The Honorable Board of Lyon County Commissioners met this day in regular session with the following present: Chairman Bob Hastings, Vice-Chairman Joe Mortensen, Commissioner Ken Gray, Commissioner Vida Keller and Commissioner Jay Dini. Also present: District Attorney Steve Rye and County Manager Jeff Page.

1. Roll Call

Present: Bob Hastings, Joe Mortensen, Ken Gray, Vida Keller and Jay Dini.

2. Invocation

Invocation was given by Mitch Forster of the Mason Valley Southern Baptist church.

3. Pledge of Allegiance

4. Time Certain

4.a. Time Certain at 10:00 A.M. - Public Hearing on Nuisance Complaint For Possible Action: The Lyon County Board of Commissioners will consider the public nuisance complaint existing at 456 Upper Colony Rd Wellington NV 89444.

District Attorney Steve Rye presented this item and reviewed the contents of the staff report. He presented the overview of an aerial view and photographs of the property. He confirmed the property has been purchased and the property owner is acquiring help to have the area cleared.

Comm. Mortensen asked if the house will be torn down.

District Attorney Steve Rye confirmed he was informed their intentions was to clear the property.

Comm. Gray asked the estimated costs to clean up the property and the assessed value?

District Attorney Steve Rye stated from what he knew was $50,000 and $250,000 was the reported value of the property. He recommended that the county allow them to clean the property on their own. He recommended to bring the item back in 30 to 60 days.

Comm. Gray moved to declare 456 Upper Colony Road Wellington Nevada a public nuisance and to defer action for thirty days; and for the owner to supply a contract to the Board. Comm. Mortensen seconded.

Comm. Hastings opened the meeting for public comment.

Public Comment:
Kathy Eckart gave a testimony to her efforts in communicating with the County and the owner to clean the property. She addressed her concern that a vote was taken before public comment.

Comm. Hastings clarified for the audience that only the motion was made and a vote has not been taken. The motion was to declare the property a nuisance and for the owner to surrender to the Board a signed contract.

James Kinninger gave his testimony to the poor condition and fire hazard of the property. He is in support of taking action today.

Comm. Hastings closed public participation.

Comm. Hastings requested as part of the motion, to have the contract that is brought forward contain a deadline as to when the property will be cleaned.

District Attorney Steve Rye recommended to the Board to have the item brought back within thirty days and at that time, add a timeline to the contract. If the contract is not presented, then the Board will move forward.

Comm. Keller requested to have the contract address any environmental hazards that could be left in the soil. She requested this be added to the motion.

District Attorney Steve Rye stated that it could be asked, but he is not stating that it is under the code enforcement provision.

Comm. Mortensen is concerned with the fees to clean the property and what is the assessed value of the property.

Comm. Hastings reviewed the motion, it is to declare 456 Upper Colony Road a public nuisance; to defer action for thirty days; for the owner to supply a contract to the Board to include a timeline of the cleanup; and to request an environmental hazardous assessment of the property.

District Attorney Steve Rye recommended to the Board to have the item placed on the second agenda in January 2020. That would be approximately thirty days.

The second stands and the motion passed 5-0.

Chairman Comm. Hastings was not present for item #4.b, and Vice Chairman Comm. Mortensen opened the meeting at 1:30 P.M. for the workshop only.

4.b. Time Certain at 1:30 P.M. - A workshop of the Board of Commissioners to discuss the current status, future needs, Capital Improvements for the Lyon County Utilities Department.

Utilities David Bruketta, and Sean Sinclair, gave a PowerPoint presentation. He reported water and sewer System Highlights and Current Issues, Current 5-Year CIP Summary and Current / Near Term Projects, and reviewed the existing operation issues and challenges and lift plant improvement options.

Comm. Mortensen asked if sending water from Rolling A to Aspen Creek would create need for an added lift station to the design. He asked if Minor Ranch has a higher elevation where there could be a need for another lift station.

Engineer Kishora Panda answered the design can be modified if needed, it depends on the distance and how much is being moved.

Utilities Director David Bruketta stated that Minor Ranch is higher, but he does not have the exact elevation with him at this time.

Waste Water Superintendent Joe Carter stated the pump station is at the plant and is not an additional station. The line can go either way.

Comm. Gray is concerned with the price increase of sludge disposal to Carson versus utilizing Minor Ranch.

Utilities Director David Bruketta commented when they had discussions with the Minors, they wanted to rent the property and not sell to the County. The discussion with sludge disposal was a twenty four inch pipe that would run through their property and that was taken off the table. Staff can go back to have discussions, however, the most cost effective way to deal with it is landfill disposal. Which can be addressed on another date if the Board directs staff to do so. The contract currently in place with Carson for disposal is $10 dollars per ton. The contract expires December 2020, and the rate could be increased to $58 dollars per ton. They will ask to negotiate a new contract.

Comm. Mortensen asked how many tons are used. He also asked if the pond was cleaned, would that be approximately 300 tons.

Waste Water Superintendent Joe Carter stated 8-10 tons are used per week. He agreed with Comm. Mortensen assessment with the large increment in tons if the pond was cleaned. He recommended to the Board to have the pond cleaned this year, as it would be beneficial.

Utilities Director David Bruketta recommended to move forward with the discussions with the Minors and the RIB disposal. He wanted to move forward with the purchase of Aspen Creek.

Comm. Gray asked what was spent on the Aspen Creek Site.

Utilities Director David Bruketta stated the County has spent approximately $150,000 for geotech work previously. There is more of a cost to purchase, but when you are leasing a property that is not on Federal Lands and placing treated waste water on private property, it is difficult to predict what will happen in thirty years.

Comm. Keller asked if there could be a land swap with Aspen Creek.

Comptroller Josh Foli is concerned with the value being equal and the size being adequate.

Comm. Gray would still like to discuss options with Minor Ranch.

Comm. Mortensen doesn't agree because of the homes in close proximity.

Comptroller Josh Foli stated the land at Minor Ranch is zoned for residential and not agriculture, and the acreage is not large enough. His concern is that homes can be built around it. He is in favor of Aspen Creek, the parcels are larger and it has better expansion capabilities.

County Manager Jeff Page recommended to the Board to continue with Aspen Creek because of the sewer odors. NDEP sent a letter stating there will be no more approvals of final maps until this problem is fixed. The concern is the future fiscal impact on commercial and industrial growth. He asked what the Board wants to hear in the future from Utilities.

Comm. Mortensen asked what has the State signed off on for hookups but has not been hooked up yet.

Sean Sinclair stated that the State has approved approximately 250-300, but no hook-ups have been completed.

Comm. Keller asked for a report monthly of progress at the Board meetings. Unless there is large update, and a longer meeting is required. She asked if the tier rate system for conservation applied to the County. She is concerned it could be a future issue.

Utilities Director David Bruketta commented that he will find out and they do need to update their Water Conservation Plan.

Comm. Keller commented that she would like to see future plans with census tracts to assess if this can be an option for certain areas in the County.

Comptroller Josh Foli replied that it could possibly be an option for the Mound House area.

Comm. Gray stated that he wanted to see collection of hookup fees at the final map stage, and then a current updated increased connection fee if they did not hookup prior to expiration of the map. He asked why the sewage rates are different between multifamily housing versus single housing residences. He wants the hookup fees to be addressed.

Comptroller Josh Foli stated that it would be a legal discussion on what the County can legally do. It could be charging the fee twice. He addressed the rate is different because of laundry. The multi-family housing has lower flows because they don't have laundry facilities. He agreed to have the hookup fees to be addressed. He stated the Master Plan should be updated first, then the encompassing information and be gathered and what the fees are being charged for.

Comm. Mortensen is concerned with the depreciation of infrastructure with development not being completed and charged at a lower rate.

Comptroller Josh Foli stated that would need to be discussed further as an agenda item and a rate analysis be completed. Also, it needs to be determined when to collect a connection fee.

County Manager Jeff Page asked if the Board wants language for Minor Ranch to be explored. He will place that on the agenda.

Comm. Mortensen asked for public participation and there was none.

7. Presentation of awards and/or recognition of accomplishments

7.a. For Possible Action: Recognize Deputy Marty Dues of the Lyon County Sheriff's Office for a Distinguished Service Medal.

Sheriff Frank Hunewill recognized Deputy Marty Dues for his efforts in successfully achieving funding and a process utilizing drones. He stated that Deputy Marty Dues has also been an outstanding employee.

8. Commissioners/County Manager reports

Comm. Keller stated the Christmas tree lighting in Silver Springs was a success and she thanked staff for helping.

Comm. Hastings also thanked staff, the Dayton Community Center and other members of the community for helping with the tree lighting. He thanked the 4H Leadership Group for inviting him to attend their meeting.

County Manager Jeff Page reported he met with the Department of Agriculture. They discussed two significant topics. The wild horses have no funding through the state of Nevada for management. They are hopeful to gain a partnerships with surrounding counties to facilitate herd management into the legislation. He commented that President Trump has signed into law allowance of hemp into commercial business. Hemp production can be utilized for biodegradable packaging and paper. There are some local hemp agriculture crops within the county. Agriculture is a large portion of the economics of the Lyon County. Construction in Silver Springs and Fernley is moving forward with commercial growth. Pumpkin Hollow mine is in process of its first production and increasing its employment. The higher traffic volume could be an issue for the community. NNDA and EDON reported to him a couple of businesses that will be relocating to the Fernley Industrial Complex with a decent hourly wage.

Comm. Gray asked if there are other businesses coming in next to Grocery Outlet. He also asked how many agriculture jobs are there. County Manager Jeff Page stated there are not currently other applications in the area. There have been approximately 1082 jobs created.

Comm. Mortensen asked what the average compensation was for agriculture workers is.

County Manager Jeff Page stated that the Federal Visa rate was approximately $12.00 per hour and to provide housing that can be charged to the employee.

9. Elected Official's reports

9.a. Dayton Justice Court

- Civil, Criminal & Monthly Statistics November 2019

There were no other reports given.

Comm. Hastings asked if the "Shop with a Sheriff" was coming back.
Sheriff Frank Hunewill stated there will not be.

10. Appointed Official's Report

Facilities Director Rob Dunbar reported the Fernley Senior Center's foundation was poured yesterday. The trailer at the Animal Shelter is gone.

Human Services Director Shayla Holmes reminded the Board that January 30th is the Point in Time Count and the Board members can participate. She stated January 15th is the Task Force on Poverty stakeholder luncheon.

11. Advisory Board Reports

There was no reports given.

CONSENT AGENDA

Comm. Hastings asked for any further changes from the Board or staff on the consent agenda.

Comm. Mortensen moved to approve the consent agenda items #12.a – 15.d as presented. Comm. Gray seconded.

Comm. Hastings asked for public participation and there was none.

The motion passed 5-0.

12. Assessor's Corrections

12.a. For Possible Action: Approval of changes on Assessor's tax roll due to correction in assessments and review of tax roll changes.

Unsecured Factual Corrections totaled $917.69.

13. For Possible Action: Approve County Commission Minutes

13.a. For Possible Action: Approve the December 5, 2019 minutes.

The December 5, 2019 Lyon County Commissioners' minutes were approved.

14. Contracts

14.a. For Possible Action: Renewal of the Lease Agreement with Fernley Commerce Center for Lyon County Human Services' Fernley office space for the one year period ending January 1, 2021.
-2020 Fernley Lyon County Human Services Lease

14.b. For Possible Action: Approve Contract for Services of Independent Contractor between Lyon County and Healthy Communities Coalition, not to exceed $6,000.00, for services funded through a grant from Nevada Division of Public and Behavioral Health.
- FY20 Healthy Communities Coalition peer support contract MOST
- FY20 HCC MOST Peer Support Scope of Work

14.c. For Possible Action: Approve proposal from RFI for purchase, installation, and configuration of additional cameras in the Justice Complex to cover blind spots in the facility in the amount of $25,452 to be paid from the public safety sales tax in the Capital Improvements Fund.
- RFI Proposal

14.d. For Possible Action: Approve proposal from Prism Systems Corporation for purchase, installation, and configuration of an additional station to the door control program in the Justice Complex facility in the amount of $28,700 to be paid from the public safety sales tax in the Capital Improvements Fund.
- Prism Systems Quote

15. Other Consent Items

15.a. For Possible Action: Review and accept claims and financial reports.

The cash balance as of November 30, 2019 was $63,093,081.17. County claims totaled $ 615,767.55 and payroll totaled $1,070,358.39.

15.b. For Possible Action: Review and accept travel claims.

Travel claims totaled as of November 30, 2019 was $6,176.89.

15.c. For Possible Action: Approve a budget transfer from contingency in the amount of $3,408 to pay for increased costs to purchase a vehicle for Juvenile Probation.

15.d. For Possible Action: Approve Addendum 1 for consultant agreement between Lyon County and Lumos & Associates for testing and inspection of the Justice Complex Parking Lot Expansion. The addendum is for an increase of $1,800.00 for extra time spent caused by unsuitable material. This addendum will increase contract to $21,300.00

****END OF CONSENT AGENDA****

REGULAR AGENDA - (Action will be taken on all Items unless otherwise noted)

16. Board Appointments and Resignations

16.a.For Possible Action: Appoint up to four (4) members to the Central Lyon County Park Advisory Board, with terms expiring December 31, 2022.
- Scott Keller, Silver Springs Representative
- Rachel Henderson, Silver City Representative

Comm. Hastings asked if there was any discussion from the Board or staff and there was none.

Comm. Keller stated that she will abstain from the vote because of her relationship to Scott Keller.

Comm. Hastings recommended for the Board to vote on each application separately.

Comm. Mortensen moved to appoint Scott Keller as the Silver Springs Representative to the Central Lyon County Park Advisory Board, with a term expiring December 31, 2022.

Comm. Hastings asked for any Public Participation and there was none.

Comm. Gray seconded and the motion passed 4 - 0. Comm. Keller abstaining.

Comm. Gray moved to appoint Rachel Henderson as the Silver City Representative to the Central Lyon County Park Advisory Board, with a term expiring December 31, 2022.

Comm. Hastings asked for any Public Participation and there was none.

Comm. Keller seconded and the motion passed 5 - 0.

17. County Manager

17.a. For Possible Action: Approve a resolution of the Lyon County Board of Commissioners to name the Chambers of the Lyon County Commissioners to the Greg Hunewill Chambers. (Requested by Commissioner Ken Gray)

County Manager Jeff Page stated that he has reached out to a graphics company to have a plaque made and should the resolution be passed today he will move forward.

Comm. Hastings read the resolution into the record.

Comm. Gray moved to approve a resolution of the Lyon County Board of Commissioners to name the Chambers of the Lyon County Commissioners to the Greg Hunewill Chambers. Comm. Mortensen seconded.

Comm. Hastings opened the meeting for public participation and there was none.

The motion passed 5 – 0.

Comm. Gray requested to have two resolutions to be signed, one for the chambers and one for Phyllis Hunewill.

County Manager Jeff Page stated that he would will arrange to have a ceremony be done in the future.

17.b. For Possible Action: Approve a Professional Services Agreement between Armstrong Consulting and Lyon County, Nevada (Sponsor) to improve the Silver Springs Airport. (Requested by County Manager)

County Manager Jeff Page commented this and the following two items are recurring between Armstrong Consulting and Lyon County. He asked the Board to approve a Professional Services Agreement between Armstrong Consulting and Lyon County, Nevada (Sponsor) to improve the Silver Springs Airport.

Comm. Mortensen moved to approve 17.b as presented. Comm. Gray seconded.

Comm. Hastings opened the meeting for public participation and there was none.

Comm. Hastings closed Public Participation

The motion passed 5 – 0.

17.c. For Possible Action: To approve Armstrong Consulting Task Order A providing for professional engineering services to reconfigure and expand aircraft parking aprons (5,800 SY) (DESIGN ONLY) [requested by County Manager]

County Manager Jeff Page asked the Board to approve Armstrong Consulting Task Order a providing for professional engineering services to reconfigure and expand aircraft parking aprons.

Comm. Mortensen moved to approve item #17.c as presented. Comm. Gray seconded.

Comm. Hastings opened the meeting for public participation and there was none.

The motion passed 5 – 0.

17.d. For Possible Action: Approve requesting grant funding from the Federal Aviation Administration (FAA) for $500,000.00 with a Lyon County match of $31,250.00 to expand and reconfigure both aircraft parking aprons by approximately 5800 Square Yards (Requested by the County Manager)

County Manager Jeff Page asked the Board to approve requesting grant funding from the Federal Aviation Administration (FAA) for $500,000.00 with a Lyon County match of $31,250.00 to expand and reconfigure both aircraft parking aprons by approximately 5800 Square Yards.

Comm. Mortensen moved to approve item #17.d as presented. Comm. Gray seconded.

Comm. Hastings opened the meeting for public participation and there was none.

The motion passed 5 – 0.

18. Comptroller

18.a. For Possible Action: Approve a promotion for employee #383 in the Assessor's Office from Appraiser Trainee to Appraiser effective on the employee's anniversary date, with the increase to be funded from a budget transfer from contingency in the amount of $1,039.

Comptroller Josh Foli stated that there was an error in the process from before and should have been requested by the Department Head at the budget request earlier this year.

Comm. Mortensen moved to approve item #18.a as presented. Comm. Gray seconded.

Comm. Hastings opened the meeting for public participation and there was none.

The motion passed 5 – 0.

18.b. For Possible Action: Approve Sciarani & Co. as the auditor for the County for fiscal years 2020 through 2022 at an annual cost of $70,000.

Comptroller Josh Foli stated this increase is below what other comparable counties are paying. He requested for the Board to approve Sciarani & Co. as the auditor for the County for fiscal years 2020 through 2022 at an annual cost of $70,000.

Comm. Mortensen questioned how long the audit process takes the company.

Comptroller Josh Foli answered that is approximately from May through November.

Comm. Mortensen moved to approve item #18.b as presented. Comm. Dini seconded.

Comm. Hastings opened the meeting for public participation and there was none.

The motion passed 5 – 0.

19. Human Services

19.a. For Possible Action: Presentation of the FY18-19 Annual Report by Lyon County Human Services.

Human Services Director Shayla Holmes gave her gratitude to her staff for the effort and dedication they place into their work.

Administrative Services Manager Jennifer Thomas gave an overview of her challenges and success for the last year.

Children Services Manager Anna Coons reported the challenges with care, and the activities her department does to support the children in the community and their caregivers.

Adult Services Division Manager Heather Benson reported her department's goals to encourage change and hope for individuals. She gave a presentation of the model they work with to obtain these goals.

Senior Service Division Manager Rebecca Williams gave a report of using innovation to tackle barriers, creating fluid programming and focusing on community collaboration.

Human Services Director Shayla Holmes stated that they will be presenting their 2024 five year strategic plan at a future meeting.

Comm. Mortensen congratulated the department on their work and thanked them.

Comm. Gray stated that their services are appreciated.

Comm. Hastings stated that with manager changes it can be difficult. He thanks the department for their efforts in embracing those changes as a team.

County Manager Jeff Page stated that Edrie LaVoie developed a great foundation in her time in the department. He congratulated Shayla Holmes and her team for the services that they perform and adapting to change.

20. Human Resources

20.a. For possible action: Approve a Memorandum of Understanding with the Lyon County Sheriff's Employees Association establishing a pilot period for sworn personnel to work twelve-hour shifts.

Human Resources Director Eric Milavski presented the item requested is a pilot period for sworn personnel to work twelve-hour shifts. The MOU establishes a pilot period of six months. After thirty days, the Board can review the MOU to be continued or cancelled. The request is to increase manpower. The fiscal impact should not be increased. There should not be an increase in hours or holiday pay.

Comm. Gray asked if there will be bench marks to compare to. He asked if the intent is to keep this at a contract process.

Comptroller Josh Foli stated they will compare to what they have seen in prior years. To bench mark a comparison would be difficult with the variety of calls and other factors. He responded the intent is to keep it at a contract. If there is a further request past the six months, it will be a MOU for a time period.

Comm. Mortensen would like to have it stated in the future contracts that this can be removed if there is a result in any unfavorable situations.

Human Resources Director Eric Milavski stated that if the MOU reaches the six months it will have to come back to the Board again for approval.

County Manager Jeff Page stated that if this approved today, there will be a meeting with the Sheriff's Office and the Sheriff's Employees Association. To be clear if there is any misuse reported, this can be cancelled.

Comm. Gray moved to approve a Memorandum of Understanding with the Lyon County Sheriff's Employees Association establishing a pilot period for sworn personnel to work twelve-hour shifts.

Comm. Mortensen seconded.

Comm. Hastings opened the meeting for public participation and there was none.

The motion passed 5 – 0.

RECESS TO RECONVENE AS WILLOWCREEK GENERAL IMPROVEMENT DISTRICT BOARD

21. Public Participation

There was no public participation.

22. For Possible Action: Review and Accept Claims and Financial Report

22.a. For Possible Action: Review and accept claims and financial reports.

The cash balance as of November 30, 2019 was $456,320.95. County claims totaled $1,251.33 and there was no payroll.

Comm. Mortensen moved to approve the claims and financial report as presented. Comm. Gray seconded and the motion passed 5 – 0.

23. Public Participation

There was no public participation.

ADJOURN TO RECONVENE AS MASON VALLEY MOSQUITO ABATEMENT DISTRICT BOARD

24. Public Participation

There was no public participation.

25. For Possible Action: Review and Accept Claims and Financial Report
25.a. For Possible Action: Review and accept claims and financial reports.

The cash balance as of November 30, 2019 was $449,081.81. County claims totaled $78.60 and payroll totaled $3,165.72.

Comm. Mortensen moved to approve the claims and financial report as presented.

Comm. Gray seconded and the motion passed 5 – 0.

26. Public Participation

ADJOURN TO RECONVENE AS WALKER RIVER WEED CONTROL DISTRICT BOARD

27. Public Participation

There was no public participation.

28. For Possible Action: Review and Accept Claims and Financial Report
28.a. For Possible Action: Review and accept claims and financial reports.

The cash balance as of November 30, 2019 was $154,035.80. County claims totaled $106.48 and payroll totaled $602.84.

Comm. Mortensen moved to approve the claims and financial report as presented. Comm. Gray seconded and the motion passed 5 – 0.

29. Public Participation

There was no public participation.

ADJOURN TO RECONVENE AS CENTRAL LYON COUNTY VECTOR CONTROL DISTRICT BOARD

30. Public Participation

There was no public participation.

31. For Possible Action: Review and Accept Claims and Financial Report
31.a. For Possible Action: Review and accept claims and financial reports.

The cash balance as of November 30, 2019 was $268,082.36. County claims totaled $0 and there was no payroll.

Comm. Mortensen moved to approve the claims and financial report as presented. Comm. Gray seconded and the motion passed 5 – 0.

32. Public Participation

There was no public participation.

ADJOURN TO RECONVENE AS SILVER SPRINGS GENERAL IMPROVEMENT DISTRICT BOARD

33. Public Participation

There was no public participation.

34. For Possible Action: Review and Accept Claims and Financial Report
34.a. For Possible Action: Review and accept claims and financial reports.

The cash balance as of November 30, 2019 was $2,845,090.35. County claims totaled $7,141.06 and there was no payroll.

Comm. Mortensen moved to approve the claims and financial report as presented. Comm. Gray seconded and the motion passed 5 – 0.

35. Public Participation

There was no public participation.

ADJOURN TO RECONVENE AS THE LYON COUNTY BOARD OF COMMISSIONERS

36. Comm. Comments

Comm. Gray stated that he went to attend the Eagle Scout presentation.

Comm. Hastings reminded the public they will go into Closed Session and will reconvene at 1:30 P.M. for Time Certain item #4.b.

The Commissioners gave their comments to wish a Happy Holidays to the community and staff.

37. Closed Session pursuant to NRS 241.015(3)(b)(2) - Go into closed session, pursuant to NRS 241.015(3)(b)(2), to receive information from the District Attorney regarding potential or existing litigation involving a matter over which the Board has supervision, control, jurisdiction or advisory power, and to deliberate toward a decision on the matter, and pursuant to NRS Chapter 288.220, to receive a report on the status of ongoing labor negotiations; and direct staff accordingly. (For possible action)

38. Public Participation

There was no public participation.

39. Adjourn

Comm. Hastings adjourned the meeting.

LYON COUNTY BOARD OF COMMISSIONERS

Vida Keller, **Chairman**

ATTEST

NIKKI BRYAN, Lyon County Clerk/Treasurer

Lyon County Utilities

Dayton / Mound House Workshop

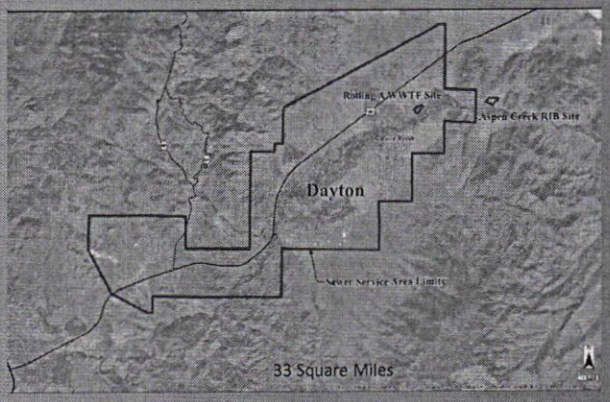
Board of County Commissioners December 19, 2019 Agenda Item 4b.

Outline

- Water
  - System Highlights and Current Issues
  - Current 5-Year CIP Summary
  - Current / Near Term Projects
- Sewer
  - System Highlights and Current Issues
  - Current 5-Year CIP Summary
  - Current / Near Term Projects
- Questions and Discussions

Lyon County Utilities Dayton / Mound House Service Area

Current Issues– Water
- Mound House industrial area
- Ag wells
- Storage tank RR
- Staffing resources
- Water rights management



Current Issues– Sewer
- Capacity (treatment, disposal, collections)
- Flow meters
- Aging Infrastructure
- Staffing resources
- Master planning

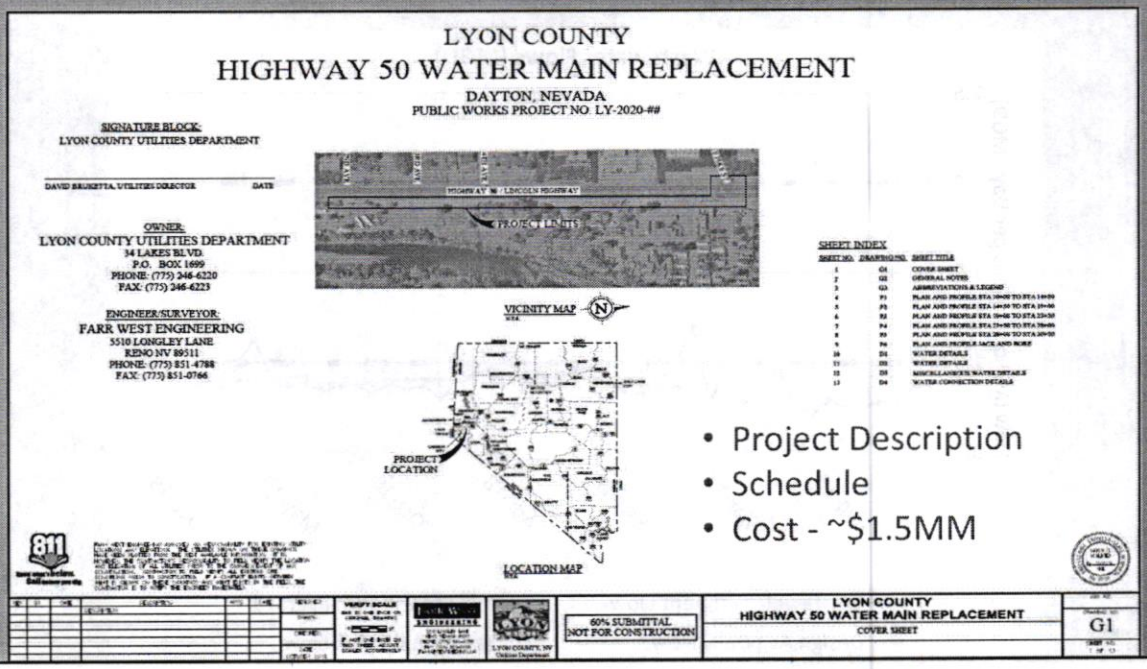
System Highlights – Water
- Dayton / Mound House (Dressler Park , Smith Valley)
- 9 wells (+14 non operational wells)
- 12 storage tanks
- 8 booster stations - 10 pressure zones
- 125 miles of pipe
- Interoperability with Carson City

System Highlights – Sewer
- Dayton / Mound House (SSGID, Willow Creek)
- 2 WWTP
- 12 lift stations
- 90 miles pipe -1628 manholes

WATER – 5 Year Capital Improvement Plan Summary

Item Description	2020	2021	2022	2023	2024	Total
Water Meter Replacement Project	$400,000	$150,000				$550,000
Water Main Replacement - Mound House	$150,000					$150,000
Water Storage Tank Coating	$300,000			$300,000		$600,000
Water Main Looping for Improved Flows	$100,000		$200,000	$100,000		$400,000
Replace old town water main HWY 50	$1,500,000					$1,500,000
10 Mile Water Storage Tank	$25,000	$2,700,000				$2,725,000
PRV Relocation	$50,000					$50,000
SCADA Server Replacement	$20,000					$20,000
Laser Alignment Tool (split w sewer)	$6,500					$6,500
Field Talk Work Order Dispatch & Logging System		$20,000				$20,000
Grosh/Rose Pk-Main replacement		$125,000	$300,000		$125,000	$550,000
Field Talk Work Order Dispatch & Logging System		$20,000				$20,000
River Park Subdivision Hydraulic Analysis		$92,000				$92,000
Hydraulic Modeling		$200,000				$200,000
Mira Vida Well				$250,000	$1,700,000	$1,950,000
Water Main Addition			$2,000,000			$2,000,000
Well Head Protection Improvements			$30,000		$100,000	$130,000
Replace old town water main, hydrants and meter pits				$50,000	$500,000	$550,000
Holley Ranch Well			$200,000			$200,000
Subtotals:	$2,551,500	$3,307,000	$2,730,000	$700,000	$2,425,000	$11,713,500

WATER - Current / Near Term Projects


LYON COUNTY
HIGHWAY 50 WATER MAIN REPLACEMENT
DAYTON, NEVADA
PUBLIC WORKS PROJECT NO. LY-2020-##

SIGNATURE BLOCK:
LYON COUNTY UTILITIES DEPARTMENT

DAVID BRUSETTA, UTILITIES DIRECTOR DATE

OWNER:
LYON COUNTY UTILITIES DEPARTMENT
34 LAKES BLVD.
P.O. BOX 1699
PHONE: (775) 246-6220
FAX: (775) 246-6223

ENGINEER/SURVEYOR:
FARR WEST ENGINEERING
5510 LONGLEY LANE
RENO NV 89511
PHONE: (775) 851-4788
FAX: (775) 851-0766

VICINITY MAP

PROJECT LOCATION

LOCATION MAP

SHEET INDEX

SHEET NO.	DRAWING NO.	SHEET TITLE
1	G1	COVER SHEET
2	G2	GENERAL NOTES
3	G3	ABBREVIATIONS & LEGEND
4	P1	PLAN AND PROFILE STA 10+00 TO STA 14+50
5	P2	PLAN AND PROFILE STA 14+50 TO STA 19+00
6	P3	PLAN AND PROFILE STA 19+00 TO STA 23+50
7	P4	PLAN AND PROFILE STA 23+50 TO STA 28+00
8	P5	PLAN AND PROFILE STA 28+00 TO STA 32+50
9	P6	PLAN AND PROFILE JACK AND BORE
10	D1	WATER DETAILS
11	D2	WATER DETAILS
12	D3	MISCELLANEOUS WATER DETAILS
13	D4	WATER CONNECTION DETAILS

60% SUBMITTAL
NOT FOR CONSTRUCTION

LYON COUNTY
HIGHWAY 50 WATER MAIN REPLACEMENT
COVER SHEET

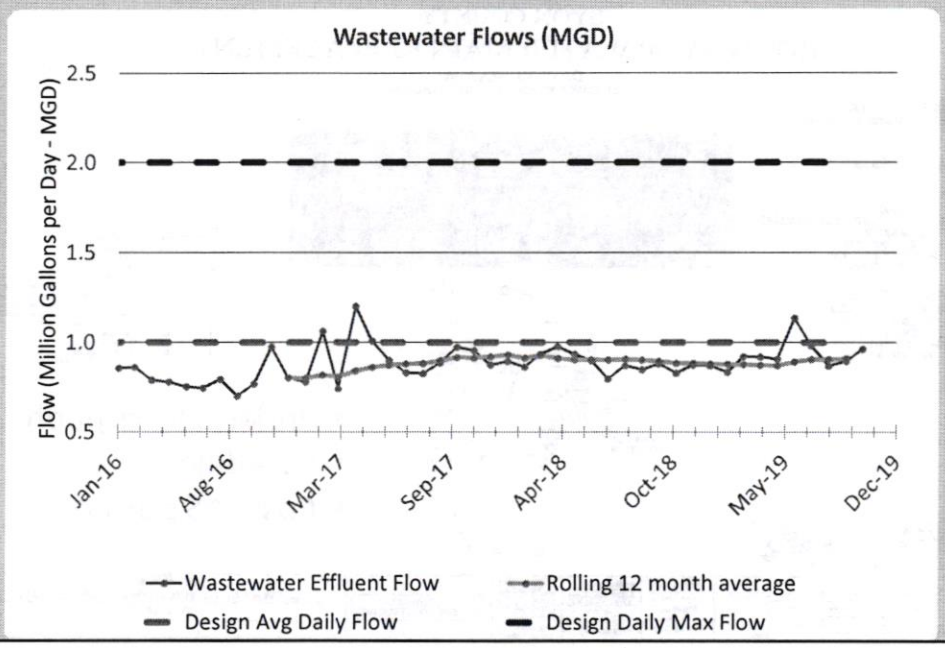
G1

- Project Description
- Schedule
- Cost - ~$1.5MM

SEWER - System Highlights and Current Issues

- **Treatment Capacity**
  - ✓ Rolling A designed to 1 MGD (AA) : 2 MGD (DM)
  - ✓ 2018 De-rated to 0.9 MGD
  - ✓ Temporary South Plant came online in April 2019
  - ✓ Current daily flow exceeds the permit limit set to 0.9 MGD
- **Effluent Disposal Capacity**
  - ✓ Summer – Golf Course, Fields at Rolling A WWTP, RIBS
  - ✓ Winter - RIBS at South Plant and Rolling A Plant, Golf Course
  - ✓ 2019 study shows RIBs capacity is Insufficient
  - ✓ Need additional capacity
- **Operation and Maintenance**
  - ✓ Deferred repair and replacement due to economic downturn
  - ✓ Staff resources at lowest quartile of the national standard
  - ✓ Collection system inspection limitations
  - ✓ Source control and pre-treatment program
  - ✓ Condition assessment limitations

Treatment Capacity - Growth and Planning Horizon



SEWER - System Highlights and Current Issues

Treatment Capacity - Growth and Planning Horizon

Current flow

Annual Average= 0.9 MGD

30 Day Average = 0.9 MGD to 1.1 MGD

[Flow meter issues brings 200,000 GPD difference between influent and effluent]

SEWER - System Highlights and Current Issues

Treatment Capacity - Growth and Planning Horizon

Phase 4 Expansion(based on 0.9 MGD flow)

Annual Average flow	= 1.4 MGD
Increase in Capacity	= 1.4 – 0.9 = 0.5 MGD
(175 Gal/Connection)	= 2860 connections
(125 Connections/yr)	= 23 yrs
85% of 1.4 MGD Capacity	= 1.2 MGD
	= 1.2 -0.9 = 0.3 MGD
	= 1710 connection
	= 13 yrs. To begin planning

SEWER - System Highlights and Current Issues

Treatment Capacity - Growth and Planning Horizon

Phase 4 Expansion(based on 1.1 MGD flow)

Annual Average flow	= 1.4 MGD
Increase in Capacity	= 1.4 – 1.1 = 0.3 MGD;
	= 1710 connections
	= 13 yrs
85% of 1.4 MGD Capacity	= 1.2 MGD
	= 1.2 -1.1 = 0.1 MGD
	= 570 connection
	= 4.5 yrs. To begin planning

SEWER - System Highlights and Current Issues

Disposal Capacity - Growth and Planning Horizon

Effluent Disposal Background

- Four primary disposal locations

Effluent Disposal Facility	2018 Average Effluent Disposal (gpd) Summer (May-Oct)	Winter (Nov-April)
(3) Rapid Infiltration Basins		356,000 gpd
Flood Irrigation Area	372,000 gpd	71,000 gpd
Dayton Valley Golf Course	365,000 gpd	297,000 gpd
South Plant Ponds/RIBs	79,000 gpd	222,000 gpd

- Insufficient disposal capacity to support WWTF expansion

FARR WEST ENGINEERING

SEWER - System Highlights and Current Issues

Disposal Capacity - Growth and Planning Horizon

Minor Ranch
-Lease 30 years
- 15 acres
- Ph 1: 0.75 MGD,
- Ph 2: 1.4 MGD ($3MM)

Aspen Creek
-Own,
- 57 acres, 135 acres
- Ph 1: 1.4 MGD ($5.3MM)
- Ph 2: 2+ MGD
- Future expansion to BLM



Staff Recommendation
- Own land
  - Permanent commitment
  - Control / flexibility
  - Future expansion
- Avoid project delays
- Moving forward with Aspen Creek

SEWER – 5 Year Capital Improvement Plan Summary

Item Description	2020	2021	2022	2023	2024	Total
RA WWTP - Capacity Expansion	$5,000,000	$8,000,000	$2,000,000			$15,000,000
RIB - Effluent Disposal Expansion	$2,500,000	$4,000,000				$6,500,000
Rebuild LS 2; add FM and LS2A	$2,000,000	$5,500,000				$7,500,000
RA WWTP - Rebuild Sludge Lagoon	$1,200,000					$1,200,000
SCADA Server Replacement	$20,000					$20,000
Laser Alignment tool (split w water)	$6,500					$6,500
Rose Peak Lift Station Force Main		$1,000,000				$1,000,000
Rose Peak Generator Replacement		$45,000				$45,000
Lift Sta 1A & Force Main		$345,000	$4,300,000			$4,645,000
Replace gravity lines Hwy50 @ DV road			$500,000			$500,000
Replace Sutro Lift Sta/Force Main			$250,000	$2,500,000		$2,750,000
Replace South Plant SCADA			$100,000			$100,000
RA WWTP - Open Space Effluent Irrigation Expansion			$50,000	$50,000		$100,000
Lift Station 1 Wetwell Replacement				$300,000		$300,000
Collection System Odor Controls		$75,000	$75,000	$100,000	$500,000	$750,000
Collection System Air Relief Replacement		$25,000	$25,000	$25,000	$25,000	$100,000
Manhole Lining		$50,000	$50,000	$100,000	$100,000	$300,000
Lift StationFlow Meters Addition				$50,000	$50,000	$100,000
Collection System PIG station					$200,000	$200,000
Subtotals:	$10,726,500	$19,040,000	$7,350,000	$3,125,000	$875,000	$41,116,500

SEWER – SRF Funded Projects

Project	% Growth	% Operational
RA WWTP Capacity Expansion	80	20
RIB - Effluent Disposal Expansion	60	40
Rebuild LS 2; add FM LS2A	40	60

Current / Near Term Projects

Rolling A Plant - Existing Operational Issues and Challenges

Item #	Item Name
HW1	Headworks H_2S Corrosion and Odor
HW2	Influent Flow Monitoring
HW3	Influent - Common Force Main
ST1	SBR Process Influent Flow Splitting
ST2	SBR's 1 A/B & 2 Process Control
ST3	Blower Speed/Aeration Control
ST4	SBR Process Redundancy
ST5	Aeration System
EF1	Bulk Chemical Storage Capacity
EF2	Bulk Chemical Storage Tank
EF3	Chlorine Disinfection
EF4	Effluent Turbidity affecting disposal in RIBs
SH1	Sludge Thickening in SBR Tanks
I&C1	Network Protocol Support is Limited
I&C2	Undersized Programmable Logic Controller

* **RED Items** were improved in the project

Rolling A Plant Improvement Options

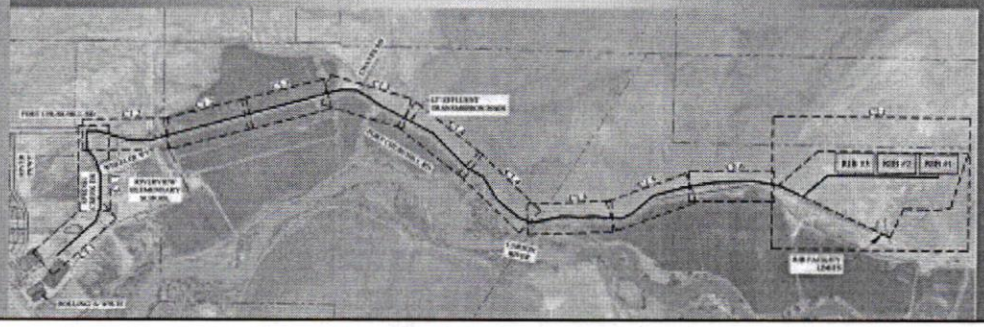
Option#	Name & Conceptual Improvements	Cost
IP&P Option 1 Phase 1	Reroute 3A/Sutro Force Main – Phase 1	$180,000
IP&P Option 1 Phase 2	Reroute 3A/Sutro Force Main – Phase 2	$525,000
IP&P Option 2	3A/Sutro Force Main Meter Vault	$105,000
HW Option 1	Channel Covers	$32,000
HW Option 2	Ventilation System Improvements	$53,000
HW Option 3.1	Screening Upgrades – Screw Screen	$200,000
HW Option 3.2	Screening Upgrades – Step Screen	$415,000
Aeration Option 1	Increase Operational Depth in Basins 1 and 2 (Existing Basins 3 & 4)	$67,000
Aeration Option 2	Remove Repair Existing Diffusers in Basins 1 and 2 (Existing Basins 3 & 4)	$76,000
Aeration Option 3	New Blowers	$432,000
Aeration Option 4	Replace Diffusers in Basins 1 and 2 (Existing Basins 3 & 4)	$299,000
FS Alternative 1	Dedicated Pumps (only applies to ST&SH Configuration 3)	$465,000
D&EP Option 1.1	New Bulk Chemical Single Wall Tank	$130,000
D&EP Option1.2	New Bulk Chemical Double Wall Tank	$115,000
D&EP Option 2	Convert to UV Disinfection	$880,000
EI&C Option 1	New PLC	$70,000
EI&C Option 2.1	Shelf Spare Redundant PLC	$20,000
EI&C Option 2.2	Hot Standby Redundant PLC	$150,000
Sludge Pond	Pond Cleaning and Rehabilitation	$1,775,000

Rolling A Plant Phase 4 Project Scope

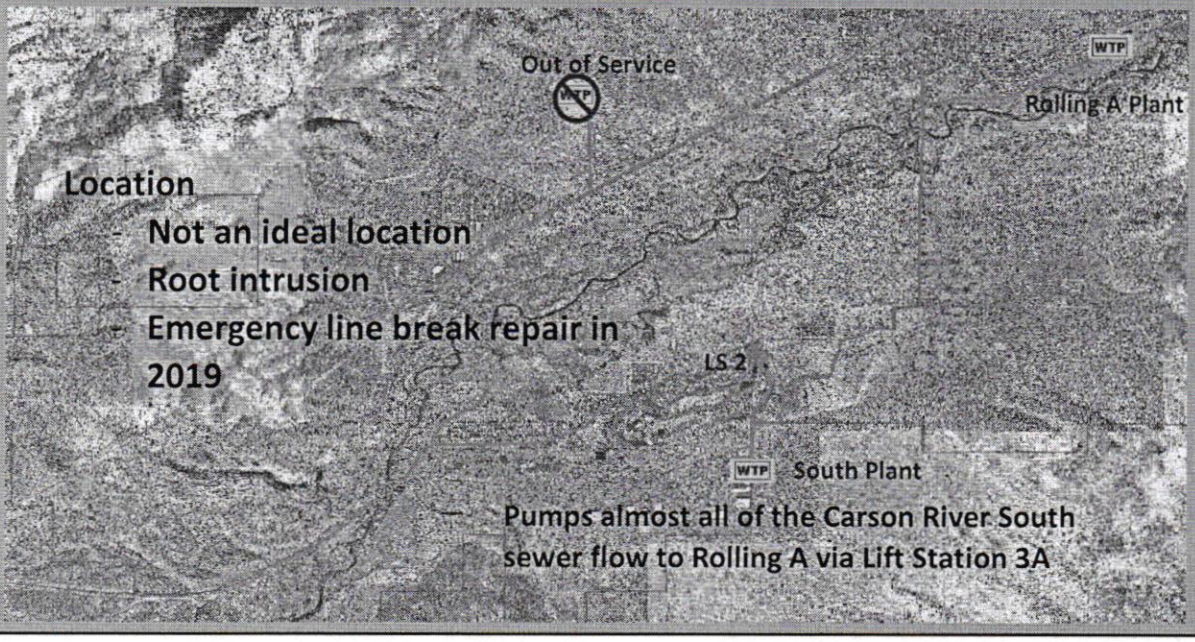
Design Phase Activities	
Project Component	Cost
Engineering Services During Design	$1,145,000
Permitting, Mitigation, Funding	$270,000
Legal Fees/Bonding	$125,000
Acquisition of Access and Rights of Way	$0
Design Phase Cost Total	$1,540,000
Construction Phase Activities	
Project Component	Cost
IP&P Option 2 – 3A Flow Meter	$105,000
HW Option 1 – Channel Covers	$32,000
ST&SH Configuration 3 – 2 SBR's & Repurposed Thickener	$5,550,000
EI&C Option 1 – New PLC	$70,000
Aeration Option 1 – Increased Basin Operating Depth	$67,000
Sludge Pond Cleaning and Rehabilitation	$1,775,000
Construction Cost Subtotal	$7,599,000
Engineering Services During Construction	$750,000
Subtotal	$8,349,000
Contingency (30%)	$2,500,000
Construction Phase Cost Total	$10,849,000
Total Project Cost	$12,389,000

RIB Expansion

- Design capacity = ~1.5 MGD
- Major project elements
  1. ~3 new ~4-acre RIBs
  2. New 12-inch treated effluent force main
  3. Upgrades to effluent pump station



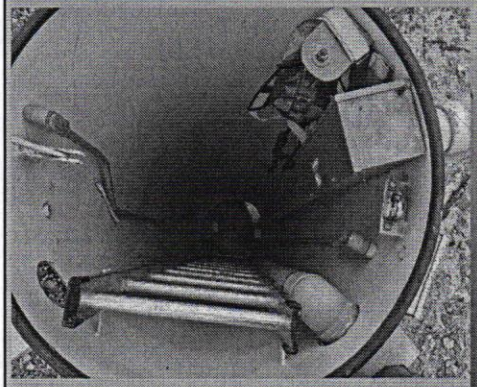
Lift Station 2 Improvements



Location
- Not an ideal location
- Root intrusion
- Emergency line break repair in 2019

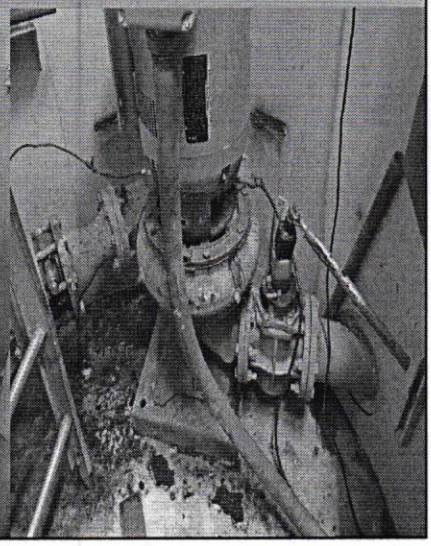
- Pumps almost all of the Carson River South sewer flow to Rolling A via Lift Station 3A

Lift Station 2 Improvements



More than 40 years old





Lift Station 2 Improvements

Design

- Under capacity to the current estimated flows
- Estimated future capacity to match Rolling A expansion : 1200 gpm

Alternatives

1. Existing LS w/1000gpm new pumps : $1.25M
2. Existing LS w/1200gpm new pumps : $1.65M
   Second wetwell
3. New 1200 gpm LS : $2.4M

Recommendation Alternative 3

- Avoid the existing site
- Avoid the limitation in existing wetwell capacity
- Meet the Expanded Rolling A capacity

Hwy 50-Dayton Valley Rd. Sewer Replacement

- Engineering Feasibility study
- Alternative analysis



Questions and Discussions