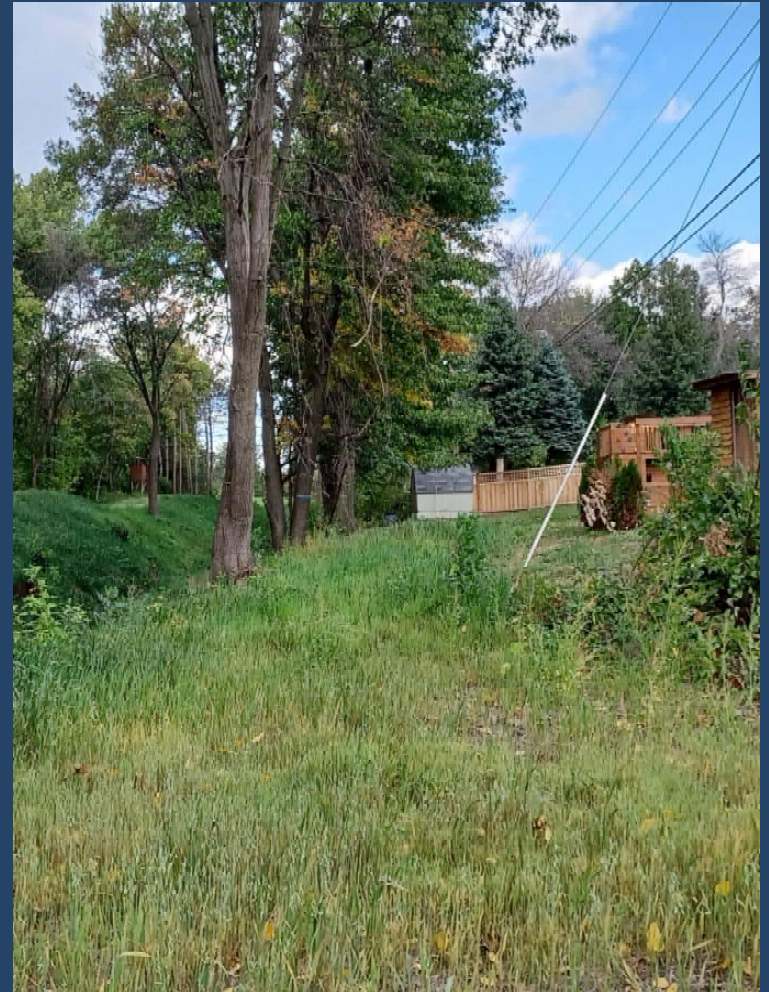
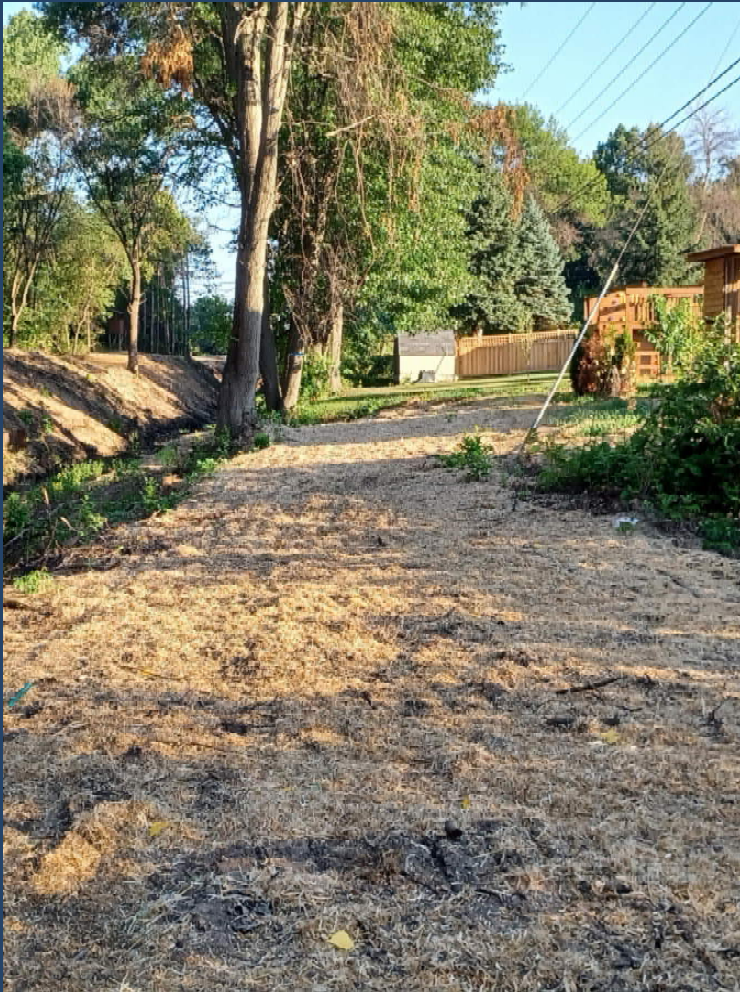
City of Mounds View
request to include tree
removal on both sides of
ditch on City property

Tree removal zones as displayed on plans

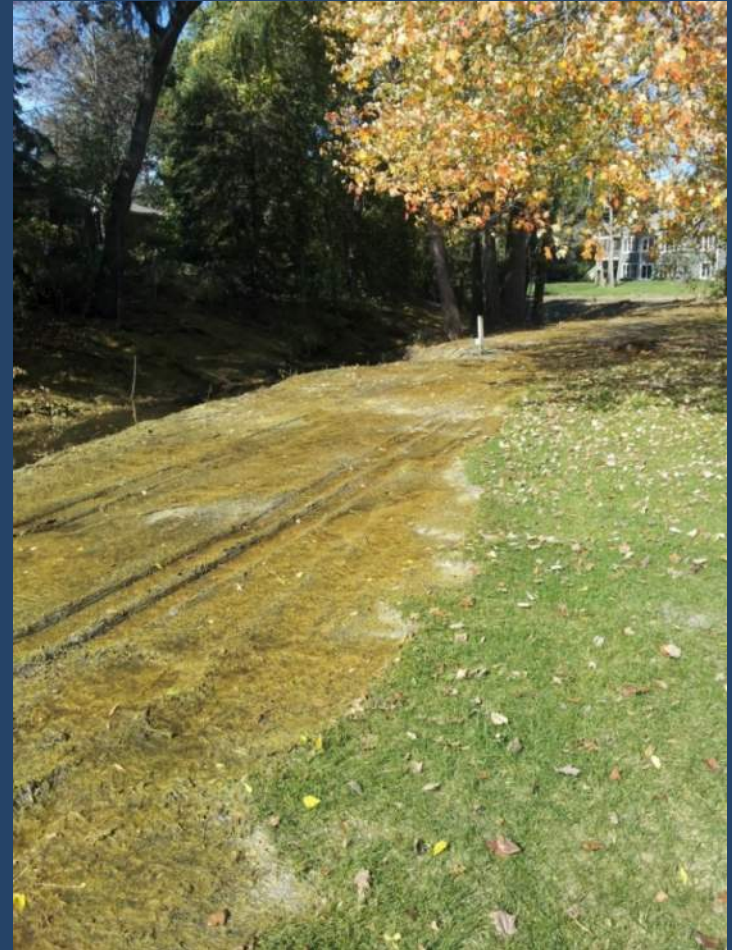
Construction Examples



Construction Examples



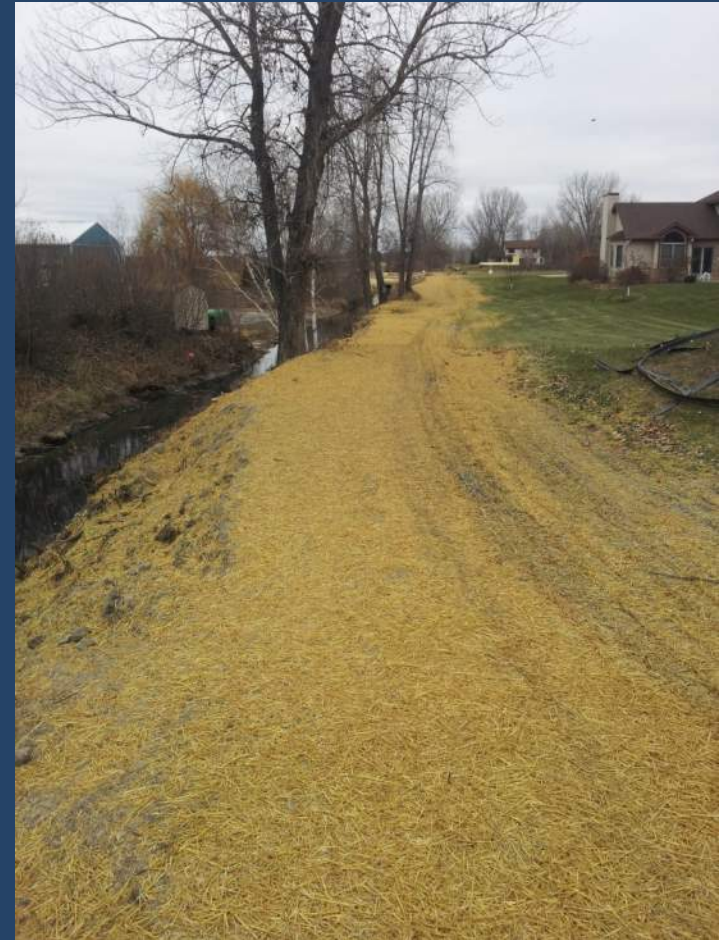
Construction Examples



Management of Ditch Bank



- Spoil will be Smoothed (where applicable)
- Seeded using mesic inslope seed mix (not turf grass)
- Use of herbicide for maintenance (prevent tree growth)
- Recommend leave tall grasses (don't mow)
- No placement of fences / sheds /objects in right of way

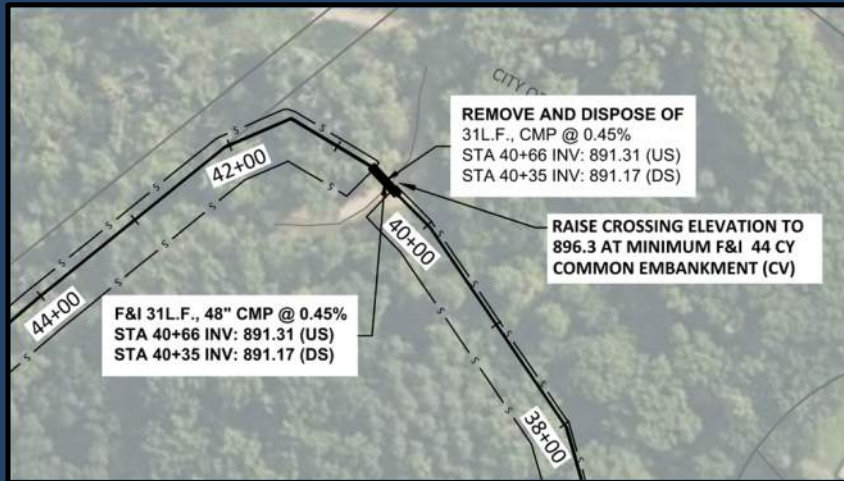


Weir Wall Removal

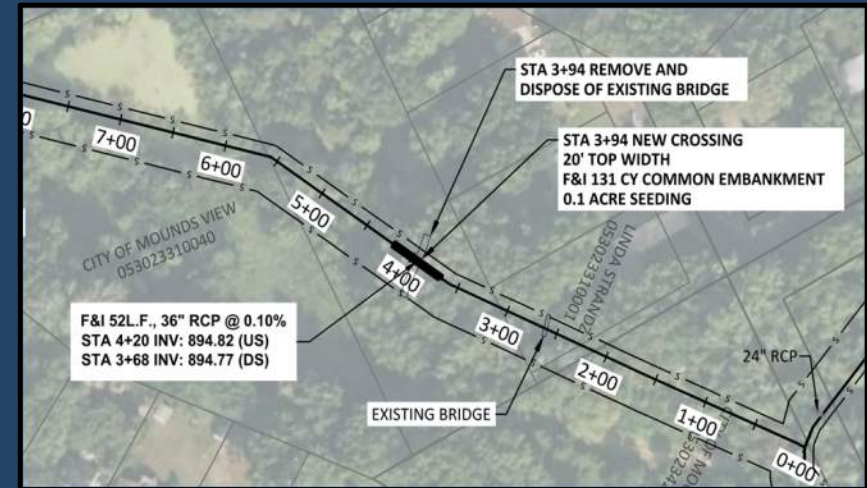
- Located on Main Trunk north of CR J
- Intended to divert flow into large stormwater pond for water quality
- Does not accomplish intended purpose
- Acts as obstruction to flow and an attractive location for building of beaver dams
- Recommend removal



Crossing Modifications



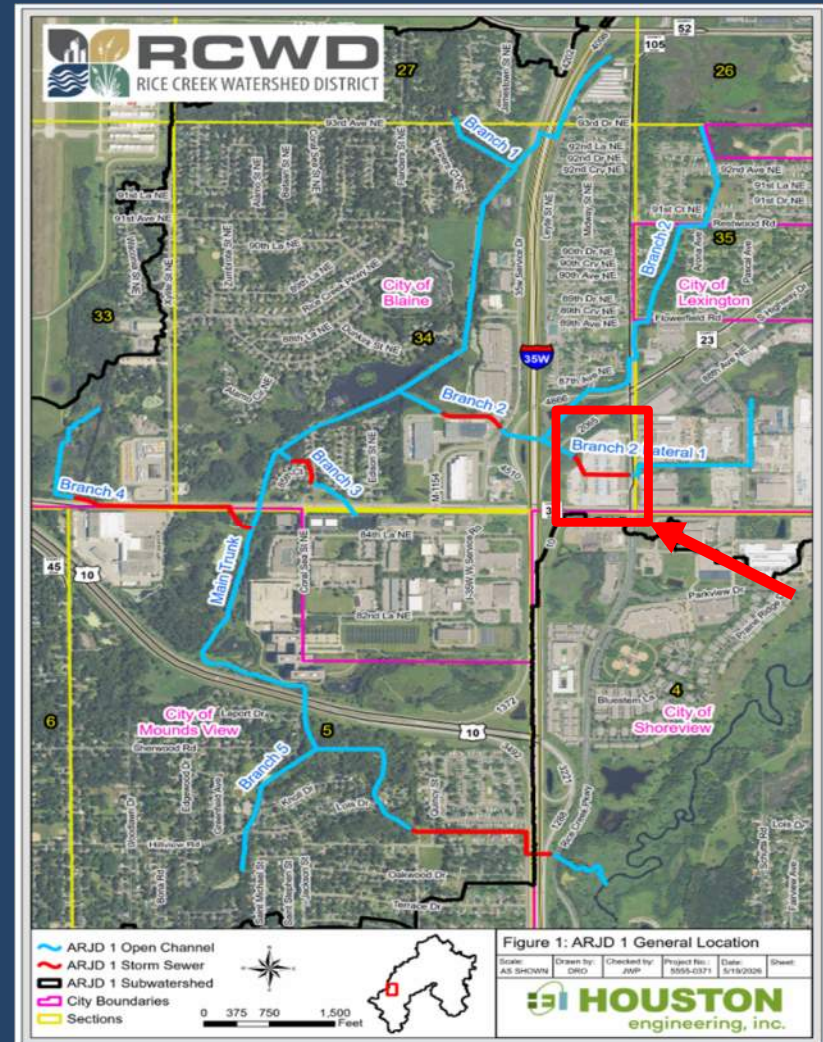
- Trail Crossing at STA 40+59 on the Main Trunk in Mounds View.
 - Existing 36" CMP is undersized
 - Replace with 48" CMP
 - Raise Crossing Elevation for Adequate Cover



- Bridge Crossing at STA 3+94 on the Branch 5 in Mounds View.
 - Remove and Dispose of Existing Bridge
 - Replace with 36" RCP
 - Install a 20' wide crossing

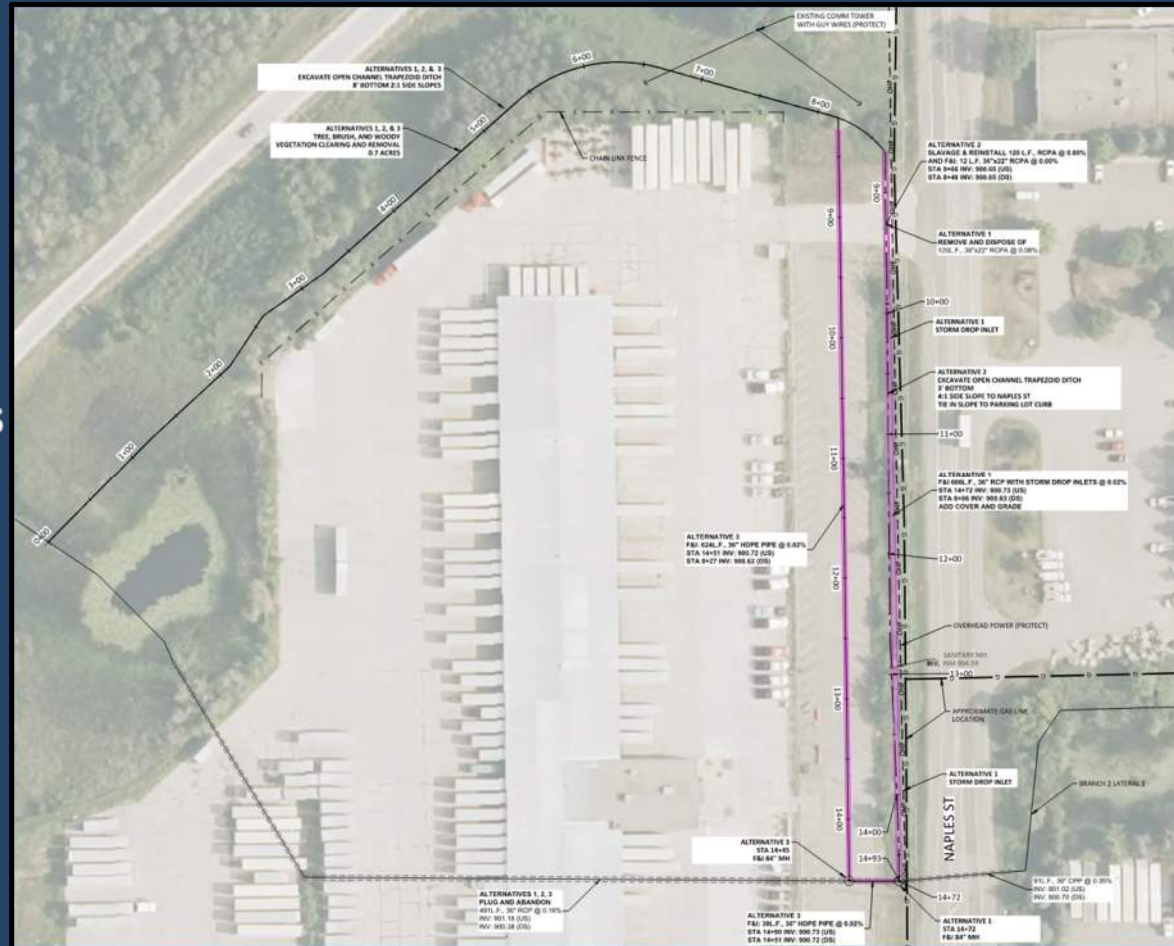
Branch 2, Lateral 1 Realignment

- Current alignment runs through storm sewer underneath a freight dispatch building.
- Maintenance of existing segment is infeasible
- Significant risk for upstream properties and roadways if the pipe were to clog or deteriorate
- Propose to realign the alignment around the building



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Preliminary Opinion of Probable Construction Cost



Category	System-wide Drainage Repairs	Branch 2, Lateral 1 Realignment	Total
Construction Costs	\$931,626	\$200,900	\$1,132,526
Contingency*	\$139,374	\$30,100	\$169,474
Engineering/Legal/Administrative**	\$186,000	\$40,000	\$226,000
Total	\$1,257,000	\$271,000	\$1,528,000

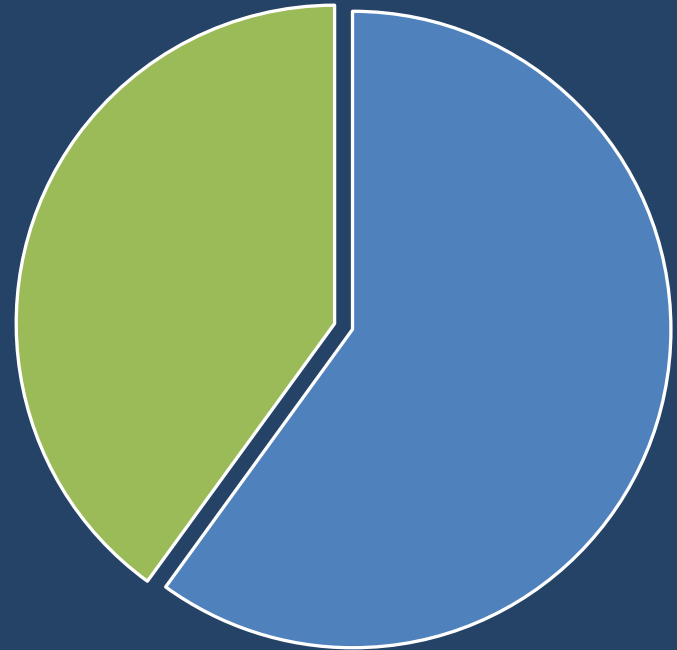
* Based on 15% of construction cost

** Based on 20% of construction cost

Project Funding

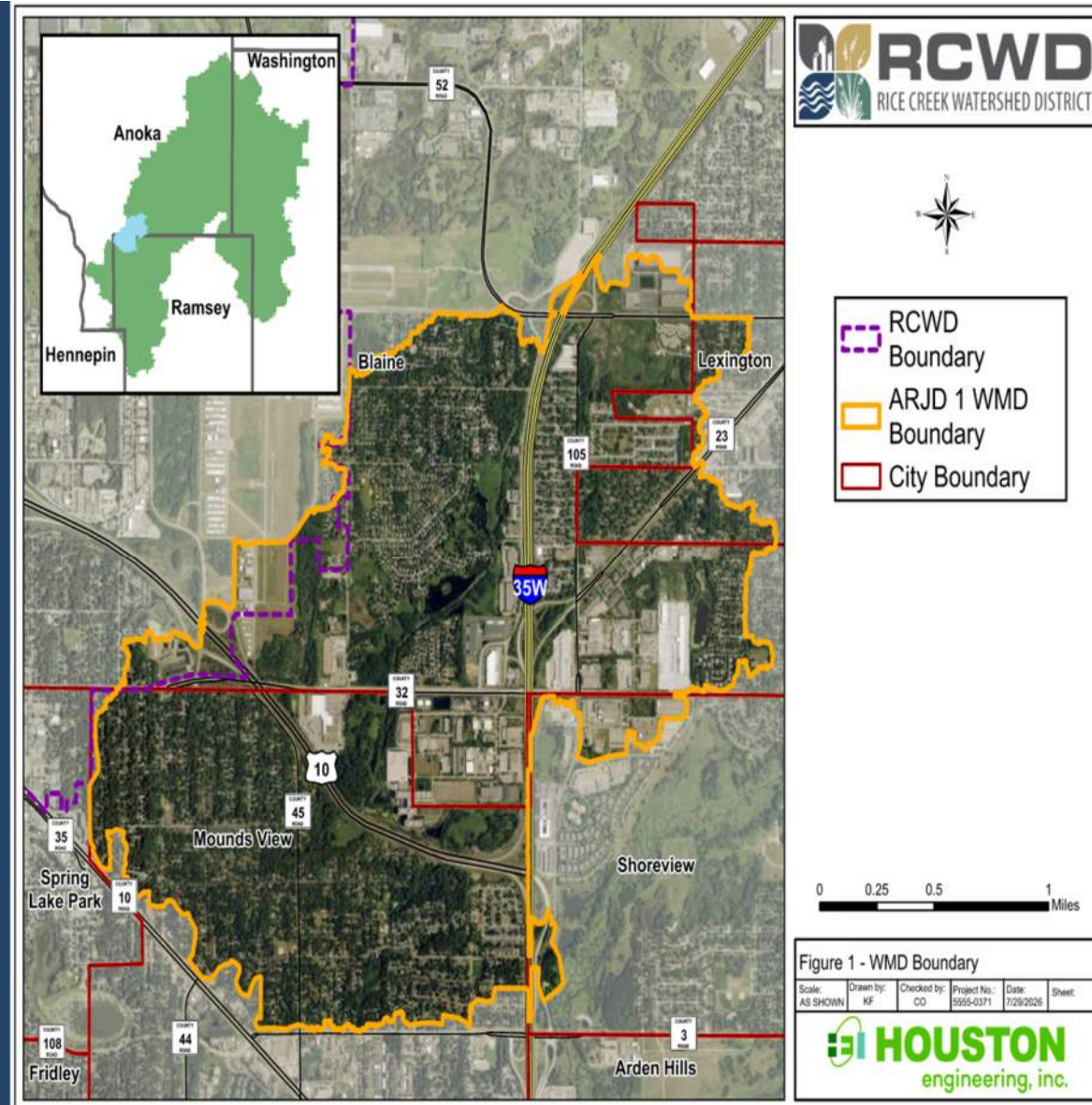


- Per RCWD Watershed Management Plan, public drainage system repairs are split between Water Management District (WMD) and ad valorem funding
- Recent repair charges have been allocated 60% WMD and 40% via ad valorem
- RCWD Board has discretion to modify funding approach
- HEI prepared a charge analysis

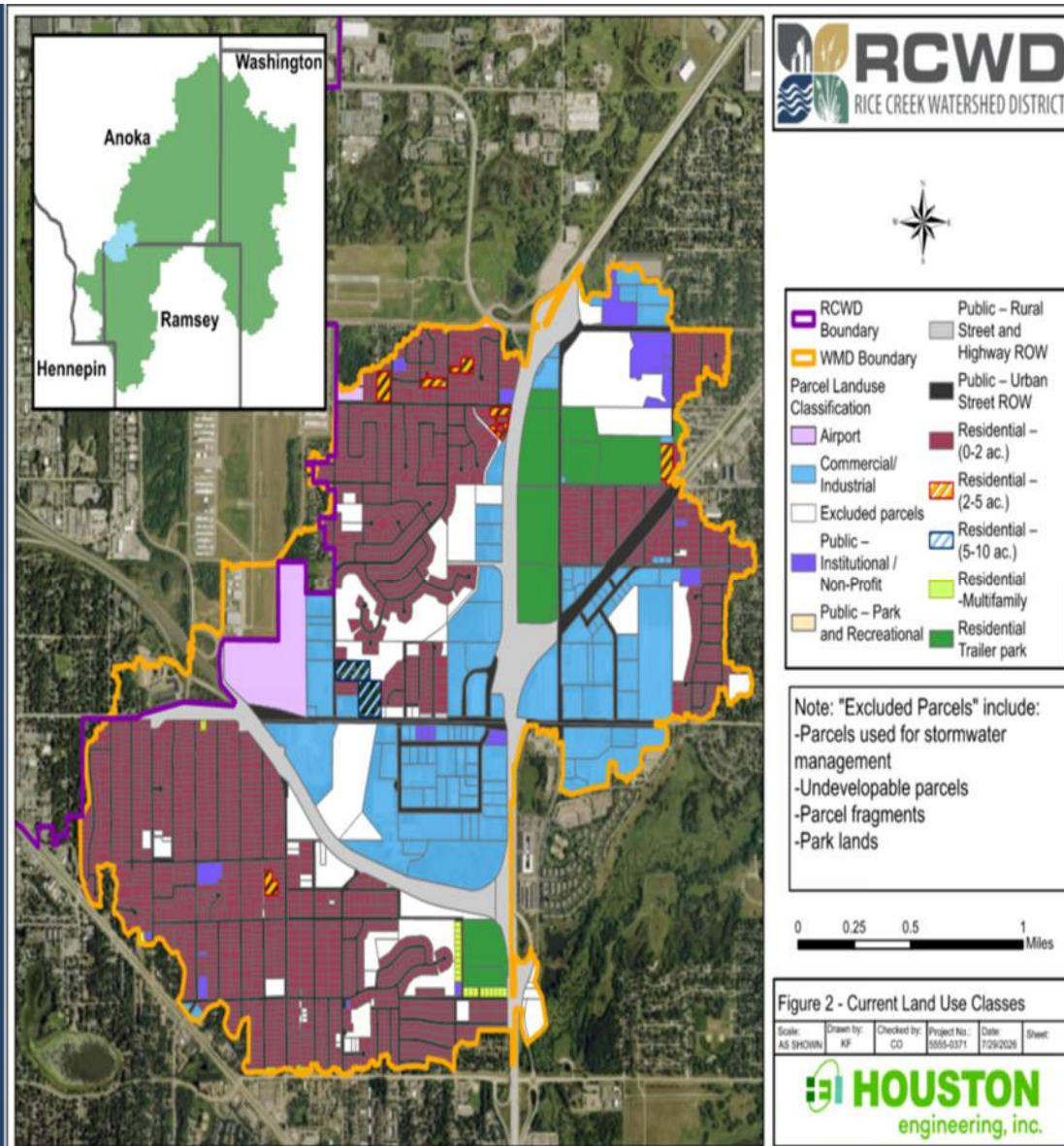


WMD Land Use

- WMD share of project cost is allocated to parcels based on runoff volume contribution
- Land use and parcel size are used to determine runoff volume contribution
- GIS Analysis to determine Land Use Category of each Parcel
- Excluded Parcels
 - Common Element Parcels
 - Parcel Fragments
 - Parks
 - Public Stormwater Management features
- Road authorities (cities, counties, state) pay for road contribution



Current Land Use	Impervious Percentage	Annual Runoff Depth (inches)	Total Area (acres)	Charge Per Acre	Number of Parcels	Revenue Generated Land Use*
Residential - Multifamily	65%	18.8	10	\$425	33	\$4,051
Residential – (0-2 ac.)	38%	12.7	995	\$288	2696	\$285,655
Residential – (2-5 ac.)	12%	6.9	18	\$156	6	\$2,763
Residential – (5-10 ac.)	7%	5.8	13	\$131	2	\$1,754
Commercial/Industrial	81%	22.3	539	\$506	118	\$272,889
Public – Institutional / Non-Profit	81%	22.3	53	\$506	20	\$26,943
Public – Rural Street and Highway ROW	50%	15.4	195	\$349	4	\$67,919
Public – Urban Street ROW	85%	23.2	330	\$527	8	\$173,945
Residential Trailer Park	65%	18.8	161	\$425	12	\$68,382
Airport	15%	7.6	73	\$171	5	\$12,496
Excluded parcels**	0%	4.2	351	\$0	271	\$0
Totals			2,737		3,175	916,797



Large Charges & Revenue Schedule



Parcel PIN	Taxpayer Name	Total Charge
Interstate and US Highway	MnDOT	\$67,479.56
Blaine City Roads	City of Blaine	\$61,333.51
Mounds View City Roads	City of Mounds View	\$61,006.99
Anoka County Roads	Anoka County	\$31,477.79
353123340001	Old Dominion Freight Line Inc	\$21,013.28

- 4 of 5 Largest Charges are public entities

Charge Year	Revenue Generated
Year 1 (2027)	\$492,023
Year 2 (2028)	\$212,387
Year 3 (2029)	\$212,387

- Any Charge more than \$300 is allocated over 3 year period



Next Steps / Estimated Timeline

Dates are approximate and
subject to change

We Appreciate Your Input

- Are there problem areas in the public drainage system that we did not discuss (culverts needing replacement, blockages, etc.)?
- Do you have concerns about loss of drainage benefits (e.g., areas not identified for repair)?
- Do you have concerns about trees or structures located next to the ditch?

Questions



Project Contacts

- Abel Green, District Drainage Inspector
(612) 597-5031 or Agreen@ricecreek.org
- Chris Otterness, Project Engineer
(763) 493-4522 or Cotterness@houstoneng.com