

City of Sparks
Planning Commission Item

Meeting Date: August 1, 2019

Subject: PCN19-0023 (CU19-0008) – Consideration of and possible action on a request for a Conditional Use Permit to allow for the construction and operation of an approximately 4,512 square-foot car wash on a site 1.61 acres in size located at 4620 Wedekind Road, Sparks, Nevada, in the PO (Professional Office) zoning district. (For Possible Action)

Petitioner: BW Sparks LLC

Recommendation: The Community Services Department recommends approval of CU19-0023 as submitted and conditioned; see suggested motion below.

Financial Impact: NA

Business Impact (per NRS Chapter 237):

- A Business Impact Statement is attached.
- X A Business Impact Statement is not required because
 - X this is not a rule;
(term excludes vehicles by which legislative powers are exercised under NRS Chapters 271, 278, 278A or 278B)

POSSIBLE MOTION

I move to approve the Conditional Use Permit (CU19-0008) associated with PCN19-0023, adopting Findings C1 through C5, and the facts supporting these findings as set forth in the staff report, subject to the four (4) Conditions of Approval as listed in the staff report.

Respectfully submitted,

Karen Melby

Karen Melby, AICP
Development Services Manager

Ian Crittenden

Ian Crittenden
Senior Planner

PLANNING CASE SUMMARY

CASE NUMBER:	PCN19-0023/CU19-0008
REQUESTED ACTION(S):	Approval of a Conditional Use Permit to allow for the construction and operation of a car wash on a site in the PO (Professional Office) zoning district
PROPERTY OWNER:	BW Sparks LLC
APPLICANT:	BW Sparks LLC
LOCATION:	4620 Wedekind
PARCEL SIZE:	1.61 ± acres
SITE SIZE:	1.61 ± acres
EXISTING ZONING:	PO (Professional Office)
EXISTING LAND USE:	C (Commercial)
WARD INFORMATION:	Ward 2, Ed Lawson
APPLICABLE REGULATIONS:	Sparks Municipal Code Title 20.05.008 (Conditional Use Permits)

BACKGROUND

This site is located at the northeast corner of McCarran Boulevard and Wedekind Road (Exhibit 1 – Vicinity Map). The site is vacant.

This site has PO (Professional Office) zoning and a C (Commercial) Comprehensive Plan Land Use designation.

A request for a master plan amendment from LDR (Low Density Residential) to GC (General Commercial) and a rezoning from R1-15 (Single Family Residential 15,000 square foot minimum) to C-1 (Neighborhood Commercial) was denied in 2004 (PCN03058). A subsequent request for a master plan amendment from LDR to OP (Office Professional) and a rezoning (from R1-15 to PO) was approved in 2006 (PCN06078). The 2016 approval of the Comprehensive Plan changed the OP land use to the C land use.

The Planning Commission previously reviewed and approved a Conditional Use Permit (CUP) for an approximately 5,369 square-foot car wash on this site in 2016 (PCN16041). The application was submitted by Miles Construction on behalf of Surf Thru Car Wash. That approval expired in 2018 because the construction was not initiated and the use was not established. This application has been submitted by Blue Wave Car Wash.

ANALYSIS

This site is located in the PO (Professional Office) zoning district. Car washes are a permitted use in the PO (Professional Office) zoning district subject to approval of a CUP. The applicant is proposing to construct and operate an approximately 4,512 square-foot tunnel-type car wash (Exhibit 2 – Site Plan). All washing machinery and equipment will be located inside the building. The plans also include the construction of carport/canopy areas with vacuum stations. The vacuum equipment will be located in two small structures on the eastern portion of the site.

The applicant has indicated that their proposed hours of operation are 8am to 7pm, seven days a week. At this time, it is the opinion of staff that a condition restricting the hours of operation is not necessary to make this use compatible with its adjacent uses.

The location of the car wash and vacuum equipment inside of structures on site should minimize the amount of noise generated by this use. The site is adjacent to the Wildcreek Golf Course to the north and west and office uses to the east. The only residential use is to the south, across McCarran Boulevard.

Noise issues can be a concern with the operation of car washes near residential uses. Staff believes the location of car wash and vacuum equipment inside structures, the distance across McCarran (approximately 130 feet), the existing sound wall adjacent to the residential uses, and the ambient traffic noise on McCarran, will effectively mitigate any potential noise impacts this use would have on the residential properties to the south of the subject site.

The landscaping proposed by the applicant (Exhibit 3 – Landscape) is in substantial compliance with the requirements of SMC 20.04.006 (Landscaping & Screening).

Required parking for car wash facilities under SMC 20.04.009 (Parking & Loading) is one (1) space per 1,500 square feet of building gross floor area. The proposed building is 4,512 square feet in size, so three (3) parking spaces are required. The site plan for the proposed car wash shows 29 parking spaces. The proposed car wash thus complies with the parking requirements contained in SMC 20.04.009.

The zoning code does not specify stacking standards for car washes, but SMC 20.03.16 requires drive-through restaurants to have a minimum of 160 feet of stacking distance. The stacking distance provided in the proposed site plan is approximately 600 feet, nearly four times the stacking distance required for a drive-through restaurant. Staff believes that this is adequate for this car wash use.

The applicant submitted a Traffic Impact Study (Exhibit 4 – Traffic Study). The study estimated the Average Daily Trips (ADT) to be 775 with a PM peak hour trip generation of 78. Typically, a traffic study is not required for uses that are estimated to generate less than 80 peak hour trips. Due to this site being located on McCarran Boulevard (a Nevada Department of Transportation (NDOT) controlled road) and the request from the applicant to locate an access to the site on McCarran in relatively close proximity to the intersection of McCarran Boulevard and Wedekind Road, staff felt it was reasonable and appropriate to require a traffic study as part of this request.

Transportation and engineering staff reviewed the Traffic Impact Study submitted by the applicant. Staff supplied the applicant with a letter detailing their comments. This letter (Exhibit 5 – Engineering Letter) also suggested one Condition of Approval requiring that the applicant submit to the City documentation of NDOT permits prior to the issuance of any building permits for the site (Condition 5).

The applicant has been working with NDOT to have their proposed roadway improvements permitted and believes that the proposed site design can be approved by NDOT. If the Planning Commission approves this request, NDOT subsequently denies the

request for access to the site from McCarran Boulevard, and the applicant still wants to move forward with the project, the applicant would have to return to the Planning Commission to amend the CUP, revising the site plan to remove the access from McCarran Boulevard.

The applicant has submitted building elevations (Exhibit 6 - Elevations) that are in substantial compliance with the design standards for the PO zoning district. The elevations reflect a mix of materials that includes both smooth and split face CMU block, stucco, and a corrugated perforated metal panel system. The elevations also incorporate a variety of colors including Sierra Spruce and Alpollic Blue.

CONDITIONAL USE PERMIT:

FINDING C1:

The proposal, as submitted and conditioned, is in compliance with the Comprehensive Plan.

The site has a C (Commercial) Comprehensive Plan land use designation.

The Goals and Policies in the Comprehensive Plan that are relevant to this proposal include:

Goal MG1: Support economic vitality by providing a non-residential land use base.

Goal MG4: Facilitate infill and redevelopment.

Policy CF1: When reviewing new development, the City will not approve an application unless City services can be provided at acceptable service levels.

Allowing this proposed car wash would provide a non-residential land use, which supports Goal MG1. The site is adjacent to and surrounded by developed land, and this infill development supports Goal MG2. As the site is surrounded by a developed area, all City services can be provided at acceptable levels, which is in conformance with Policy CF1. For these reasons, City staff believe the use of this site as a car wash is in compliance with the Comprehensive Plan.

FINDING C2:

The application, as submitted and conditioned, is compatible with the existing or permitted uses of adjacent properties.

The existing uses of the adjacent properties are as follows:

Direction	COMPREHENSIVE PLAN LAND USE	ZONING
North:	Community Facilities (CF)	PF (Public Facilities)
East:	Commercial (C)	PO (Professional Office)
South:	Multi-Family Residential (MF14)	MF-2 (Multi-Family Residential)
West:	Community Facilities (CF)	PF (Public Facilities)

This request is to permit a car wash on a site in the PO zoning district. This use is permitted in this location with approval of a CUP.

The site is adjacent to other commercial uses located to the east, a golf course to the north and west, and multi-family residential to the south. The area is characterized by a mix of land uses, is located on a busy arterial, and is not expected to conflict with the other commercial uses to the east and the golf course use to the north and west. The multi-family residential properties to the south are located across McCarran Boulevard. As discussed in the Analysis section, the distance and proposed design of the car wash are anticipated to mitigate the potential noise impacts.

FINDING C3:

The potential impairment of natural resources and the total population which available natural resources will support without unreasonable impairment has been considered.

This site, while undeveloped, has been graded and fenced for many years. City staff does not believe that approval of this CUP to allow a car wash would impair the availability of natural resources or the region's ability to support its population.

FINDING C4:

The application, as submitted and conditioned, will address identified impacts.

Identified impacts of the proposed car wash are as follows.

Parking:

The parking requirement for this use according to SMC 20.04.009 is 3 spaces. This business has proposed to provide 29 spaces and thus complies with the parking standards.

Traffic:

One potential impact of a car wash at this location would be traffic. The applicant is proposing right-in only site access from McCarran Boulevard and a full movement site access from Wedekind Road. To mitigate the impacts of the short distance between the proposed McCarran site access and the intersection of McCarran Boulevard and Wedekind Road, the applicant is proposing improvements that would limit the left-out and through movements at the intersection. Staff has proposed Condition 5 to require documentation of approved NDOT permits for these improvements prior to the issuance of any building permits.

Noise:

As discussed in the Analysis section, staff believes that the potential noise impact from this use will be adequately mitigated by the design and location of the project.

Finding C5:

Public notice was given and a public hearing held per the requirements of the Sparks Municipal Code and the Nevada Revised Statutes.

Public notice was published in the *Reno Gazette-Journal* on July 7, 2019. In addition, 98 notices were mailed to owners of property within 500 feet of the subject property on July 17, 2019. The Planning Commission meeting functions as the public hearing required by Nevada Revised Statutes and the Sparks Municipal Code.

At the time of the writing of this report, staff had received no public comment on this item.

CONDITIONS OF APPROVAL
PCN19-0023/CU19-0008
Blue Wave

1. APPROVAL:

THIS CONDITIONAL USE PERMIT IS APPROVED AS SUBMITTED AND CONDITIONED. ANY SUBSTANTIAL CHANGES SHALL REQUIRE REVIEW AND AMENDMENT OF THIS CONDITIONAL USE PERMIT.

2. EXPIRATION DATE:

EXPIRATION OF THIS CONDITIONAL USE PERMIT SHALL COMPLY WITH SPARKS MUNICIPAL CODE 20.05.008.



3. ARCHITECTURE:

THE BUILDING ELEVATIONS ARE APPROVED AS SUBMITTED AND CONDITIONED. ANY SUBSTANTIAL CHANGES SHALL REQUIRE REVIEW AND APPROVAL BY THE PLANNING COMMISSION AS AN AMENDMENT TO THIS CONDITIONAL USE PERMIT.

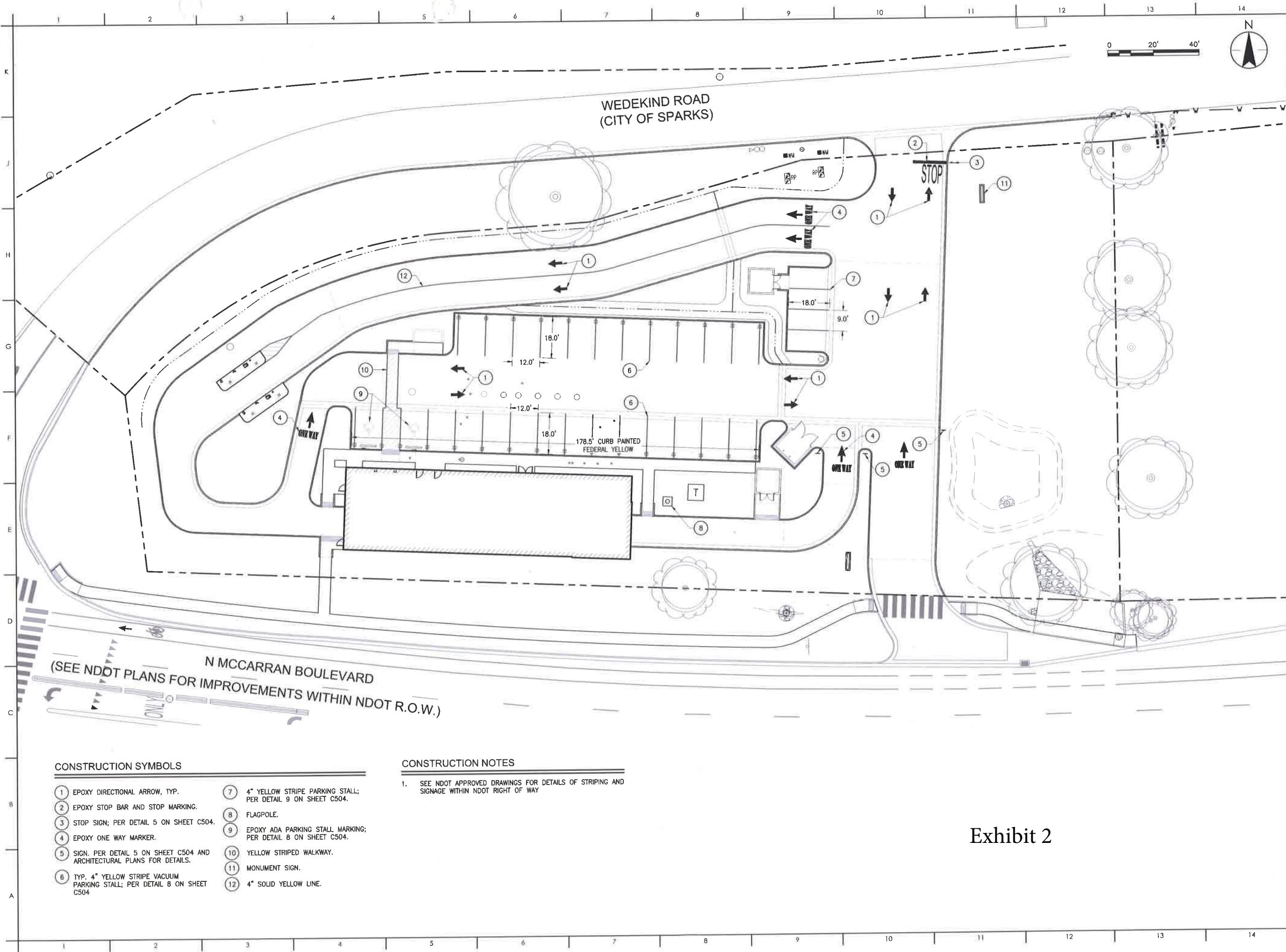
ALL AWNING SUPPORT POLES SHALL BE CLAD WITH THE SAME OR SUBSTANTIALLY SIMILAR MATERIAL USED ON THE EXTERIOR OF THE BUILDING TO A HEIGHT NO LESS THAN THAT OF THE WAINSCOT ON THE BUILDING TO THE APPROVAL OF THE ADMINISTRATOR.

4. NEVADA DEPARTMENT OF TRANSPORTATION (NDOT) APPROVAL

THE APPLICANT SHALL PROVIDE TO THE CITY DOCUMENTATION OF THE APPROVED NDOT PERMITS FOR ALL STREET IMPROVEMENTS AND SITE ACCESS LOCATIONS PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT FOR THE SITE.

 Subject Site
 City Boundary





6995 SIERRA CENTER PARKWAY
 Reno, Nevada 89511
 Tel. (775) 850-0777 Fax (775) 850-0787
 NVPE # F-20190 NVPLS # 20793

TWO DAYS BEFORE YOU DIG
 CALL USA TOLL FREE
 811/1-800-227-2600



**BLUEWAVE
 MCCARRAN
 BOULEVARD
 SPARKS**

Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada

STRIPING AND SIGNAGE PLAN

PERMIT SET	05/29/2019
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **C202**
 Revision Sheet
 0 6 of 24

CONSTRUCTION SYMBOLS

- | | |
|--|--|
| ① EPOXY DIRECTIONAL ARROW, TYP. | ⑦ 4" YELLOW STRIPE PARKING STALL; PER DETAIL 9 ON SHEET C504. |
| ② EPOXY STOP BAR AND STOP MARKING. | ⑧ FLAGPOLE. |
| ③ STOP SIGN; PER DETAIL 5 ON SHEET C504. | ⑨ EPOXY ADA PARKING STALL MARKING; PER DETAIL 8 ON SHEET C504. |
| ④ EPOXY ONE WAY MARKER. | ⑩ YELLOW STRIPED WALKWAY. |
| ⑤ SIGN, PER DETAIL 5 ON SHEET C504 AND ARCHITECTURAL PLANS FOR DETAILS. | ⑪ MONUMENT SIGN. |
| ⑥ TYP. 4" YELLOW STRIPE VACUUM PARKING STALL; PER DETAIL 8 ON SHEET C504 | ⑫ 4" SOLID YELLOW LINE. |

CONSTRUCTION NOTES

- SEE NDOT APPROVED DRAWINGS FOR DETAILS OF STRIPING AND SIGNAGE WITHIN NDOT RIGHT OF WAY

Exhibit 2

PLANT SCHEDULE					
TREES	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
+	ACER X FREEMANNI 'JEFFSPRED'	AUTUMN BLAZE MAPLE	2" CAL	50"X30"	6
•	CUPRESSUS ARIZONICA 'BLUE PYRAMID'	BLUE PYRAMID CYPRESS	6' TALL	20"X10"	3
•	JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	6' TALL	20"X8"	6
•	MALLUS X 'ADAMS'	CRAB APPLE	1" CAL	20"X20"	6
•	PICEA PUNGENS	COLORADO SPRUCE	6' TALL	25"X10"	3
•	PINUS NIGRA	AUSTRIAN BLACK PINE	6' TALL	40"X20"	4
•	PLATANUS X ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	2" CAL	40"X35"	4
•	QUERCUS COCCINEA	SCARLET OAK	2" CAL	40"X35"	4
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
•	ACHILLEA MACROPHYLLA	YARROW	5 GAL	2"X2"	26
•	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	5 GAL	4"X3"	77
•	FORESTIERA NEOMEXICANA	NEW MEXICO PRIVET	5 GAL	12"X12"	8
•	LAWANDULA ANGSTIFOLIA 'MIDCOTE SUPERIOR'	MIDCOTE SUPERIOR LAVENDER	5 GAL	2.5"X2.5"	33
•	MAHONIA REPENS	CREeping MAHONIA	5 GAL	1"X4"	12
•	PENNISETUM ALOPECUROIDES 'KARLAY ROSE'	FOUNTAIN GRASS	5 GAL	5"X4"	18
•	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	5 GAL	4"X4"	42
•	PINUS MUGO 'MOPS'	MUGO PINE	5 GAL	3"X3"	16
•	PRUNUS BESSEYI 'PAWNEE BUTTES'	SAND CHERRY	5 GAL	3"X5"	36
•	RHUS AROMATICA	FRAGRANT SUMAC	5 GAL	3"X8"	36
•	RHUS GLABRA	SMOOTH SUMAC	5 GAL	10"X8"	18
•	RIBES AUREUM	GOLDEN CURRANT	5 GAL	5"X5"	9
•	SHEPHERDIA ARGENTEA	SILVER BUFFALOBERRY	5 GAL	10"X10"	18

GROUNDPLANE		
SYMBOL	DESCRIPTION	QTY
	Shadow Ridge 1-1/2"	17,680 SF
	Shadow Ridge 100% 1-1/2"	17,443 SF
	25% Scatter 3"-10"	4,260 SF
	River Rock 3"-8"	10,211 SF
	Seeded Revegetation	6 EA
	Boulders - 3" DIA.	6 EA

SITE DATA & REQUIREMENTS			
ZONING: PO			
SITE AREA (DEVELOPED): 70,045 SF			
LANDSCAPE:	(20%)	REQUIRED 14,009 SF	PROVIDED 30,621 SF
ONE TREE PER FIVE HUNDRED SF OF REQUIRED LANDSCAPE INCLUDES		28 EA	28 EA
ONE TREE PER 7 PARKING SPACES	(25)	4 EA	4 EA
TOTAL TREES REQUIRED		32 EA	32 EA
-INCLUDES ONE STREET TREE PER 30 LF FRONTAGE	(890 LF)		
(WEDEKIND RD/ 500 LF - 17, McCARRAN BLVD/ 390 LF - 13)			
-50% RED DECID. TREES SHALL BE MIN. 1" CAL.		6	6
-50% RED DECID. TREES SHALL BE MIN. 2" CAL.		12	12
-EVERGREEN TREES SHALL BE MIN. 6' HT.		16	22
SHRUBS			
-60% SHRUBS SHALL BE MIN. 5 GAL. SIZE		203	226
-40% SHRUBS SHALL BE MIN. 1 GAL. SIZE		X	113
GROUND COVERING OVER ENTIRE LANDSCAPE AREA IS PROVIDED WITH SHRUBS, ORNAMENTAL GRASSES, DECORATIVE ROCK MULCHES, AND SEEDED REVEGETATION.			
PROJECT ENTRY WITH SPECIAL LANDSCAPE ELEMENTS IS PROVIDED WITH SPECIMEN ORNAMENTAL TREES			
*PROVIDED LANDSCAPE INCLUDES 15,100 SF EAST OF DRIVEWAY WITH DRYLAND SEEDED REVEGETATION.			

LANDSCAPE SPECIFICATIONS

GENERAL:

- PLAN IS DIAGRAMMATIC ONLY. ALL LOCAL GOVERNING CODES SHALL BE MET. EXACT LOCATION OF TREES AND SHRUBS SHALL BE DETERMINED IN THE FIELD (INSTALL AS PER DETAILS) AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- A MINIMUM OF TWO WORKING DAYS BEFORE PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRIC CABLES, TELEPHONE CABLES, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND PROTECTION OF ALL UTILITIES, AND REPAIR OF ANY DAMAGE RESULTING FROM HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- DAMAGES: CONTRACTOR SHALL PROMPTLY REPAIR ALL DAMAGES TO EXISTING SITE AT NO COST TO OWNER.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES (I.E., PAVING, PLUMBING, ELECTRICAL, ETC.)
- THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION AND TO NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHOULD CONDITIONS EXIST WHICH PREVENT CONSTRUCTION AS PER THESE PLANS. COMMENCEMENT OF WORK SHALL CONSTITUTE ACCEPTANCE OF CONDITIONS AND RESPONSIBILITY FOR CORRECTIONS.
- CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE OWNER FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT.

REQUIRED SEQUENCE

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADING THROUGHOUT ALL LANDSCAPE AREAS SUCH THAT THERE ARE NO HUMPS OR DEPRESSIONS AND POSITIVE DRAINAGE OCCURS THROUGHOUT. THE TOP 18" OF ALL PLANTING BEDS SHALL BE CLEAN NATIVE SOIL, FREE OF ALL CONSTRUCTION DEBRIS AND NATIVE ROCKS OVER 6" IN DIAMETER. THE CONTRACTOR SHALL AMEND THE PLANTING BED OR PLANTING HOLES PER PLANS AND SPECIFICATIONS. FINAL GRADE OF ALL PLANTERS (I.E. MULCH SURFACE) SHALL BE FLUSH WITH ADJACENT HARDSCAPE SURFACES.
- THE CONTRACTOR SHALL OBTAIN SOIL TEST RESULTS AND RECOMMENDATIONS FOR EXISTING SITE SOIL INCLUDING TEXTURE CLASSIFICATION, PH, NITROGEN, POTASSIUM, MAGNESIUM, CALCIUM, PHOSPHORUS, SODIUM HAZARD, SALINITY HAZARD, BORON HAZARD, CATION EXCHANGE, AND FERTILIZATION MINERALS. RECOMMENDATION FOR THE INTENDED USE. CONTRACTOR SHALL UTILIZE SOIL TEST RESULTS AND RECOMMENDATIONS AND SHALL PROVIDE SOIL AMENDMENTS ACCORDINGLY. CONTRACTOR SHALL PROVIDE COPIES OF SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER UPON REQUEST. RECOMMENDED SOIL TESTING LABS: MGS HARRIS, 621 ROSE ST., LINCOLN, NE 68502, (402) 476-2811, SOILAND ANALYTICAL LAB, 11353 PYRITES WAY, SUITE 4, RANCHO CORDOVA, CA 95670, (916)-852-8557 LTP 2 MAJOR LANDSCAPE EVALUATION WITH BORON.
- INSTALL ALL PLANT MATERIALS AS PER DETAILS AND SOIL AND PLANT LAB REPORT. INSTALL SLOW RELEASE FERTILIZER TABLETS FOR ALL PLANTS. INFORMATION IN SOILS AND PLANT LAB REPORT SHALL PREVALE OVER NOTES AND DETAILS.
- PLANTING MIX - SOIL AMENDMENT SHALL BE DOUBLE MIX COMPOSED OF TOPSOIL, BARK HUMUS, AND COMPOST. SUBMIT TO LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
- ALL PLANTING AREAS TO RECEIVE THREE-INCH MINIMUM DEPTH ROCK MULCH UNLESS OTHERWISE NOTED. SEE PLANS PRIOR TO PLACEMENT SMOOTH AND COMPACT THE SUBGRADE TO 80% OF RELATIVE DENSITY. REMOVE WEEDS. INSTALL WOVEN WEED BARRIER FABRIC BENEATH ALL AREAS OF MULCH. LANDSCAPE FABRIC TO BE 'DEWITT' PRO-5 WEED BARRIER (OAE) INSTALLED IN ACCORDANCE WITH MFG'S SPECIFICATIONS. ANCHOR ALL EDGES PER MANUFACTURER'S SPECIFICATIONS.
- APPLY PRE-EMERGENT HERBICIDE TO ALL AREAS RECEIVING ROCK MULCH AND DECOMPOSED GRANITE. APPLY AFTER IRRIGATION AND PLANTING ARE COMPLETED. BEFORE AND AFTER INSTALLATION OF ROCK MULCH MATERIAL.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT MATERIAL PER SYMBOLS AND SPACING INDICATED ON PLAN AND IN LEGENDS. SYMBOLS PREVAIL OVER NUMBERS ON PLAN LIST. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT EXPRESSED WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. SEE SUBMITTALS.
- ALL PLANTS NOT MEETING OR EXCEEDING REQUIREMENTS AND RECOMMENDATIONS OF ANSI Z601 "AMERICAN STANDARD FOR NURSERY STOCK" WILL BE REJECTED. CONTRACTOR SHALL RECEIVE ON-SITE APPROVAL OF PLANT MATERIAL BY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING. FAILURE TO RECEIVE PRIOR APPROVAL MAY RESULT IN REJECTION OF PLANT MATERIAL AT ANY POINT DURING CONSTRUCTION OR THE PERIOD FOLLOWING INSTALLATION. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND EVALUATE PLANTS DURING THE MAINTENANCE PERIOD. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF FAILED PLANTS.
- ALL PLANT ROOTBALLS SHALL BE MOIST UPON ARRIVAL AT SITE AND KEPT THAT WAY THROUGH PLANTING AND APPROVAL OF FINAL WORKING IRRIGATION SYSTEM WITH WHATEVER MEANS NECESSARY INCLUDING: HAND WATERING, HOSE, WATER TRUCK, TEMPORARY IRRIGATION SYSTEM.

MAINTENANCE/GUARANTEES

- ALL PLANTED AREAS SHALL BE MAINTAINED FOR A PERIOD OF SIXTY DAYS FOLLOWING WRITTEN ACCEPTANCE BY OWNER'S REPRESENTATIVE. LANDSCAPE CONTRACTOR WILL GUARANTEE ALL PLANT MATERIAL (INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, GRASS, COVER, AND GRASSES) FOR A PERIOD OF ONE FULL YEAR FOLLOWING FINAL ACCEPTANCE OF THE LANDSCAPE INSTALLATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE. IN BIDDING AND INSTALLING THE PLANT MATERIAL SPECIFIED ON THESE PLANS, THE LANDSCAPE CONTRACTOR AGREES THAT THE PLANT MATERIAL SPECIFIED IS SUITABLE TO THE PROJECT SITE. FURTHERMORE, THE LANDSCAPE CONTRACTOR AGREES TO HONOR THE WARRANTY AND, IF NECESSARY, REPLACE SPECIES WITH MORE HARDY PLANT TYPE IF DEEMED NECESSARY DUE TO EXCESSIVE DIE OUT. IF THE LANDSCAPE CONTRACTOR DOES NOT BELIEVE CERTAIN PLANT MATERIAL IS SUITABLE FOR THE SITE AND/OR ITS MICRO-CLIMATES, THE LANDSCAPE CONTRACTOR SHALL REQUEST TO MAKE PLANT MATERIAL SUBSTITUTIONS IN WRITING TO THE LANDSCAPE ARCHITECT PRIOR TO THE START OF INSTALLATION. PROPOSED SUBSTITUTIONS WILL RESULT IN NO ADDED COST.

TREE PLANTING NOTES:

- REMOVE ALL NURSERY STAKES, TIES, AND TAGS ABOVE & BELOW GROUND. TREES MUST STAND VERTICAL PRIOR TO STAKING TO BE ACCEPTABLE.
- TREES GROWN STAKED IN A NURSERY WILL NOT BE ACCEPTED ON THIS PROJECT UNLESS STAKES HAVE BEEN REMOVED FOR A MINIMUM OF TWO YEARS BEFORE THE TREES ARE QUAG FROM THE NURSERY. A CERTIFICATION OF THIS CONDITION WILL BE PROVIDED AT OR BEFORE DELIVERY OF TREES TO THE SITE.
- REMOVE DAMAGED BRANCHES, RETAIN NATURAL GROWTH SHAPE CHARACTERISTICS OF SPECIES. DO NOT REMOVE OR CUT CENTRAL LEADER OR ANY LOWER BRANCHES. TREES WITH DAMAGED OR CUT CENTRAL LEADERS WILL NOT BE ACCEPTED. CUT STAKES IF NEEDED, TO PREVENT WIND DAMAGE TO LOWER BRANCHES. PRUNE ACCORDING TO CLASS 1 OR 11 STANDARDS OF THE NATIONAL ARBORISTS ASSOCIATION.
- TOP OF FOOT BALL IS DEFINED AS THE LOCATION OF THE UPPERMOST LATERAL ROOT, NOT THE SOIL LEVEL IN THE PLANT CONTAINER. TOP OF FOOT BALL TO BE 1" ABOVE EXISTING GRADE - NO NATIVE SOIL TO BE PLACED ON TOP OF FOOT BALL.
- CONDITIONS THAT WILL NOT BE ACCEPTED: TRUNK OR BARK WOUNDS; KINKED, GROWING, CIRCLING OR J ROOTS.
- DIG SQUARE OR RECTANGULAR HOLES FOR OPTIMUM ROOT GROWTH. SCARIFY EDGES OF PLANT HOLE: DEPTH TO BE SUCH THAT TREE CAN BE PLANTED AT SAME RELATIONSHIP TO FINISH GRADE AS GROWN OR 1" ABOVE.
- DIG PLOT HOLES FOR STAKES WITH ROTO-HAMMER INTO UNDISTURBED SOIL. PRESET STAKES IN EMPT Y HOLES USING (2) 2" DIA LODGE POLE PINE STAKES, AFTER TREE IS LOWERED INTO HOLE AND SET.
- USE STRAPS OR HOOKS CONNECTED TO ROOTBALL OR WIRE BASKET TO LOWER TREE INTO HOLE. SET AND PLUM TREE FIRST, THEN USING BOLT CUTTERS AND UTILITY KNIFE REMOVE WIRE BASKET AND BURLAP TO BOTTOM OF FOOT BALL.
- BACKFILL HOLE WITH PLANTING MIX IN LAYERS, TAMP SOIL AT 50% TOTAL BACKFILL DEPTH AND WATER/SOAK BEFORE ADDING MORE SOIL. ROOTBALL NOT TO BE ALLOWED TO DRY OUT, EITHER BEFORE, DURING OR AFTER PLANTING.
- MINERAL SUPPLEMENTS TO BE ADDED TO SOIL AMENDMENTS PER RECOMMENDATION BASED ON SOIL ANALYSIS.
- BACKFILL W/PLANTING MIX OF NATIVE SOIL AND SOIL AMENDMENT MIX SOIL AMENDMENT TO NATIVE SOIL AT 1:3 RATIO. NATIVE SOIL TO BE SCREENED FREE OF ROCKS, CLODS, AND DEBRIS GREATER THAN 6" DIA. TAMP TO REMOVE AIR POCKETS.
- CONSTRUCT WATER BASIN AROUND PERIMETER OF EXCAVATED PIT. GRADE BASIN SUCH THAT WATER COLLECTS AT THE EDGE OF BASIN, NOT AT TRUNK. FILL BASIN W/WOOD CHIP MULCH PER PLAN & SPECS. KEEP BARK 4" AWAY FROM TRUNK. DO NOT COVER TRUNK COLLAR WITH MULCH.
- CINCH BELT SECURE TO WOODEN STAKE WITH GALVANIZED NAIL DRIVEN THROUGH THE CINCH-BELT AND INTO THE STAKE TO PREVENT SLIPPAGE FOR ATTACHMENT TO METAL STAKE. WRAP AROUND TREE TRUNK AND DOUBLE-WRAP STAKE TO PREVENT SLIPPAGE. DO NOT USE WIRE OR CRIMP HOSE AROUND TRUNK.

OBSTRUCTIONS/APPROVALS/SUBMITTALS:

- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE, A MINIMUM OF 48 HOURS IN ADVANCE, FOR THE FOLLOWING SITE OBSERVATIONS AND/OR MEETINGS:
 - PRECONSTRUCTION MEETING WITH ALL PARTIES
 - PLANTING PIT EXCAVATION, PRIOR TO INSTALLATION
 - BOULDER LOCATIONS STAKED OUT, PRIOR TO PLACEMENT (IF SPECIFIED)
 - PLANT MATERIAL ON SITE, PRIOR TO INSTALLATION
 - PLANT LOCATIONS STAKED OUT, PRIOR TO PLANTING
 - SITE FURNISHINGS, PRIOR TO INSTALLATION (IF SPECIFIED)
 - FINAL PROJECT WALK-THROUGH
 - ADDITIONAL SITE OBSERVATIONS AS DEEMED NECESSARY BY THE LANDSCAPE ARCHITECT AND/OR CONTRACTOR
- SUBMIT THE FOLLOWING SAMPLES TO LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. ADDITIONAL SAMPLES MAY BE REQUIRED PRIOR TO FINAL APPROVAL. FAILURE TO COMPLY MAY RESULT IN REJECTION OF ITEM(S) PRIOR TO OR FOLLOWING INSTALLATION.
 - PLANTING MIX - SOIL AMENDMENT
 - SOIL/AMENDMENT TESTS
 - FERTILIZER TABLETS
 - WOOD CHIPS
 - ROCK MULCHES
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 - TREE TIES & STAKES
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 - BOULDERS
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROVIDE PLANT MATERIAL AS SPECIFIED ON THIS PLAN. THE CONTRACTOR MAY SUBMIT A REQUEST TO PROVIDE SUBSTITUTIONS FOR THE SPECIFIED PLANT MATERIAL UNDER THE FOLLOWING CONDITIONS:
 - ANY SUBSTITUTIONS PROPOSED SHALL BE SUBMITTED TO THE PROJECT LANDSCAPE ARCHITECT WITHIN TWO WEEKS OF THE AWARD OF CONTRACT. SUBSTITUTIONS MUST MEET EQUIVALENT DESIGN AND FUNCTIONAL GOALS OF THE ORIGINAL MATERIALS AS DETERMINED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. ANY CHANGES MUST HAVE THE APPROVAL OF THE LANDSCAPE ARCHITECT.
 - THE REQUEST WILL BE ACCOMPANIED BY AT LEAST THREE NOTICES FROM PLANT MATERIAL SUPPLIERS THAT THE PLANT MATERIAL SPECIFIED IS NOT AVAILABLE AND WILL NOT BE AVAILABLE PRIOR TO CONSTRUCTION.
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- RECORD (AS-BUILT) DRAWINGS: FOLLOWING COMPLETION OF PROJECT INSTALLATION, AND PRIOR TO FINAL APPROVAL, CONTRACTOR SHALL PREPARE AND SUBMIT RECORD DRAWINGS DEPICTING A COMPLETE LANDSCAPE AND IRRIGATION INSTALLATION. PROCEDURE FROM LANDSCAPE ARCHITECT FULL-SIZE CONTRACT DRAWINGS: CONSTRUCTION DRAWINGS SHALL BE ON THE PROJECT SITE AT ALL TIMES DURING INSTALLATION. CONTRACTOR SHALL MAKE A DAILY RECORD OF ALL WORK INSTALLED DURING EACH DAY. ACTUAL LOCATION OF TREES AND SHRUB BEDS, IRRIGATION VALVES, AND ALL IRRIGATION AND DRAINAGE PIPING SHALL BE SHOWN ON THE PRINTS BY DIMENSIONS FROM EASILY IDENTIFIED PERMANENT FEATURES, SUCH AS BUILDING, CURBS, FENCES, WALLS, OR PROPERTY LINES. DRAWINGS IDENTIFIED PERMANENT FEATURES SHALL BE TRANSFERRED TO THE COPIES BY CONTRACTOR AND ALL INDICATIONS SHALL BE RECORDED IN A NEAT, ORDERLY WAY. THE RECORD DRAWING SHALL BE TURNED OVER TO THE LANDSCAPE ARCHITECT, OR OWNER'S REPRESENTATIVE.



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BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

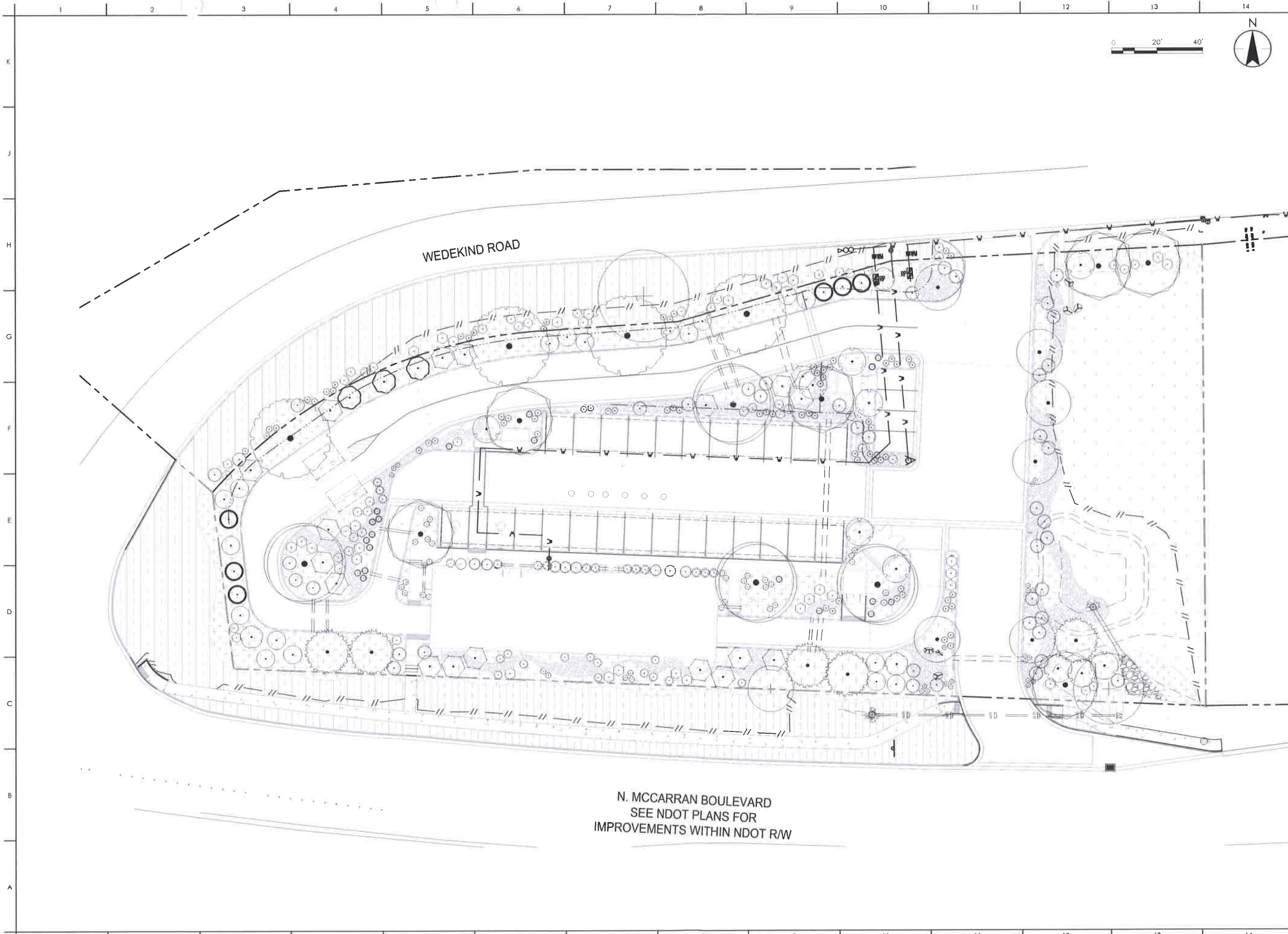
PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

Drawing No. **C600**
Revision Sheet
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Exhibit 3

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LANDSCAPE PLANTING LEGEND AND NOTES



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 Reno, Nevada 89511
 Tel. (775) 850-0777 Fax (775) 850-0787
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**BLUEWAVE
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Client/Project
BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada
 LANDSCAPE PLANTING PLAN

PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

Drawing No. **C601**
 Revision Sheet
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LANDSCAPE THEME - ENHANCED HIGH DESERT

- Drought resistant trees, shrubs, and ornamental grasses are designed for the required landscaped areas around the parking lot, driveways and structures.
- Large shade trees are located along Wedekind Road and internally at parking lot islands.
- Evergreen tree groups are located along N. McCarran at both sides of the building to buffer the views of the structure.
- Ornamental trees are located to accent the driveway locations.
- A cobble streambed feature meanders through out the landscaped areas.
- Within NDOT right of way small diameter decorative mulch called 'Shadow Ridge' is placed from the back of curb to a meandering line outside of NDOT's clear zone. This rock is recommended because landscape rock must be smaller than 4 inches in diameter to meet NDOT's clear zone requirements.
- Outside of the clear zone and inside the property the landscaped areas the Shadow Ridge small rock mulch is supplemented with a scatter of larger 3 – 10 inch rock to provide texture.
- Seeded revegetation is designed for the area east of the entrance driveway. This would be established as a dryland seed mix that contains grasses, flowers and shrubs which will have a meadow appearance once established. Topsoil is required to be salvaged and replaced prior to seeding and the area is required to be maintained for 2 years until established. This area is approximately 15,000 SF which is beyond the required amount of landscaping.

VEGETATION- PROPOSED TREES



Autumn Blaze Maple



Bloodgood London Planetree



Scarlet Oak



Austrian Black Pine



Blue Pyramid Cypress



Colorado Blue Spruce



Adams Crabapple

VEGETATION- PROPOSED SHRUBS, GRASSES AND FLOWERING PLANTS



Karl Forester Grass



Fountain grass



Hidcote Lavender



Moonshine Yarrow



Russian Sage



Smooth Sumac



Buffaloberry



New Mexico Privet

INERT MATERIALS AND SEEDED REVEGETATION



Dry Streambed Swale



Shadow Ridge 1-1/2 inch



Shadow Ridge 3-10 inch



River Cobble 3-8 inch



Seeded Revegetation

TREES	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
(+)	EXISTING		EXISTING		3
(+)	ACER X FREEMANII 'JEFFSRED'	AUTUMN BLAZE MAPLE	2" CAL	50'X30'	6
(+)	CUPRESSUS ARIZONICA 'BLUE PYRAMID'	BLUE PYRAMID CYPRESS	6' TALL	20'X10'	3
(+)	JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	6' TALL	20'X8'	6
(+)	MALUS X 'ADAMS'	CRAB APPLE	1" CAL	20'X20'	2
(+)	PICEA PUNGENS	COLORADO SPRUCE	6' TALL	25'X10'	3
(+)	PINUS NIGRA	AUSTRIAN BLACK PINE	6' TALL	40'X20'	4
(+)	PLATANUS X ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	2" CAL	40'X35'	5
(+)	QUERCUS COCCINEA	SCARLET OAK	2" CAL	40'X35'	7
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
(+)	ACHILLEA MACROPHYLLA	YARROW	5 GAL	2'X2'	14
(+)	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	5 GAL	4'X3'	70
(+)	FORESTIERA NEOMEXICANA	NEW MEXICO PRIVET	5 GAL	12'X12'	18
(+)	LAVANDULA ANGUSTIFOLIA 'HIDCOTE SUPERIOR'	HIDCOTE SUPERIOR LAVENDER	5 GAL	2.5'X2.5'	24
(+)	MAHONIA REPENS	CREeping MAHONIA	5 GAL	1'X4'	12
(+)	PENNISETUM ALOPECUROIDES 'KARLAY ROSE'	FOUNTAIN GRASS	5 GAL	5'X4'	10
(+)	PEROVSKIA ATRIPICIFOLIA	RUSSIAN SAGE	5 GAL	4'X4'	51
(+)	PINUS MUGO 'MOPS'	MUGO PINE	5 GAL	3'X3'	19
(+)	PRUNUS BESSEYI 'PAMNEE BUTTES'	SAND CHERRY	5 GAL	3'X5'	33
(+)	RHUS AROMATICA	FRAGRANT SUMAC	5 GAL	3'X6'	35
(+)	RHUS GLABRA	SMOOTH SUMAC	5 GAL	10'X8'	22
(+)	RIBES AUREUM	GOLDEN CURRRANT	5 GAL	5'X5'	9
(+)	SHEPHERDIA ARGENTEA	SILVER BUFFALOBERRY	5 GAL	10'X10'	21

SYMBOL	DESCRIPTION	QTY
(diagonal lines)	Shadow Ridge 1-1/2"	17,715 SF
(cross-hatch)	Shadow Ridge 100% 1-1/2" 25% Scatter 3"-10"	22,136 SF
(dotted)	River Rock 3"-8"	10,930 SF
(circles)	Boulders - 3' DIA.	8 EA.

SITE DATA & REQUIREMENTS			
ZONING: PO			
SITE AREA (DEVELOPED): 70,045 SF			
LANDSCAPE*:	(20%)	REQUIRED 14,009 SF	PROVIDED 30,621 SF
ONE TREE PER FIVE HUNDRED SF OF REQUIRED LANDSCAPE INCLUDES		28 EA	28 EA
ONE TREE PER 7 PARKING SPACES	(25)	4 EA	4 EA
TOTAL TREES REQUIRED		32 EA	32 EA
-INCLUDES ONE STREET TREE PER 30 LF FRONTAGE - 30 (WEDEKIND RD/ 500 LF - 17, McCARRAN BLVD/ 390 LF - 13)			
-50% REQ. DECID. TREES SHALL BE MIN. 1" CAL.		6	6
-50% REQ. DECID. TREES SHALL BE MIN. 2" CAL.		12	12
-EVERGREEN TREES SHALL BE MIN. 6' HT.		16	22
SHRUBS			
-60% SHRUBS SHALL BE MIN. 5 GAL. SIZE		203	337
-40% SHRUBS SHALL BE MIN. 1 GAL. SIZE		X	X
GROUND COVERING OVER ENTIRE LANDSCAPE AREA IS PROVIDED WITH SHRUBS, ORNAMENTAL GRASSES AND DECORATIVE ROCK MULCHES.			
PROJECT ENTRY WITH SPECIAL LANDSCAPE ELEMENTS IS PROVIDED WITH SPECIMEN ORNAMENTAL TREES			

LANDSCAPE SPECIFICATIONS

GENERAL:

- PLAN IS DIAGRAMMATIC ONLY. ALL LOCAL GOVERNING CODES SHALL BE MET. EXACT LOCATION OF TREES AND SHRUBS SHALL BE DETERMINED IN THE FIELD (INSTALL AS PER DETAILS) AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- A MINIMUM OF TWO WORKING DAYS BEFORE PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRIC CABLES, TELEPHONE CABLES, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND PROTECTION OF ALL UTILITIES, AND REPAIR OF ANY DAMAGE RESULTING FROM HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- DAMAGES: CONTRACTOR SHALL PROMPTLY REPAIR ALL DAMAGES TO EXISTING SITE AT NO COST TO OWNER.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES (I.E., PAVING, PLUMBING, ELECTRICAL, ETC.)
- THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION AND TO NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHOULD CONDITIONS EXIST WHICH PREVENT CONSTRUCTION AS PER THESE PLANS. COMMENCEMENT OF WORK SHALL CONSTITUTE ACCEPTANCE OF CONDITIONS AND RESPONSIBILITY FOR CORRECTIONS.
- CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE OWNER FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT.

REQUIRED SEQUENCE

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADING THROUGHOUT ALL LANDSCAPE AREAS SUCH THAT THERE ARE NO HUMPS OR DEPRESSIONS AND POSITIVE DRAINAGE OCCURS THROUGHOUT. THE TOP 18" OF ALL PLANTING BEDS SHALL BE CLEAN NATIVE SOIL, FREE OF ALL CONSTRUCTION DEBRIS AND NATIVE ROCKS OVER 6" IN DIAMETER. THE CONTRACTOR SHALL AMEND THE PLANTING BED OR PLANTING HOLES PER PLANS AND SPECIFICATIONS. FINAL GRADE OF ALL PLANTERS (I.E. MULCH SURFACE) SHALL BE FLUSH WITH ADJACENT HARDSCAPE SURFACES.
- THE CONTRACTOR SHALL OBTAIN SOIL TEST RESULTS AND RECOMMENDATIONS FOR EXISTING SITE SOIL INCLUDING: TEXTURE CLASSIFICATION, PH, NITROGEN, POTASSIUM, MAGNESIUM, CALCIUM, PHOSPHORUS, SODIUM HAZARD, SALINITY HAZARD, BORON HAZARD, CAT ION EXCHANGE, AND FERTILIZATION MINERALS RECOMMENDATION FOR THE INTENDED USE. CONTRACTOR SHALL UTILIZE SOIL TEST RESULTS AND RECOMMENDATIONS AND SHALL PROVIDE SOIL AMENDMENTS ACCORDINGLY. CONTRACTOR SHALL PROVIDE COPIES OF SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER UPON REQUEST. RECOMMENDED SOIL TESTING LABS: MDS HARRIS, 621 ROSE ST., LINCOLN, NE 98502, (402) 476-2811, SUNLAND ANALYTICAL LAB, 11353 PYrites WAY, SUITE 4, RANCHO CORDOVA, CA 95670, (916)-852-8557. LTP.2 MAJOR LANDSCAPE EVALUATION WITH BORON.
- INSTALL ALL PLANT MATERIALS AS PER DETAILS AND SOIL AND PLANT LAB REPORT. INSTALL SLOW RELEASE FERTILIZER TABLETS FOR ALL PLANTS. INFORMATION IN SOILS AND PLANT LAB REPORT SHALL PREVAIL OVER NOTES AND DETAILS.
- PLANTING MIX - SOIL AMENDMENT SHALL BE DOUBLE MIX COMPOSED OF TOPSOIL, BARK HUMUS, AND COMPOST. SUBMIT TO LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
- ALL PLANTING AREAS TO RECEIVE THREE-INCH MINIMUM DEPTH ROCK MULCH UNLESS OTHERWISE NOTED. SEE PLANS. PRIOR TO PLACEMENT SMOOTH AND COMPACT THE SUBGRADE TO 80% OF RELATIVE DENSITY. REMOVE WEEDS. INSTALL WOVEN WEED BARRIER FABRIC BENEATH ALL AREAS OF MULCH. LANDSCAPE FABRIC TO BE 'DEWITT' PRO-5 WEED BARRIER (OAE) INSTALLED IN ACCORDANCE WITH MFG'S SPECIFICATIONS. ANCHOR ALL EDGES PER MANUFACTURER'S SPECIFICATIONS.
- APPLY PRE-EMERGENT HERBICIDE TO ALL AREAS RECEIVING ROCK MULCH AND DECOMPOSED GRANITE. APPLY AFTER IRRIGATION AND PLANTING ARE COMPLETED; BEFORE AND AFTER INSTALLATION OF ROCK MULCH MATERIAL.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT MATERIAL PER SYMBOLS AND SPACING INDICATED ON PLAN AND IN LEGENDS. SYMBOLS PREVAIL OVER NUMBERS ON PLANT LIST. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT EXPRESSED WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. SEE SUBMITTALS.
- ALL PLANTS NOT MEETING OR EXCEEDING REQUIREMENTS AND RECOMMENDATIONS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK" WILL BE REJECTED. CONTRACTOR SHALL RECEIVE ON-SITE APPROVAL OF PLANT MATERIAL BY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING. FAILURE TO RECEIVE PRIOR APPROVAL MAY RESULT IN REJECTION OF PLANT MATERIAL AT ANY POINT DURING CONSTRUCTION OR THE PERIOD FOLLOWING INSTALLATION. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND EVALUATE PLANTS DURING THE MAINTENANCE PERIOD. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF FAILED PLANTS.
- ALL PLANT ROOTBALLS SHALL BE MOIST UPON ARRIVAL AT SITE AND KEPT THAT WAY THROUGH PLANTING AND APPROVAL OF FINAL WORKING IRRIGATION SYSTEM WITH WHATEVER MEANS NECESSARY INCLUDING; HAND WATERING, HOSE, WATER TRUCK, TEMPORARY IRRIGATION SYSTEM.

MAINTENANCE/GUARANTEES

- ALL PLANTED AREAS SHALL BE MAINTAINED FOR A PERIOD OF SIXTY DAYS FOLLOWING WRITTEN ACCEPTANCE BY OWNER'S REPRESENTATIVE. LANDSCAPE CONTRACTOR WILL GUARANTEE ALL PLANT MATERIAL (INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, GROUND COVER, AND GRASSES) FOR A PERIOD OF ONE FULL YEAR FOLLOWING FINAL ACCEPTANCE OF THE LANDSCAPE INSTALLATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE. IN BIDDING AND INSTALLING THE PLANT MATERIAL SPECIFIED ON THESE PLANS, THE LANDSCAPE CONTRACTOR AGREES THAT THE PLANT MATERIAL SPECIFIED IS SUITABLE TO THE PROJECT SITE. FURTHERMORE, THE LANDSCAPE CONTRACTOR AGREES TO HONOR THE WARRANTY AND, IF NECESSARY, REPLACE SPECIES WITH MORE HARDY PLANT TYPE IF DEEMED NECESSARY DUE TO EXCESSIVE DIE OUT. IF THE LANDSCAPE CONTRACTOR DOES NOT BELIEVE CERTAIN PLANT MATERIAL IS SUITABLE FOR THE SITE AND/OR ITS MICRO-CLIMATES, THE LANDSCAPE CONTRACTOR SHALL REQUEST TO MAKE PLANT MATERIAL SUBSTITUTIONS IN WRITING TO THE LANDSCAPE ARCHITECT PRIOR TO THE START OF INSTALLATION. PROPOSED SUBSTITUTIONS WILL RESULT IN NO ADDED COST.

TREE PLANTING NOTES:

- REMOVE ALL NURSERY STAKES, TIES, AND TAGS ABOVE & BELOW GROUND TREES MUST STAND VERTICAL PRIOR TO STAKING TO BE ACCEPTABLE.
- TREES GROWN STAKED IN A NURSERY WILL NOT BE ACCEPTED ON THIS PROJECT UNLESS STAKES HAVE BEEN REMOVED FOR A MINIMUM OF TWO YEARS BEFORE THE TREES ARE DUG FROM THE NURSERY. A CERTIFICATION OF THIS CONDITION WILL BE PROVIDED AT OR BEFORE DELIVERY OF TREES TO THE SITE.
- REMOVE DAMAGED BRANCHES, RETAIN NATURAL GROWTH SHAPE CHARACTERISTICS OF SPECIES. DO NOT REMOVE OR CUT CENTRAL LEADER OR ANY LOWER BRANCHES. TREES WITH DAMAGED OR CUT CENTRAL LEADERS WILL NOT BE ACCEPTED. CUT STAKES IF NEEDED, TO PREVENT WIND DAMAGE TO LOWER BRANCHES. PRUNE ACCORDING TO CLASS 1 OR 11 STANDARDS OF THE NATIONAL ARBORISTS ASSOCIATION.
- TOP OF ROOT BALL IS DEFINED AT THE LOCATION OF THE UPPERMOST LATERAL ROOT, NOT THE SOIL LEVEL IN THE PLANT CONTAINER. TOP OF ROOT BALL TO BE 1" ABOVE EXISTING GRADE - NO NATIVE SOIL TO BE PLACED ON TOP OF ROOT BALL.
- CONDITIONS THAT WILL NOT BE ACCEPTED: TRUNK OR BARK WOUNDS; KINKED, GIRDLING, CIRCLING OR J ROOTS.
- DIG SQUARE OR RECTANGULAR HOLES FOR OPTIMUM ROOT GROWTH. SCARIFY EDGES OF PLANT HOLE: DEPTH TO BE SUCH THAT TREE CAN BE PLANTED AT SAME RELATIONSHIP TO FINISH GRADE AS GROWN OR 1" ABOVE.
- DIG PILOT HOLES FOR STAKES WITH ROTO-HAMMER INTO UNDISTURBED SOIL. PRESET STAKES IN EMPTY HOLES USING (2) 2" DIA. LODGE POLE PINE STAKES, AFTER TREE IS LOWERED INTO HOLE AND SET.
- USE STRAPS OR HOOKS CONNECTED TO ROOTBALL OR WIRE BASKET TO LOWER TREE INTO HOLE. SET AND PLUM TREE FIRST, THEN USING BOLT CUTTERS AND UTILITY KNIFE REMOVE WIRE BASKET AND BURLAP TO BOTTOM OF ROOT BALL.
- BACKFILL HOLE WITH PLANTING MIX IN LAYERS, TAMP SOIL AT 50% TOTAL BACKFILL DEPTH AND WATER/SOAK BEFORE ADDING MORE SOIL. ROOTBALL NOT TO BE ALLOWED TO DRY OUT, EITHER BEFORE, DURING OR AFTER PLANTING.
- MINERAL SUPPLEMENTS TO BE ADDED TO SOIL AMENDMENTS PER RECOMMENDATION BASED ON SOIL ANALYSIS.
- BACKFILL W/PLANTING MIX OF NATIVE SOIL AND SOIL AMENDMENT. MIX SOIL AMENDMENT TO NATIVE SOIL AT 1:3 RATIO. NATIVE SOIL TO BE SCREENED FREE OF ROCKS, CLODS, AND DEBRIS GREATER THAN 6" DIA. TAMP TO REMOVE AIR POCKETS.
- CONSTRUCT WATER BASIN AROUND PERIMETER OF EXCAVATED PIT. GRADE BASIN SUCH THAT WATER COLLECTS AT THE EDGE OF BASIN, NOT AT TRUNK. FILL BASIN W/WOOD CHIP MULCH PER PLAN & SPECS. KEEP BARK 4" AWAY FROM TRUNK. DO NOT COVER TRUNK COLLAR WITH MULCH.
- CINCH BELT SECURE TO WOODEN STAKE WITH GALVANIZED NAIL DRIVEN THROUGH THE CINCH-BELT AND INTO THE STAKE TO PREVENT SLIPPAGE. FOR ATTACHMENT TO METAL STAKE WRAP AROUND TREE TRUNK AND DOUBLE-WRAP STAKE TO PREVENT SLIPPAGE. DO NOT USE WIRE OR CRIMP HOSE AROUND TRUNK.

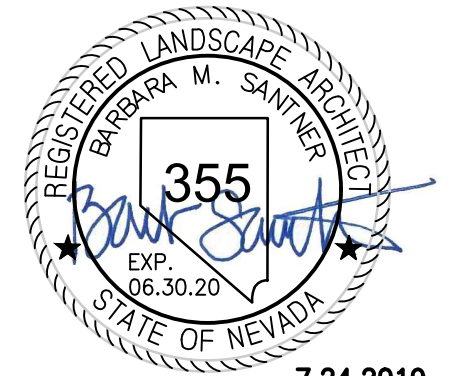
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Reno, Nevada 89511
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CUP RESOLUTION 07/23/2019

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

PERMIT SET 06/18/2019

Issues

Project Number 222310634

Drawn By DM/JW/CM

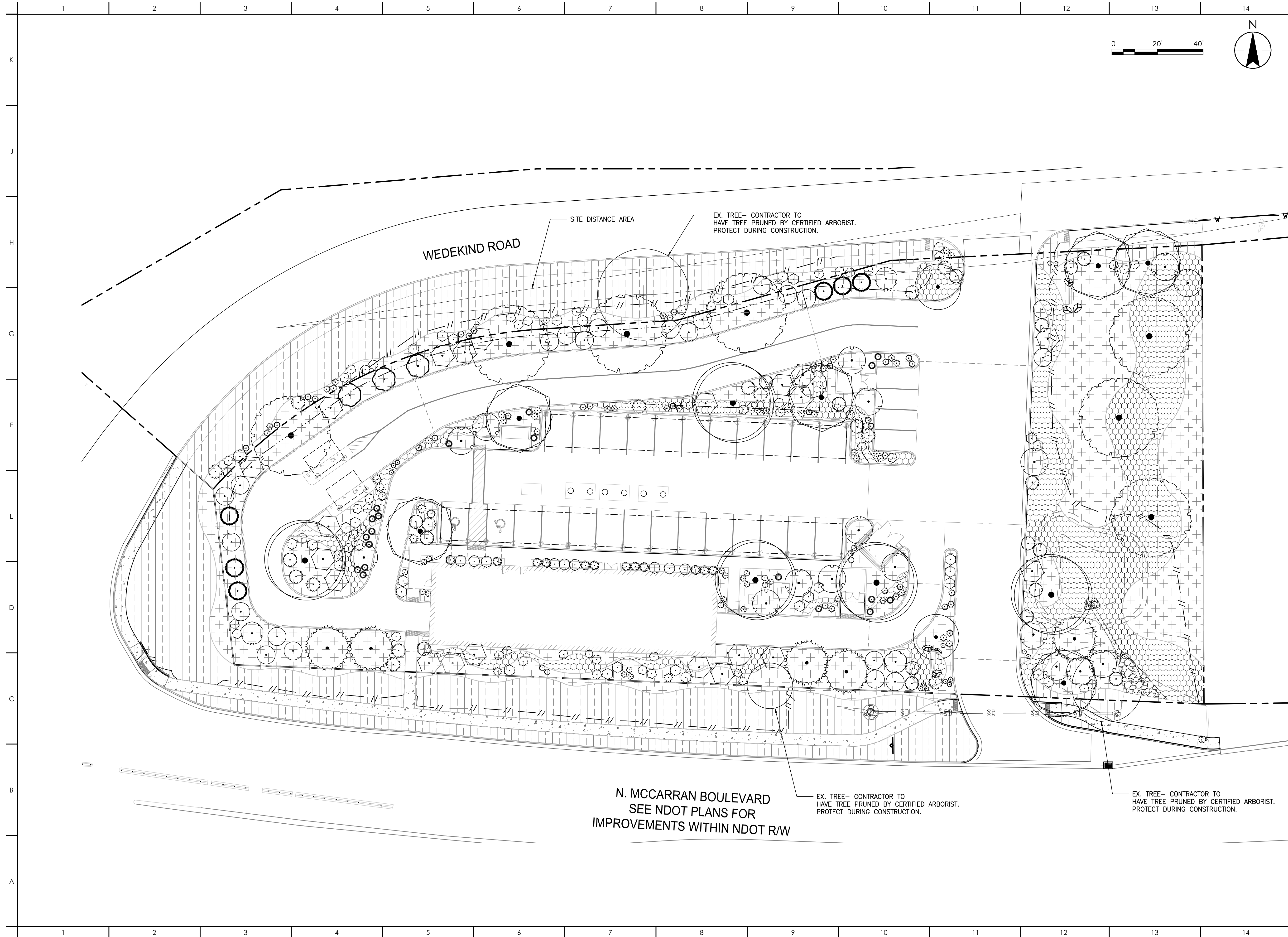
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Drawing No. **C600**

Revision Sheet

0 16 of 24

Exhibit 3



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 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada
 LANDSCAPE PLANTING PLAN

PERMIT SET 06/18/2019

Issues

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Revision Sheet

0 17 of 24

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LANDSCAPE THEME - ENHANCED HIGH DESERT

- Drought resistant trees, shrubs, and ornamental grasses are designed for the required landscaped areas around the parking lot, driveways and structures.
- Large shade trees are located along Wedekind Road and internally at parking lot islands.
- Evergreen tree groups are located along N. McCarran at both sides of the building to buffer the views of the structure.
- Ornamental trees are located to accent the driveway locations.
- A cobble streambed feature meanders through out the landscaped areas.
- Within NDOT right of way small diameter decorative mulch called 'Shadow Ridge' is placed from the back of curb to a meandering line outside of NDOT's clear zone. This rock is recommended because landscape rock must be smaller than 4 inches in diameter to meet NDOT's clear zone requirements.
- Outside of the clear zone and inside the property the landscaped areas the Shadow Ridge small rock mulch is supplemented with a scatter of larger 3 – 10 inch rock to provide texture.
- Seeded revegetation is designed for the area east of the entrance driveway. This would be established as a dryland seed mix that contains grasses, flowers and shrubs which will have a meadow appearance once established. Topsoil is required to be salvaged and replaced prior to seeding and the area is required to be maintained for 2 years until established. This area is approximately 15,000 SF which is beyond the required amount of landscaping.

VEGETATION- PROPOSED TREES



Autumn Blaze Maple



Bloodgood London Planetree



Scarlet Oak



Austrian Black Pine



Blue Pyramid Cypress



Colorado Blue Spruce



Adams Crabapple

VEGETATION- PROPOSED SHRUBS, GRASSES AND FLOWERING PLANTS



Karl Forester Grass



Fountain grass



Hidcote Lavender



Moonshine Yarrow



Russian Sage



Smooth Sumac



Buffaloberry



New Mexico Privet

INERT MATERIALS AND SEEDED REVEGETATION



Dry Streambed Swale



Shadow Ridge 1-1/2 inch



Shadow Ridge 3-10 inch



River Cobble 3-8 inch



Seeded Revegetation



**Traffic Impact Study for
BlueWave Car Wash**

APN 027-041-03
4620 Wedekind Road
Sparks, Nevada 89431

June 19, 2019

Prepared for:

BW Sparks LLC
2175 Francisco Blvd. East, Suite G
San Rafael, California 94901

Prepared by:

Stantec Consulting Services Inc.
6995 Sierra Center Parkway
Reno, Nevada 89511



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Figure 8. Background Plus Project Condition Traffic Volumes

Figure 9. Background Plus Project Condition LOS

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Appendix B – Background Condition LOS

Appendix C – Background Plus Project Condition LOS



Executive Summary

BW Sparks LLC is proposing development of an automated car wash facility at the northeast corner of McCarran Boulevard and Wedekind Road. As requested by City of Sparks this traffic study evaluates impacts to the existing two-way stop controlled intersection of McCarran Boulevard and Wedekind Road, access of the proposed driveways, and queue storage for the westbound to southbound movement at the intersection of McCarran Boulevard and Sullivan Lane.

Conclusions

The major approach movements at the intersection of McCarran Boulevard and Wedekind Road currently meet the Policy Level of Service (LOS). The minor approach left-turn and through movements currently operate at LOS F.

Previous coordination with the Nevada Department of Transportation (NDOT) have resulted in this proposed development being tasked to construct improvements on McCarran Boulevard to restrict left-out and through movements from Wedekind Road consistent with a recently completed Intersection Control Evaluation.

The proposed improvements to the BlueWave Car Wash are projected to generate 78 PM peak hour trips. The proposed BW CarWash traffic volumes will have a minor effect on the study intersections, with no changes to movement LOS and an overall increase in delay of less than 1 second per vehicle, during the peak hour. The traffic generated by this project do not indicate any additional improvements, other than those directed by NDOT, are necessary to the study intersections.

Two driveways are proposed for this development. A right-in only driveway is proposed along McCarran Boulevard. This driveway offset to Wedekind Road is less than required by NDOT's Access Management Standards but has been agreed to by NDOT consistent with construction of the above described improvements. A full access driveway is proposed along Wedekind Road. This driveway meets the Regional Transportation Plan Access Management Standards for spacing from McCarran Boulevard and is slightly below Access Management Standards for spacing to adjacent driveways. Given the horizontal curvature of the roadway adjacent to the project and the desire to maximize the driveway offset from McCarran Boulevard, no alterations to this proposed driveway location are recommended.

The project would not result in a significant impact to pedestrian, bicycle, or transit facilities.



1.0 INTRODUCTION

This report presents the results of a traffic study conducted to analyze the impact of traffic associated with development of a drive-through car wash facility at 4620 Wedekind Road, Sparks, Nevada (APN 027-041-03). The parcel is currently undeveloped. The City of Sparks requires a traffic study be performed as part of the Conditional Use Permit submittal.

The project study area is shown in Figure 1. This report describes the existing transportation conditions around the project site and addresses the potential traffic impacts of the project. The impacts have been reviewed in terms of intersection level of service as well as trip generation, traffic distribution, traffic assignment and potential intersection and roadway improvements needed to mitigate expected deficiencies. The study has also included a review of site access.

The project's potential effects on transit services, pedestrian, and bicycle facilities in the project area are also evaluated. Measures that would mitigate these impacts to a less than significant level are recommended, where appropriate.

1.1 CITY OF SPARKS COORDINATION

As per the City of Sparks Conditional Use Permit Application, a Traffic Study is required for any project which will generate more than 80 p.m. peak hour trips. A previous traffic study for this site and usage indicated a trip generation in excess of this requirement. Stantec staff had several phone calls with City of Sparks Community Development Department staff during the week of May 20, 2019 to discuss the project. At that time, City of Sparks staff requested a traffic study analyzing the entry and access of the project and impacts to the following intersections:

1. McCarran Boulevard/Wedekind Road
2. Project driveways
3. Westbound to Southbound turn lane storage at McCarran Boulevard/Sullivan Lane

This traffic study is submitted in fulfillment of this request.

1.2 NDOT DISTRICT 2 COORDINATION

Discussions with NDOT District 2 Permits during the pre-permit phase indicated that they were acceptable to processing the permit with the previously submitted traffic study developed by Solaegui Engineers. NDOT performed an Intersection Control Evaluation (ICE) in late 2018 at the request of the proposed Wildcreek High School and has conditioned BlueWave with implementing the access control recommendations of the study at the intersection of McCarran Boulevard and Wedekind Road. The access control recommendations of the ICE include restriction of left-out and through movements from Wedekind Road from both the north and south approaches to the intersection. This traffic study includes these restrictions as part of the traffic analysis presented in Section 4.



1.3 EXISTING AND PROPOSED LAND USES

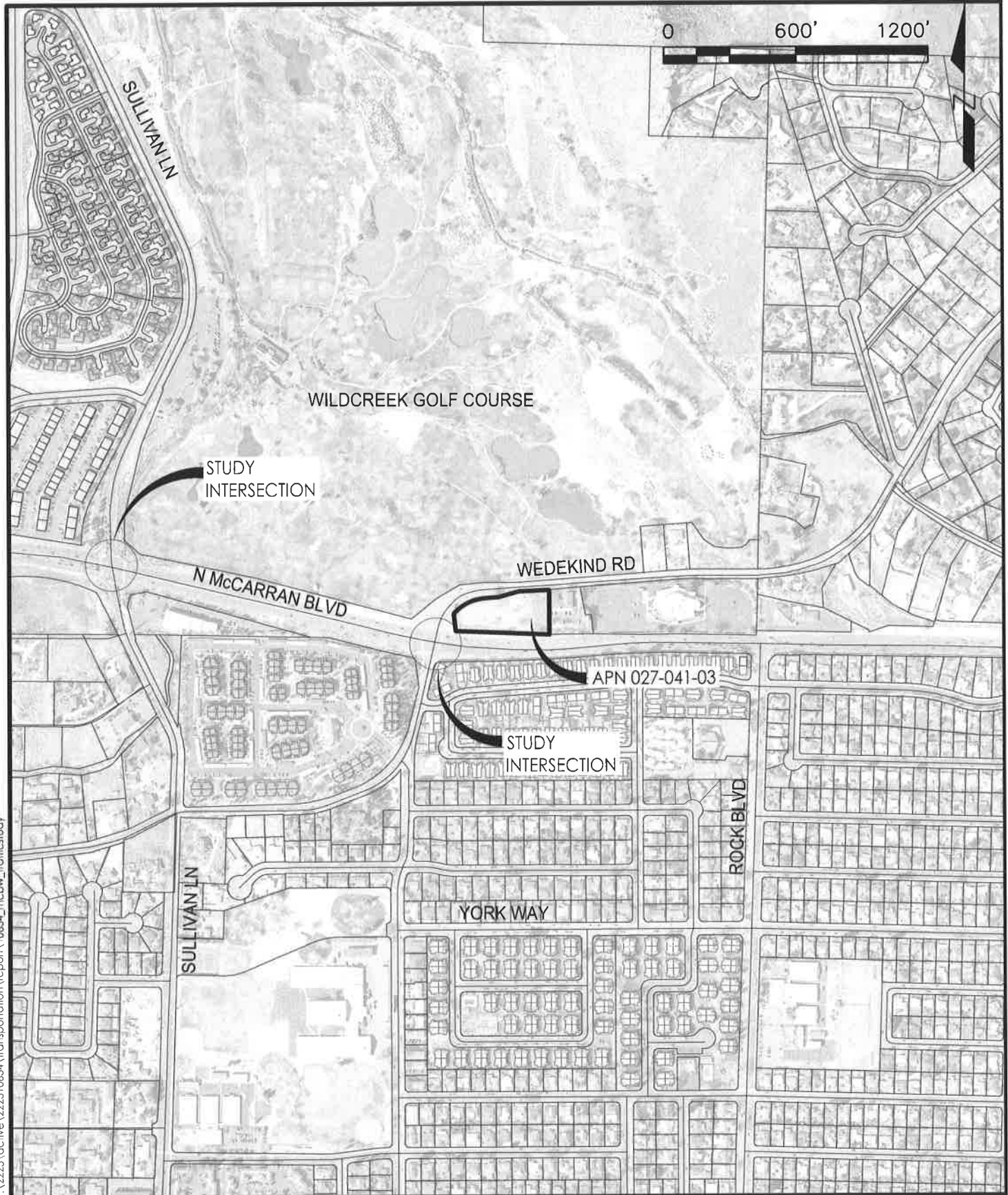
APN 027-041-03 is a 1.608 acre parcel located at the northeast quadrant of the intersection of McCarran Boulevard and Wedekind Road. The parcel is currently zoned PO – Professional Office. The parcel is currently undeveloped.

BW Sparks LLC proposes to develop a drive-through car wash on the project site. The drive-through car wash will consist of a single drive-through tunnel and approximately 25 self-service vacuum stalls.



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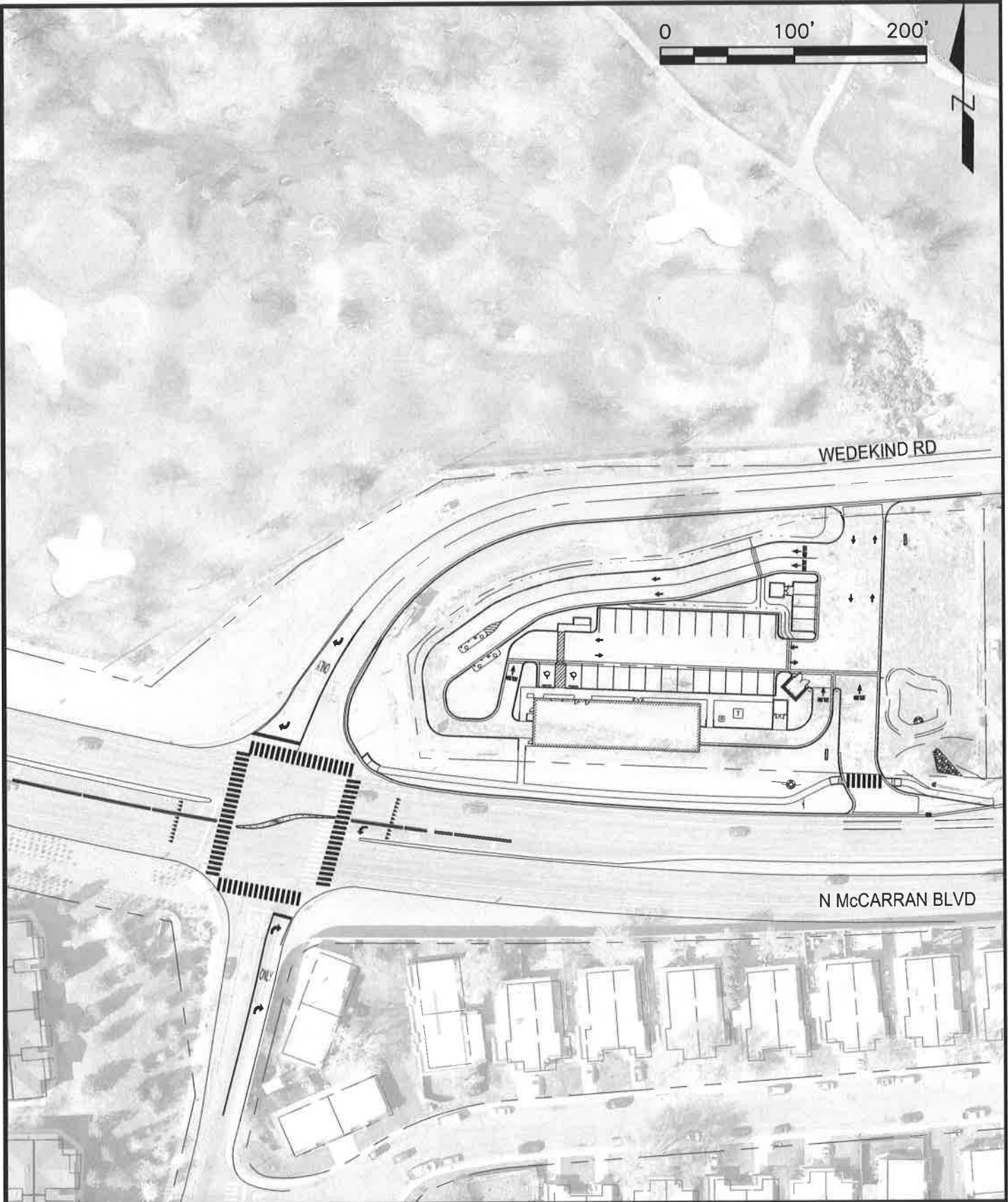
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2.0 EXISTING TRANSPORTATION FACILITIES

The project site is generally serviced by the following transportation facilities:

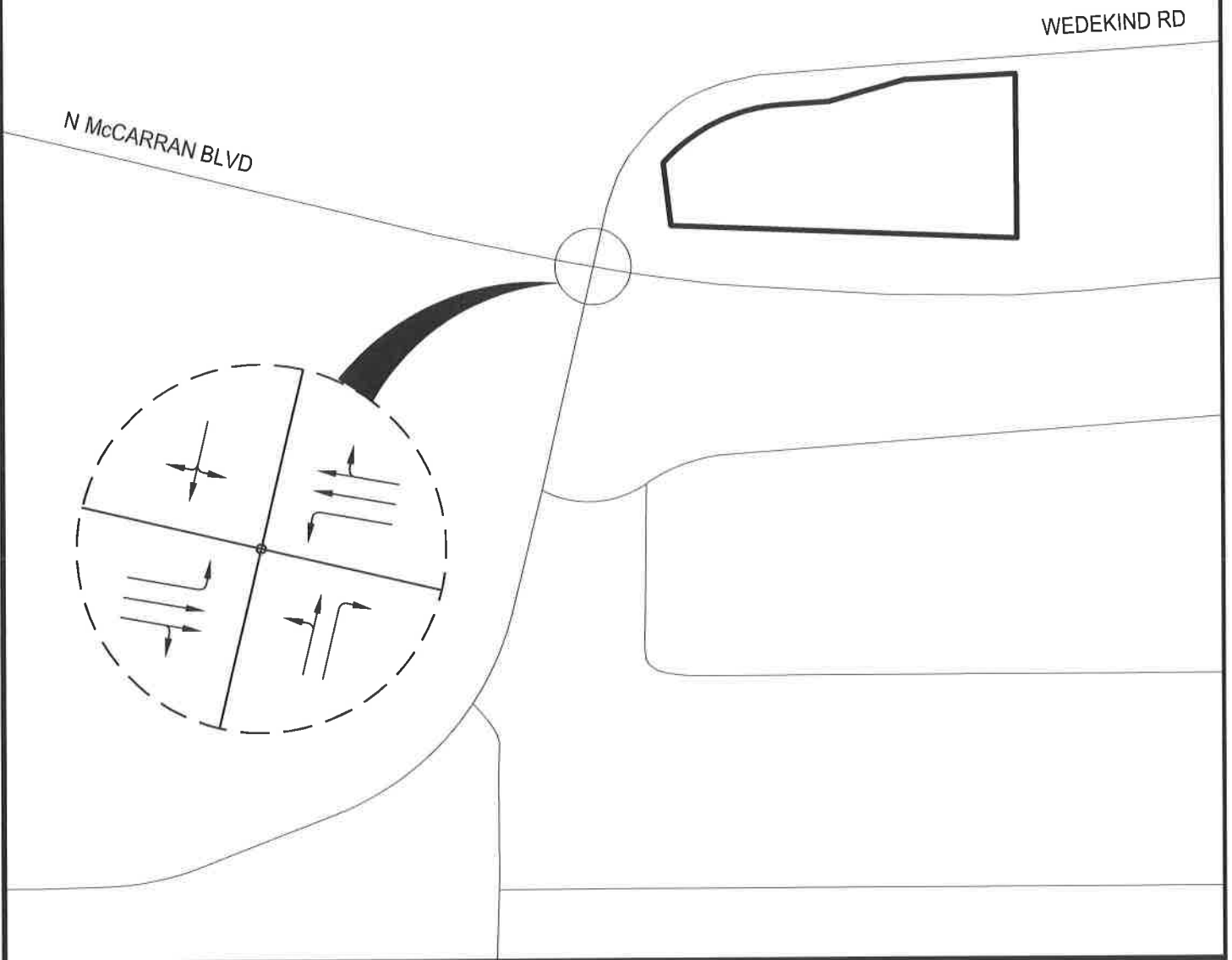
2.1 INTERSECTIONS

McCarran Boulevard/Wedekind Road Intersection – The intersection of McCarran Boulevard and Wedekind Road is a four-leg two-way stop controlled intersection immediately adjacent to the project site. The westbound approach (McCarran Boulevard) consists of two through lanes with the right lane being a shared through-right turn lane, and an exclusive left turn lane. The eastbound approach (McCarran Boulevard) consists of two through lanes with the right lane being a shared through-right turn lane, and an exclusive left turn lane. The northbound approach (Wedekind Road) consists of a shared left turn lane-through lane, and an exclusive right turn lane. The northbound approach is stop controlled. The southbound approach (Wedekind Road) consists of a shared left turn-through-right turn lane. The approach is flared to allow concurrent movements. The southbound approach is stop controlled. The intersection lies within Nevada Department of Transportation right-of-way.

Pedestrian crosswalks with crosswalk markings exist across all four legs.

Figure 3 illustrates the existing lane configuration of this intersection. As noted in Section 1.2, NDOT has conditioned this project to construct improvements to modify the intersection to restrict left-out and through movements from Wedekind Road.





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2.2 ROADWAYS

McCarran Boulevard – Existing McCarran Boulevard is an east-west four-lane arterial immediately adjacent to the project site. McCarran Boulevard is posted for a 45 MPH speed limit. The 2040 Regional Transportation Plan classifies McCarran Boulevard adjacent to the project site as a High Access Control Arterial. NDOT's functional classification maps classify McCarran Boulevard adjacent to the project site as Other Principal Arterial. McCarran Boulevard adjacent to the project site lies within Nevada Department of Transportation right-of-way.

Wedekind Road – Existing Wedekind Road is a north-south two-lane undivided collector immediately adjacent to the project site. Wedekind Road north of McCarran Boulevard is posted for a 30 MPH speed limit. Wedekind Road south of McCarran Boulevard is posted for a 25 MPH speed limit. The 2040 Regional Transportation Plan classifies Wedekind Road adjacent to the project site as a Low Access Control Collector. NDOT's functional classification maps classify Wedekind Road adjacent to the project site as Minor Collector. Wedekind Road adjacent to the project site lies primarily within City of Sparks right-of-way.

2.3 PEDESTRIAN AND BICYCLE FACILITIES

Striped and signed bike lanes exist along both sides of McCarran Boulevard immediately adjacent to the project site. There are no bike facilities on Wedekind Road. An asphalt surfaced sidewalk exists along the south side of McCarran Boulevard west of Wedekind Road. There are no other sidewalks on McCarran Boulevard or Wedekind Road. Pedestrian crosswalks with crosswalk markings exist across all four legs of the intersection of McCarran Boulevard and Wedekind Road.

2.4 TRANSIT SERVICE

Per the Spring 2019 RTC Bus Book, there is no regularly scheduled transit service adjacent to the project site. The nearest route servicing the area is Route 2 approximately 0.6 mile from the project site (at York Way and Rock Boulevard).



3.0 PROJECT GENERATED TRAFFIC

3.1 TRIP GENERATION

Stantec has estimated the trip generation for the proposed project based on rates provided in the standard reference Trip Generation (10th Edition) published by the Institute of Transportation Engineers (ITE). A land use of “Automated Car Wash” has been established for this project based on a review of project information. The tables below summarize the expected trip generation from the proposed project. Based on the trip generation analysis, the proposed project is expected to generate approximately 78 trips during the a.m. peak period and 78 trips during the p.m. peak period.

Table 1: Trip Generation Data Source

		Daily	AM Peak Hour			PM Peak Hour		
Land Use	ITE Code	Rate	Rate	% In	% Out	Rate	% In	% Out
Automated Car Wash	948	N/A	N/A	N/A	N/A	77.50	50%	50%

Table 2: Project Trip Generation

		Daily	AM Peak Hour			PM Peak Hour		
			Total	Entering	Exiting	Total	Entering	Exiting
Car Wash Tunnels	1	775*	78*	39*	39*	78	39	39

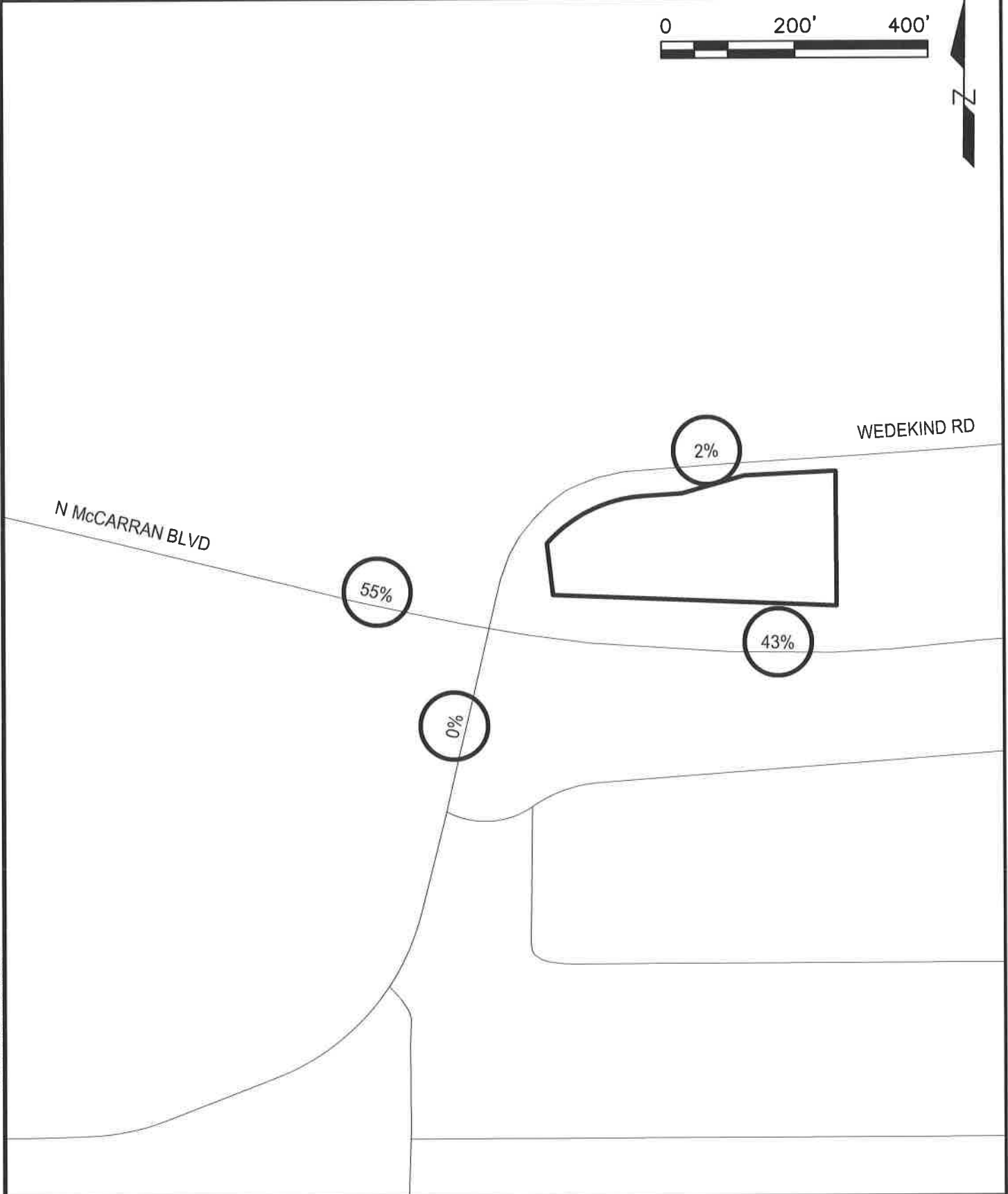
*Estimated. Data not included in ITE Trip Generation (10th Edition)

Note that ITE Trip Generation did not contain information for a.m. peak hour trips or daily trips. For the purpose of this study, the a.m. peak hour trips are assumed to be equivalent to the p.m. peak hour trips. The peak hour trips are assumed to reflect the traffic patterns of McCarran Boulevard. Per NDOT traffic count information, peak hour trips represent approximately 10% of daily trips.

3.2 TRIP DISTRIBUTION

Stantec has assigned the additional project generated traffic based on existing travel patterns. This additional traffic generally matches existing traffic patterns. Although some trips are expected to be “pass-by” trips, for the purpose of this study, all trips are assumed to be “new”. Figure 4 illustrates the assumed trip distribution for this proposed project. Figure 5 visually depicts the trip generation volumes at the study intersections.





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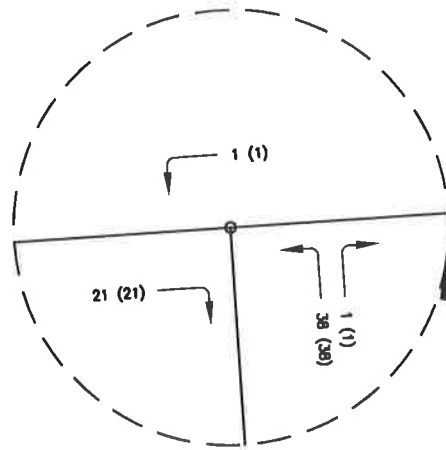
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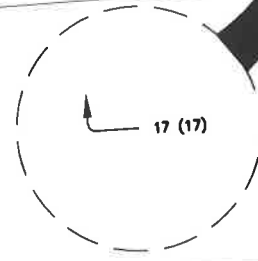
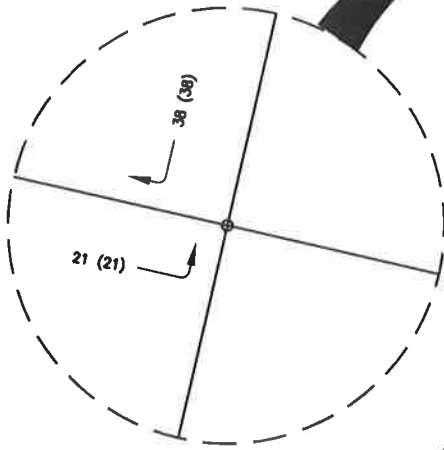
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TRAFFIC

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4.0 TRAFFIC ANALYSIS

4.1 POLICY LEVEL OF SERVICE

According to Appendix G of the 2040 Regional Transportation Plan, the Regional Level of Service (LOS) Standards for all regional roadway facilities projected to carry less than 27,000 ADT at the latest RTP horizon is LOS D. Table 3 contains the 2040 Average Daily Traffic volumes, as provided by the RTC. As shown, all roadway segments have projected 2040 volumes below the 27,000 threshold. Therefore, for the purpose of this traffic study, the Policy LOS for the study intersection is LOS D.

Table 3: RTC 2040 Model ADTs

Intersection of McCarran Boulevard and Wedekind Road	
McCarran (w/o Wedekind) –	22,826
McCarran (e/o Wedekind) –	21,044
Wedekind (n/o McCarran) –	964
Wedekind (s/o McCarran) –	6,833

The 6th Edition of the Highway Capacity Manual (HCM), published by the Transportation Research Board, provides standard traffic operational analysis methods for intersections, freeways, and ramps. LOS is the fundamental HCM parameter describing operational conditions within a traffic stream. LOS is an A-through-F letter ranking scale with LOS A indicating free-flow, low density, or nearly negligible delay conditions and LOS F indicating facility breakdown with low speeds, high densities and high delay.

For intersections, LOS is based on the average control delay per entering vehicle measured in seconds. Control delay includes not only stops at intersections, but also slower speeds as vehicles advance in queue or decelerate upstream of an intersection. For two way stop controlled intersections, individual approach delays are calculated. An overall average delay is not calculated for each intersection. The description of level of service for stop controlled intersections are show in Table 4.

Table 4: LOS Criteria for Stop Controlled Intersections

Control Delay (s/veh)	Level of Service
<=10	A
>10-15	B
>15-25	C
>25-35	D
>35-50	E
>50	F



4.2 BACKGROUND CONDITIONS

The background conditions for this project consist of existing field measured traffic counts plus anticipated traffic volumes generated by adjacent approved development projects. Peak hour turning movement counts were conducted at the study intersections on Tuesday, June 4, 2019. The counts were conducted on a school day with no unusual weather or traffic conditions. The following provides the hours of study and identified peak hour. Appendix A contains the full traffic count data.

- AM Count – From 7:00 to 9:00.
 - Peak hour 7:00 to 8:00.
- PM Count – From 4:00 to 6:00.
 - Peak hour 4:45 to 5:45.

Discussions with City of Sparks Community Development Department and NDOT District 2 staff indicated one potential relevant development projects:

1. Wildcreek High School

The Wildcreek High School is currently working its way through design development and review process at the time of the development of this traffic study. Per the Wildcreek High School traffic study, Wildcreek High School will not be using Wedekind Road as an access point and is proposing no modifications to the intersection of McCarran Boulevard and Wedekind Road. Therefore, trip generation volumes from the Wildcreek High School were not added to existing traffic counts for the purpose of developing background traffic volume conditions.

Figure 6 depicts the existing traffic volumes at the study intersection. Figure 7 and Table 5 below depict the LOS of the existing traffic movements for the study intersection. Appendix B contains the full LOS worksheets, as calculated by Synchro 10 applying the HCM 6th Edition methodology.



Table 5: LOS for Baseline Traffic

Intersection/ Approach/ Movement	AM Peak Hour		PM Peak Hour	
	Level of Service	Delay (sec)	Level of Service	Delay (sec)
McCarran Boulevard and Wedekind Road				
Eastbound Approach				
Left	C	16.7	C	15.5
Westbound Approach				
Left	C	17.2	C	22.5
Northbound Approach	F	218.4	F	+
Left-Through	F	2409.4*	F	+
Right	C	15.5	F	327.9
Southbound Approach				
Left-Through-Right	F	677.2*	F	+

*Indicates calculated delay >300 sec.
 +Indicates calculated queue length outside realistic limits.

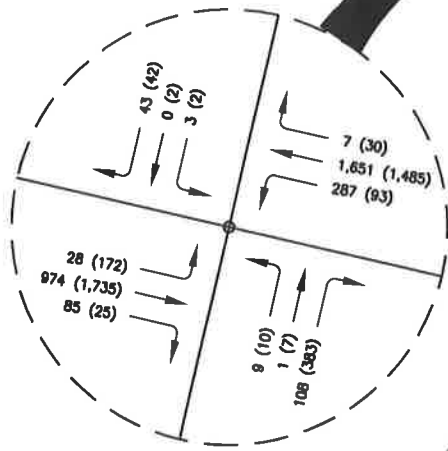
The major movements of the eastbound and westbound lefts currently operate at LOS D or better during the AM and PM peak hours, meeting the Policy LOS of LOS D. The minor street northbound and southbound currently operate at LOS F. This corresponds well with field observations indicating minor street left and through movements experience difficulty executing maneuvers during the peak hours.





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TRAFFIC VOLUMES

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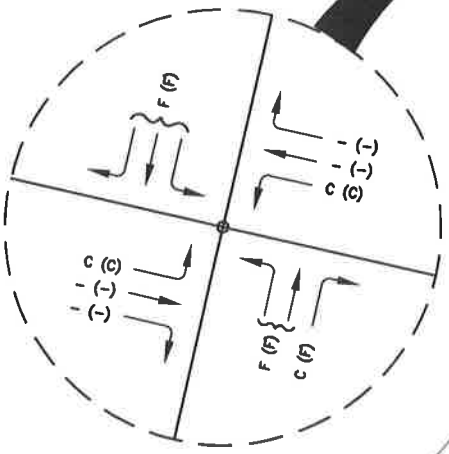
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WEDEKIND RD

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 LEVEL OF SERVICE

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4.3 BACKGROUND + PROJECT

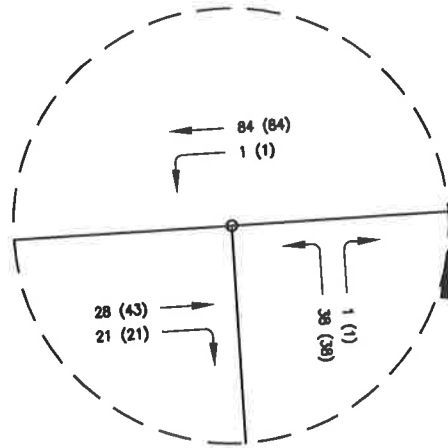
The background traffic volumes as shown in Figure 6 were combined with the project generated traffic volumes as shown in Figure 5 to develop the Background + Project Conditions Model. No modifications were made to the existing Peak Hour Factors. Permitted movements were modified to be consistent with NDOT direction to eliminate left-out and through movements from Wedekind Road as noted in Section 1.2. Figure 8 depicts the background plus project traffic volumes at the study intersections. Figure 9 and Table 6 below depict the LOS of the background plus project traffic movements for the study intersections. Appendix C contains the full LOS worksheets, as calculated by Synchro 10 applying the HCM 6th Edition methodology.

Table 6: LOS for Background + Project Traffic

Intersection/ Approach/ Movement	AM Peak Hour		PM Peak Hour	
	Level of Service	Delay (sec)	Level of Service	Delay (sec)
McCarran Boulevard and Wedekind Road				
Eastbound Approach				
Left	C	17.6	C	16.3
Westbound Approach				
Left	C	17.2	C	22.5
Northbound Approach				
Right	C	15.8	F	358.5*
Southbound Approach				
Right	C	23.9	C	21.0
Proposed Driveway – Wedekind Road				
Westbound Approach				
Left	A	7.4	A	7.4
Northbound Approach				
Left-Right	A	9.2	A	9.3

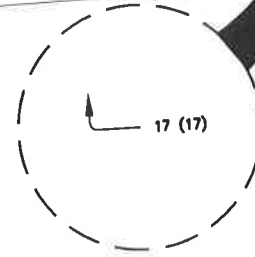
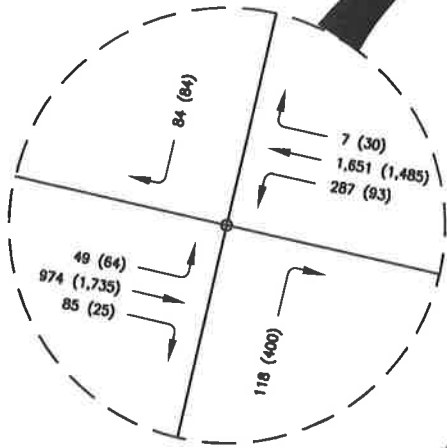
In general the intersection is projected to operate at the same Level of Service during the peak hours with the addition of the project generated traffic and turning restrictions required by NDOT. Average delay of the major approach left turning movements is anticipated to increase by less than 1 second in the AM peak with the PM peak remaining LOS F. The northbound right turn minor approach turning movement increases by less than 0.5 second. By restricting the southbound and through and left turn movements, the level of service for this approach improves from LOS F to LOS C.





N McCARRAN BLVD

WEDEKIND RD



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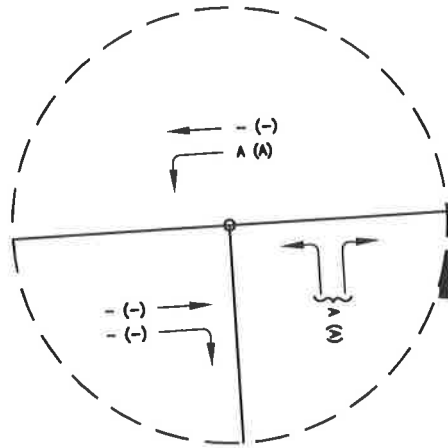
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BACKGROUND + PROJECT
CONDITION
TRAFFIC VOLUME

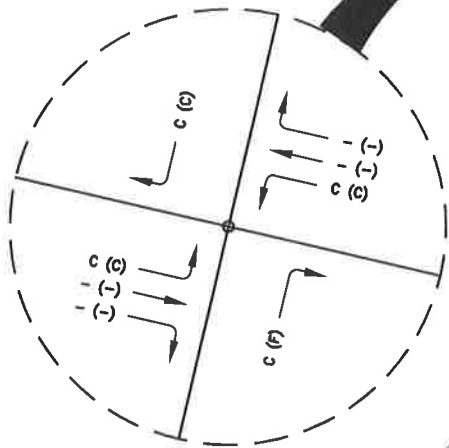
Revision	Date
0	2019.06.19

Reference Sheet	Figure No.
	8



N McCARRAN BLVD

WEDEKIND RD



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2019.06.19 12:05:14 PM



Stantec Consulting Services Inc.
6995 Sierra Center Parkway
Reno NV 89511-2213
Tel: (775) 850-0777
www.stantec.com

Client/Project
BLUEWAVE SPARKS LLC.

BLUEWAVE SPARKS
CARWASH
4620 WEDEKIND RD.

Project No.
222310634

Title BACKGROUND + PROJECT CONDITION LEVEL OF SERVICE	
Revision 0	Date 2019.06.19
Reference Sheet	Figure No. 9

5.0 PROJECT DRIVEWAYS AND ACCESS

The project is proposed to be served by one driveway on McCarran Boulevard and one driveway on Wedekind Road.

The north driveway on Wedekind Road is proposed to be a full access driveway approximately 480 feet from the intersection with McCarran Boulevard. The Access Management Standards as included in the Regional Transportation Plan for a Low Access Control Collector indicates driveways should be a minimum of 150 feet from major streets and 200 feet from adjacent driveways. The proposed driveway offset from McCarran Boulevard meets this standard. There is a driveway for the eastern adjacent parcel that is only 185 feet from this driveway, which is slightly below the above listed standard. However, the proposed driveway has been located as far east as practically possible in order to maximize the offset from McCarran Boulevard and maximize the driveway distance from the tight horizontal curvature along Wedekind Road near this location. It is recommended that this slight deviation be deemed acceptable to the City of Sparks.

The south driveway on McCarran Boulevard is proposed to be a right-in only driveway approximately 450 feet east of the intersection with McCarran Boulevard. Per the NDOT Access Management System and Standards, the minimum driveway offset for right-in/right-out access is 660 feet from adjacent accesses. This condition has been extensively discussed with NDOT and has resulted in NDOT accepting this proposed access with the condition that the driveway be right-in only, a right turn lane be constructed as long as practically possible, and the Wedekind Road left-out and through movements be restricted as described in Section 1.2.



6.0 TURN LANE STORAGE AT SULLIVAN LANE

The NDOT requested restriction of left-turns and through movements from Wedekind Road described in Section 1.2 has the potential of sending additional traffic westbound on McCarran Boulevard to make a left turn or u-turn at Sullivan Lane. City of Sparks has requested analysis and commentary how this additional potential traffic relates to the existing queues and turn lane storage at Sullivan Lane.

In general the required storage length is 1.5 to 2 times the average number of vehicles expected to accumulate during a signal cycle during design traffic. According to the Wildcreek High School traffic study, the PM peak hour volume utilizing the left turn pocket is 77 vehicles per hour. Assuming a 2 minute cycle, this corresponds to a storage requirement of 5 to 6 vehicles, or a storage length of 125 to 150 feet. The existing condition has a storage length of 150 feet with a 100 foot transition.

Based on the trips generated onsite and the existing traffic counts, it is estimated that approximately 20 vehicles would desire to make the southbound Wedekind Road to eastbound McCarran Boulevard movement, but would be rerouted to Sullivan Lane by the proposed turn restrictions. This has the potential to increase the volume utilizing the left turn pocket at Sullivan Lane to 97 vehicles per hour during the PM peak hour. Assuming a 2 minute cycle, this still corresponds to a storage requirement of 5 to 6 vehicles, and a storage length of 125 to 150 feet. The reason for the lack of change of storage length for this additional traffic is due to rounding to the nearest whole vehicle within the calculations. The existing storage length for the westbound McCarran Boulevard to southbound Sullivan Lane, or u-turn to eastbound McCarran Boulevard appears to be sufficient.



7.0 CONCLUSIONS & RECOMMENDATIONS

The following recommendations and conclusions have been derived from this traffic study:

1. The proposed BlueWave Car Wash project is proposed to generate 78 PM peak hour trips.
2. The major approach movements at McCarran Boulevard and Wedekind Road and the northbound right turn movement currently meet the Policy LOS.
3. The minor approach left and through movements at McCarran Boulevard and Wedekind Road do not meet the Policy LOS.
4. NDOT has conditioned BlueWave with constructing improvements on McCarran Boulevard restricting left-turn and through movements from Wedekind Road consistent with a recently completed Intersection Control Evaluation.
5. The proposed BlueWave development traffic volumes combined with the NDOT mandated improvements will have a minor effect on the intersection of McCarran Boulevard and Wedekind Road, with no change to any of the major movement or minor movement LOS, with overall increase in delay of less than 1 second per vehicle during the peak hour.
6. The traffic generated by this project do not indicate any improvements to McCarran Boulevard or Wedekind Road are necessary, other than what is previously conditioned by NDOT.



APPENDIX A

Traffic Counts

Tuesday, June 4, 2019

Weather: Hot and Sunny

Observers: T. Scott and H. Zimmerman

Method: Sheet tally

= PEAK HOUR FOR MORNING PERIOD

Traffic Counts
McCarran Blvd and Wedekind Road

CARS	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn
AM 15 min												
7:00 AM	5	192	26	3	0	18	47	367	2	0	0	6
7:15 AM	6	243	36	3	1	42	73	419	1	0	0	10
7:30 AM	7	283	13	2	0	27	78	426	2	1	0	13
7:45 AM	9	226	4	1	0	18	88	412	1	2	0	14
8:00 AM	7	207	5	1	0	26	36	331	0	1	1	10
8:15 AM	6	233	1	5	0	41	41	310	0	0	0	11
8:30 AM	10	216	1	2	1	28	39	319	1	0	0	10
8:45 AM	11	213	9	11	2	26	30	328	0	0	0	10

TRUCKS	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn
AM 15 min												
7:00 AM	0	10	5	0	0	2	1	6	1	0	0	0
7:15 AM	1	7	1	0	0	1	0	7	0	0	0	0
7:30 AM	0	6	0	0	0	0	0	6	0	0	0	0
7:45 AM	0	7	0	0	0	0	0	8	0	0	0	0
8:00 AM	0	8	0	0	0	0	0	10	0	0	0	0
8:15 AM	1	11	0	1	0	1	0	9	0	0	0	0
8:30 AM	1	10	0	0	0	3	0	6	0	0	0	0
8:45 AM	0	13	0	0	0	0	0	4	0	0	0	0

TOTAL	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn
AM 15 min												
7:00 AM	5	202	31	3	0	20	48	373	3	0	0	6
7:15 AM	7	250	37	3	1	43	73	426	1	0	0	10
7:30 AM	7	289	13	2	0	27	78	432	2	1	0	13
7:45 AM	9	233	4	1	0	18	88	420	1	2	0	14
8:00 AM	7	215	5	1	0	26	36	341	0	1	1	10
8:15 AM	7	244	1	6	0	42	41	319	0	0	0	11
8:30 AM	11	226	1	2	1	31	39	325	1	0	0	10
8:45 AM	11	226	9	11	2	26	30	332	0	0	0	10

Notes: No incidents impacting typical traffic flows were noted. U-Turns were tallied as movement in direction of turning movement. There were very few U-turn movements during the study, both observers believe they are fewer than 10 total in number.

Tuesday, June 4, 2019

Weather: Hot and Sunny

Observers: T. Scott and H. Zimmerman

Method: Sheet tally

= PEAK HOUR FOR LUNCH PERIOD

Traffic Counts
McCarran Blvd and Wedekind Road

CARS	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	LUNCH 15'	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through
11:30 AM	16	276	1	1	0	4	9	264	4	7	0	29
11:45 AM	36	229	0	0	0	11	18	241	2	1	0	36
12:00 PM	25	251	0	0	0	9	6	248	1	3	0	27
12:15 PM	17	252	2	1	0	19	12	277	1	5	0	14
12:30 PM	15	249	1	1	1	7	11	286	4	5	1	25
12:45 PM	14	278	1	0	0	10	0	250	1	7	1	30
1:00 PM	19	240	3	0	1	7	9	255	4	0	0	14
1:15 PM	15	247	1	0	0	9	10	293	2	3	1	17

TRUCKS	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)			
	LUNCH 15'	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn
11:30 AM	0	1	0	0	0	0	0	15	0	0	0	0	1
11:45 AM	0	7	1	0	0	0	0	4	0	0	0	0	0
12:00 PM	0	2	0	0	0	0	0	5	0	0	0	0	1
12:15 PM	0	4	0	0	0	0	0	4	0	0	0	0	1
12:30 PM	0	5	0	0	0	0	0	2	0	1	0	0	0
12:45 PM	0	5	0	0	0	0	0	1	1	0	0	0	0
1:00 PM	1	5	0	0	0	1	0	3	0	0	0	0	0
1:15 PM	0	4	0	0	0	0	1	1	0	0	0	0	0

TOTAL	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	LUNCH 15'	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through
11:30 AM	16	277	1	1	0	4	9	279	4	7	0	30
11:45 AM	36	236	1	0	0	11	18	245	2	1	0	36
12:00 PM	25	253	0	0	0	9	6	253	1	3	0	28
12:15 PM	17	256	2	1	0	19	12	281	1	5	0	15
12:30 PM	15	254	1	1	1	7	11	288	4	6	1	25
12:45 PM	14	283	1	0	0	10	0	251	2	7	1	30
1:00 PM	20	245	3	0	1	8	9	258	4	0	0	14
1:15 PM	15	251	1	0	0	9	11	294	2	3	1	17

Notes: No incidents impacting typical traffic flows were noted. U-Turns were tallied as movement in direction of turning movement. There were very few U-turn movements during the study, both observers believe they are fewer than 10 total in number.

Tuesday, June 4, 2019

Weather: Hot and Sunny

Observers: T. Scott and H. Zimmerman

Method: Sheet Tally

= PEAK HOUR FOR AFTERNOON/STUDY

Traffic Counts
McCarran Blvd and Wedekind Road

CARS	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn
PM 15 min												
4:00 PM	28	370	9	4	0	53	18	353	2	0	0	13
4:15 PM	18	446	7	8	2	94	21	343	4	0	0	12
4:30 PM	21	423	4	1	0	88	28	306	0	1	0	9
4:45 PM	51	421	6	1	1	85	44	360	4	2	0	13
5:00 PM	37	467	4	3	3	98	11	389	10	0	2	5
5:15 PM	33	415	8	0	3	103	25	405	11	0	0	14
5:30 PM	47	407	7	6	0	97	13	321	5	0	0	10
5:45 PM	53	404	21	1	2	51	20	374	13	0	0	8

TRUCKS	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn
PM 15 min												
4:00 PM	0	9	0	0	7	0	0	7	0	0	0	0
4:15 PM	0	5	0	0	0	0	0	10	0	0	0	0
4:30 PM	2	9	0	0	0	0	0	3	0	0	0	0
4:45 PM	0	9	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	4	0	0	0	0	0	5	0	0	0	0
5:15 PM	4	2	0	0	0	0	0	3	0	0	0	0
5:30 PM	0	10	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	2	0	0	1	0	2	4	0	0	0	0

TOTAL	McCarran (EB)			Wedekind (NB)			McCarran (WB)			Wedekind (SB)		
	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Right Turn
PM 15 min												
4:00 PM	28	379	9	4	7	53	18	360	2	0	0	13
4:15 PM	18	451	7	8	2	94	21	353	4	0	0	12
4:30 PM	23	432	4	1	0	88	28	309	0	1	0	9
4:45 PM	51	430	6	1	1	85	44	361	4	2	0	13
5:00 PM	37	471	4	3	3	98	11	394	10	0	2	5
5:15 PM	37	417	8	0	3	103	25	408	11	0	0	14
5:30 PM	47	417	7	6	0	97	13	322	5	0	0	10
5:45 PM	53	406	21	1	3	51	22	378	13	0	0	8

Notes: No incidents impacting typical traffic flows were noted. U-Turns were tallied as movement in direction of turning movement. There were very few U-turn movements during the study, both observers believe they are fewer than 10 total in number.

APPENDIX B

Background Condition LOS



Intersection												
Int Delay, s/veh	19.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↕	
Traffic Vol, veh/h	28	974	85	287	1651	7	9	1	108	3	0	43
Future Vol, veh/h	28	974	85	287	1651	7	9	1	108	3	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	1059	92	312	1795	8	10	1	117	3	0	47

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	1803	0	0	1151	0	0	2687	3592	576	3013	3634	902
Stage 1	-	-	-	-	-	-	1165	1165	-	2423	2423	-
Stage 2	-	-	-	-	-	-	1522	2427	-	590	1211	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	338	-	-	603	-	-	10	5	460	6	5	281
Stage 1	-	-	-	-	-	-	206	267	-	33	62	-
Stage 2	-	-	-	-	-	-	124	62	-	461	253	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	338	-	-	603	-	-	~ 5	2	460	~ 2	2	281
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 5	2	-	~ 2	2	-
Stage 1	-	-	-	-	-	-	188	243	-	30	30	-
Stage 2	-	-	-	-	-	-	50	30	-	311	230	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	2.5	218.4	\$ 677.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	4	460	338	-	-	603	-	-	28
HCM Lane V/C Ratio	2.717	0.255	0.09	-	-	0.517	-	-	1.786
HCM Control Delay (s)	\$ 2409.4	15.5	16.7	-	-	17.2	-	-	\$ 677.2
HCM Lane LOS	F	C	C	-	-	C	-	-	F
HCM 95th %tile Q(veh)	2.5	1	0.3	-	-	3	-	-	5.9

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

3:

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕	↖		↕	
Traffic Vol, veh/h	43	1735	25	93	1485	30	10	7	383	2	2	42
Future Vol, veh/h	43	1735	25	93	1485	30	10	7	383	2	2	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	1886	27	101	1614	33	11	8	416	2	2	46

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	1647	0	0	1913
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.14	-	-	4.14
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22
Pot Cap-1 Maneuver	389	-	-	306
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				
Mov Cap-1 Maneuver	389	-	-	306
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.3		
HCM LOS				

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	258	389	-	-	306	-	-	-
HCM Lane V/C Ratio	-	1.614	0.12	-	-	0.33	-	-	-
HCM Control Delay (s)	-	\$ 327.9	15.5	-	-	22.5	-	-	-
HCM Lane LOS	-	F	C	-	-	C	-	-	-
HCM 95th %tile Q(veh)	-	25.8	0.4	-	-	1.4	-	-	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕				↗			↗
Traffic Vol, veh/h	49	974	85	287	1651	7	0	0	118	0	0	84
Future Vol, veh/h	49	974	85	287	1651	7	0	0	118	0	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	1059	92	312	1795	8	0	0	128	0	0	91

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	1803	0	0	902
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.14	-	4.14	6.94
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.22	-	2.22	3.32
Pot Cap-1 Maneuver	338	-	603	281
Stage 1	-	-	0	0
Stage 2	-	-	0	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	338	-	603	281
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	2.5	15.8	23.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	460	338	-	-	603	-	-	281
HCM Lane V/C Ratio	0.279	0.158	-	-	0.517	-	-	0.325
HCM Control Delay (s)	15.8	17.6	-	-	17.2	-	-	23.9
HCM Lane LOS	C	C	-	-	C	-	-	C
HCM 95th %tile Q(veh)	1.1	0.6	-	-	3	-	-	1.4

Intersection

Int Delay, s/veh 2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↘	↙
Traffic Vol, veh/h	35	21	1	46	38	1
Future Vol, veh/h	35	21	1	46	38	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	23	1	50	41	1

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	61
Stage 1	-	-	50
Stage 2	-	-	52
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1542	896
Stage 1	-	-	972
Stage 2	-	-	970
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1542	895
Mov Cap-2 Maneuver	-	-	895
Stage 1	-	-	972
Stage 2	-	-	969

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	898	-	-	1542	-
HCM Lane V/C Ratio	0.047	-	-	0.001	-
HCM Control Delay (s)	9.2	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection												
Int Delay, s/veh	37.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↕		↘	↕				↗			↗
Traffic Vol, veh/h	64	1735	25	93	1485	30	0	0	400	0	0	84
Future Vol, veh/h	64	1735	25	93	1485	30	0	0	400	0	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	70	1886	27	101	1614	33	0	0	435	0	0	91

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	1647	0	0	1913	0	0	-	-	957	-	-	824
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	389	-	-	306	-	-	0	0	~ 258	0	0	316
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	389	-	-	306	-	-	-	-	~ 258	-	-	316
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.3	\$ 358.5	21
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	258	389	-	-	306	-	-	316
HCM Lane V/C Ratio	1.685	0.179	-	-	0.33	-	-	0.289
HCM Control Delay (s)	\$ 358.5	16.3	-	-	22.5	-	-	21
HCM Lane LOS	F	C	-	-	C	-	-	C
HCM 95th %tile Q(veh)	27.9	0.6	-	-	1.4	-	-	1.2

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	2.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	43	21	1	46	38	1
Future Vol, veh/h	43	21	1	46	38	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	23	1	50	41	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	70	0	111
Stage 1	-	-	-	-	59
Stage 2	-	-	-	-	52
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1531	-	886
Stage 1	-	-	-	-	964
Stage 2	-	-	-	-	970
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1531	-	885
Mov Cap-2 Maneuver	-	-	-	-	885
Stage 1	-	-	-	-	964
Stage 2	-	-	-	-	969

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	888	-	-	1531	-
HCM Lane V/C Ratio	0.048	-	-	0.001	-
HCM Control Delay (s)	9.3	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



431 Prater Way
Sparks, NV 89431
Phone 775-353-2306
Fax 775-353-2470

REVISED Application Review Comments
Engineering and Traffic Division

Permit Number: **PCN19-0023 / CU19-0008**

Date: July **08**, 2019

Project Address: 4620 Wedekind, Sparks, NV 89431

Project Description: Allow for the construction and operation of an approximately 4,512 square foot car wash on a site 1.61 acres in size in the PO (Professional Office) zoning district.

To: BW Sparks, Inc.,

The referenced project has been reviewed for compliance with the Sparks Municipal Code as adopted by the City of Sparks. Please review the items listed below which include comments and proposed conditions of approval for this Conditional Use Permit Application.

Comments:

1. Please provide documentation of acceptance of access location **and improvements** on McCarran Boulevard from NDOT.
2. Please provide documentation of acceptance of proposed intersection improvements at Wedekind Road and McCarran Boulevard from NDOT.
3. Please analyze sight distance at the access on Wedekind Road. There is an existing very large tree located east of the proposed driveway which may impede drivers from being able to have clear sight to the east. Additionally, there is another very large tree to the west which may need to be trimmed to avoid sight distance issues.
4. Please ensure that proper emergency services circulation is provided through the site to the approval of the Fire Department.
5. Please verify that Type 1 curb and gutter is proposed to be constructed along the project frontage on Wedekind Road.
6. Please add attached minimum 4' wide sidewalk along project frontage on Wedekind

Road.

7. Please provide plans which show proposed improvements at the intersection of Wedekind Road and McCarran Boulevard.
8. Please verify that standards for Low Access Control (LAC) driveway spacing is met on Wedekind Road.
9. **Traffic comment – please provide a stop condition for traffic exiting the car wash tunnel in order to mitigate vehicle conflicts between entering traffic from McCarran Boulevard and the exiting car wash traffic.**

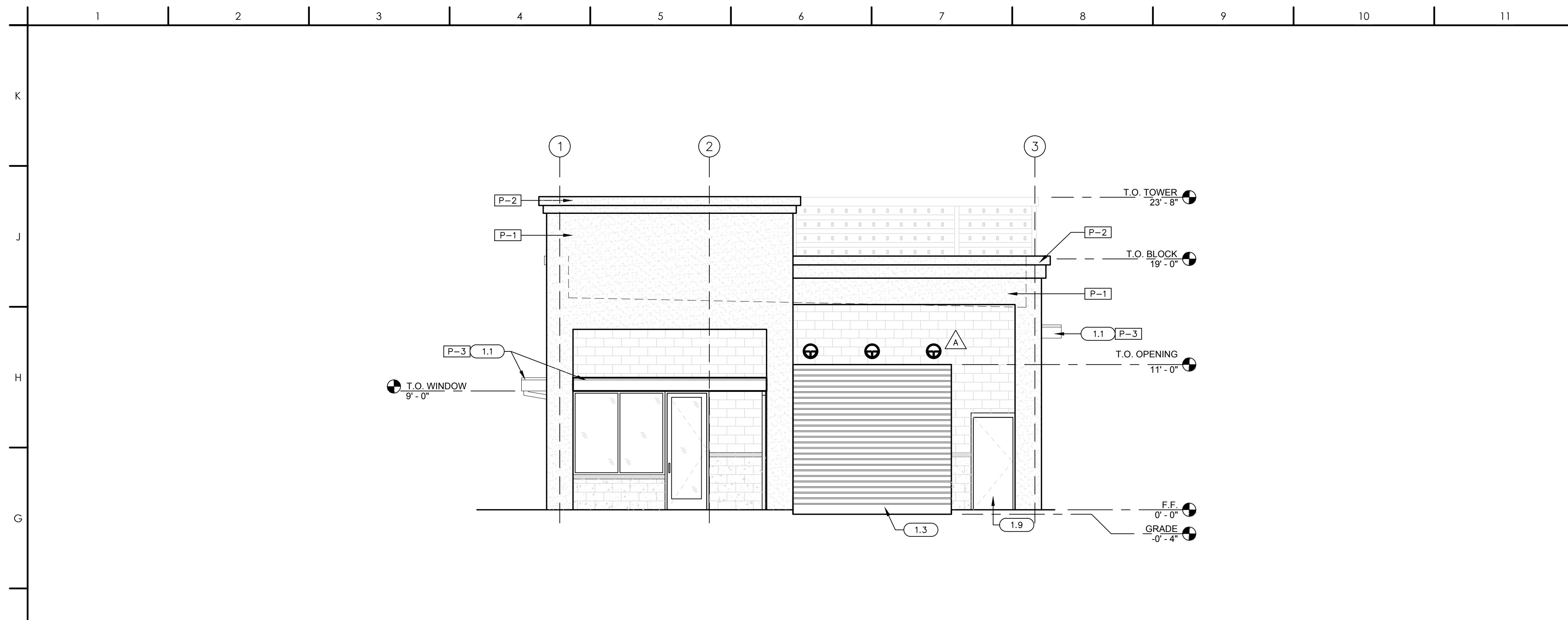
Proposed Conditions of Approval:

1. The applicant shall obtain permits from NDOT for construction of the approved intersection improvements at Wedekind Road and McCarran Boulevard prior to or concurrent with the issuance of City of Sparks site improvement or building permits.

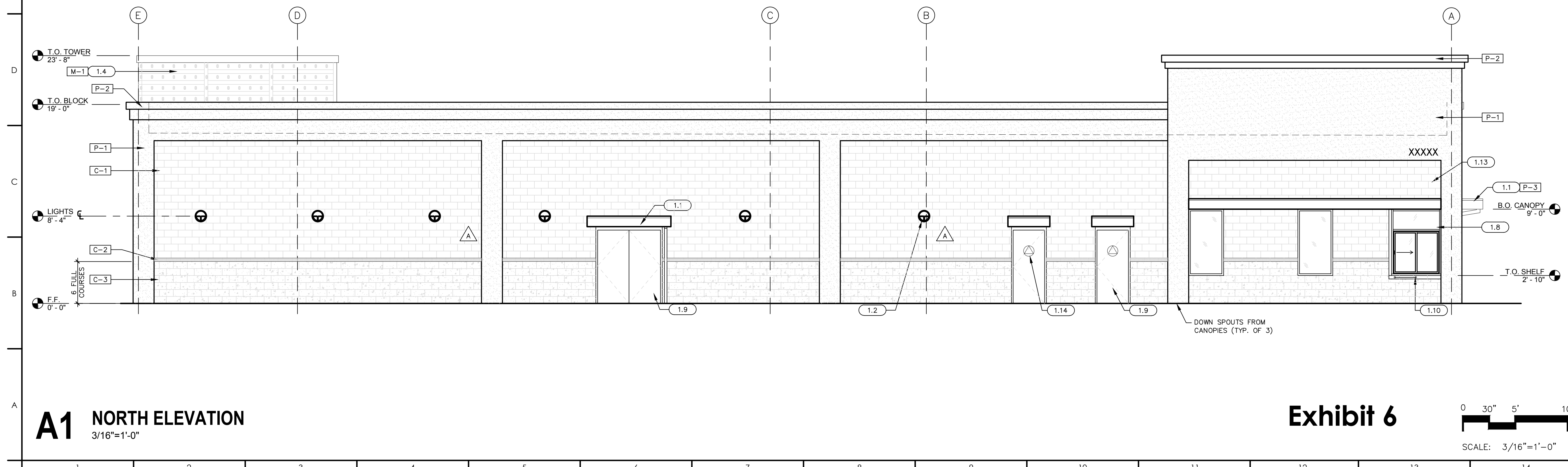
Please feel free to contact me directly if you have any questions or concerns at 775-353-1668 or via email at jthomas@cityofsparks.us.

Reviewed by,

Janelle Thomas
Civil Engineer Sr
City of Sparks



F1 WEST ELEVATION
3/16"=1'-0"

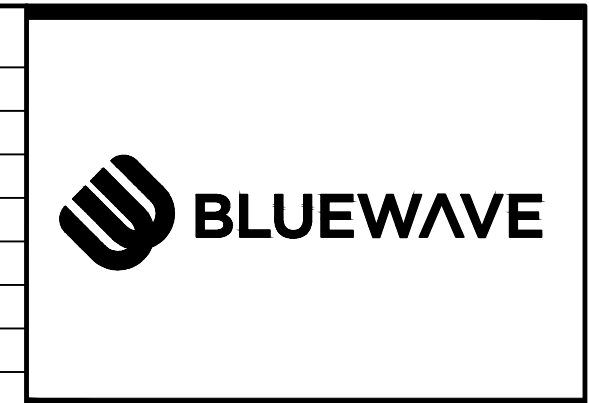


A1 NORTH ELEVATION
3/16"=1'-0"

EXTERIOR COLOR LEGEND			
MARK	COLOR	MATERIAL	MANUF.
P-1	DRIFT WOOD	STUCCO	BENJAMIN MOORE
P-2	SIERRA SPRUCE	STUCCO	BENJAMIN MOORE
P-3	BLUE		
C-1	320	GROUND FACE CMU	BASALITE
C-2	684	SMOOTH FACE CMU	BASALITE
C-3	336	SPLIT FACE CMU	BASALITE
M-1	A23	CORRUGATED, PERFORATED METAL PANEL SYSTEM	ATAS INTERNATIONAL

- ELEVATION KEY NOTES**
- PRE-ENGINEERED ALUM. CANOPY, 4'-0" DEEP (TYP.)
 - SCHEDULED WALL MOUNTED LIGHT FIXTURE
 - PRE-FINISHED ROLLING OVERHEAD DOOR
 - CORRUGATED PERFORATED METAL PANEL SYSTEM, PROVIDE 4" FRAMING GIRTS AT MIN. 48" O.C. COORDINATE W/ GROUTED CMU CELLS, GAUGE TO BE SPECIFIED AND ENGINEERED BY FRAMING SUBCONTRACTOR & COORDINATED WITH METAL PANEL MFR.
 - DOWN SPOUT, PAINT TO MATCH CMU #320
 - OVERFLOW SCUPPER WILL BE ON THE SIDES OF CONDUCTOR HEAD, PAINT TO MATCH CMU #320
 - METAL TRELLIS, SEE DETAIL A3/A-701
 - ALUM. STOREFRONT SYSTEM W/ 1" INSULATED CLEAR TEMPERED GLAZING
 - PAINTED HM DOOR, PAINT TO MATCH C-3
 - GAMCO STAINLESS STEEL TRANSACTION SHELF, 18"x24" STAINLESS STEEL
 - BLUEWAVE SIGN, FRAMING & ATTACHMENTS BY SIGN MFR. G.C. TO COORDINATE W/ METAL PANEL INSTALLATION
 - LIGHT FIXTURE BEYOND
 - BUILDING ADDRESS, 6" NUMERALS, ILLUMINATED
 - ACCESSIBLE UNISEX RESTROOM SIGNAGE, SEE 17/G-102B
 - CEMENT PLASTER, SEE ELEVATION NOTE 1
 - CONTROL JOINT, SEE DETAIL 612/A-702
 - PAINT CONCRETE STEM WALL TO MATCH C-3 CMU

- ELEVATION NOTES**
- CEMENT PLASTER SHALL BE 7/8" THICKNESS OVER EXPANDED METAL LATH ATTACHED WITH FASTENERS PER CBC SECTION 2512, OVER WEATHER BARRIER. WEATHER BARRIER TO BE TYVEK COMMERCIAL BUILDING WRAP INSTALLED PER THE MANUFACTURER WITH TAPED SEAMS AND WITH EDGES SEALED TO FLASHING WITH DUPONT STRAIGHT FLASH SELF ADHERING FLASHING. PLASTER FINISH TO BE MEDIUM DASHED FINISH.



BLUEWAVE SPARKS, NV
N. McCARRAN BLVD. AND WEDEKIND RD.

CLIENT REVISED	
CLIENT REVISIONS	06.18.2019
AGENCY ISSUE/REVISED	
PLAN CHECK REVISION	06.18.2019
ISSUED FOR PERMIT	12.19.2018
ISSUED / REVISED	
Project Number	222310634
Drawn By	RAM
Checked By	GMS

Exhibit 6
SCALE: 3/16"=1'-0"
0 30" 5' 10"

A300
BUILDING ELEVATIONS

V:\222310634\architecture\drawing\05_222310634_A300.dwg modified by maddock on 7/12/2019 1:45 PM

1 2 3 4 5 6 7 8 9 10 11 12 13 14

K

J

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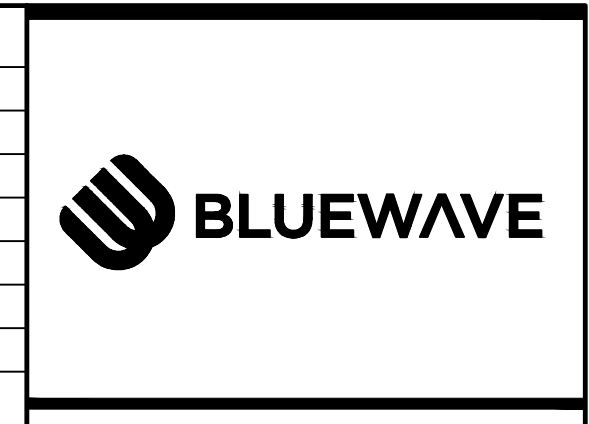
D

C

B

A

EXTERIOR COLOR LEGEND			
MARK	COLOR	MATERIAL	MANUF.
P-1	DRIFT WOOD	STUCCO	BENJAMIN MOORE
P-2	SIERRA SPRUCE	STUCCO	BENJAMIN MOORE
P-3	BLUE		
C-1	320	GROUND FACE CMU	BASALITE
C-2	684	SMOOTH FACE CMU	BASALITE
C-3	336	SPLIT FACE CMU	BASALITE
M-1	A23	CORRUGATED, PERFORATED METAL PANEL SYSTEM	ATAS INTERNATIONAL



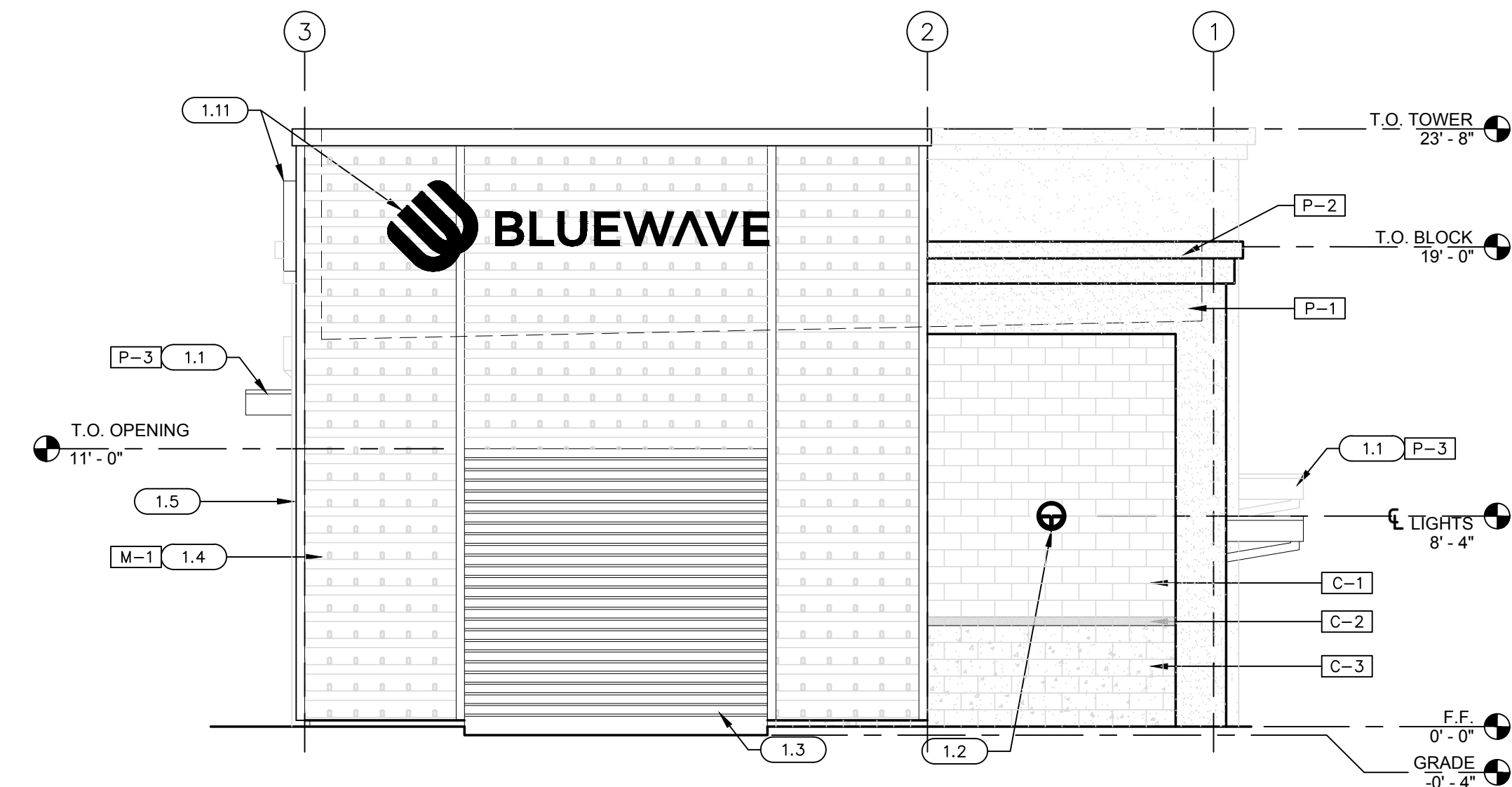
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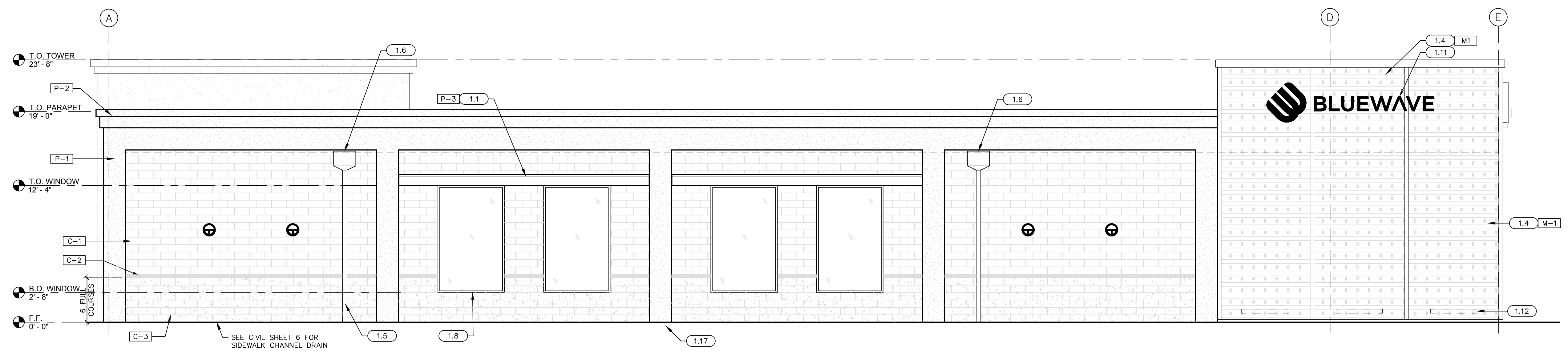
BLUEWAVE SPARKS, NV

N. McCARRAN BLVD. AND WEDEKIND RD.

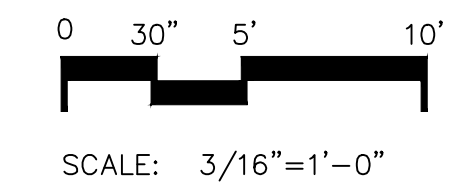
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F1 EAST ELEVATION
3/16"=1'-0"



A1 SOUTH ELEVATION
3/16"=1'-0"



CLIENT REVISED	
CLIENT REVISIONS	06.18.2019
AGENCY ISSUE / REVISED	
PLAN CHECK REVISION	06.18.2019
ISSUED FOR PERMIT	12.19.2018
ISSUED / REVISED	
Project Number	222310634
Drawn By	RAM
Checked By	GMS

A301
BUILDING ELEVATIONS

Color Legend:

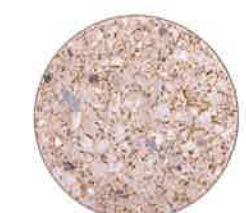
Benjamin Moore
#2107-40 "Drift Wood"



Benjamin Moore
#2108-20 "Sierra Spruce"



Alpolic DYB Blue



Basalite
Ground Face #320



Basalite
Smooth Face #684



Basalite
Ground Face #336



Corrugated Perforated
Metal Panel System



North Elevation



West Elevation



BlueWave
N. McCarran Blvd. and Wedekind Rd.
Sparks, NV



Color Legend:

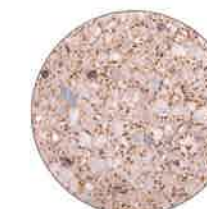
Benjamin Moore
#2107-40 "Drift Wood"



Benjamin Moore
#2108-20 "Sierra Spruce"



Alpolic DYB Blue



Basalite
Ground Face #320



Basalite
Smooth Face #684



Basalite
Ground Face #336



Corrugated Perforated
Metal Panel System



South Elevation



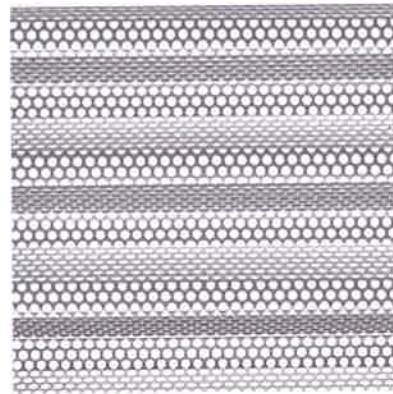
East Elevation



BlueWave
N. McCarran Blvd. and Wedekind Rd.
Sparks, NV

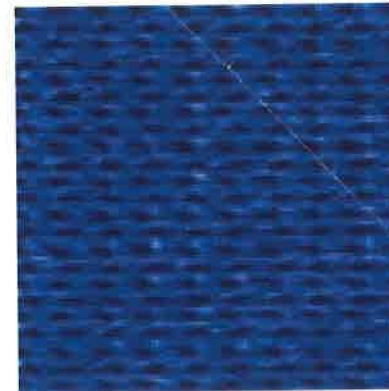


METAL



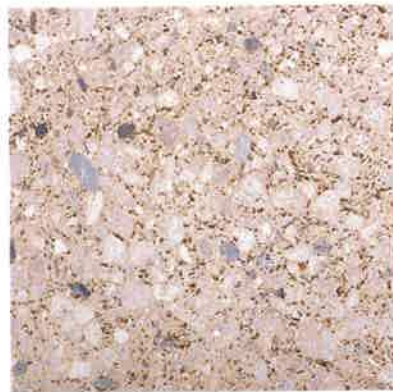
CORRUGATED PERFORATED
METAL PANEL SYSTEM

AWNING



SYNTHESIS COMMERCIAL 95
"AQUATIC BLUE" #444938

CMU BLOCK



BASALITE GROUND FACE #320

PAINT



ALPOLIC DYB BLUE



BASALITE SPLIT FACE #336

<p>COLOR MATERIAL BOARD</p>	<p>BLUEWAVE ELK GROVE</p> <p>9660 EAST STOCKTON BLVD. ELK GROVE, CA 95624</p>	 <p>1201 J STREET, STUDIO 100 SACRAMENTO, CA 95814-2927 Tel. (916) 442-3230 Fax (916) 422-3249</p>	
------------------------------------	--	---	---

Original



DEVELOPMENT APPLICATION

ACTION REQUESTED:

- Administrative Review
- Administrative Review MME
- Annexation
- Conditional Use Permit
- Comprehensive Plan Amendment
- Major Deviation
- Minor Deviation
- Planned Development
- Rezoning

- Tentative Subdivision Map
- Variance

CASE NUMBER:	FEE:
PCN19-0023	\$ 2500.00
Noticing Fee	\$ 500.00
District Health Fee	\$ 798.00
TOTAL FEES	\$ 3798.00
Rec'd by: _____	Date: _____
(For Planning Department Use Only)	

CU19-0008

DATE: 06-19-2019

PROJECT NAME: Blue Wave Car Wash

PROJECT DESCRIPTION: Drive through (tunnel type) car wash and vacuum stations

RECEIVED-CITY OF SPARKS

(Mark one box to indicate responsible party and mailing address)

PROPERTY OWNER*

Name: BW Sparks LLC
 Address: 2175 Francisco Blvd. East, Suite G
 City San Rafael State CA ZipCode 94901
 Phone: 415-747-3044 Fax: _____
 Contact Person: Louis Truong
 E-mail Address: L.Truong@bluewaveexpress.com

PROJECT ADDRESS:

4620 Wedekind Rd, Sparks, NV

PARCEL NO. (APN): 027-041-03

PROPERTY SIZE: 1.61 Acres

EXISTING ZONING: PO

PROPOSED ZONING: PO

MASTER PLANNED LAND USE: Commercial

EXISTING USE: Vacant

SURROUNDING USES:

North Golf Course

East Dental Office

South Residential

West Golf Course

APPLICANT*

Name: BW Sparks LLC
 Address: 2175 Francisco Blvd. East, Suite G
 City San Rafael State CA ZipCode 94901
 Phone: 415-747-3044 Fax: _____
 Contact Person: Louis Truong
 E-mail Address: L.Truong@bluewaveexpress.com

PERSON / FIRM PREPARING PLANS

Name: Stantec
 Address: 6995 Sierra Center Parkway
 City Reno State Nevada ZipCode 89511
 Phone: 775-398-1270 Fax: _____
 Contact Person: Cynthia Albright
 E-mail Address: cynthia.albright@stantec.com



Jim Pringle, PE
Civil Engineer

Stantec
 6995 Sierra Center Parkway Suite 200, Reno NV 89511-2279
 phone: (775) 850-0777 ext.: 1224 560 3511 c
 direct: (775) 398-1224 fax: (775) 850-0787
 jim.pringle@stantec.com

DEAR APPLICANT:

THE CITY OF SPARKS APPLICATION PROCESS REQUIRES THAT THE PROPERTY OWNER AUTHORIZE THE APPLICANT TO REQUEST DEVELOPMENT RELATED APPLICATIONS. DEVELOPMENT APPROVALS REMAIN WITH THE LAND; THEREFORE, THE PROPERTY OWNER IS ALWAYS RESPONSIBLE FOR ANY ACTIVITY ON THE PROPERTY.

OWNER AFFIDAVIT

STATE OF NEVADA)
COUNTY OF WASHOE) SS.

I, Bill R. Poland being duly sworn, depose and say that I am an owner of property/authorized agent involved in this petition and that I authorize BW Sparks, LLC and Stantec to request development related applications on my property. I also give permission for site visitation by the Planning Commission, City Council and City Staff.

Name: Bill R. Poland
Title: Manager
Signed: 

Subscribed and sworn to before me this ____ Day of _____, 20__.

See attached
Notary Public in and for said County and State
My commission expires: _____

APPLICANT AFFIDAVIT

STATE OF NEVADA)
COUNTY OF WASHOE) SS.

I, Bill R. Poland being duly sworn, depose and say that I am the applicant involved in this petition and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. I also give permission for site visitation by the Planning Commission, City Council and City Staff.

Name: Bill R. Poland
Title: Manager
Signed: 

Subscribed and sworn to before me this ____ Day of _____, 20__.

See attached
Notary Public in and for said County and State
My commission expires: _____

CALIFORNIA JURAT WITH AFFIANT STATEMENT

GOVERNMENT CODE § 8202

- See Attached Document (Notary to cross out lines 1–6 below)
- See Statement Below (Lines 1–6 to be completed only by document signer[s], not Notary)

1 _____

2 _____

3 _____

4 _____

5 _____

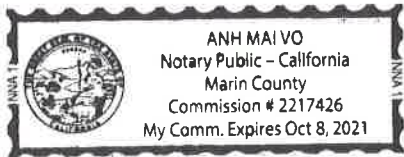
6 _____

Signature of Document Signer No. 1 *Signature of Document Signer No. 2 (if any)*

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
 County of Marin

Subscribed and sworn to (or affirmed) before me
 on this 17 day of June, 2019,
 by Bill R. Poland
 (1) _____
 (and (2) _____),
Name(s) of Signer(s)



proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Signature _____
Signature of Notary Public

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Owner Affidavit

Document Date: 06/19/19 Number of Pages: _____

Signer(s) Other Than Named Above: _____

CALIFORNIA JURAT WITH AFFIANT STATEMENT

GOVERNMENT CODE § 8202

- See Attached Document (Notary to cross out lines 1–6 below)
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1 _____

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5 _____

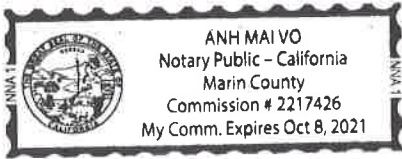
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State of California
 County of Marin

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 on this 17 day of June, 2019,
 by Bill R. Poland
 (1) _____
 (and (2) _____),
Name(s) of Signer(s)



Place Notary Seal and/or Stamp Above

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.
 Signature _____
Signature of Notary Public

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Applicant Affidavit

Document Date: 06/19/19 Number of Pages: _____

Signer(s) Other Than Named Above: _____

	WASHOE COUNTY ASSESSOR PROPERTY DATA	06/14/2019
--	--------------------------------------	------------

APN: 027-041-03 Card 1 of 1

Owner Information & Legal Description

Situs	4620 WEDEKIND RD , SPARKS 89431		
Owner 1	BW SPARKS LLC		
Mail Address	361 3RD ST STE A SAN RAFAEL CA 94901		
Rec Doc No	4738588	Rec Date	08/29/2017
Prior Owner	CASTLES LLC		
Prior Doc	4378794		
Keyline Desc	FR NW4 SEC 32 TWP 20 RGE 20		
Subdivision	_UNSPECIFIED		
	Lot: Block:	Sub Map#	
	Record of Survey Map:	Parcel Map#	
	Section: 32 Township: 20 Range: 20	SPC	
Tax Dist	2000 Add'l Tax Info	Prior APN	
Tax Cap Status	Use does not qualify for Low Cap, High Cap Applied		

Building Information

Quality		Bldg Type	
Stories		Square Feet	0
Year Built	0	Square Feet does not include Basement or Garage Conversion Area.	
W.A.Y.	0	Finished Bsmt	0
Bedrooms	0	Unfin Bsmt	0
Full Baths	0	Bsmt Type	
Half Baths	0	Gar Conv Sq Foot	0
Fixtures		Total Gar Area	0
Fireplaces	0	Gar Type	
Heat Type		Det Garage	0
Sec Heat Type		Bsmt Gar Door	0
Ext Walls		Sub Floor	
Sec Ext Walls		Frame	
Roof Cover		Construction Mod	0
Obso/Bldg Adj	0	Units/Bldg	0
% Complete	0%	Units/Parcel	0

Land Information

Land Use	140	Zoning	PO	Sewer	Municipal	NBC	DDDQ
Size	70,044 SqFt or ~ 1.608 Acre	Water	Muni	Street	Paved	NBC Map	DD NBC Map

Valuation Information

Valuation History	2018/19 FV	2019/20 VN
Taxable Land Value	425,517	472,797
Taxable Improvement Value	0	0
Taxable Total	425,517	472,797
Assessed Land Value	148,931	165,479
Assessed Improvement Value	0	0
Total Assessed	148,931	165,479

The 2019/2020 values are preliminary values and subject to change.

Sales/Transfer Information/Recorded Document

V-Code	DOR	Doc Date	Value/Sale Price	Grantor	Grantee
2D	140	08-29-2017	1,075,000	CASTLES LLC	BW SPARKS LLC
3BGG	140	07-31-2014	0	CASTLES LLC	CASTLES LLC
3BGG	120	12-30-2003	271,000	NETWORK REALTY INC,	CASTLES LLC
3BDS	120	02-07-2003	261,000	UNITED STATES OF AMERICA,	NETWORK REALTY INC
3MNT	120	10-16-2001	0	A G E CORP INC,	UNITED STATES OF AMERICA



Stantec Consulting Services Inc.
6995 Sierra Center Parkway, Reno NV 89511-2213

June 19, 2019
File: 222310634

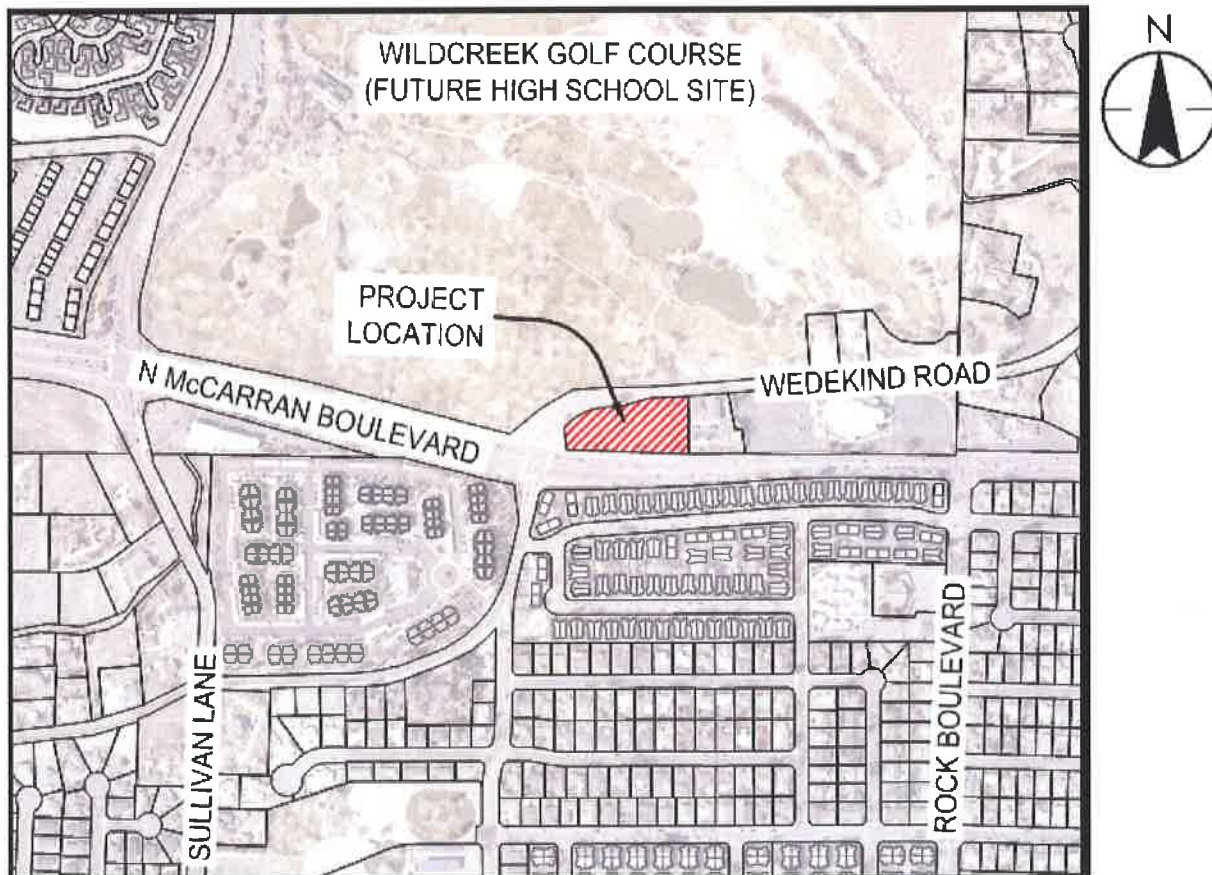
Community Services Department

City of Sparks
431 Prater Way
Sparks, Nevada 89431

Reference: BlueWave Express Car Wash, APN #027-041-03
Expired CUP Case #PCN16041
Current Building Application #SBLD18-23748
NDOT Review #209554-18

To Whom it May Concern:

This application relates to a previous approved CUP for subject parcel, case number referenced above which expired on November 17, 2018. The original approval for #PCN16041 belonged to a different owner for the same use and was sold to BlueWave LLC on August 29, 2017. Upon taking ownership, BlueWave and its consultant team went to work to address the conditions of approval which largely involved satisfying the Nevada Department of Transportation (NDOT). A vicinity map below shows the car wash location.



June 19, 2019

Community Services Department; APN 027-041-03

The subject parcel located at 4620 Wedekind Road and is vacant. This application requests approval of a 4,500 square foot drive through, tunnel-type car wash, (customer remains inside) with pay stations, and a vacuum canopy parking area. The proposed building type is V-B; Occupancy category B. Building materials include a mixture of ground and split face CMU block in an earth tone color palette, a perforated decorative metal panel at the building corner, and blue aluminum canopies for accent.

Stantec submitted construction documents for permit review on December 21, 2018, not knowing the approval expired. Coordination with NDOT required significant time due to the ongoing study and design efforts of the adjacent proposed high school development on Wedekind. Stantec worked diligently to incorporate the modifications to McCarran and Wedekind. Coordination with other agencies has now been completed. The submitted building plans were prepared in conformance with the conditions of approval.

The surrounding neighborhood consists of a duplex subdivision, Meadowview, and the Village at Wildcreek apartments south and southwest of McCarran, the Wildcreek Golf Course (and future high school) to the north, and a church on the eastern property line. The intersection at Wedekind and McCarran is unsignalized. Future improvements at this intersection, identified by an NDOT traffic study in association with the Wild Creek High School planning effort, will be constructed by BlueWave to restrict turning movements onto McCarran.

In addition to completed coordination with NDOT for improvements at the project intersection, work has been completed with project approvals through Truckee Meadows Water Authority (TMWA) and preliminary design by Nevada Energy (NVE). All conditions from the original planning approval and review comments from building review have been addressed.

Thank you for your consideration of this application and please do not hesitate to call with questions. We look forward to working with the City of Sparks.

Kindest Regards,

Stantec Consulting Services Inc.



Meghan Cronin, PE
Project Manager
meghan.cronin@stantec.com



Cynthia Albright, AICP CUD, GISP
Principal, Urban Planning and Design
cynthia.albright@stantec.com

V:/active/222310634/planning/20190619 submittal letter

MC:cja
Enclosures

**CONDITIONAL USE PERMIT
NON-RESIDENTIAL PROJECT DATA SHEET
City of Sparks, Nevada**

1. Site Area Breakdown

Building Coverage	<u>0.10</u> Ac.	<u>6.21</u> %
Landscaped Area	<u>0.70</u> Ac.	<u>43.48</u> %
Paved Area	<u>0.81</u> Ac.	<u>50.31</u> %
Undeveloped Area	<u>0</u> Ac.	<u>0</u> %
Public Right-of-Way	<u>0</u> Ac.	<u>0</u> %
TOTAL	<u>1.61</u> Ac.	<u>100</u> %

2. Existing Building Information

#1 Description	<u>N/A</u>	
Floor Area	<u> </u> Sq.Ft	Height <u> </u> Feet
Type of Construction	<u> </u>	
#2 Description	<u>N/A</u>	
Floor Area	<u> </u> Sq.Ft	Height <u> </u> Feet
Type of Construction	<u> </u>	

3. Floor Area Ratio

<u>4,512</u>	/	<u>70,093</u>	=	<u>6.4</u> %
Total Floor Area (Sq. Ft.)		Net Site Area (Sq. Ft.)		Floor Area Ratio

4. Description of Proposed Use

Construct 4,512 SQFT drive-through tunnel-type car wash and office space with 25 covered vacuum stations plus four additional parking spaces for employees and guests.

5. Building Area Breakdown & Parking Calculations

Auto Repair / Service	<u> </u>	1 per 500 Sq.Ft.	=	<u> </u>	Spaces
Child Care	<u> </u>	1 per 350 Sq. Ft	=	<u> </u>	Spaces
Church	<u> </u>	1 per 150 Sq. Ft.	=	<u> </u>	Spaces
Financial	<u> </u>	1 per 400 Sq. Ft.	=	<u> </u>	Spaces
Gaming Establishment	<u> </u>	1 per 100 Sq. Ft. + 1 per 300 Sq. Ft.	=	<u> </u>	Spaces
		for Accessory uses	=	<u> </u>	Spaces
Health Club	<u> </u>	1 per 150 Sq. Ft.	=	<u> </u>	Spaces
Hospitals	<u> </u>	1 per 400 Sq. Ft.	=	<u> </u>	Spaces
Hotel/Motel	<u> </u>	1 per guest room	=	<u> </u>	Spaces
Life Care	<u> </u>	1 per 400 Sq. Ft.	=	<u> </u>	Spaces
Manufacturing	<u> </u>	1 per 2000 Sq. Ft.	=	<u> </u>	Spaces
Medical/Clinic	<u> </u>	1 per 500 Sq. Ft.	=	<u> </u>	Spaces
Office	<u> </u>	1 per 800 Sq. Ft	=	<u> </u>	Spaces
Personal Service	<u> </u>	1 per 300 Sq. Ft.	=	<u> </u>	Spaces
Recreational Facility	<u> </u>	1 per 200 Sq. Ft.	=	<u> </u>	Spaces
Restaurant/Bar	<u> </u>	1 per 300 Sq. Ft.	=	<u> </u>	Spaces
Retail	<u> </u>	1 per 300 Sq. Ft.	=	<u> </u>	Spaces
Sale of Bulky Goods	<u> </u>	1 per 400 Sq. Ft.	=	<u> </u>	Spaces
School, Elementary	<u> </u>	1 per classrm + 1 per 100 students =	=	<u> </u>	Spaces
School, Middle	<u> </u>	2 per classrm + 1 per 100 students =	=	<u> </u>	Spaces
School, High	<u> </u>	1 per 1.5 Students + Staff =	=	<u> </u>	Spaces
Theatre/Auditorium	<u> </u>	1 per 300 Sq. Ft.	=	<u> </u>	Spaces
Warehousing	<u> </u>	1 per 2000 Sq. Ft.	=	<u> </u>	Spaces
Carwash	<u>4,512</u>	1 per 1,500 Sq. Ft.	=	<u>4</u>	Spaces (not vacuum stalls)

6. Outdoor Uses

Outdoor Storage	<u> </u> Yes	<u>X</u> No
Outdoor Processing	<u> </u> Yes	<u>X</u> No
Staging/Loading of Trucks	<u> </u> Yes	<u>X</u> No

7. Estimated Water Demand (Attach Calculations)

Domestic	<u>4.84</u>	AFY
Irrigation	<u>0.72</u>	AFY
TOTAL	<u>5.56</u>	AFY
Source of water supply:	<u>TMWA</u>	

8. Traffic (Attach Calculations)

Average Daily Trips	<u>780</u>	Trips
Peak Hour Trips	<u>78</u>	Trips

9. Estimated Sewage to be Generated

<u>3,253</u>	GPD
(Attach Calculations)	

10. Hazardous Materials

Will the use on this site involve the use of hazardous materials? Yes X No

11. Flood Hazard

Portion of site subject to inundation by 100 year flood: 0 Ac. 0 %

12. Portion of Site within the Following Slope Categories:

0% - 10%	<u>0</u> Ac.	<u>0</u> %
10% +	<u>0</u> Ac.	<u>0</u> %

DEAR APPLICANT:

THE CITY OF SPARKS APPLICATION PROCESS REQUIRES THAT THE PROPERTY OWNER AUTHORIZE THE APPLICANT TO REQUEST DEVELOPMENT RELATED APPLICATIONS. DEVELOPMENT APPROVALS REMAIN WITH THE LAND; THEREFORE, THE PROPERTY OWNER IS ALWAYS RESPONSIBLE FOR ANY ACTIVITY ON THE PROPERTY.

OWNER AFFIDAVIT

STATE OF NEVADA)
) SS.
COUNTY OF WASHOE)

I, Bill R. Poland being duly sworn, depose and say that I am an owner of property/authorized agent involved in this petition and that I authorize BW Sparks, LLC and Stantec to request development related applications on my property. I also give permission for site visitation by the Planning Commission, City Council and City Staff.

Name: Bill R. Poland
Title: Manager
Signed: 

Subscribed and sworn to before me this ____ Day of _____, 20__.


See attached
Notary Public in and for said County and State

My commission expires: _____

APPLICANT AFFIDAVIT

STATE OF NEVADA)
) SS.
COUNTY OF WASHOE)

I, Bill R. Poland being duly sworn, depose and say that I am the applicant involved in this petition and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. I also give permission for site visitation by the Planning Commission, City Council and City Staff.

Name: Bill R. Poland
Title: Manager
Signed: 

Subscribed and sworn to before me this ____ Day of _____, 20__.

See attached
Notary Public in and for said County and State

My commission expires: _____

CALIFORNIA JURAT WITH AFFIANT STATEMENT

GOVERNMENT CODE § 8202

- See Attached Document (Notary to cross out lines 1–6 below)
- See Statement Below (Lines 1–6 to be completed only by document signer[s], not Notary)

1 _____
 2 _____
 3 _____
 4 _____
 5 _____
 6 _____

Signature of Document Signer No. 1

Signature of Document Signer No. 2 (if any)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
 County of Marin

Subscribed and sworn to (or affirmed) before me
 on this 17 day of June, 2019,
 by Bill R. Poland
 (1) _____
 (and (2) _____),
Name(s) of Signer(s)



proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Signature _____
Signature of Notary Public

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Owner Affidavit

Document Date: 06/19/19 Number of Pages: _____

Signer(s) Other Than Named Above: _____

CALIFORNIA JURAT WITH AFFIANT STATEMENT

GOVERNMENT CODE § 8202



- See Attached Document (Notary to cross out lines 1–6 below)
- See Statement Below (Lines 1–6 to be completed only by document signer[s], not Notary)

Signature of Document Signer No. 1

Signature of Document Signer No. 2 (if any)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

Subscribed and sworn to (or affirmed) before me

County of Marin

on this 17 day of June, 2019,
by Date Month Year



(1) Bill R. Poland

(and (2) _____),
Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Place Notary Seal and/or Stamp Above

Signature _____
Signature of Notary Public

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Applicant Affidavit

Document Date: 06/19/19 Number of Pages: _____

Signer(s) Other Than Named Above: _____



June 19, 2019

Community Services Department; APN 027-041-03

Appendix A **APPLICATION REVIEW PACKET**

Completed Development Application form

Completed Non-Residential Project Data Sheet

Owner Affidavit & Applicant Affidavit

Written description of the proposed use (see introductory letter)

Site plans

June 19, 2019

Community Services Department; APN 027-041-03

Appendix B **WATER & SEWER DEMAND**

Backup Utility Calculations

June 19, 2019

BlueWave McCarran

Water usage calculations:

Bathroom domestic usage = 0.61 afy x factor amount 11% = 0.68 afy

Car wash domestic usage = 3.75 afy x factor amount 11% = 4.16 afy

Total domestic = 4.84 afy

Water values from the TMWA calculation sheet.

Sewage calculations:

Bathroom discharge = 26 FU x 15 gal/day/FU = 390 gal/day

Car wash discharge = 85886 gal/month/ 30 days/month = 2863 gal/day

Total discharge to sewer = 3253 gal/day

Fixture unit count from plumbing drawing P304.

Car wash discharge from BlueWave water usage analysis spreadsheet.



**WATER RIGHTS AND WATER RESOURCE SUSTAINABILITY
CALCULATION WORKSHEET FOR MULTI-TENANT APPLICATIONS**

			Demand (Acre Feet)
1	Existing demand (current usage) at Service Property		0.00
2	Number of units	<u>0</u> x .12 (Apartments)	0.00
3	Retail space:	<u> </u> x 0.0004 per sq.ft.	0.00
4	Fixture units:	<u>36.5</u> x 15x 365x 3.07/ 1 mil	0.61
5	Landscaping:	Turf <u> </u> sq ft x 3.41/ 43,560	0.00
6	Drip (39 Trees, 337 Shrubs)		0.65
7	Other calculated demand: Provided analysis by Applicant		<u>3.75</u>
8	New or additional demand at Service Property (lines 2+3+4+5+6)		<u>5.01</u>
9	Total Demand at Service Property (lines 1+8)		5.01
10	Less: Prior demand commitments at service property		0.00
11	Less: Other resource credits		0.00
12	Total Credits (lines 10+11)		0.00
13	Subtotal: Required resource dedication/commitment (lines 9-12)		5.01
14	Factor amount (0.11 x Line 13)		0.55
15	No return flow required		<u>0.00</u>
16	TOTAL RESOURCES REQUIRED (lines 13+14+15)		<u>5.56</u>
17	Price of Water Rights per AF	<u>\$7,600</u>	\$ 42,256
18	Will Serve Commitment Letter Preparation Fee (\$100.00 per letter)		\$ 100
19	Due Diligence Fee (\$150.00 per parcel)		\$
20	Document Preparation Fees (\$100.00 per document)		\$ 0
21	Water Resource Sustainability (\$1,600 x 5.01 acre feet of demand)		\$ <u>8,016</u>
22	TOTAL FEES DUE (lines 17+18+19+20)		\$ <u>50,372</u>

Project: Bluewave Carwash

Applicant: BW Sparks LLC - Louis Tuong **Quote date:** 3/5/2019

Phone: 415-747-3040 **Tech contact:** Eden 775-834-8053

APN: 027-041-03 **Project No:** 19-6682

Remarks: Storage, Treatment, Supply and Feeder Main fees calculated on 5.01 acre feet of demand

Fee quotes are valid only within 15 calendar days of Quote Date.

- A. GENERAL PROVISIONS**
- THE WORK SHALL CONSIST OF FURNISHING LABOR, EQUIPMENT, AND MATERIALS TO PROVIDE THE COMPLETE INTEGRATED AND PROPER FUNCTIONING SYSTEMS AS SHOWN ON THE DRAWINGS.
 - SCOPE OF WORK INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, INSTALLING AND TERMINATING PER THESE DRAWINGS, AND EQUIPMENT MANUFACTURERS' INSTALLATION MANUALS.
 - THE GENERAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES SO AS TO AVOID INTERFERENCE.
 - THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL LAYOUT OF PLUMBING SYSTEMS. FIELD VERIFICATIONS OF DIMENSIONS IS DIRECTED.
 - SECURE PERMITS AND INSPECTIONS REQUIRED BY STATE AND LOCAL LAWS AND ORDINANCES.
 - UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER CERTIFICATES OF FINAL INSPECTIONS AND APPROVALS FROM AUTHORITIES HAVING JURISDICTION.
 - ALL WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
- 1.0 DESCRIPTION**
- THE INTENT OF THE PLANS AND SPECIFICATIONS IS TO OBTAIN COMPLETE SYSTEMS TESTED, ADJUSTED AND READY FOR OPERATION.
 - CHECK, VERIFY AND COORDINATE THE INSTALLATION WITH THE WORK OF OTHER TRADES, INCLUDE MODIFICATIONS, RELOCATIONS, OR ADJUSTMENTS NECESSARY TO COMPLETE WORK OR TO AVOID INTERFERENCES.
- 1.1 RECORD DRAWINGS**
MAINTAIN AND PROVIDE, ON REQUEST, COMPLETE UP-TO-DATE RECORD DRAWINGS.
- 1.2 GUARANTEE**
GUARANTEE FOR ONE YEAR AFTER OWNER ACCEPTANCE ALL MATERIALS, EQUIPMENT AND WORKMANSHIP, REPAIR, REPLACE OR ALTER SYSTEMS FOUND DEFECTIVE, RESTORE WORK DISTURBED WHICH IS GUARANTEED UNDER CONTRACT.
- 1.3 CERTIFICATES AND INSPECTIONS**
OBTAIN AND PAY FOR ALL REQUIRED INSTALLATION INSPECTIONS AND DELIVER CERTIFICATES APPROVING INSTALLATION TO THE OWNER.
- 1.4 UTILITY SERVICE**
DETERMINE UTILITY REQUIREMENTS, INCLUDING TEMPORARY, AND INCLUDE ALL COSTS.
- 1.5 SHOP DRAWINGS**
SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT AND SYSTEMS.
- 1.6 EQUIPMENT ACCESS**
INSTALL ALL WORK TO PERMIT ACCESS TO EQUIPMENT FOR MAINTENANCE.
- 1.7 CUTTING AND PATCHING**
ALL CUTTING AND PATCHING IS BY THIS CONTRACTOR INCLUDING NECESSARY MATERIALS REQUIRED, UNLESS OTHERWISE NOTED.
- 1.8 HOUSEKEEPING AND CLEANUP**
PERIODICALLY REMOVE WASTE MATERIALS AND LEAVE AREAS OF WORK ROOM CLEAN.
- 2.0 PLUMBING SYSTEMS**
- 2.1 PROHIBITED LOCATIONS**
WATER CARRYING PIPE SHALL NOT BE INSTALLED OVER SWITCH GEAR OR ELECTRICAL EQUIPMENT.
- 2.2 PROTECTIVE CHASES**
- PIPE AND FITTINGS
- AROV AND FLOW GRADE: SCHEDULE-40 PVC DWV CONFORMING TO ASTM D2665-82.

- 2.3 WATER DISTRIBUTION**
- A. PIPE AND FITTINGS**
COPPER TUBE, TYPE-K, BELOW GROUND. TYPE-L ABOVE GROUND, WROUGHT COPPER OR BRONZE SWEAT FITTINGS WITH LEAD FREE SOLDER.
COPPER PIPING SHALL NOT COME IN CONTACT WITH CONCRETE. PROVIDE INSULATING MATERIAL BETWEEN THE PIPE AND CONCRETE AT ALL REQUIRED LOCATIONS.
- B. VALVES**
- BALL VALVES TWO INCHES (2") AND SMALLER BY**
ML WINKEL (OR APPROVED EQUAL) MODEL 48A-150 RATED AT 150 SWP, 600 CMP. BODY OF ASTM B-584 BRONZE WITH CHROME PLATED ASTM B-16 BRASS BALL WITH GLASS REINFORCED PIPE SEALS AND STERN SEAL FULL PORT FLOW AND ADJUSTABLE PACKING NUT.
 - GATE VALVES TWO INCHES (2") AND SMALLER: NRS, MSS**
SP-80: CLASS 125 (125 SWP/200 CMP). BODY BONNET AND STEM OF ASTM B-62 BRONZE, THREADED ENDS TO ANSI B1.20.1, SOLDER ENDS TO ANSI B16.18, SOLID WEDGE DISC, GLAND PACKED WITH NON-ASBESTOS PACKING AND MALEABLE IRON HANDWHEEL.
 - GATE VALVES TWO AND ONE-HALF INCHES (2-1/2") AND LARGER:** NRS, MSS SP-70; CLASS 125 (125 SWP/200 CMP). BODY AND BONNET OF ASTM A126 CLASS B CAST IRON, ASTM B-18 BRASS STERN AND ASTM B-62 BRONZE SEAL AND DISC FACE. FLANGED ENDS TO ANSI B16.1. NON-ASBESTOS PACKING.
- C. DISSIMILAR METALS**
INSTALL APPROVED DIELECTRIC UNIONS BETWEEN ALL CONNECTIONS OF DISSIMILAR METALS.
- 2.4 CAR WASH CHASE WAY, DRAINS AND SUPPLY LINES**
- A. RECLAMATION DRAINAGE PIPE, SECTION LINES AND OZONE TREATMENT LINES AND FITTINGS.**
- (IF PERMITTED BY LOCAL OR APPLICABLE CODES) ALL RECLAIM DRAINAGE LINES, SUCTION LINES, OZONE TREATMENT LINES AND RELATED FITTINGS SHALL BE SCHEDULE-80 POLYVINYL CHLORIDE (PVC) PIPING CONFORMING TO ASTM D-1785-B3.
 - MECHANICAL ENGINEER TO VERIFY LOCAL OR APPLICABLE CODES AND SPECIFY ALTERNATE MATERIAL IF PVC IS NOT PERMITTED.
- 2.5 PNEUMATIC LINES**
- A. PNEUMATIC SUPPLY LINES**
- ALL PNEUMATIC SUPPLY LINES SHALL BE TYPE-K COPPER TUBE WITH WROUGHT COPPER OR BRONZE SWEAT FITTINGS ABOVE GRADE. NO FITTINGS SHALL BE ALLOWED BELOW GRADE.
 - ALL PNEUMATIC SUPPLY LINES BELOW GRADE SHALL BE ENCASED IN SCHEDULE-40 CHASEWAYS.
- 2.6 HYDRAULIC HOSE**
- A. PIPE AND FITTINGS**
- ALL HYDRAULIC HOSE SHALL BE SAE-100R7 BY SYNFLEX (OR APPROVED EQUAL) WITH 2,000 PSI WORKING PRESSURE; 10,000 PSI BURST PRESSURE.
 - ALL HYDRAULIC SUPPLY LINES BELOW GRADE SHALL BE ENCASED IN SCHEDULE-40 PVC CHASEWAYS.
- 2.7 PRESSURE TEST**
LEAVE UNCOVERED AND UNCONCEALED ALL WATER DISTRIBUTION PIPING UNTIL IT HAS TESTED AND APPROVED. EXPOSE ALL SUCH WORK FOR TESTING THAT HAS BEEN COVERED OR CONCEALED BEFORE IT HAS BEEN TESTED AND APPROVED.
CAP AND SUBJECT THE PIPING SYSTEM TO A STATIC WATER PRESSURE OF 150 PSIG WITHOUT EXCEEDING THE PRESSURE RATING OF THE PIPING SYSTEM MATERIALS. ISOLATE THE TEST SOURCE AND ALLOW TO STAND FOR A PERIOD OF FOUR HOURS. LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS WHICH MUST BE REPAIRED. REPAIR ALL LEAKS AND DEFECTS USING NEW MATERIAL AND RETEST SYSTEM OR PORTION THEREOF UNTIL SATISFACTORY RESULTS ARE OBTAINED.
TESTING REQUIREMENTS ARE MINIMUM AND ARE NOT INTENDED TO BE LIMITING WHERE ADDITIONAL TESTING METHODS ARE REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

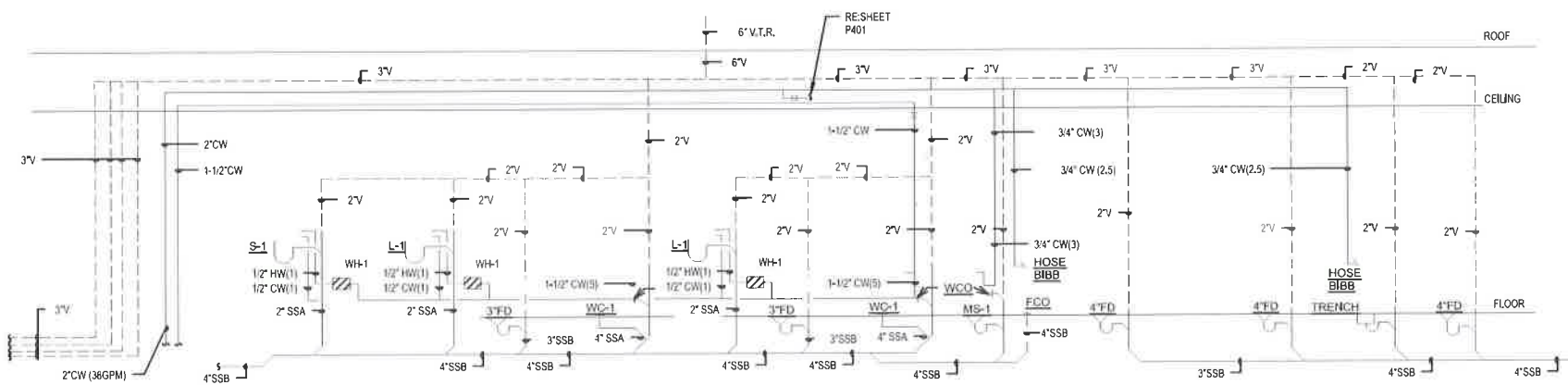
WASH BAY EQUIPMENT - LAYOUT SCHEDULE			
ITEM #	EQUIPMENT DESCRIPTION	MODEL	NOTES-L1
01	CORRELATOR	XR120	
02	CONVEYOR	XR1000	
03	ROLLER UP TAPE SWITCH		FOR VEHICLE DETECTION
04	TAPE SWITCH FOR GTA'S		FOR VEHICLE DETECTION
05	DOUBLE PHOTO EYES (DS & PS)	IR-110-2	VEHICLE DETECTOR
06	VERSA ARCH WITH DUAL FOAMING MANFOLDS	RW-11W-2	WITH FOAMNATOR & LIGHT BAR KIT
07	CHEMICAL TIRE APPLICATOR - STAINLESS STEEL	CTA	WHEEL RITE PRECISION CTA
08	MOTOR CITY MITTER	F2B	BY OTHERS
09	SINGLE BANANA FOAMERS - SQUARE MOUNTS		
10	LOW SIDE WASHER WITH 30" CORE (DS & PS)	RS400	
11	SUPERFLEX WRAP-AROUND (PS)	RS701	WITH QUAD PAK BASE PLATE OPTION
12	LOW PRESSURE UNDERCARRIAGE SPRAY	RW-100	
13	CHEMICAL TIRE APPLICATOR - STAINLESS STEEL	CTA	WHEEL RITE PRECISION CTA
14	SINGLE BANANA FOAMERS - SQUARE MOUNTS		
15	SUPERFLEX WRAP-AROUND (DS)	RS701	WITH QUAD PAK BASE PLATE OPTION
16	RAIN BAR - CEILING MOUNTED	RW112	
17	VERSA ARCH WITH SINGLE NON-FOAMING MANFOLD	RW-11W-1	WITH AQUAFOAMER & LIGHT BAR KIT - LAVA APPLICATOR
18	MOTOR CITY MITTER	S2S	BY OTHERS
19	MAGNUM WHEEL BOSS - FOAM BRUSH - (DS & PS)	MW2000	
20	RAIN BAR - ARCH MOUNTED	RW112	
21	VERSA ARCH WITH FOAMING / NON-FOAMING MANFOLDS	RW-11W-2	WITH LIGHT BAR KIT
22	WHEEL BLASTER - 6 NOZZLES FIXED	WB-600	
23	VERSA ARCH WITH DUAL NON-FOAMING MANFOLDS	RW-11W-2	WITH LIGHT BAR KIT
24	GLOSS BOSS (DS & PS)	MT2500	
25	TECH 21 DRYERS WITH X-WIDE PROBUILD ARCH		BY PRODUCERS
26	TECH 21 DRYERS WITH X-WIDE PROBUILD ARCH		BY PRODUCERS

MECHANICAL ROOM EQUIPMENT - LAYOUT SCHEDULE			
ITEM #	EQUIPMENT DESCRIPTION	MODEL	NOTES-L1
A	MAIN DISTRIBUTION PANEL	MDP	
B	SECONDARY DISTRIBUTION TRANSFORMER	STX	
C	SECONDARY DISTRIBUTION PANEL	SDP	
D	MASTER CONTROL CENTER - 12W-72-18D	MCC	
E	POWERLOCK AIR PANEL / GLOSS BOSS CHEMICAL PANEL		
F	HYDRAULIC POWERPACK		
G	HYDRAULIC POWERPACK		
H	MAGNUM HIGH PRESSURE PUMP 7.5HP & TANK	M1000R	
I	MAGNUM HIGH PRESSURE TANK		
J	AIR DISTRIBUTION PANEL		
K	WATER DISTRIBUTION PANEL		
L	HYDRAFLEX CHEMICAL PANELS X2	MD5A	2X 20GP
M	HYDRAFLEX CHEMICAL PUMPS X2 WITH SPARE		
N	CHEMICAL MONITORING SYSTEM	MDP	
O	DOSATRON CHEMICAL PANEL		
P	HYDRAFUSE - SINGLE PUMP - FOAMING		
Q	WATER SOFTENER	CP218	
R	AIR COMPRESSOR - DUAL VERTICAL		BY OTHERS
S	AIR DRYER		BY OTHERS
T	RECLAIM SYSTEM	PW350-5M120	
U	AQUA LINK	PWACS	
V	R.O. REJECT TANK		
W	R.O. STORAGE TANK		
X	R.O. DELIVERY REJECT PUMP		

3 PLUMBING EQUIPMENT SCHEDULE
N.T.S.

1 PLUMBING SPECIFICATION
N.T.S.

Water Supply Fixture Units WSFU Table A 103.1						
Project: BLUE WAVE		Date:				
Project Number:		Prepared By:				
Fixture	Occupa...	Type of Supply	Fixture	Fixture Units	Total Fixture Units	Minimum Pipe Size
Water Closet	Public	Flush Valve	2	5	10	1-1/2"
Lavatory	Public		2	1	2	1/2"
Urinal	Public	Flush Valve	1	4	4	3/4"
Hand Slnk	Public		1	1.5	1.5	1/2"
Mop Slnk	Public		1	3	3	3/4"
Wall Hydrant / Hose Blbb	Public		4	2.5+1	5.5	3/4"
				TOTAL FU	26	
CAR WASH EQUIPMENT USES RECLAIMED WATER				TOTAL GPM	38	
				WTR ENTRY...	2"	



2 PLUMBING RISER DIAGRAM
N.T.S.



Stantec
Archllcture Inc.
1383 N. MCDOWELL BLVD, SUITE 250
PETALUMA, CA 94954
Tel. (707) 765-1660 Fax (707) 765-9908

ROBISON
ENGINEERING, INC

19431 40TH AVE W, SUITE 302
LYNNWOOD WA 98036
206-564-3343 Fx

CONTACT: MARK MANGIACIOT



05/10/19

BLUEWAVE
SPARKS, NV

N. McCARRAN BLVD. AND WEDEKIND RD.

1 Building Commons 02/20/2019

Issues

Project Number 222310634

Drawn By MMM

Checked By REI

P304
PLUMBING
SPECIFICATIONS

BLUEWAVE EXPRESS

ESTIMATED WATER USAGE ANALYSIS

Prepared For: BLUEWAVE EXPRESS
 Location: _____
 Prepared By: _____
 Date: _____

APPLICATION NUMBER	FUNCTION	WATER TYPE	JET			USE FACTOR	FLOW RATE PER MIN	RECLAIM WATER/MIN	FRESH WATER/MIN	WELL WATER/MIN	R.O. REJECT
			SIZE	QUANTITY	GPM/JET						
1	FOAMING CTA APPLICATOR	fresh	SH	2	0.75	25.00%	1.5		1.5		
2	FIRST SOAP ARCH	fresh	KPVC15	4	0.5	100.00%	2		2		
3	UV PROTECTANT	fresh	SH	3	3.25	100.00%	9.75		9.75		
4	ROCKER 21	RECLAIM	4550	4	0.5	100.00%	2	2	0		
5	1ST WRAP FOAMER	fresh	SH	2	3.5	100.00%	3.5		3.5		
6	1ST WRAP WATER	RECLAIM	4010	4	1	100.00%	4	4	0		
7	2ND WRAP FOAMER	N/A					0		0		
8	2ND WRAP WATER	N/A					0		0		
9	FIRST MITTER 901 WATER	RECLAIM	4010	4	4	100.00%	6	6	0		
10	OMNI TOP	RO Reject	WJ02	10	1	100.00%	10		0		10
11	OMNI SIDES	Reclaim	WJ02	10	1	100.00%	10	10	0		
12	HOT WAX MACHINE	fresh	DOSATRON	2	7	50.00%	14		14		
13	ROCKER 28	fresh	0.5	4	0.5	50.00%	2	1	0		
14	2ND MITTER 807 WATER	fresh	0.5	4	0.5	50.00%	2	1			
15	FINEL RINSE					0.00%			0		
16	POLY GLAZE PROTECTANT	fresh	KPVC15	2	1	100.00%	2		2		
17	DRAYING AID	fresh	6580	10	0.8	100.00%	8		8		
18	RO RINSE	RO	Rain Bar	3	1.5	100.00%	6		3		
19	BUG OFF	fresh	6540	1	0.5	100.00%	0.5		0.2		
20	Window Washer	RO	4010	6	4	100.00%	24				2
21							0				
22							0				
23							0				
24							0				
25							0				
26							0				
27							0				
28							0				
29							0				
30							0				
31							0				

TOTAL 105.75 24 43.95 0 12

AVERAGE APPLICATION TIME IN SECONDS: FACTOR: 56.67% 56.67% 56.67% 56.67%
 (BASED ON 80 CPH CHAIN SPEED)
 AVERAGE GALLONS USED PER CAR: 13.60 24.91 0.00 6.80
 AVERAGE CARS PER MONTH: 3100 3100 3100
 ESTIMATED GALLONS PER MONTH: 42160 77206 0 21080

AVERAGE EVAPORATION AND CARRY OUT PER CAR
 TOTAL WATER USES
 Gallons Per Car (GPC) 45.31 13.60 31.71 4 27.71
 ESTIMATED AVERAGE RECLAIMED PORTION: MONTHLY TOT 140,446 42,160 98,286 12,400 85,886

June 19, 2019

Community Services Department; APN 027-041-03

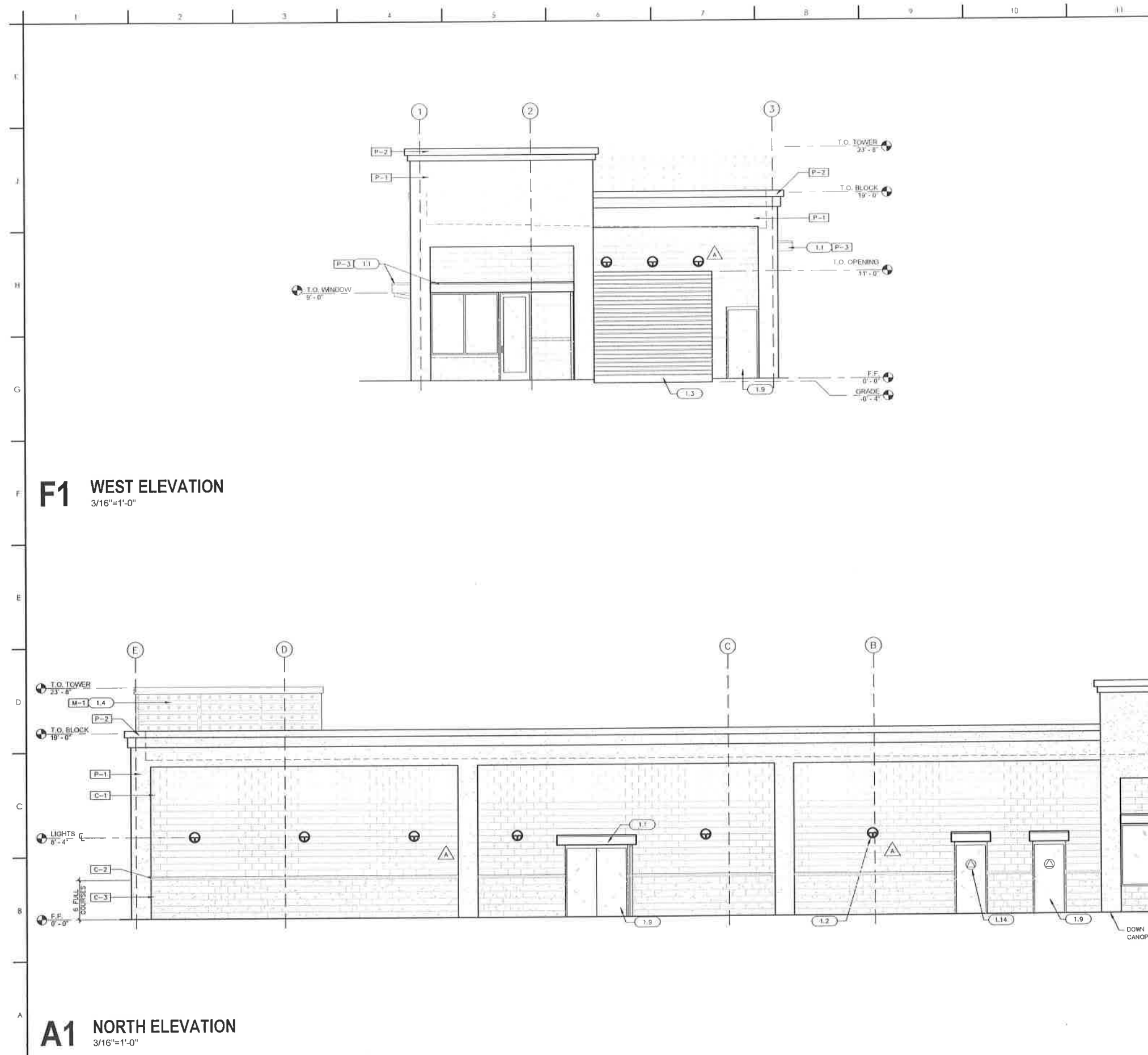
Appendix C **PROJECT PLANS**

Selected Architectural Plans

Civil Plans

Landscaping Plans

Signage Plans



F1 WEST ELEVATION
3/16"=1'-0"

A1 NORTH ELEVATION
3/16"=1'-0"

EXTERIOR COLOR LEGEND

MARK	COLOR	MATERIAL	MANUF.
P-1	DRIFT WOOD	STUCCO	BENJAMIN MOORE
P-2	SIERRA SPRUCE	STUCCO	BENJAMIN MOORE
P-3	BLUE		
C-1	320	GROUND FACE CMU	BASALITE
C-2	684	SMOOTH FACE CMU	BASALITE
C-3	336	SPLIT FACE CMU	BASALITE
M-1	A23	CORRUGATED, PERFORATED METAL PANEL SYSTEM	ATAS INTERNATIONAL

ELEVATION KEY NOTES

- 1.1 PRE-ENGINEERED ALUM. CANOPY, 4'-0" DEEP (TYP.)
- 1.2 SCHEDULED WALL MOUNTED LIGHT FIXTURE
- 1.3 PRE-FINISHED ROLLING OVERHEAD DOOR
- 1.4 CORRUGATED PERFORATED METAL PANEL SYSTEM, PROVIDE 4" FRAMING GRIDS AT MIN. 48" O.C. COORDINATE W/ GROUTED CMU CELLS. GAUGE TO BE SPECIFIED AND ENGINEERED BY FRAMING SUBCONTRACTOR & COORDINATED WITH METAL PANEL MFR.
- 1.5 DOWN SPOUT, PAINT TO MATCH CMU #320
- 1.6 OVERFLOW SCUPPER WILL BE ON THE SIDES OF CONDUCTOR HEAD, PAINT TO MATCH CMU #320
- 1.7 METAL TRELLIS, SEE DETAIL A3/A-701
- 1.8 ALUM. STOREFRONT SYSTEM W/ 1" INSULATED CLEAR TEMPERED GLAZING
- 1.9 PAINTED HM DOOR, PAINT TO MATCH C-3
- 1.10 GAMCO STAINLESS STEEL TRANSACTION SHELF, 18"x24" STAINLESS STEEL
- 1.11 BLUEWAVE SIGN, FRAMING & ATTACHMENTS BY SIGN MFR. G.C. TO COORDINATE W/ METAL PANEL INSTALLATION
- 1.12 LIGHT FIXTURE BEYOND
- 1.13 BUILDING ADDRESS, 6" NUMERALS, ILLUMINATED
- 1.14 ACCESSIBLE UNISEX RESTROOM SIGNAGE, SEE 17/G-102B
- 1.15 CEMENT PLASTER, SEE ELEVATION NOTE 1
- 1.16 CONTROL JOINT, SEE DETAIL 612/A-702
- 1.17 PAINT CONCRETE STEM WALL TO MATCH C-3 CMU

ELEVATION NOTES

1. CEMENT PLASTER SHALL BE 7/8" THICKNESS OVER EXPANDED METAL LATH ATTACHED WITH FASTENERS PER CBC SECTION 2512, OVER WEATHER BARRIER. WEATHER BARRIER TO BE TYVEK COMMERCIAL BUILDING WRAP INSTALLED PER THE MANUFACTURER WITH TAPED COMMERCIAL BUILDING WRAP INSTALLED PER THE MANUFACTURER WITH TAPED SEAMS AND WITH EDGES SEALED TO FLASHING WITH DUPONT STRAIGHT FLASH SELF ADHERING FLASHING. PLASTER FINISH TO BE MEDIUM DASHED FINISH.

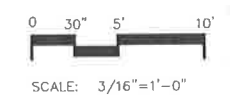


BLUEWAVE SPARKS, NV

N. McCARRAN BLVD. AND WEDEKIND RD.

REVISION	DATE
CLIENT REVISED	
CLIENT REVISIONS	05.18.2019
AGENCY ISSUE REVISED	
PLAN CHECK REVIEW	05.18.2019
ISSUED FOR PERMITS	12.19.2018
ISSUED / REVISED	
Project Number	222310634
Drawn By	RAM
Checked By	GMS

A300
BUILDING ELEVATIONS



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EXTERIOR COLOR LEGEND

MARK	COLOR	MATERIAL	MANUF.
P-1	DRIFT WOOD	STUCCO	BENJAMIN MOORE
P-2	SIERRA SPRUCE	STUCCO	BENJAMIN MOORE
P-3	BLUE		
C-1	320	GROUND FACE CMU	BASALITE
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M-1	A23	CORRUGATED, PERFORATED METAL PANEL SYSTEM	ATAS INTERNATIONAL

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BLUEWAVE
SPARKS, NV

N. McCARRAN BLVD. AND
WEDEKIND RD.

CLIENT REVISED

CLIENT REVISIONS 06.18.2019

AGENCY ISSUE /REVISED

PLAN CHECK REVISION 05.18.2019

ISSUED FOR PERM 12.19.2018

ISSUED /REVISED

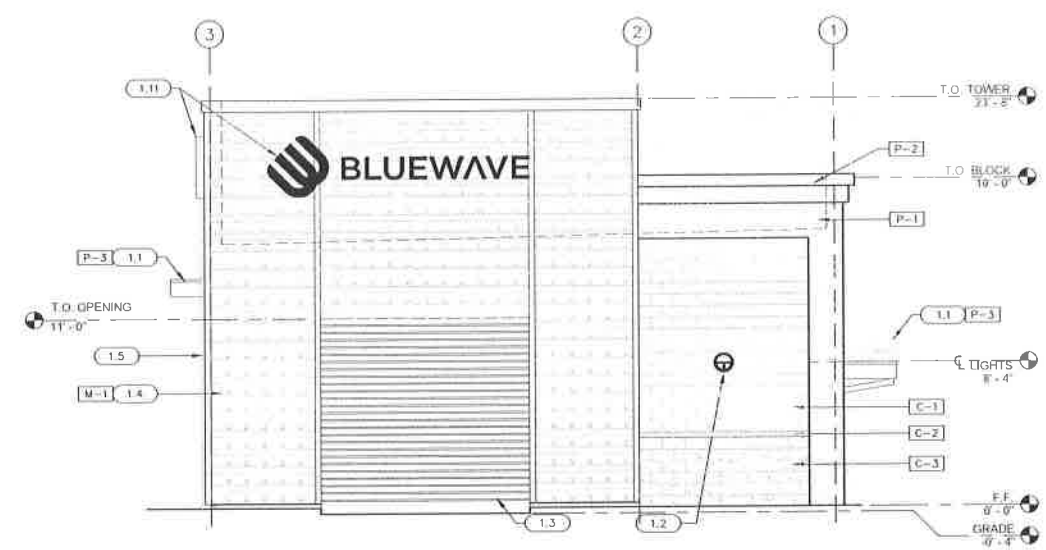
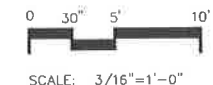
Project Number 222310634

Drawn By RAM

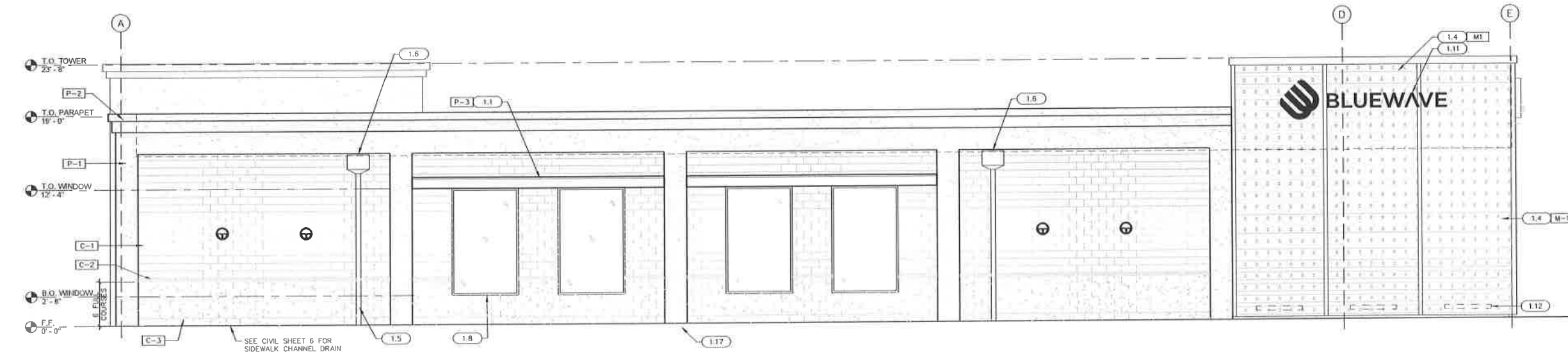
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A301

BUILDING ELEVATIONS



F1 EAST ELEVATION
3/16"=1'-0"



A1 SOUTH ELEVATION
3/16"=1'-0"

Color Legend:

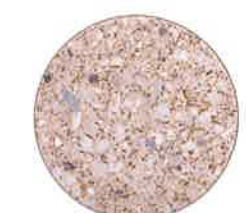
Benjamin Moore
#2107-40 "Drift Wood"



Benjamin Moore
#2108-20 "Sierra Spruce"



Alpolic DYB Blue



Basalite
Ground Face #320



Basalite
Smooth Face #684



Basalite
Ground Face #336



Corrugated Perforated
Metal Panel System



North Elevation



West Elevation

Color Legend:

Benjamin Moore #2107-40 "Drift Wood"



Benjamin Moore #2108-20 "Sierra Spruce"



Alpolic DYB Blue



Basalite Ground Face #320



Basalite Smooth Face #684



Basalite Ground Face #336



Corrugated Perforated Metal Panel System



South Elevation



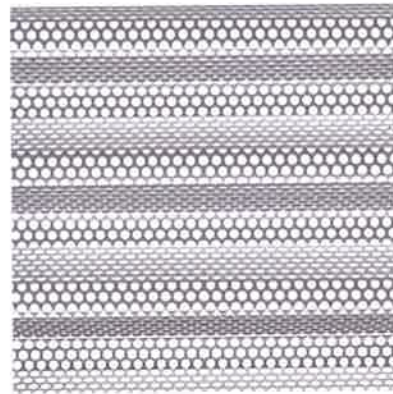
East Elevation



BlueWave
N. McCarran Blvd. and Wedekind Rd.
Sparks, NV

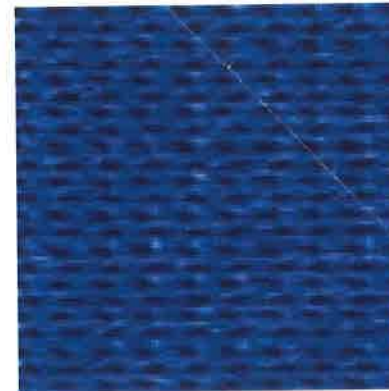


METAL



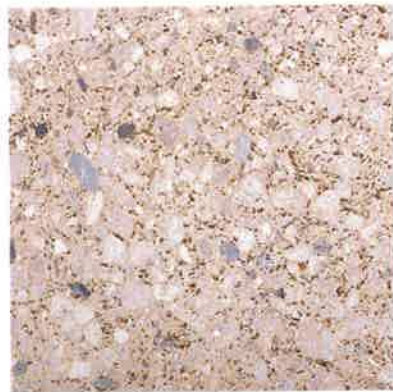
CORRUGATED PERFORATED
METAL PANEL SYSTEM

AWNING



SYNTHESIS COMMERCIAL 95
"AQUATIC BLUE" #444938

CMU BLOCK



BASALITE GROUND FACE #320

PAINT



ALPOLIC DYB BLUE



BASALITE SPLIT FACE #336

<p>COLOR MATERIAL BOARD</p>	<p>BLUEWAVE ELK GROVE</p> <p>9660 EAST STOCKTON BLVD. ELK GROVE, CA 95624</p>	 <p>1201 J STREET, STUDIO 100 SACRAMENTO, CA 95814-2927 Tel. (916) 442-3230 Fax (916) 422-3249</p>	
------------------------------------	--	---	---



BLUEWAVE

BLUEWAVE SPARKS, NV

N. McCARRAN BLVD. AND WEDEKIND RD.
SPARKS, NV

VICINITY MAP



SHEET INDEX

CVR	COVER SHEET
A001	SITE PLAN
A201	FLOOR PLAN
A300	BUILDING ELEVATIONS
A301	BUILDING ELEVATIONS

PROJECT DESCRIPTION

CONSTRUCTION OF A NEW 4,512 S.F. CMU AUTOMATIC CAR WASH BUILDING WITH (2) VACUUM CANOPIES, VACUUM EQUIPMENT ENCLOSURES, TRASH ENCLOSURE AND SITE IMPROVEMENTS.

SITE INFORMATION AND CODE ANALYSIS

APN:	027-041-03
SITE AREA:	70,093 SF (1.61 ACRES)
EXISTING ZONING:	PO PROFESSIONAL OFFICE DISTRICT
PROPOSED LAND USE:	FULL-SERVICE CAR WASH
PARKING REQUIRED:	1 PER 1,500 SF (3 REQUIRED)
BUILDING TYPE:	V-B
OCCUPANCY:	B
BUILDING SIZE:	4,512 SF
NUMBER OF STORIES:	ONE
BUILDING HEIGHT:	23'-8"
FIRE ALARM:	NO
FIRE SPRINKLER:	NO

APPLICABLE CODES:
 2012 INTERNATIONAL BUILDING CODE
 2012 INTERNATIONAL MECHANICAL CODE
 2012 UNIFORM MECHANICAL CODE
 2012 UNIFORM PLUMBING CODE
 2012 INTERNATIONAL ENERGY CONSERVATION CODE
 2012 INTERNATIONAL FUEL GAS CODE
 2011 NATIONAL ELECTRICAL CODE
 2012 NORTHERN NEVADA AMENDMENTS
 2015 NORTHERN NEVADA AMENDMENTS
 (APPLIES TO 2012 INTENTIONAL ENERGY CONSERVATION CODE)

PROJECT CONTACTS

APPLICANT
BLUEWAVE EXPRESS DEVELOPMENT I, LLC
 6630 ROXBURGH DRIVE
 HOUSTON, TX 77041
 CONTACT: NEIL HORNE
 (503) 686-4711

ARCHITECT
STANTEC ARCHITECTURE INC.
 1383 N. MCDOWELL BLVD SUITE 250
 PETALUMA, CA 94954
 CONTACT: GARY SEMLING
 (707) 765-1660 PHONE (EXT. 722)
 (707) 765-9908 FAX

CIVIL ENGINEER
STANTEC
 555 CAPITOL MALL SUITE 650
 SACRAMENTO, CA 95814
 CONTACT: JOSEPH SAMAHA
 (916) 669-5965

CONDITIONAL USE PERMIT

CONDITIONS OF APPROVAL
 PCN16041- CONDITIONAL USE PERMIT
 4600 WEDEKIND ROAD

1. APPROVAL: THIS CONDITIONAL USE PERMIT IS APPROVED AS SUBMITTED AND CONDITIONED, ANY SUBSTANTIAL CHANGES TO THE SITE PLAN OR USE SHALL REQUIRE REVIEW AND AMENDMENT OF THIS CONDITIONAL USE PERMIT.
2. APPROVAL OF MCCARRAN ACCESS: THE SITE PLAN ASSOCIATED WITH THIS CONDITIONAL USE PERMIT IS APPROVED AS SUBMITTED. THE ENTRANCE TO THE SITE FROM MCCARRAN BOULEVARD SHALL BE TO THE APPROVAL OF THE NEVADA DEPARTMENT OF TRANSPORTATION DISTRICT ENGINEER. ALL CONDITIONS OF APPROVAL FOR THIS ENTRANCE SHALL BE ENFORCED BY THE NEVADA DEPARTMENT OF TRANSPORTATION.
3. EXPIRATION DATE: THE CONDITIONAL USE PERMIT SHALL COMPLY WITH SPARKS MUNICIPAL CODE 20.05.08.
4. LANDSCAPING: THE DEVELOPER SHALL SUBMIT A LANDSCAPING & IRRIGATION PLAN FOR THE SITE IN CONFORMANCE WITH THE SPARKS MUNICIPAL CODE CHAPTER 20.04.006 FOR REVIEW AND APPROVAL BY THE ADMINISTRATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. APPROVED PLANS PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY FOR THE BUILDING. THESE PLANS SHALL REFLECT THE REQUIREMENTS OF THE SPARKS MUNICIPAL CODE CHAPTER 20.04.006.
5. PROJECT CONTACT: THE DEVELOPER SHALL DESIGNATE TO THE ADMINISTRATOR A PROJECT CONTACT PERSON RESPONSIBLE/ AUTHORIZED TO CORRECT PROBLEMS REGARDING THE PROJECT ON A 24-HOUR/7-DAY A WEEK BASIS. THE DEVELOPER SHALL DESIGNATE THE PROJECT CONTACT PERSON TO THE ADMINISTRATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE PROJECT.
6. CONSTRUCTION HOURS: CONSTRUCTION HOURS SHALL BE LIMITED TO 7 AM-7PM MONDAY THROUGH FRIDAY AND 9AM-5PM SATURDAY. THERE SHALL BE NO CONSTRUCTION ON SUNDAY.
7. POSTING: CONSTRUCTION HOURS AND THE 24 HOUR CONTACT INFORMATION SHALL BE POSTED ON SITE DURING CONSTRUCTION OF THE PROJECT.



Stantec
 Architecture Inc.
 1383 N. MCDOWELL BLVD. SUITE 250
 PETALUMA, CA 94954
 Tel. (707) 765-1660 Fax (707) 765-9908

BLUEWAVE SPARKS, NV

N. McCARRAN BLVD. AND
WEDEKIND RD.

AGENCY ISSUE/REVISED

ISSUED FOR CUP 12.19.2018

ISSUED / REVISED

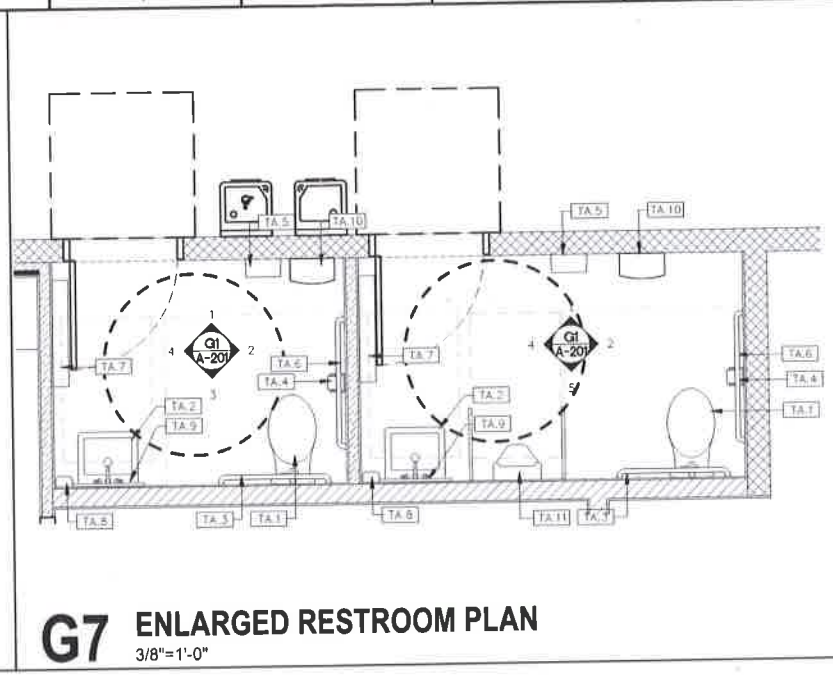
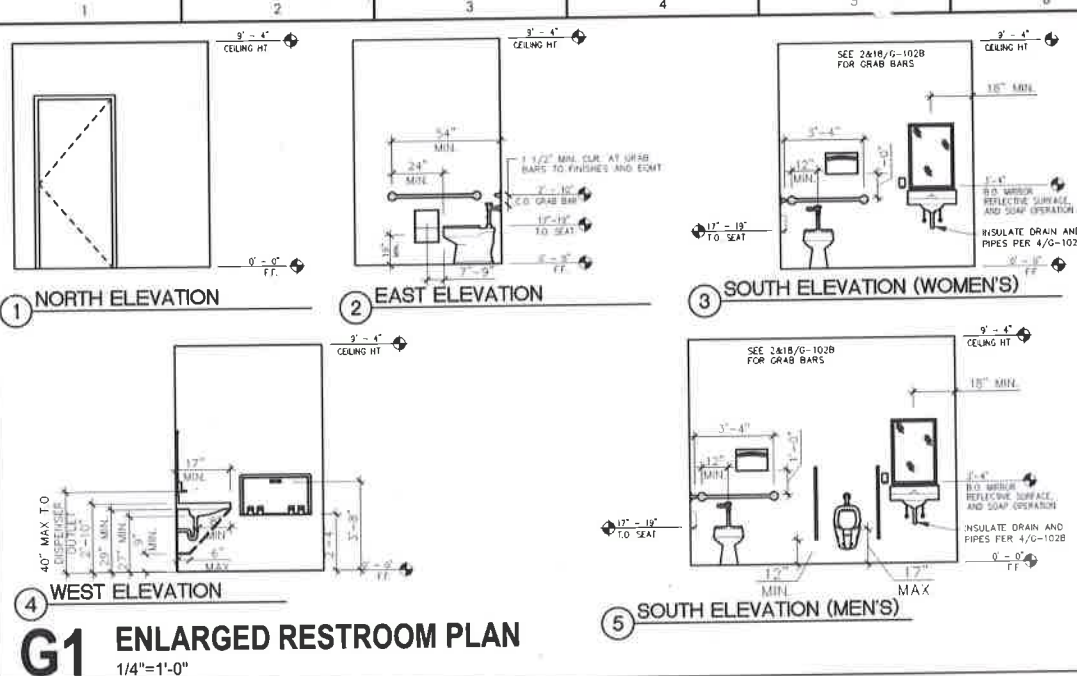
Project Number 222310634

Drawn By RAM

Checked By GMS

CVR

COVER SHEET



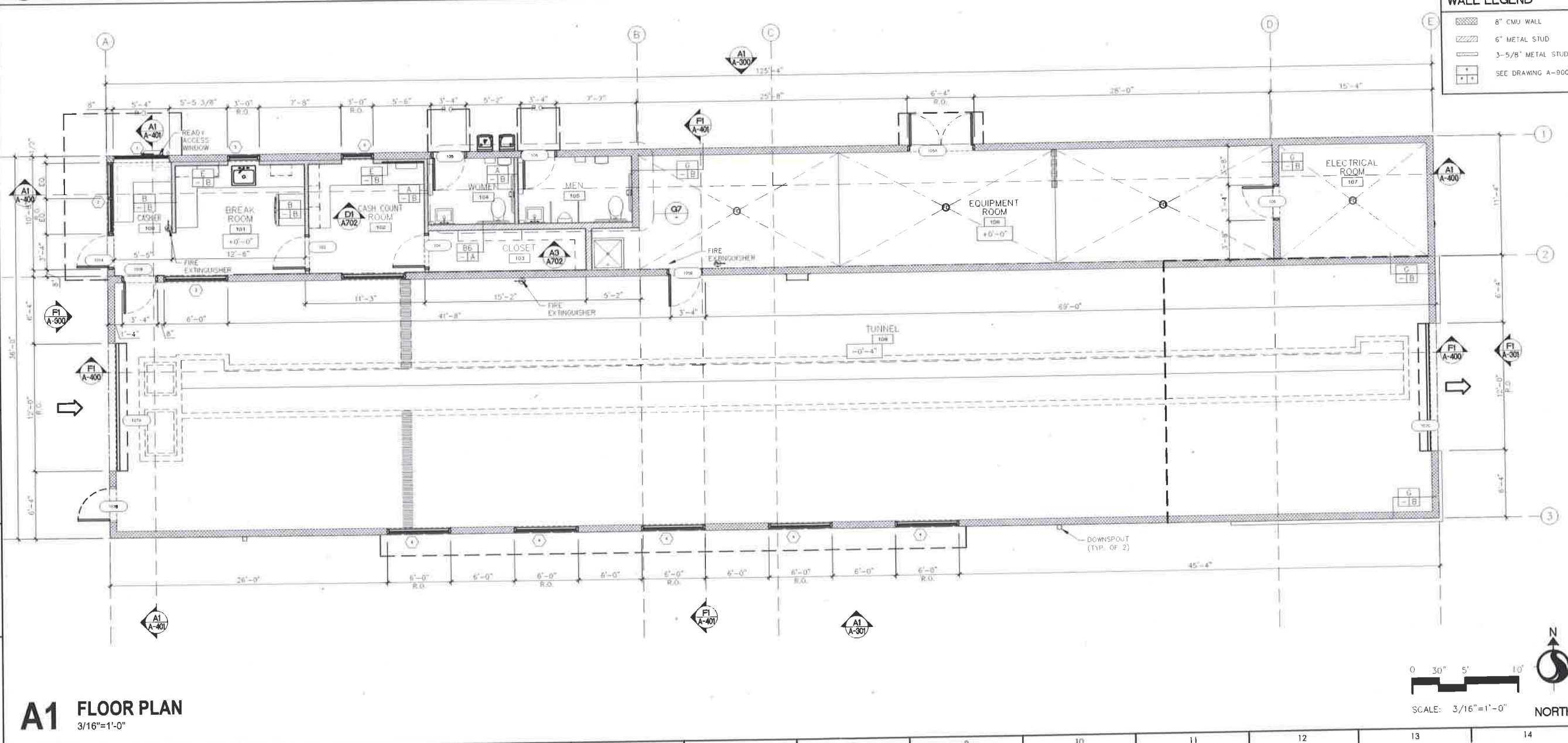
RESTROOM ACCESSORY SCHEDULE

TA.1 TOILET W/ FLUSH VALVE REFER TO PLUMBING DRAWINGS	TA.7 INFANT CHANGING TABLE KOALA BABY KARE (WAPER) CHANGER, MODEL # KB200-00
TA.2 LAVATORY W/ FAUCET, WRAP ALL PIPING WITH INSULATION REFER TO PLUMBING DRAWINGS	TA.8 SURFACE-MOUNTED-SOAP DISPENSER BOBRICK, CONTURA SERIES; MODEL #B-4112 OR APPROVED EQUAL
TA.3 GRAB BAR - 36" BOBRICK; MODEL #B-5806X36 OR APPROVED EQUAL	TA.9 CHANNLED MIRROR BOBRICK, MODEL #B-165 1830
TA.4 GRAB BAR - 42" BOBRICK, MODEL #B-5806X42 OR APPROVED EQUAL	TA.10 BOBRICK B277
TA.5 AIR DRYER DYSON AIRBLAD V, SPRAYED NICKEL FINISH	TA.11 URINAL REFER TO PLUMBING DRAWINGS
TA.6 SURFACE-MOUNTED TOILET PAPER DISPENSER BOBRICK, CONTURA SERIES; MULTI-ROLL TOILET TISSUE DISPENSER; MODEL #B-4288 OR APPROVED EQUAL	

- FLOOR PLAN NOTES**
- FLOOR AREAS ARE TO BE PREPARED FOR FINISH MATERIALS IN ACCORDANCE WITH MANUFACTURER'S SPECIFIC REQUIREMENTS. RESPONSIBILITY INCLUDES FLASH PATCHING TO LEVEL AND SMOOTH FLOOR TO 1" IN 20'-0" NON-CUMULATIVE AND 1/4" PER 10'-0" AT CRITICAL AREAS UNDER MILLWORK, FILES, SPECIAL FINISH MATERIALS, AND TRANSITIONS.
 - ALL PARTITIONS ARE TO BE PERPENDICULAR OR PARALLEL WITH EXTERIOR WINDOW WALL ELEMENTS, UNLESS NOTED OTHERWISE. CENTER PARTITIONS ON COLUMNS OR MULLIONS, UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE TO CENTERLINE OF PARTITIONS, UNLESS NOTED OTHERWISE.
 - ALL DOOR JAMBS ARE TO BE LOCATED 4" FROM AN INSIDE CORNER, UNLESS NOTED OTHERWISE.
 - ALL WOODWORK, BLOCKING, AND MOUNTED BOARDS SHALL BE FIRE-RETARDANT-TREATED FOR USE IN NON-COMBUSTIBLE CONSTRUCTION.
 - SEE ACCESSIBILITY DETAILS SHEETS G-102A & G-102B FOR PROPER HEIGHT AND GENERAL NOTES.
 - FOR DOOR AND WINDOW SCHEDULE, SEE SHT A-210.
 - FOR PARTITION TYPES, SEE SHT A-900.

BLUEWAVE SPARKS, NV

N. McCARRAN BLVD. AND WEDEKIND RD.



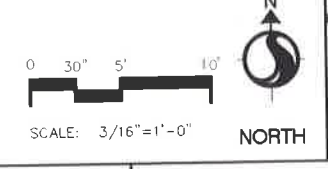
WALL LEGEND

[Pattern]	8" CMU WALL
[Pattern]	6" METAL STUD
[Pattern]	3-5/8" METAL STUD
[Symbol]	SEE DRAWING A-900

AGENCY ISSUE / REVISED

ISSUED FOR CUP	12.19.2018
ISSUED / REVISED	
Project Number	222310634
Drawn By	RAM
Checked By	GMS

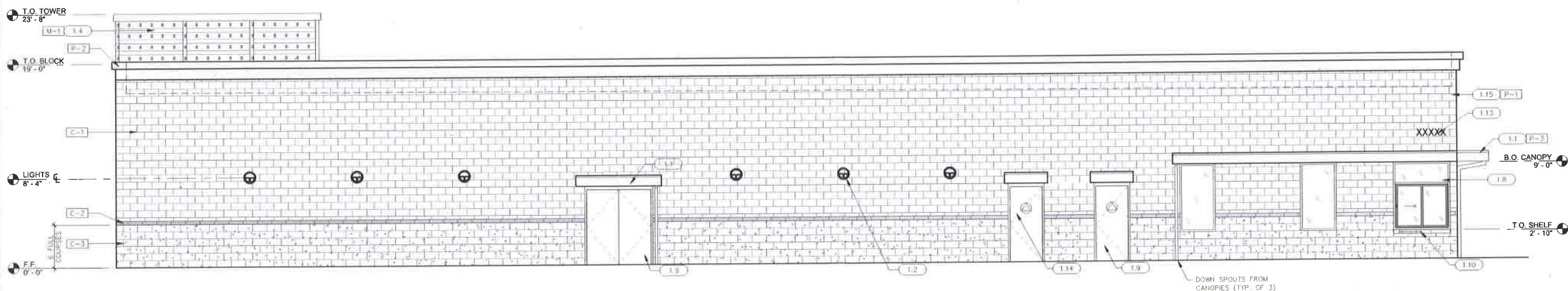
A201 FLOOR PLAN



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F1 WEST ELEVATION
3/16"=1'-0"



A1 NORTH ELEVATION
3/16"=1'-0"

EXTERIOR COLOR LEGEND

MARK	COLOR	MATERIAL	MANUF.
P-1	DRIFT WOOD	STUCCO	BENJAMIN MOORE
P-2	SIERRA SPRUCE	STUCCO	BENJAMIN MOORE
P-3	BLUE		
C-1	320	GROUND FACE CMU	BASALITE
C-2	684	SMOOTH FACE CMU	BASALITE
C-3	336	SPLIT FACE CMU	BASALITE
M-1	SILVER SMITH 23	CORRUGATED, PERFORATED METAL PANEL SYSTEM-A23	ATAS INTERNATIONAL

ELEVATION KEY NOTES

- 1.1 PRE-ENGINEERED ALUM. CANOPY, 4'-0" DEEP (TYP.)
- 1.2 SCHEDULED WALL MOUNTED LIGHT FIXTURE
- 1.3 PRE-FINISHED ROLLING OVERHEAD DOOR
- 1.4 CORRUGATED PERFORATED METAL PANEL SYSTEM, PROVIDE 4" FRAMING GIRTS AT MIN. 48" O.C. COORDINATE W/ GROUTED CMU CELLS. GAUGE TO BE SPECIFIED AND ENGINEERED BY FRAMING SUBCONTRACTOR & COORDINATED WITH METAL PANEL MFR.
- 1.5 DOWN SPOUT, PAINT TO MATCH CMU #320
- 1.6 OVERFLOW SCUPPER WILL BE ON THE SIDES OF CONDUCTOR HEAD. PAINT TO MATCH CMU #320
- 1.7 METAL TRELLIS, SEE DETAIL A3/A-701
- 1.8 ALUM. STOREFRONT SYSTEM W/ 1" INSULATED CLEAR TEMPERED GLAZING
- 1.9 PAINTED HM DOOR, PAINT TO MATCH C-3
- 1.10 GAMCO STAINLESS STEEL TRANSACTION SHELF, 18"x24" STAINLESS STEEL
- 1.11 BLUEWAVE SIGN, FRAMING & ATTACHMENTS BY SIGN MFR. G.C. TO COORDINATE W/ METAL PANEL INSTALLATION
- 1.12 LIGHT FIXTURE BEYOND
- 1.13 BUILDING ADDRESS, 6" NUMERALS, ILLUMINATED
- 1.14 ACCESSIBLE UNISEX RESTROOM SIGNAGE, SEE 17/G-102B
- 1.15 CEMENT PLASTER, SEE ELEVATION NOTE 1
- 1.16 CONTROL JOINT, SEE DETAIL 612/A-702
- 1.17 PAINT CONCRETE STEM WALL TO MATCH C-3 CMU

ELEVATION NOTES

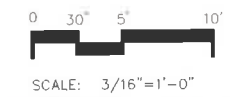
- 1 CEMENT PLASTER SHALL BE 7/8" THICKNESS OVER EXPANDED METAL LATH ATTACHED WITH FASTENERS PER CBC SECTION 2512, OVER WEATHER BARRIER. WEATHER BARRIER TO BE TY-TEK COMMERCIAL BUILDING WRAP INSTALLED PER THE MANUFACTURER WITH TAPED COMMERCIAL BUILDING WRAP INSTALLED PER THE MANUFACTURER WITH TAPED SEAMS AND WITH EDGES SEALED TO FLASHING WITH DUPONT STRAIGHT FLASH SELF ADHERING FLASHING. PLASTER FINISH TO BE MEDIUM DASHED FINISH.



BLUEWAVE SPARKS, NV
N. MCCARRAN BLVD. AND WEDEKIND RD.

AGENCY ISSUE / REVISED	
ISSUED FOR CUP	12.19.2018
ISSUED / REVISED	
Project Number	222310634
Drawn By	RAM
Checked By	GMS

A300
BUILDING ELEVATIONS



BLUE WAVE MCCARRAN

BW SPARKS LLC

SITE CIVIL IMPROVEMENTS PROJECT

4620 WEDEKIND RD, SPARKS 89431



6995 SIERRA CENTER PARKWAY
Reno, Nevada 89511
Tel. (775) 850-0777 Fax (775) 850-0787
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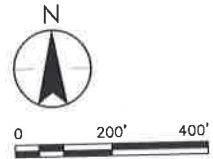


**BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS**

PLANS PREPARED AND SUBMITTED BY:

JAMES PRINGLE, PE
PROJECT ENGINEER

6995 SIERRA CENTER PARKWAY
RENO, NV 89511
(775) 850-0777



VICINITY MAP

SITE ADDRESS

4620 WEDEKIND RD, SPARKS, NV 89431
APN: 027-041-03

BW SPARKS LLC

6630 ROXBURGH DR.
SUITE 120
HOUSTON, TX 77041

MR. NEIL HORNE
DIRECTOR OF DEVELOPMENT
(281) 652-5455 EXT. 720

Client/Project
BLUE WAVE CAR WASH

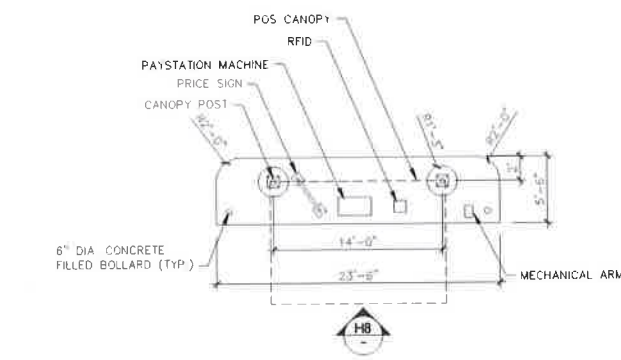
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

COVER SHEET

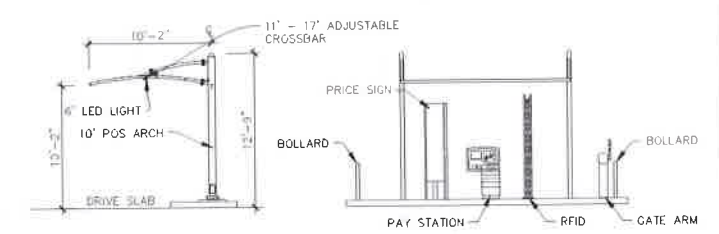
PERMIT SET	05/29/2019
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **C000**
Revision Sheet
0 1 of 24

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H4 PAYSTATION PLAN
1/8"=1'-0"



H8 PAYSTATION ELEVATION
1/8"=1'-0"

SITE INFORMATION

SITE AREA	70,093 SF (1.61 ACRES)
BUILDING	
RETAIL/OFFICE	613 S.F.
CAR WASH/UTILITY	3,892 S.F.
TOTAL	4,505 S.F.
CANOPIES	
VACUUM #A	2,528 S.F.
VACUUM #B	1,875 S.F.
PAY STATION 1	152 S.F.
PAY STATION 2	152 S.F.
TOTALS	4,707 S.F.

PARKING ANALYSIS

PARKING REQUIRED: 1 SPACE PER 1,500 SF = 3 SPACES REQUIRED

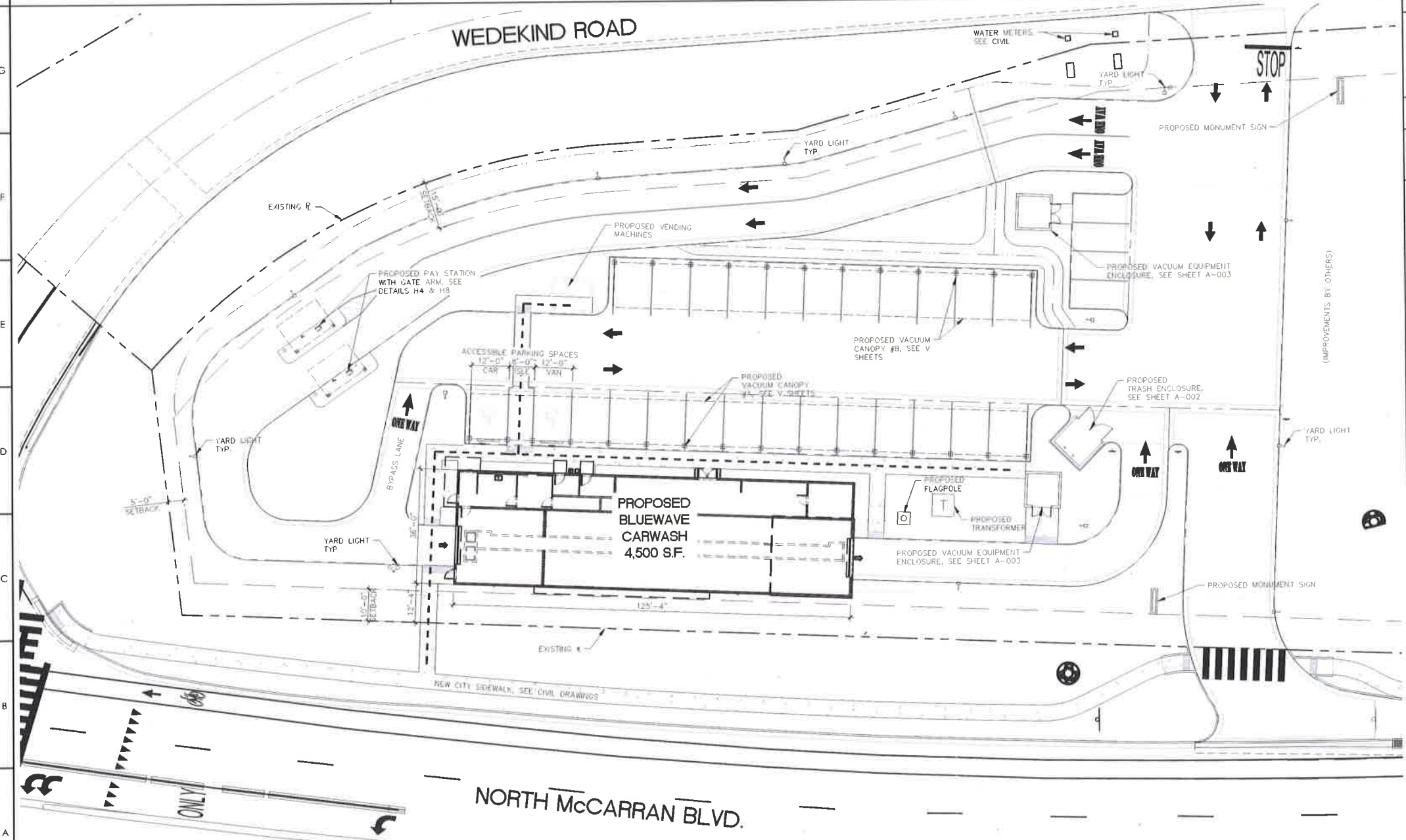
PARKING PROPOSED:		QTY
STALLS		23
VACUUM STALLS		4
STD STALLS		2
ACCESSIBLE VACUUM STALLS		2
TOTAL		29

SITE PLAN NOTES

1. THE PAY STATION WILL INCLUDE A SPEAKER, THE SOUND LEVEL WILL BE IN ACCORDANCE WITH CITY REQUIREMENTS (50 DECIBEL MAX.)

ACCESSIBLE PATH OF TRAVEL

PATH OF TRAVEL MAXIMUM 5% SLOPE IN THE DIRECTION OF TRAVEL AND MAX 2% CROSS SLOPE



A1 ARCH. SITE PLAN
1'-0"=20'-0"



BLUEWAVE SPARKS, NV

N. McCARRAN BLVD. AND WEDEKIND RD.

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A001
ARCH. SITE PLAN

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GENERAL NOTES

- LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE, AND WERE NOT DETERMINED BY FIELD INVESTIGATION. EXISTING UTILITIES ARE SHOWN BASED UPON AVAILABLE RECORD DRAWINGS. ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITY STRUCTURES, WHETHER SHOWN OR NOT, AND TO NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATION OF THEIR INSTALLATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL UTILITY STRUCTURES FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT SHALL BE BORNE SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REQUEST FIELD MARKING OF EXISTING UTILITIES AT LEAST 48 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION BY CALLING UNDERGROUND SERVICE ALERT AT 811/(800) 227-2600. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO RETAIN AND PROTECT ALL CULVERTS DURING CONSTRUCTION.
- TOPOGRAPHIC INFORMATION CONTAINED WITHIN THESE CONSTRUCTION PLANS WERE PREPARED BY AERIAL TOPOGRAPHIC SURVEYS.
BASIS OF BEARINGS
NAD83(94) NEVADA STATE PLAN COORDINATE SYSTEM, WEST ZONE BASED ON THE WASHOE COUNTY VRS GPS NETWORK. GRID COORDINATES WERE MULTIPLIED BY A COMBINED GRID TO GRID FACTOR OF 1.000197939.
BASIS OF ELEVATIONS
NAVD88 BASED ON USGS TRIANGULATION STATION "RANCH", ELEVATION 4281.62
- PROTECTION AND REPLACEMENT OF ALL SURVEY MONUMENTS OR PROPERTY STAKES NOT DELINEATED ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. DAMAGED OR REMOVED MONUMENTS AND/OR PROPERTY STAKES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL EXCAVATION AND EMBANKMENT SHALL BE IN ACCORDANCE WITH ORANGE BOOK AND STANDARD DETAILS AND GEOTECHNICAL INVESTIGATION REPORT PREPARED BY CME INC., DATED FEBRUARY 2016.
- ALL GRAVITY UTILITIES ARE TO BE CONSTRUCTED FROM THE DOWNSTREAM END TO THE UPSTREAM END.
- THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS AND PAY ALL FEES PRIOR TO CONSTRUCTION.
- WASHOE COUNTY DISTRICT HEALTH DEPARTMENT REQUIRES THAT A DUST CONTROL PERMIT BE OBTAINED BEFORE BEGINNING ANY LAND DISTURBING ACTIVITIES. THE CONTRACTOR SHALL COMPLY WITH THE CURRENT REGULATIONS PERTAINING TO DUST AND EROSION CONTROL AT ALL TIMES.
- TRAFFIC CONTROL, CONSTRUCTION SIGNS, AND BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF THE M.U.T.C.D. MANUAL, AND THE GUIDELINES FOR TRAFFIC CONTROL IN WORK ZONES, LATEST EDITIONS.
- THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY AND COMMUNICATIONS COMPANIES LOCATED WITHIN THE PROJECT LIMITS AND ALLOW ACCESS TO THEIR INFRASTRUCTURE AT ALL TIMES.
- EXISTING DRAINAGE FACILITIES SHALL BE KEPT IN SERVICE AT ALL TIMES DURING CONSTRUCTION.
- ALL SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS, BUILDINGS OR OTHER STRUCTURES RESULTING FROM HIS CONSTRUCTION ACTIVITIES. REPAIRS SHALL BE MADE TO THE SATISFACTION OF WASHOE COUNTY AND THE ENGINEER AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THESE DRAWINGS AND THE CONDITIONS EXISTING IN THE FIELD. THE CONTRACTOR SHALL COMPARE ALL DRAWINGS AND VERIFY THE FIGURES BEFORE STARTING THE WORK AND WILL BE RESPONSIBLE FOR ANY ERRORS WHICH MIGHT HAVE BEEN AVOIDED THEREBY. IF THE CONTRACTOR FAILS TO NOTIFY THE OWNER OR THEIR REPRESENTATIVE IN A TIMELY MANNER OF ANY APPARENT ERROR OR OMISSION ON THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING WORK INCORRECTLY DONE AT THE CONTRACTOR'S EXPENSE.
- SHOULD ANY PREHISTORIC OR HISTORIC REMAINS/ARTIFACTS BE DISCOVERED DURING CONSTRUCTION, WORK SHALL TEMPORARILY BE HALTED AT THE SPECIFIC SITE AND THE STATE HISTORIC PRESERVATION OFFICE OF THE DEPARTMENT OF MUSEUMS, LIBRARY AND ARTS, BE NOTIFIED TO RECORD AND PHOTOGRAPH THE SITE. THE PERIOD OF TEMPORARY DELAY SHALL BE LIMITED TO A MAXIMUM OF TWO (2) WORKING DAYS FROM THE DATE OF CONTRACTOR'S NOTIFICATION TO THE STATE.
- CONTRACTOR SHALL OBTAIN A STREET CUT PERMIT PRIOR TO ANY WORK IN CITY OF SPARKS RIGHT-OF-WAY. CITY INSPECTION FEES WILL BE BASED UPON TIME AND MATERIALS AND APPLIED TO THE STREET CUT PERMIT FEE. ALL FEES SHALL BE PAID PRIOR TO COFO. PLEASE COORDINATE THE PERMIT WITH JUSTIN KISTNER AT (775) 353-1504

CONSTRUCTION PERMIT NOTES

- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS OF WAYS OF WASHOE COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM OR NATURAL DRAINAGE CONVEYANCE SYSTEM.
- ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN WASHOE COUNTY ORDINANCE NO. 1223 AND THE TRUCKEE MEADOWS CONSTRUCTION SITE BEST MANAGEMENT PRACTICES HANDBOOK.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICAL AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO STORMWATER GENERAL PERMIT NVR100000, SECTION 1.B.1.b (2).
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMP'S WEEKLY, PRIOR TO A FORECASTED RAIN EVENT AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS FROZEN GROUND CONDITIONS OR SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO STORMWATER GENERAL PERMIT NVR100000, SECTION 1.B.1.g.
- ACCUMULATED SEDIMENT IN BMP'S SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

CIVIL ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CEMENT
ADA	AMERICANS WITH DISABILITY ACT
ADD'L	ADDITIONAL
AGG	AGGREGATE
ALT	ALTERNATIVE
APN	ASSESSOR'S PARCEL NUMBER
AP	ANGLE POINT
ARV	AIR RELEASE VALVE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BC	BEGINNING OF CURVE
BFC	BACK FACE OF CURB
BW	BACK OF SIDEWALK/BOTTOM OF WALL
CB	CATCH BASIN
CF	CUBIC FEET
CL	CENTERLINE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CONST	CONSTRUCT
COR	CITY OF RENO
COS	CITY OF SPARKS
CPLG	COUPLING
DEG	DEGREES
DET	DETAIL
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DYLT	DAYLIGHT LINE
EA	ELECTRIC, EAST
E	EACH
ELEV	ELEVATION
EC	END OF CURVE
EG	EXISTING GRADE
EOS	EDGE OF SHOULDER
EP	EDGE OF PAVEMENT
EQ	EQUIDISTANT
EX	EXISTING
F	FUTURE
FF	FINISHED FLOOR
FFC	FRONT FACE OF CURB
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FOC	FIBER OPTIC CONDUIT (CABLE)
FM	FORCE MAIN
FR	FIBER ROLL
FT	FEET
FV	FLUSH VALVE
G	GAS
GB	GRADE BREAK
HDPE	HIGH-DENSITY POLYETHYLENE
HORZ	HORIZONTAL
HW	HEAD WALL
HWY	HIGHWAY
ID	INNER DIAMETER
IE	INVERT ELEVATION
INV	INVERT
ISA	INTERNATIONAL SYMBOL OF ACCESSIBILITY
JT	JOINT
L	LENGTH, LEFT
LAT	LATERAL
LF	LINEAL FEET
LO	LEFT OFFSET
LP	LOW POINT
MAX	MAXIMUM
MDD	MAXIMUM DRY DENSITY
MH	MANHOLE
MI	MILES
MIN	MINIMUM
MJ	MECHANICAL JOINT
MPOC	MIDPOINT OF CURVE
MPH	MILES PER HOUR
MS	MATERIAL DELIVERY AND STORAGE
N	NORTH
N/A	NOT APPLICABLE
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION
NTS	NOT TO SCALE
NV	NEVADA
NVE	NEVADA ENERGY
OC	ON CENTER
OHE	OVERHEAD ELECTRIC
OHP	OVERHEAD POWER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEV	PRESERVATION OF EXISTING VEGETATION
PI	POINT OF INTERSECTION
PC	POINT OF CURVATURE
P.C.C.	PORTLAND CEMENT CONCRETE
PP	PROPOSED
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS, RANGE, RIGHT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REF	REFERENCE
REQ'D	REQUIRED
RET	RETURN
RO	RIGHT OFFSET
RP	RADIUS POINT
RT	RIGHT
R/W	RIGHT OF WAY
SCH	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SEC	SECTION
SF	SQUARE FEET
SQ	SQUARE
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
TC	TOP OF CURB
TMWA	TRUCKEE MEADOW WATER ASSOCIATION
TS	TRAFFIC SIGNAL
TYP	TYPICAL
UG	UNDERGROUND
UGT	UNDERGROUND TELEPHONE
UP	UTILITY POLE
VERT	VERTICAL
VB	VALUE BOX
VC	VERTICAL CURVE
VPI	VERTICAL POINT OF INTERSECTION
W	WATER, WEST
WSEL	WATER SURFACE ELEVATION
W/	WITH

LEGEND

	PROFILE ELEVATION INDICATORS
	PROPOSED GRADE ELEVATION (TYP)
	LIMITS OF WORK
	SAWCUT
	EXISTING ABANDONED WATER MAIN
	EXISTING WATER MAIN
	VALLEY GUTTER FLOWLINE
	EDGE OF PAVEMENT/FLOWLINE
	BOUNDARY LINE
	DAYLIGHT CATCH LINE
	IRRIGATION SLEEVE
	FIBER ROLL/STRAW WATTLE
	EXISTING PROPERTY LINE
	EX. FENCE
	CENTER LINE
	EXISTING PROPERTY LINE
	EXISTING ROAD
	STREAM/DITCH/SWALE DITCH FLOW LINE
	POWER POLE/LINE
	BEEHIVE INLET
	HEAVY DUTY AC PAVEMENT
	AC PAVEMENT
	CONCRETE
	BUILDING
	DETECTABLE WARNING PANEL
	MONUMENT SIGN
	SILT FENCE
	CURB & GUTTER
	EXISTING TREE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	GRADE BREAK
	FIRE HYDRANT
	DESIGN SLOPE PERCENT AND DIRECTION
	UTILITY POLE W/ LIGHT
	LIGHT POLE
	UTILITY POLE
	EXISTING OVERHEAD POWER DUPLICATE
	STORM DRAIN LINE
	STORM DRAIN MANHOLE
	STORM DRAIN FLARED END SECTION
	EX. CATCH BASIN
	PR. CATCH BASIN
	SANITARY SEWER LINE
	SANITARY SEWER MANHOLE
	SANITARY SEWER CLEANOUT
	WATER LINE
	WATER METER
	FLUSH ASSEMBLY
	REDUCED PRESSURE ASSEMBLY

SHEET SET KEY

SHEET NO.	DRAWING NO.	SHEET TITLE
1	C000	COVER SHEET
2	C001	GENERAL NOTES, LEGEND, SHEET INDEX, AND ABBREVIATIONS
3	C100	EXISTING CONDITIONS AND DEMOLITION PLAN
4	C200	HORIZONTAL SITE CONTROL PLAN
5	C201	HORIZONTAL SITE CONTROL PLAN DETAILS
6	C202	STRIPING AND SIGNAGE PLAN
7	C300	PRECISE GRADING PLAN
8	C301	PRECISE GRADING PLAN DETAILS
9	C400	WET UTILITY PLAN
10	C500	CONSTRUCTION DETAILS
11	C501	CONSTRUCTION DETAILS
12	C502	CONSTRUCTION DETAILS
13	C503	CONSTRUCTION DETAILS
14	C504	CONSTRUCTION DETAILS
15	C505	CONSTRUCTION DETAILS
16	C600	LANDSCAPE PLANTING LEGEND AND NOTES
17	C601	LANDSCAPE PLANTING PLAN
18	C602	LANDSCAPE PLANTING DETAILS
19	C700	REVEGETATION SPECIFICATIONS
20	C800	LANDSCAPE IRRIGATION LEGEND AND NOTES
21	C801	LANDSCAPE IRRIGATION PLAN
22	C802	LANDSCAPE IRRIGATION DETAILS
23	C803	LANDSCAPE IRRIGATION DETAILS
24	C900	CONCEPTUAL STORM WATER POLLUTION PREVENTION PLAN

ADDITIONAL PLANS PROVIDED FOR REFERENCE

TRUCKEE MEADOWS WATER AUTHORITY PLAN SET		
1	W-1	TRUCKEE MEADOWS WATER AUTHORITY PLAN
2	W-2	TRUCKEE MEADOWS WATER AUTHORITY DETAILS
3	W-3	TRUCKEE MEADOWS WATER AUTHORITY DETAILS
4	W-4	TRUCKEE MEADOWS WATER AUTHORITY DETAILS

NEVADA DEPARTMENT OF TRANSPORTATION PLAN SET		
1	NDOT1	COVER SHEET
2	NDOT2	S. MCCARRAN BLVD - HORIZONTAL CONTROL & GRADING PLAN
3	NDOT3	S. MCCARRAN BLVD - HORIZONTAL CONTROL DETAILS
4	NDOT4	STRIPING PLAN
5	NDOT5	LANDSCAPE PLANTING LEGEND AND NOTES
6	NDOT6	LANDSCAPE PLANTING PLAN

SWPPP

CONTRACTOR SHALL MAINTAIN A COPY OF THE SITE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), A CONCEPTUAL VERSION OF WHICH IS SIGNED AND SEALED, DATED DECEMBER 19, 2018.

NOTES:

- ALL SYMBOLS AND ABBREVIATIONS MAY NOT BE INCLUDED IN PROJECT.



6995 SIERRA CENTER PARKWAY
Reno, Nevada 89511
Tel. (775) 850-0777 Fax (775) 850-0787
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**BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS**

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada
GENERAL NOTES, LEGEND, SHEET INDEX,
AND ABBREVIATIONS

PERMIT SET 05/29/2019

Issues

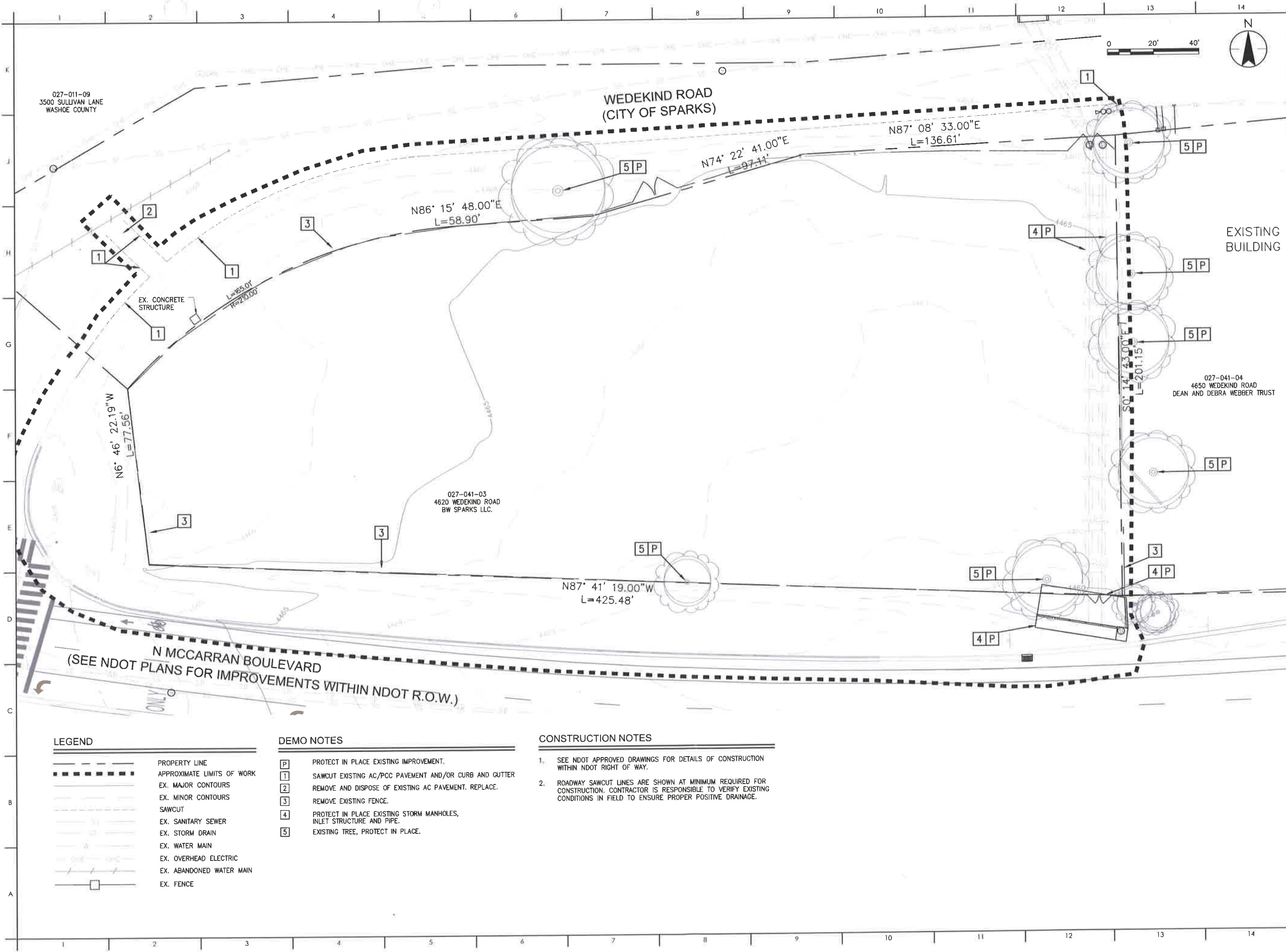
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Checked By JRP

Drawing No. **C001**

Revision Sheet
0 2 of 24



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**BLUEWAVE
 MCCARRAN
 BOULEVARD
 SPARKS**

Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada

EXISTING CONDITIONS AND DEMOLITION PLAN

PERMIT SET 05/29/2019

Project Number 222310634

Drawn By TAS/HZ

Checked By JRP

Drawing No. **C100**

Revision Sheet

0 3 of 24

LEGEND

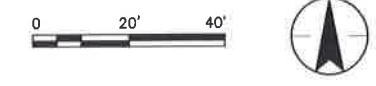
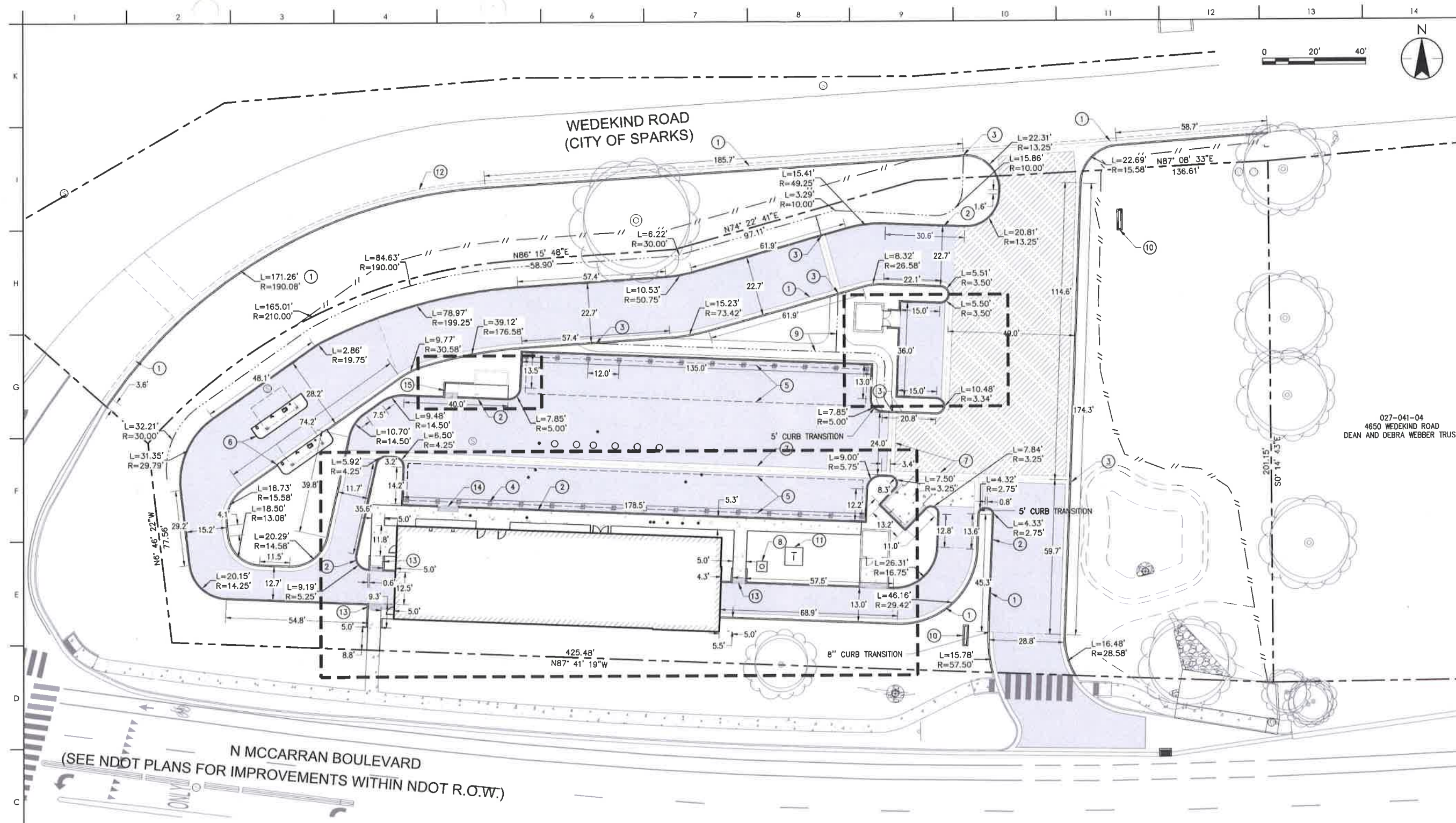
	PROPERTY LINE
	APPROXIMATE LIMITS OF WORK
	EX. MAJOR CONTOURS
	EX. MINOR CONTOURS
	SAWCUT
	EX. SANITARY SEWER
	EX. STORM DRAIN
	EX. WATER MAIN
	EX. OVERHEAD ELECTRIC
	EX. ABANDONED WATER MAIN
	EX. FENCE

DEMO NOTES

	PROTECT IN PLACE EXISTING IMPROVEMENT.
	SAWCUT EXISTING AC/PCC PAVEMENT AND/OR CURB AND GUTTER
	REMOVE AND DISPOSE OF EXISTING AC PAVEMENT. REPLACE.
	REMOVE EXISTING FENCE.
	PROTECT IN PLACE EXISTING STORM MANHOLES, INLET STRUCTURE AND PIPE.
	EXISTING TREE, PROTECT IN PLACE.

CONSTRUCTION NOTES

- SEE NDOT APPROVED DRAWINGS FOR DETAILS OF CONSTRUCTION WITHIN NDOT RIGHT OF WAY.
- ROADWAY SAWCUT LINES ARE SHOWN AT MINIMUM REQUIRED FOR CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO VERIFY EXISTING CONDITIONS IN FIELD TO ENSURE PROPER POSITIVE DRAINAGE.



WEKIND ROAD
(CITY OF SPARKS)

N MCCARRAN BOULEVARD
(SEE NDOT PLANS FOR IMPROVEMENTS WITHIN NDOT R.O.W.)

027-041-04
4650 WEKIND ROAD
DEAN AND DEBRA WEBBER TRUST

LEGEND

- PROPERTY LINE
- LANDSCAPE SWALE CENTERLINE
- SAWCUT
- VALLEY GUTTER FLOW LINE
- HEAVY DUTY AC PAVEMENT PER DETAIL 1 ON SHEET C504
- AC PAVEMENT PER DETAIL 2 ON SHEET C504
- TYP. CONCRETE PER DETAIL 3 ON SHEET C504
- TRUNCATED DOME: PER DETAIL 2 ON SHEET C502

CONSTRUCTION SYMBOLS

- ① P.C.C. CURB AND GUTTER PER DETAIL 2 ON SHEET C502
- ② P.C.C. MEDIAN CURB PER DETAIL 3 ON SHEET C502
- ③ CURB OPENING PER DETAIL 5 ON SHEET C502
- ④ BASEPLATE AND FOOTINGS PER CANOPY DRAWINGS BY OTHERS
- ⑤ APPROXIMATE LIMITS OF CANOPY OVERHANG, PER PLANS BY OTHERS
- ⑥ PAY STATION PER ARCHITECTURAL DRAWING A001.
- ⑦ P.C.C. VALLEY GUTTER PER DETAIL 4 ON SHEET C502
- ⑧ FLAGPOLE, PER ARCHITECTURAL DRAWINGS
- ⑨ LANDSCAPE SWALE, PER GRADING PLAN C300
- ⑩ MONUMENT SIGN, PER ARCHITECTURAL DRAWINGS
- ⑪ TRANSFORMER, DESIGN BY NVE
- ⑫ SAWCUT SHOWN AT MINIMUM 1' OFFSET FROM NEW LIP OF GUTTER. CONTRACTOR SHALL FIELD VERIFY EXISTING ROADWAY CONDITIONS TO VERIFY THAT 1' WILL ALLOW A SMOOTH FINISHED SURFACE FROM EXISTING ROADWAY TO DRAIN TO NEW GUTTER
- ⑬ CURB RAMP TYPE 1 PER DETAIL 1 ON SHEET C503
- ⑭ CURB RAMP TYPE 2 PER DETAIL 1 ON SHEET C503
- ⑮ CURB RAMP TYPE 3 PER DETAIL 1 ON SHEET C503

CONSTRUCTION NOTES

1. DIMENSIONS SHOWN ARE TO FLOW LINE OR EDGE OF PAVEMENT UNLESS NOTED OTHERWISE



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BOULEVARD
SPARKS

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

PERMIT SET	05/29/2019
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **C200**
Revision Sheet
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HORIZONTAL SITE CONTROL PLAN
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HORIZONTAL SITE CONTROL PLAN DETAILS

PERMIT SET 05/29/2019

Issues

Project Number 222310634

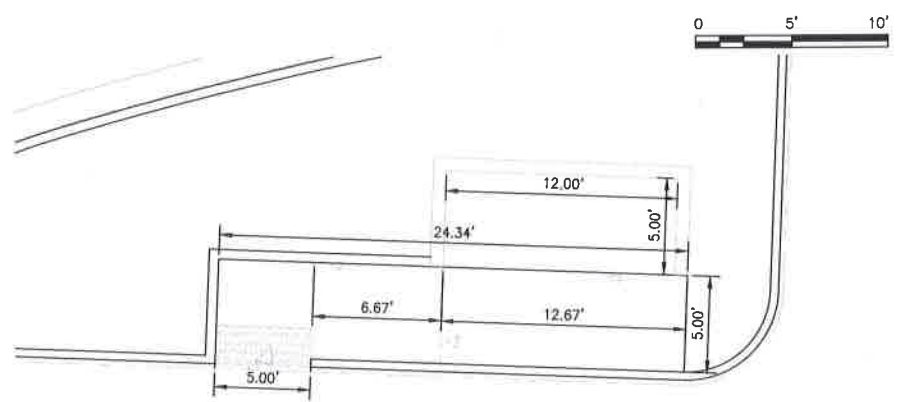
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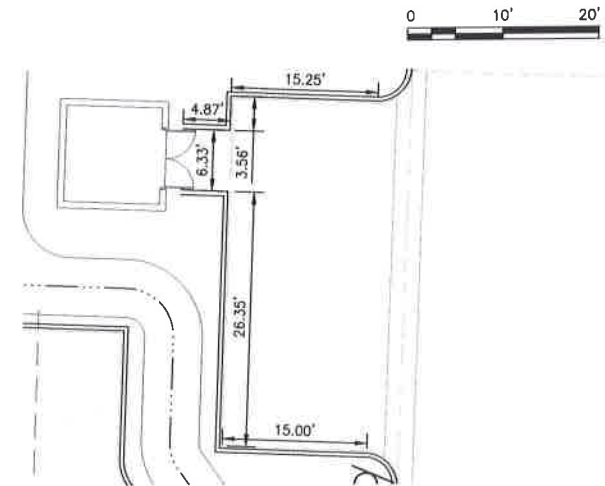
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Revision Sheet

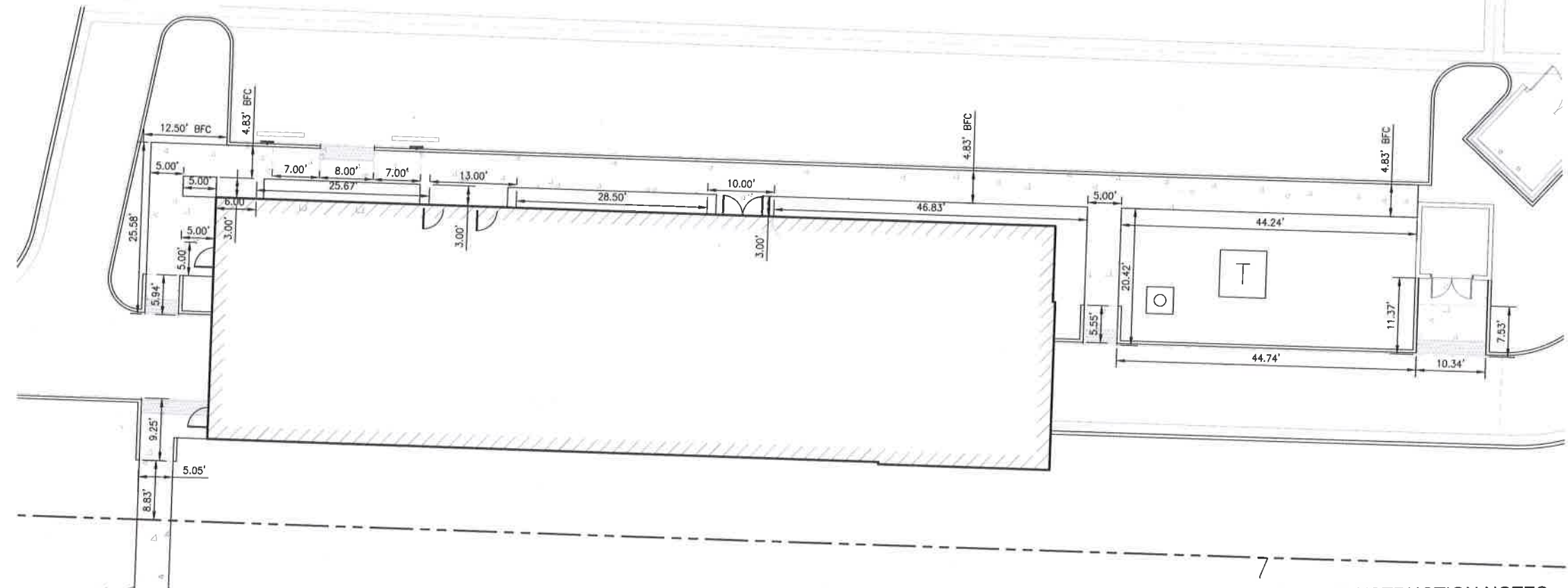
0 5 of 24



1 HORIZONTAL CONTROL PLAN ENLARGEMENT
 C201 SCALE: 1"=5'



3 HORIZONTAL CONTROL PLAN ENLARGEMENT
 C201 SCALE: 1"=10'



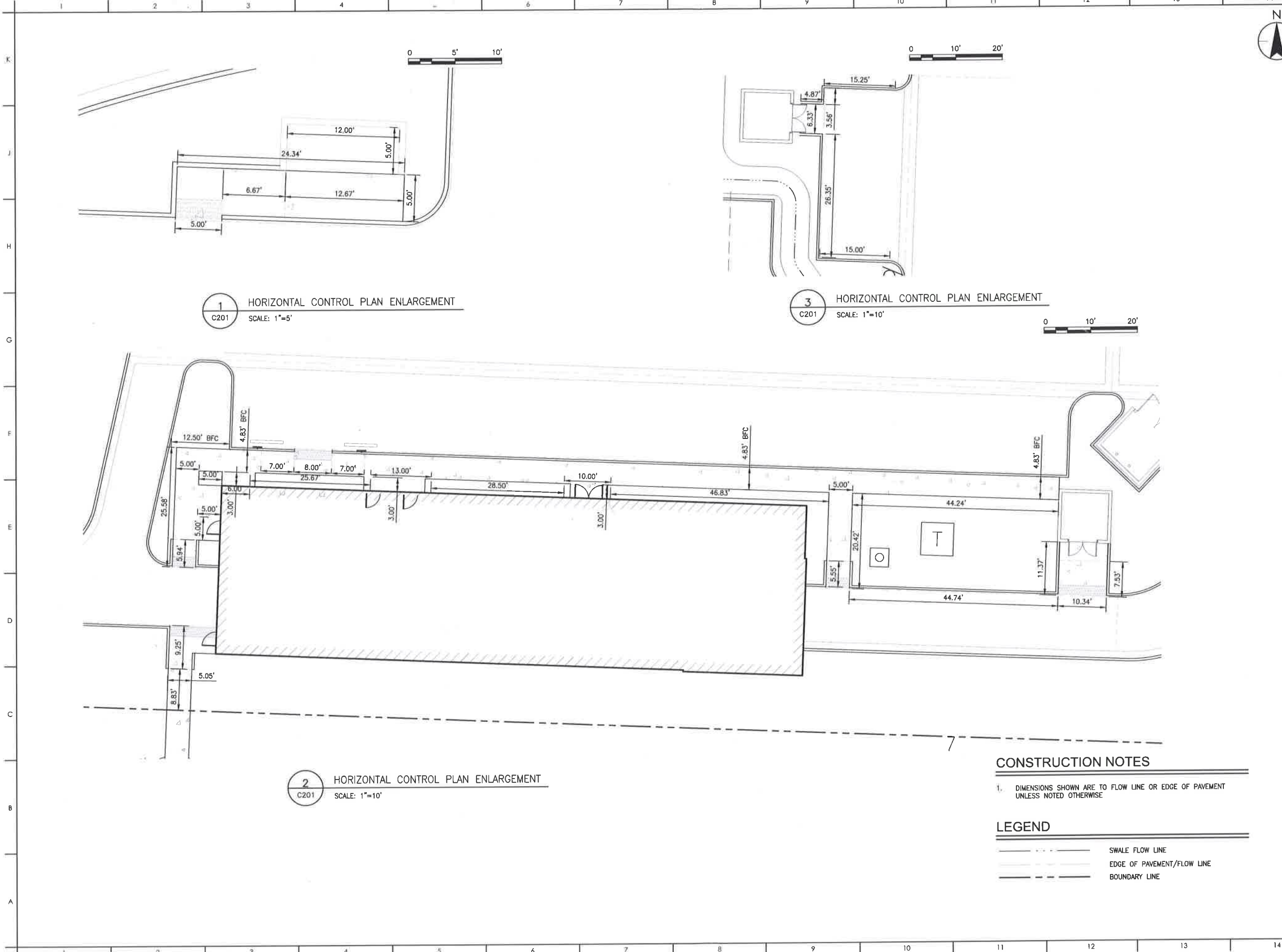
2 HORIZONTAL CONTROL PLAN ENLARGEMENT
 C201 SCALE: 1"=10'

CONSTRUCTION NOTES

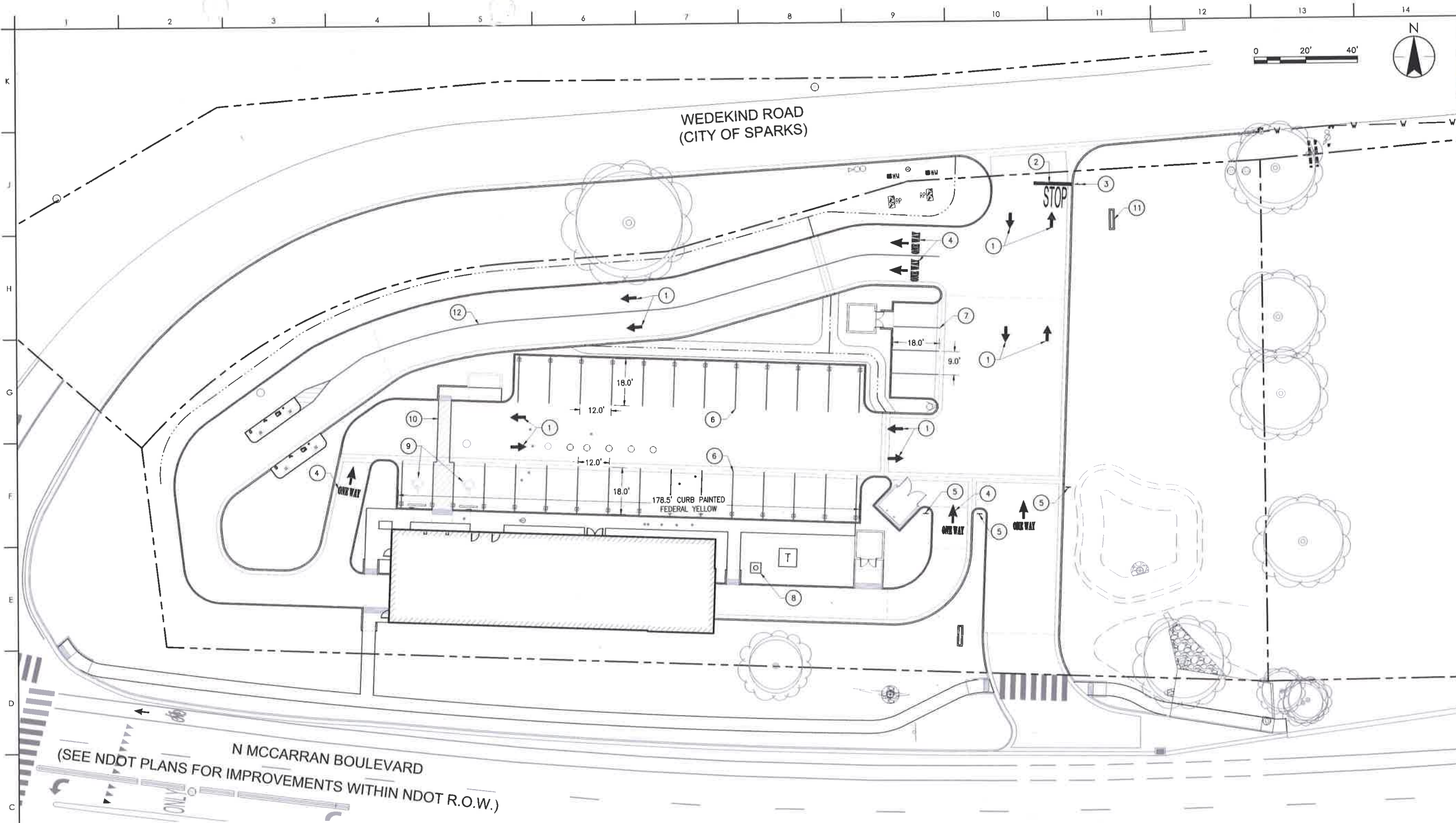
1. DIMENSIONS SHOWN ARE TO FLOW LINE OR EDGE OF PAVEMENT UNLESS NOTED OTHERWISE

LEGEND

- SWALE FLOW LINE
- EDGE OF PAVEMENT/FLOW LINE
- BOUNDARY LINE



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 Sparks, Nevada

STRIPING AND SIGNAGE PLAN

PERMIT SET	05/29/2019
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **C202**
 Revision Sheet
 0 6 of 24

CONSTRUCTION SYMBOLS

- | | |
|--|--|
| ① EPOXY DIRECTIONAL ARROW, TYP. | ⑦ 4" YELLOW STRIPE PARKING STALL; PER DETAIL 9 ON SHEET C504. |
| ② EPOXY STOP BAR AND STOP MARKING. | ⑧ FLAGPOLE. |
| ③ STOP SIGN; PER DETAIL 5 ON SHEET C504. | ⑨ EPOXY ADA PARKING STALL MARKING; PER DETAIL 8 ON SHEET C504. |
| ④ EPOXY ONE WAY MARKER. | ⑩ YELLOW STRIPED WALKWAY. |
| ⑤ SIGN, PER DETAIL 5 ON SHEET C504 AND ARCHITECTURAL PLANS FOR DETAILS. | ⑪ MONUMENT SIGN. |
| ⑥ TYP. 4" YELLOW STRIPE VACUUM PARKING STALL; PER DETAIL 8 ON SHEET C504 | ⑫ 4" SOLID YELLOW LINE. |

CONSTRUCTION NOTES

- SEE NDOT APPROVED DRAWINGS FOR DETAILS OF STRIPING AND SIGNAGE WITHIN NDOT RIGHT OF WAY

N MCCARRAN BOULEVARD
 (SEE NDOT PLANS FOR IMPROVEMENTS WITHIN NDOT R.O.W.)

WEDEKIND ROAD
 (CITY OF SPARKS)

178.5' CURB PAINTED
 FEDERAL YELLOW

STOP

ONE WAY

ONE WAY

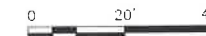
ONE WAY

ONLY

EARTHWORK

1,100 CY CUT
0 CY FILL
1,100 CY EXPORT*

* QUANTITIES DO NOT INCLUDE SHRINKAGE OR EXPANSION FACTORS, OR TRENCHING SPOILS.



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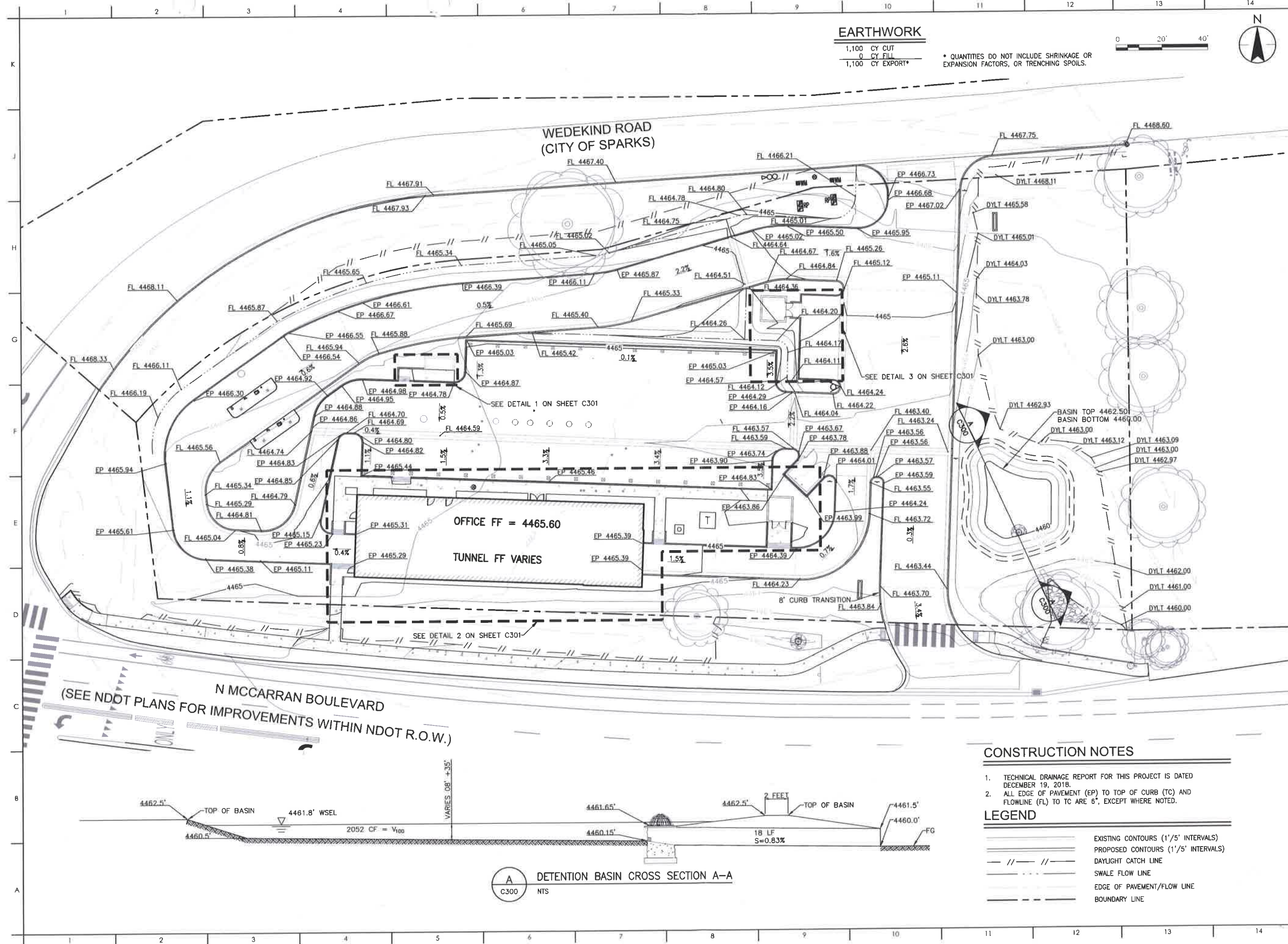
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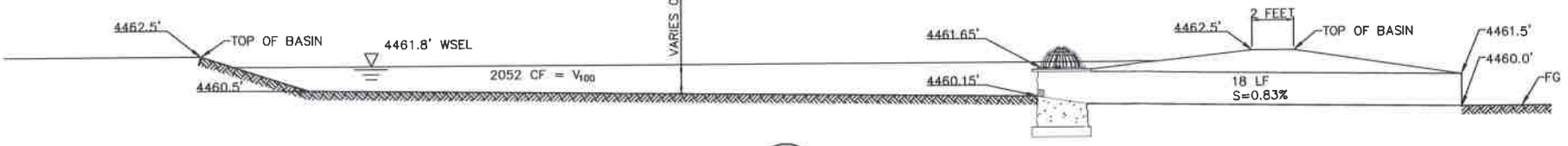
Drawing No. **C300**

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PRECISE GRADING PLAN
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N MCCARRAN BOULEVARD
(SEE NDOT PLANS FOR IMPROVEMENTS WITHIN NDOT R.O.W.)



A DETENTION BASIN CROSS SECTION A-A
C300 NTS

CONSTRUCTION NOTES

1. TECHNICAL DRAINAGE REPORT FOR THIS PROJECT IS DATED DECEMBER 19, 2018.
2. ALL EDGE OF PAVEMENT (EP) TO TOP OF CURB (TC) AND FLOWLINE (FL) TO TC ARE 6', EXCEPT WHERE NOTED.

LEGEND

- — — — — EXISTING CONTOURS (1'/5' INTERVALS)
- — — — — PROPOSED CONTOURS (1'/5' INTERVALS)
- - - - - DAYLIGHT CATCH LINE
- — — — — SWALE FLOW LINE
- — — — — EDGE OF PAVEMENT/FLOW LINE
- — — — — BOUNDARY LINE



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PRECISE GRADING PLAN DETAILS

PERMIT SET 05/29/2019

Issues

Project Number 222310634

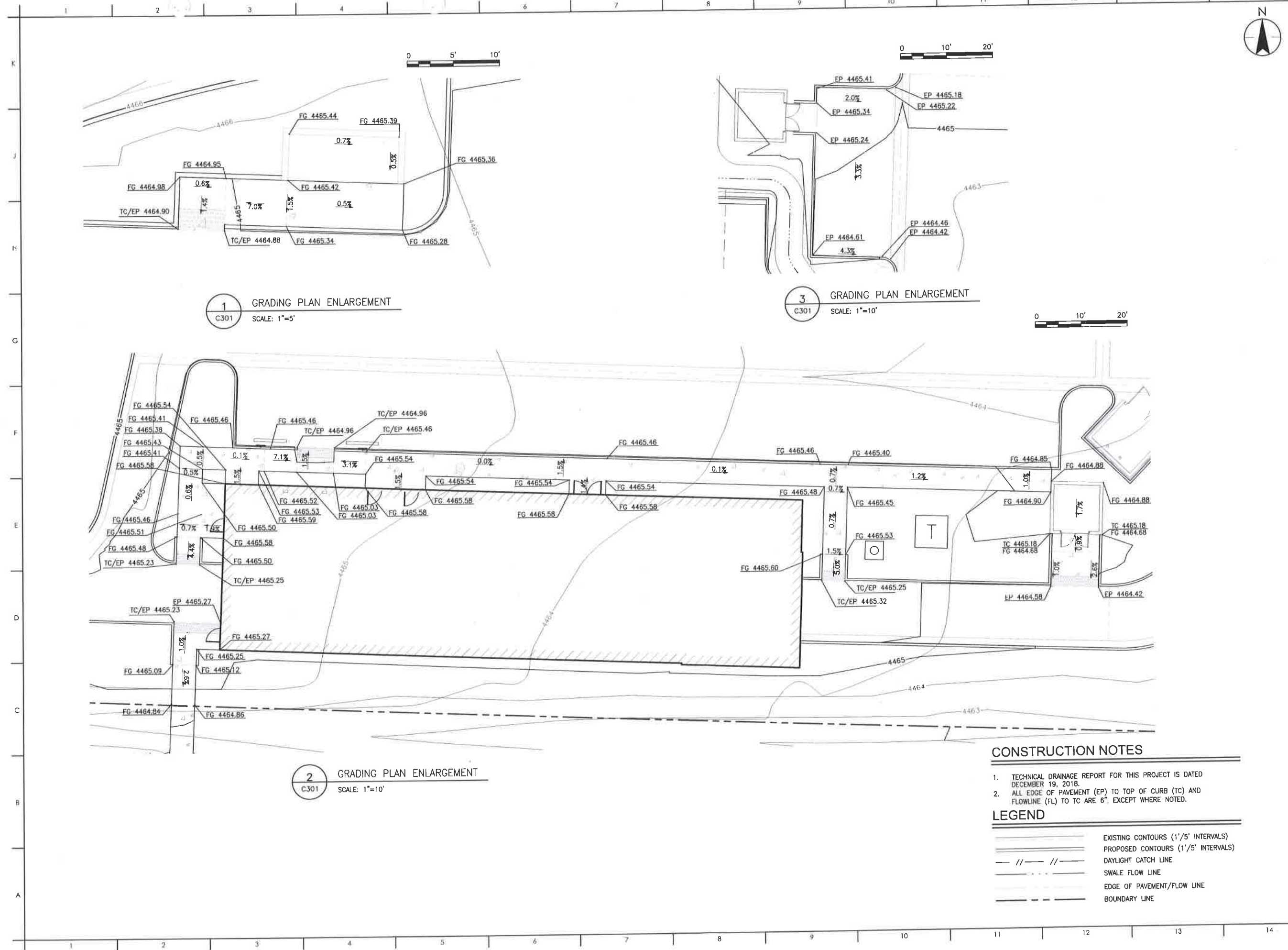
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Checked By JRP

Drawing No. **C301**

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0 8 of 24

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1 GRADING PLAN ENLARGEMENT
C301 SCALE: 1"=5'

3 GRADING PLAN ENLARGEMENT
C301 SCALE: 1"=10'

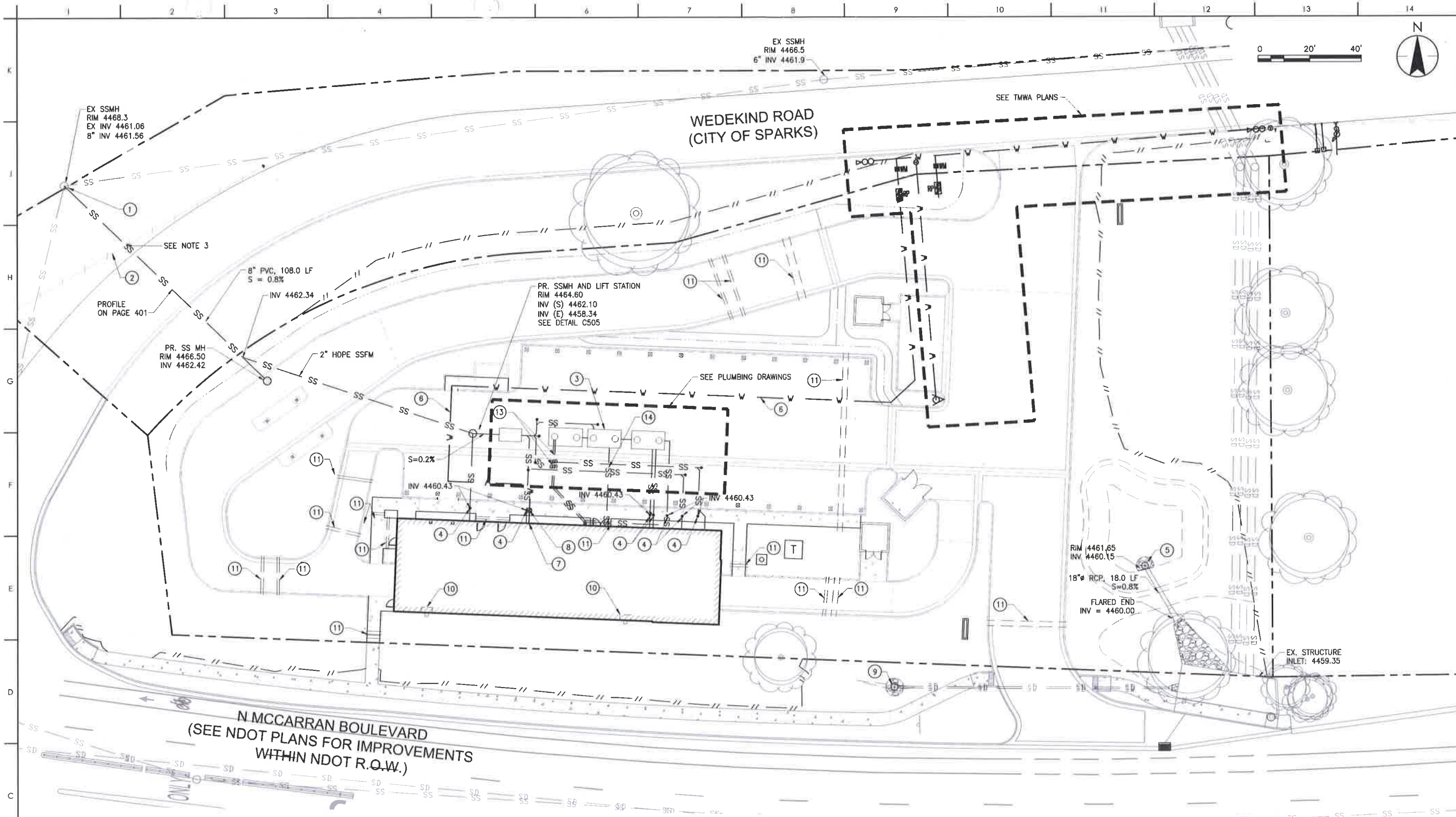
2 GRADING PLAN ENLARGEMENT
C301 SCALE: 1"=10'

CONSTRUCTION NOTES

1. TECHNICAL DRAINAGE REPORT FOR THIS PROJECT IS DATED DECEMBER 19, 2018.
2. ALL EDGE OF PAVEMENT (EP) TO TOP OF CURB (TC) AND FLOWLINE (FL) TO TC ARE 6", EXCEPT WHERE NOTED.

LEGEND

- EXISTING CONTOURS (1'/5' INTERVALS)
- PROPOSED CONTOURS (1'/5' INTERVALS)
- DAYLIGHT CATCH LINE
- SWALE FLOW LINE
- EDGE OF PAVEMENT/FLOW LINE
- BOUNDARY LINE



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WET UTILITY PLAN

PERMIT SET 05/29/2019
 Issues
 Project Number 222310634
 Drawn By TAS/HZ
 Checked By JRP

Drawing No. **C400**
 Revision Sheet
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CONSTRUCTION SYMBOLS

- | | |
|---|---|
| ① EXISTING SANITARY SEWER MANHOLE | ⑦ WATER SERVICE CONNECTION AT BUILDING; INV 4462.6 |
| ② ABANDONED WATER LINE | ⑧ 2" GATE VALVE SET FIVE FEET FROM EDGE OF BUILDING, PER DETAIL 6 ON SHEET C500 |
| ③ PROPOSED SEWER TANKS AND PIPING; PER PLUMBING DRAWINGS FOR DETAILS. | ⑨ PROPOSED BEEHIVE INLET WITHOUT ORIFICE, PER DETAIL 2 C500 |
| ④ SANITARY SEWER CLEANOUT; SEE PLUMBING DRAWINGS FOR CONTINUATION | ⑩ ROOF DOWNSPOUT |
| ⑤ PROPOSED BEEHIVE INLET WITH ORIFICE; PER DETAIL 3 ON C500. | ⑪ IRRIGATION SLEEVE. PER LANDSCAPING IRRIGATION PLAN C801 |
| ⑥ 2" DOMESTIC WATER SERVICE | ⑫ SANITARY SEWER TWO WAY CLEANOUT, SEE PLUMBING DRAINAGE FOR CONFIRMATION |
| | ⑬ 2 - 3" SCH-80 PVC SUCTION LINE, 36" COVER. SEE PLUMBING DRAINAGE FOR CONFIRMATION |
| | ⑭ 1" OZONE, 36" COVER. SEE PLUMBING DRAINAGE FOR CONFIRMATION |

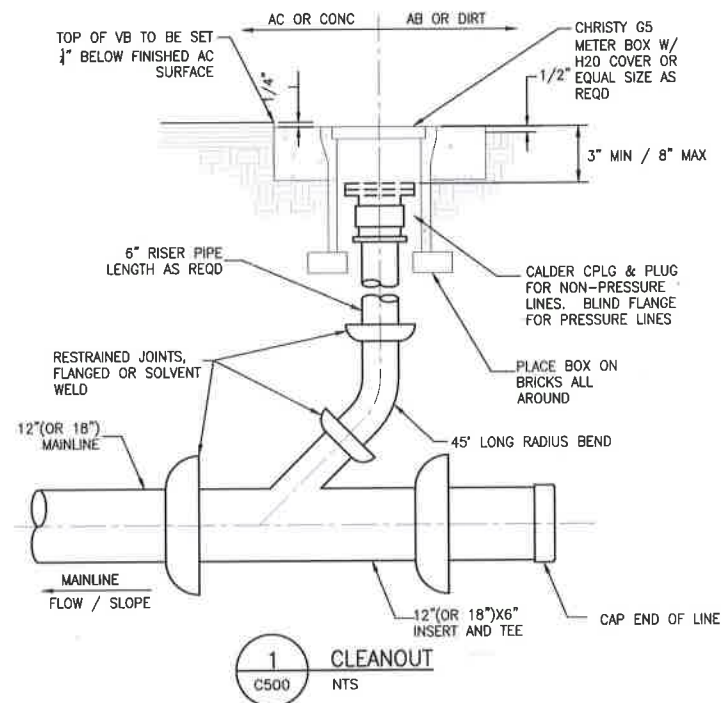
CONSTRUCTION NOTES

- DIMENSIONS SHOWN ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
- SEE TMWA APPROVED DRAWINGS FOR 12" WATER MAIN, HYDRANT, AND SERVICE TIES.
- CONTRACTOR SHALL POTHOLE TO VERIFY INVERT OF EX ABANDONED WATER LINE TO CHECK CLEARANCE.
- SEE NDOT APPROVED DRAWINGS FOR 8" CMP IN MCCARRAN BLVD.

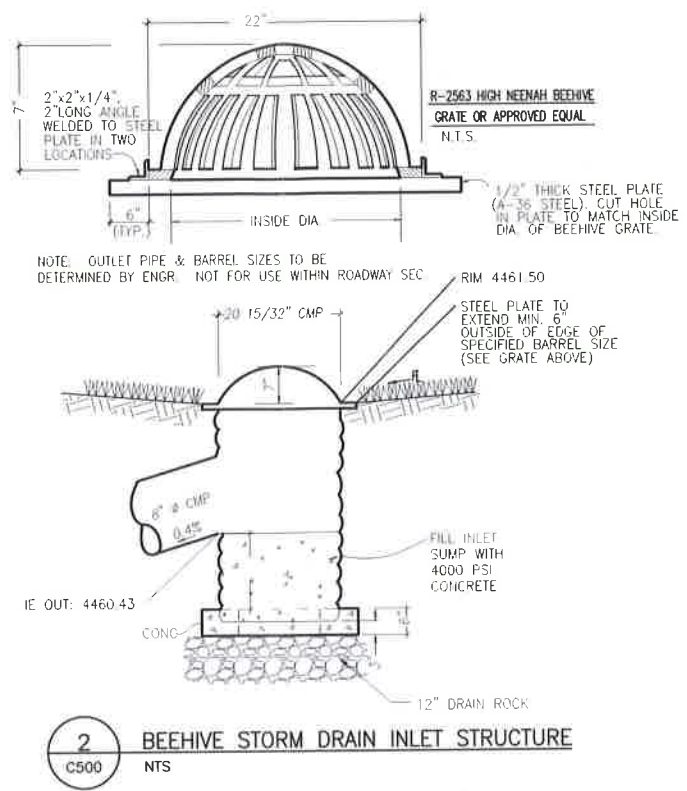
LEGEND

- | | | | |
|-------|---------------------------|---|-------------------------|
| --- | PROPERTY LINE | ⬇ | ROOF DOWNSPOUT |
| W W | WATER SERVICE | ⊙ | EX. TREE |
| --- | IRRIGATION SLEEVE | ⊙ | BEEHIVE INLET |
| SS SS | EX. SANITARY SEWER | ⊙ | SANITARY SEWER CLEANOUT |
| SS SS | PR PRIVATE SANITARY SEWER | ⊙ | WATER VALVE |
| ⊙ | SANITARY SEWER MANHOLE | | |
| SD SD | STORM SEWER | | |
| ⊙ | STORM SEWER SEWER MANHOLE | | |

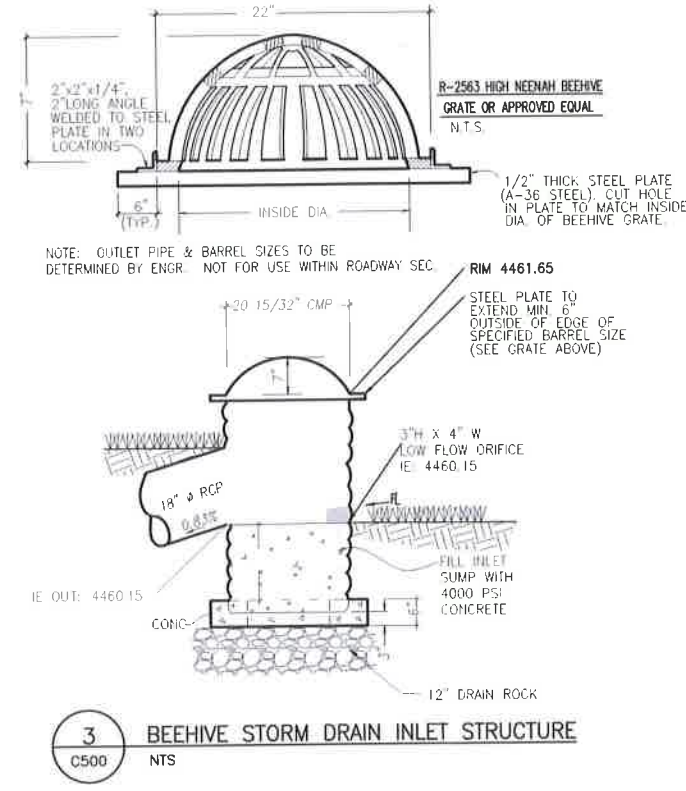
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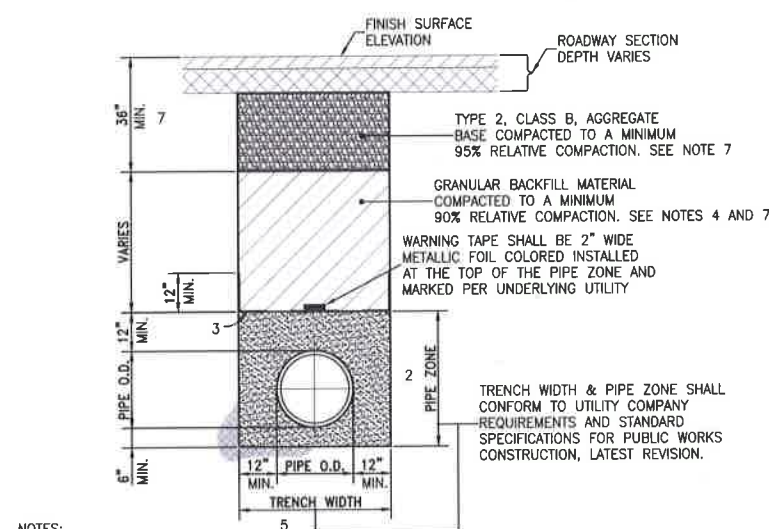
1 CLEANOUT
C500 NTS



2 BEEHIVE STORM DRAIN INLET STRUCTURE
C500 NTS

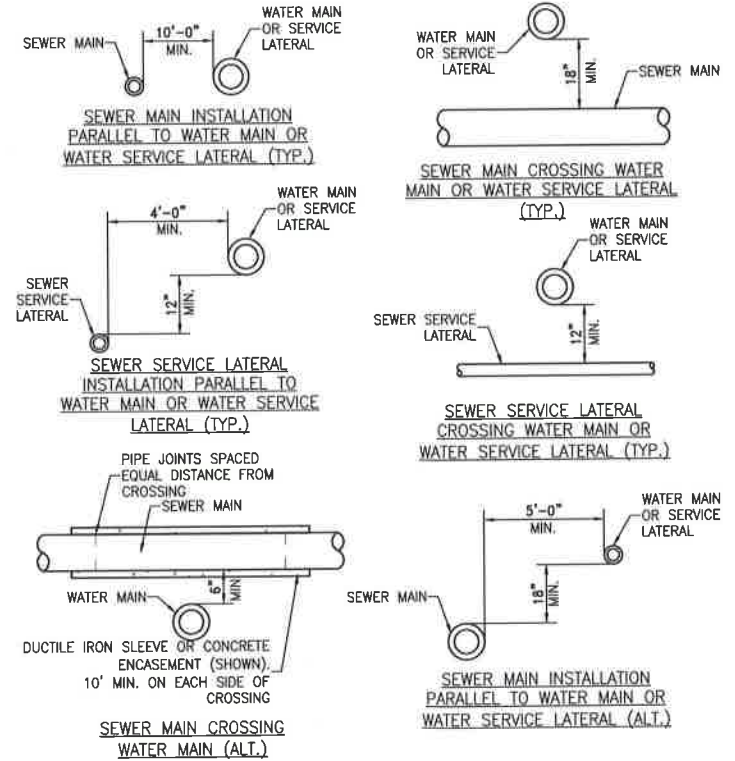


3 BEEHIVE STORM DRAIN INLET STRUCTURE
C500 NTS



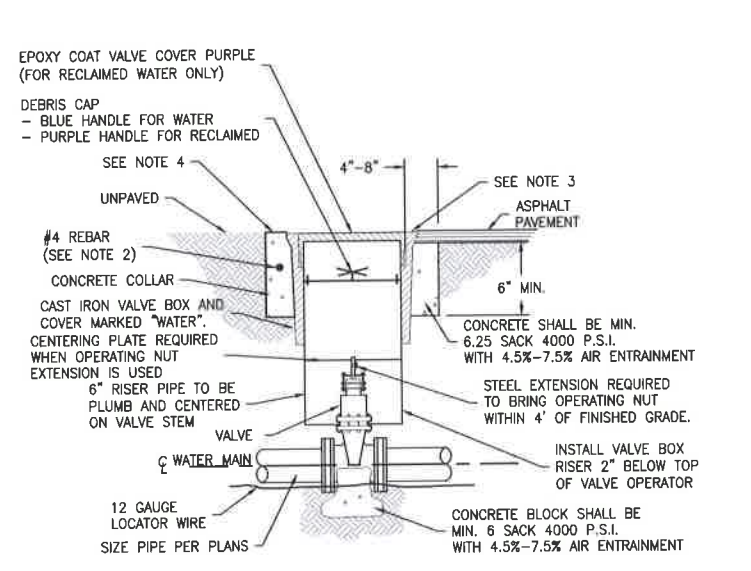
4 TRENCH EXCAVATION/BACKFILL
C500 NTS

- NOTES:**
- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), LATEST REVISION.
 - BEDDING MATERIAL SHALL CONFORM TO OWNING-UTILITY COMPANY REQUIREMENTS AS APPROVED BY THE CITY OF SPARKS. FOR CITY-OWNED UTILITIES, BEDDING MATERIAL SHALL BE CLASS A OR C, COMPACTED TO MINIMUM 90% RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
 - CLASS C BEDDING REQUIRES INSTALLATION OF GEOTEXTILE FABRIC BETWEEN PIPE ZONE AND BACKFILL MATERIAL. GEOTEXTILE FABRIC SHALL BE MIRAFI 180M OR APPROVED EQUAL.
 - BACKFILL MATERIAL SHALL BE TYPE 2, CLASS B OR CLASS E AND COMPACTED TO MINIMUM 90% RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
 - ALL EXCAVATIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.
 - EXISTING PIPE TO BE ABANDONED SHALL BE GROUT FILLED OR COMPLETELY REMOVED.
 - MINIMUM BACKFILL DEPTH REQUIREMENT IS FOR TRENCHING IN EXISTING PAVED STREETS. TRENCHING FOR NEW DEVELOPMENT WHERE STREETS HAVE NOT YET BEEN CONSTRUCTED, BACKFILL MATERIAL SHALL BE TYPE 2, CLASS B OR CLASS E AND COMPACTED TO MINIMUM 90% RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.



5 WATER/SEWER SEPARATION
C500 NTS

- NOTES:**
- INSTALLATION OF SEWER LINES AND LATERALS SHALL BE IN CONFORMANCE WITH ALL STATE OF NEVADA WATER/SEWER SYSTEM SEPARATION REGULATIONS.
 - WHENEVER POSSIBLE, SEWER LINES AND LATERALS SHALL BE INSTALLED IN SEPARATE TRENCHES IN THE TYPICAL CONFIGURATIONS SHOWN ABOVE.
 - IF THE PIPE CANNOT BE INSTALLED IN THE TYPICAL OR ALTERNATIVE CONFIGURATIONS, THE CONTRACTOR SHALL HAVE WRITTEN APPROVAL FROM THE DIVISION OF HEALTH FOR ANY OTHER INSTALLATION CONFIGURATION.



6 VALVE DETAIL
C500 NTS

- NOTES:**
- MATERIAL USED FOR SUPPORT BLOCKING SHOULD NOT PREVENT ACCESS TO THE BOLT ASSEMBLY.
 - CONCRETE SHALL MEET THE REQUIREMENTS OF SEC. 202.01 OF THE STANDARD SPECIFICATIONS. REBAR SHALL ONLY BE USED WHEN THE VALVE BOX IS LOCATED OUTSIDE OF PAVED AREAS.
 - VALVE BOXES TO BE SET 3/8"-5/8" BELOW FINISHED ROADWAY SURFACE. INSTALL OPERATING EXTENSION WITH OPERATING NUT RESTRAINING BOLT & TOP CENTERING PLATE. ANCHOR BARS & REDWOOD BLOCKS NOT REQUIRED WHEN OPERATING NUT IS AT GREATER DEPTH THAN 4' FROM FINISHED GRADE.
 - CONCRETE COLLAR TO BE LEFT 2" BELOW FINISH ASPHALT SURFACE. APPLY SS-1 TACK COAT BEFORE PAVING. SEAL A.C. SURFACE WITH SS-1 SAND, CHIP SEAL, FOG SEAL, SAND SEAL, OR SLURRY SEAL AS REQUIRED BY PLANS OR SPECS. EXTEND CONCRETE COLLAR TO GRADE WHEN NOT LOCATED IN ASPHALT PAVING.
 - CONCRETE COLLARS IN THE CITY OF RENO OR SPARKS ROADS SHALL BE BROUGHT TO GRADE ACCORDING TO THEIR RESPECTIVE REQUIREMENTS.

BLUEWAVE

Stantec

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REGISTERED PROFESSIONAL ENGINEER - STATE OF NEVADA
JAMES H. SPARKS
Exp. 12/31/2019
CIVIL
No. 20190

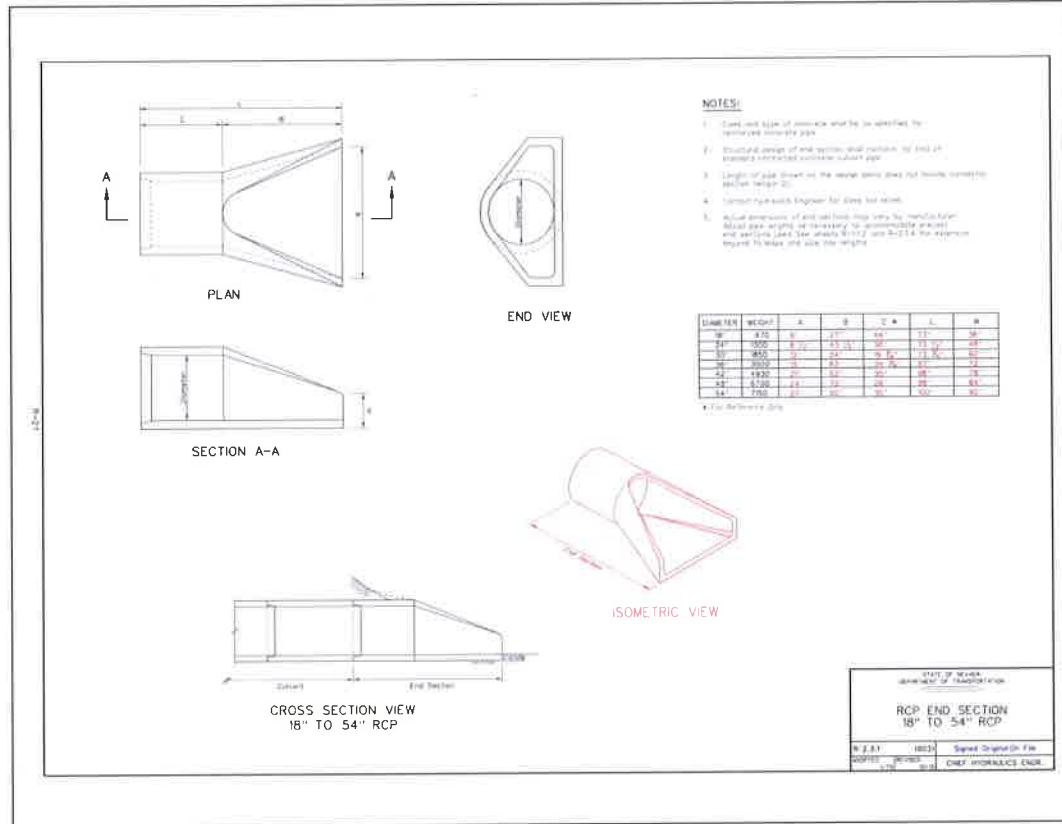
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MCCARRAN
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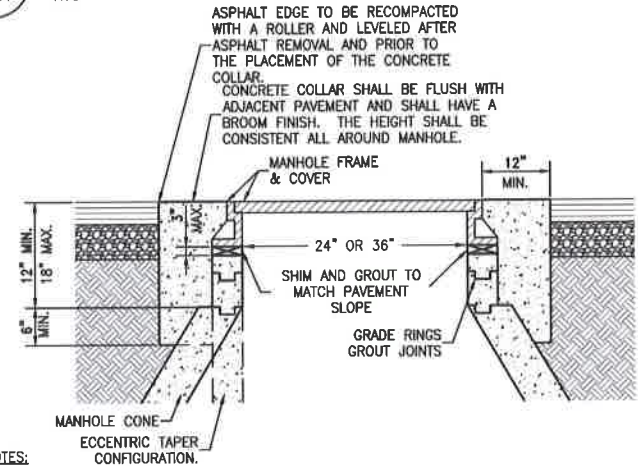
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CONSTRUCTION DETAILS

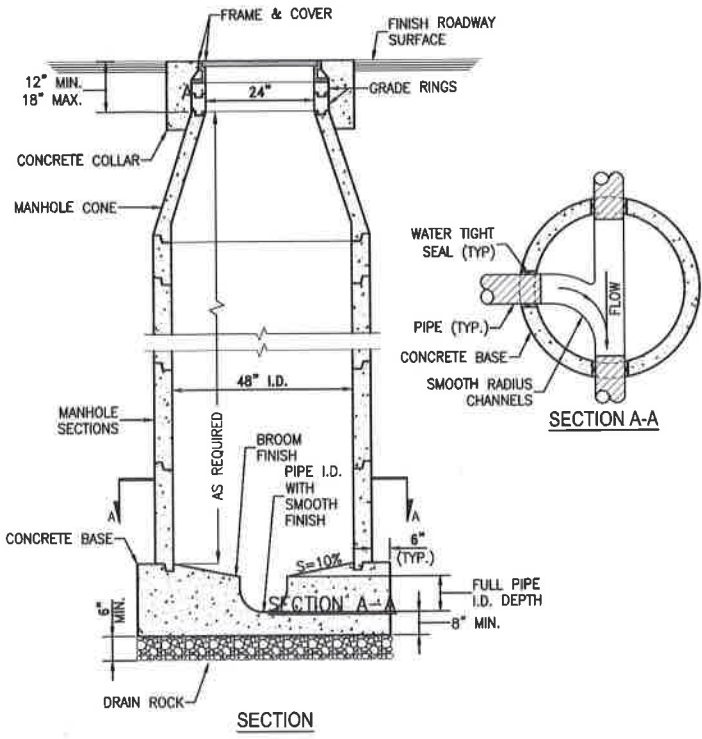
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1 RCP FLARED END SECTION
C501 NTS

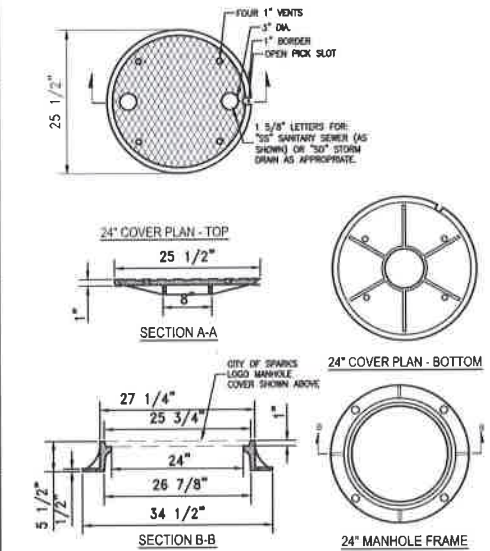


2 MANHOLE TYPE 1
C501 NTS



- GENERAL MANHOLE NOTES: TYPE I AND TYPE IV
1. ALL PRECAST MANHOLE COMPONENTS SHALL CONFORM TO ASTM C-478.
 2. PIPES SHALL NOT PROTRUDE MORE THAN 3" INSIDE MANHOLE SECTION AS MEASURED AT THE OUTSIDE EDGES OF THE PIPE, VERTICALLY ALIGNED WITH THE SPRINGLINE. PIPE CONNECTION TO MANHOLE SHALL BE WATERTIGHT PER DETAILS 5 AND 6 C501.
 3. MANHOLE BASE SHALL BE PORTLAND CEMENT CONCRETE (P.C.C.) AND SHALL HAVE THE FOLLOWING CHARACTERISTICS: 3000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS, MINIMUM 6 SACKS OF CEMENT PER CUBIC YARD WITH SLUMP AT 1 TO 4 INCHES. ALL MATERIAL SHALL CONFORM TO STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). PRECAST CONCRETE BASE MAY BE USED IN LIEU OF CAST-IN-PLACE BASE.
 4. TYPE I MANHOLE TO BE UTILIZED FOR PIPE DIAMETERS OF 12" OR SMALLER AND DEPTHS NOT EXCEEDING 18 FEET.
 5. TYPE V MANHOLE TO BE UTILIZED FOR PIPE DIAMETERS OF 15" THROUGH 27" OR DEPTHS EXCEEDING 18 FEET.
 6. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 "MANHOLES AND CATCH BASINS" OF THE STANDARD SPECIFICATIONS.
 7. PRECAST MANHOLE SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE GASKET MATERIAL SUCH AS "RAM-NEK" OR EQUAL AS PER MANUFACTURER'S RECOMMENDATIONS.
 8. EXCAVATION AND BACKFILL SHALL BE AS SPECIFIED FOR "TRENCH EXCAVATION AND BACKFILL" IN SECTION 305 OF THE STANDARD SPECIFICATIONS.
 9. EXCAVATION SHALL BE AS NEARLY VERTICAL AS POSSIBLE (SHEET AND SHORE IF SOIL CONDITIONS REQUIRE) IN EXISTING STREET SECTIONS, ALLEY SECTIONS, AND CONFINED AREAS, SUCH AS LIMITED EASEMENTS OR ADJACENT STRUCTURES.
 10. MANHOLE PRECAST SECTION LENGTH SHALL BE ARRANGED TO FIT THE REQUIRED DEPTH.
 11. NO LATERALS OR PIPES LESS THAN 8" IN DIAMETER SHALL BE CONNECTED TO THE MANHOLE.
 12. PRECAST CONCRETE BASE MAY BE USED IN LIEU OF CAST-IN-PLACE BASE.
 13. MATCH PIPE INVERTS TO MANHOLE INVERTS WHERE PIPES CONNECT TO MANHOLE BASE.
 14. ALL MANHOLES SHALL BE WATERTIGHT.
 15. SEE DETAIL FOR OUTSIDE DROP MANHOLE FOR SANITARY SEWERS WITH MORE THAN 2 FEET VERTICAL DROP AT THE MANHOLE. THE USE OF "INSIDE DROP" MANHOLES IS NOT PERMITTED.
 16. THE USE OF FLAT TOP MANHOLE CONES REQUIRES PRIOR APPROVAL FROM THE CITY ENGINEER.
 17. PRIOR TO BACKFILLING, ALL MANHOLES SHALL BE VACUUM TESTED PER ASTM C-1244.
 18. NO STEPS, LADDERS, OR OTHER CLIMBING DEVICES SHALL BE INSTALLED IN THE MANHOLE.
 19. REINFORCING STEEL SHALL BE AS SHOWN, WIRED TIGHTLY AT ALL INTERSECTIONS AND EMBEDDED AT LEAST 1 1/2" CLEAR, UNLESS OTHERWISE NOTED.
- WHEN PIPE CONNECTIONS TO EXISTING MANHOLES ARE ALLOWED, THEY SHALL BE MADE BY CORE DRILLING THE MANHOLE AND CONNECTING THE PIPE PENETRATION PER DETAILS 5 AND 6 C501.

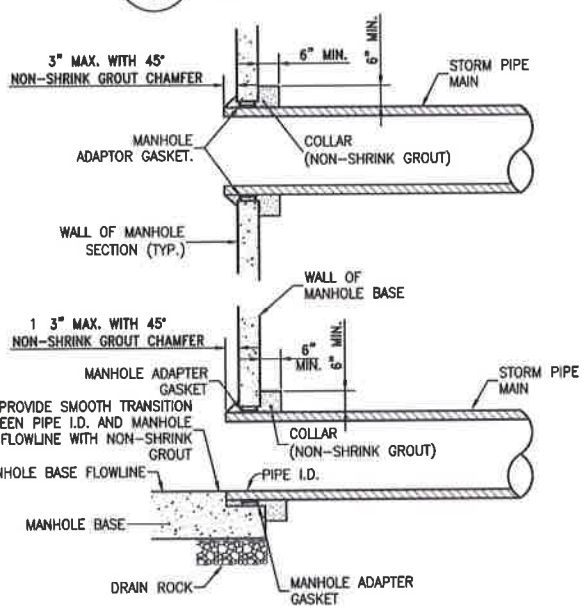
- NOTES:**
1. FIBER-REINFORCED PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC.
 2. CIRCUMSTANCES MAY REQUIRE THE NEED FOR SPECIAL TYPES OF TOP OF MANHOLE CONFIGURATIONS SUCH AS FLAT TOP, ABOVE GROUND, ETC. AS DIRECTED BY THE CITY OF SPARKS. DETAILED PLANS OF ANY SPECIAL TOP OF MANHOLE CONFIGURATIONS AND ASSOCIATED COLLARS MUST BE APPROVED BY THE ENGINEER.
 3. IN UNPAVED AREAS, IT SHALL BE NECESSARY TO SET THE MANHOLE RIM APPROXIMATELY 6 INCHES ABOVE THE SURROUNDING AREA. INSTALL A 6 INCH THICK RING OF CONCRETE, TAPERED AT A 3:1 SLOPE, FROM THE TOP, OUTSIDE EDGE OF THE COLLAR TO THE EXISTING GROUND SURFACE.
 4. EXISTING SANITARY SEWER MANHOLE LIDS LOCATED IN GUTTER PANS, SHALL HAVE NEW WATER TIGHT FRAMES AND COVERS.
 5. ALL GRADE RING JOINTS ARE TO BE GROUTED WITH NON-SHRINK GROUT HAVING THE FOLLOWING CHARACTERISTICS: 3000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD AND SLUMP AT 1 TO 4 INCHES. ALL MATERIAL SHALL CONFORM TO SSPWC.
 6. ALL GRADE RINGS SHALL BE PORTLAND CEMENT CONCRETE. PVC GRADE RINGS ARE NOT ALLOWED.



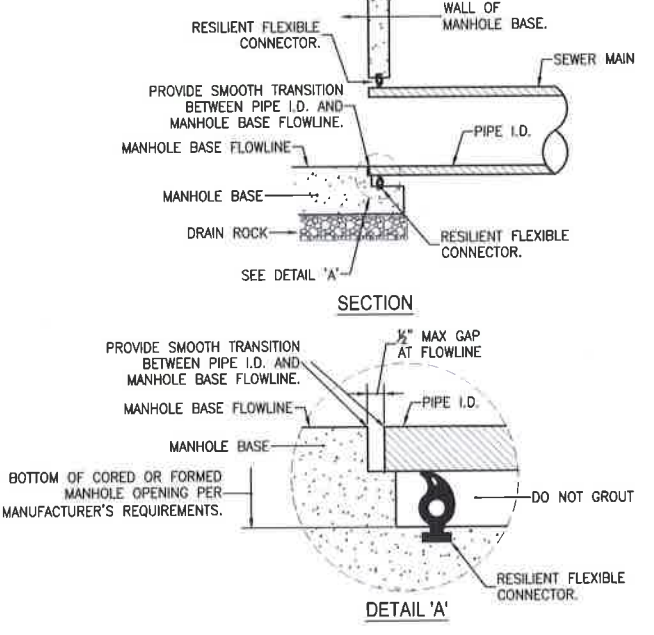
3 24" MANHOLE FRAME AND COVER
C501 NTS

- NOTES:**
1. NON-SHRINK GROUT SHALL HAVE THE FOLLOWING CHARACTERISTICS: 3000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD AND SLUMP AT 1 TO 4 INCHES. ALL MATERIAL SHALL CONFORM TO SSPWC SECTION 202.
 2. STORM DRAIN PIPE CONNECTIONS TO MANHOLE BASES AND SECTIONS REQUIRE AN AGENCY-APPROVED FORM OF SEAL OR WATER STOP AND IS REQUIRED ON ALL STORM DRAIN INSTALLATIONS TO PROVIDE A WATERTIGHT CONNECTION. UTILIZE A ROMAC STYLE "LCT" MANHOLE ADAPTER GASKET OR APPROVED EQUAL IN CONJUNCTION WITH THE NON-SHRINK GROUT.
 3. A RESILIENT FLEXIBLE CONNECTOR INSTALLED IN ACCORDANCE WITH DETAIL 6-C501 MAY BE USED TO SATISFY THE REQUIREMENTS OF NOTE 2 ABOVE.
 4. ALL PIPE OPENINGS TO NEW MANHOLES MUST BE EITHER CAST-IN-PLACE OR PRE-FORMED AND PIPE OPENINGS TO EXISTING MANHOLES MUST BE CORE DRILLED.

5 STORM DRAIN PIPE TO MANHOLE CONNECTION
C501 NTS



6 RESILIENT FLEXIBLE CONNECTOR
C501 NTS



BLUE WAVE

Stantec

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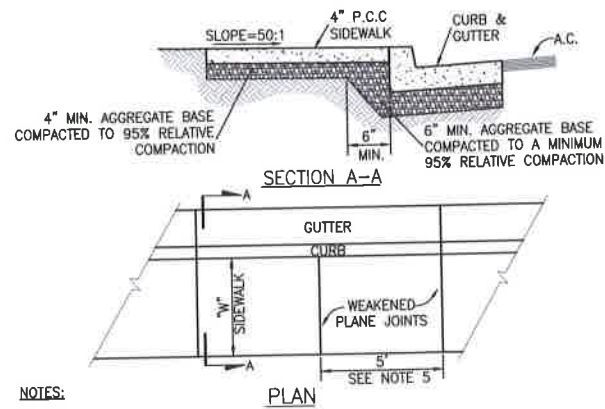


BLUEWAVE MCCARRAN BOULEVARD SPARKS

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

PERMIT SET	05/29/2019
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

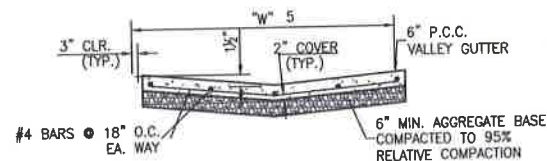
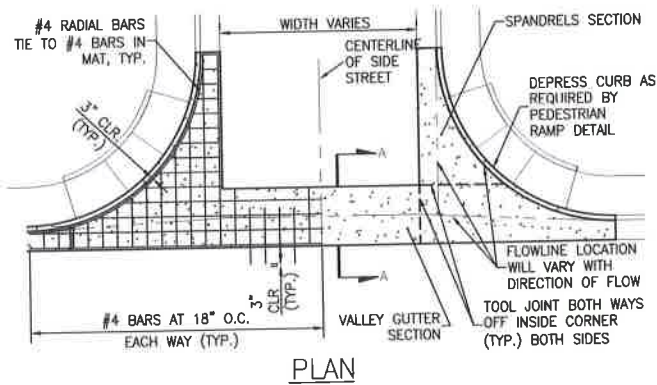
Drawing No. **C501**
Revision Sheet
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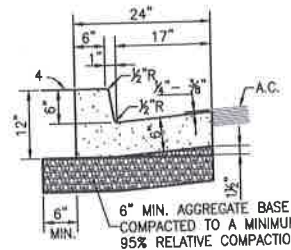
NOTES:

- FIBER-REINFORCED PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC.
- AGGREGATE BASE MATERIAL UNDER SIDEWALKS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
- SIDEWALK WIDTH "W" SHALL BE 4 FT. MIN. ON RESIDENTIAL STREETS AND 6 FT. MIN. ON COLLECTOR AND ARTERIAL STREETS.
- WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 5 FT INTERVALS AND ACCORDANCE WITH SECTION 312 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- ALL ADJACENT CONCRETE REMOVAL SHALL BE TO NEAT SAW CUT LINES AT RIGHT ANGLES TO NEW SIDEWALK. DOWEL INTO EXISTING ADJACENT CONCRETE SIDEWALK WITH A MINIMUM OF TWO (2) No. 4 REINFORCEMENT BARS EQUALLY SPACED ACROSS WIDTH "W". DOWELS SHALL PENETRATE A MINIMUM OF 4" INTO EXISTING CONCRETE.
- SIDEWALKS SHALL NOT BE POURED MONOLITHICALLY WITH CURBS.
- COLORLED CONCRETE AND PAVERS ARE NOT ALLOWED.
- TUNNELING AND/OR BORING IS NOT ALLOWED.

1 SIDEWALK DETAIL
C502 NTS



4 P.C.C. VALLEY GUTTER
C502 NTS



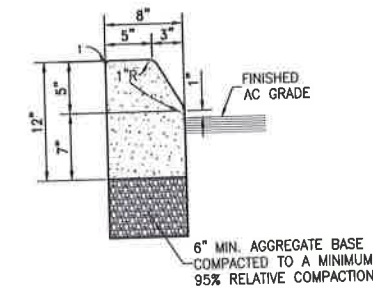
NOTES:

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- AGGREGATE BASE MATERIAL UNDER AND BEHIND CURB AND GUTTER SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
- WEAKENED PLANE JOINTS SHALL BE EVERY 10 FEET AND LOCATED ON THE BACK, TOP AND FACE OF THE CURB AND THE TOP OF THE GUTTER PAN.
- CURB & GUTTER SECTIONS SHALL BE PLACED SEPARATELY FROM SIDEWALK SECTIONS. WHEN SIDEWALK IS NOT REQUIRED DIRECTLY BEHIND THE CURB, BACKFILL TO TOP OF CURB FOR A HORIZONTAL DISTANCE OF 12" FROM BACK FACE OF CURB AND COMPACT TO 90% RELATIVE COMPACTION.
- FOR REPLACEMENT OF EXISTING CURB AND GUTTER, MATCH EXISTING TYPE.

2 P.C.C. CURB AND GUTTER
C502 NTS

NOTES:

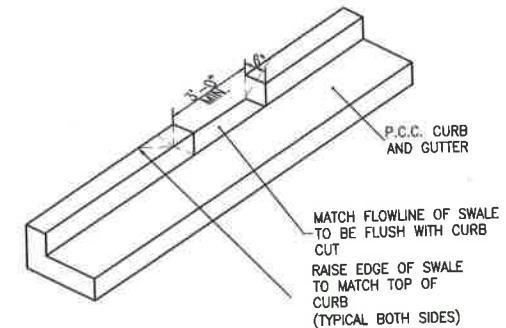
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- AGGREGATE BASE UNDER VALLEY GUTTER AND SPANDRELS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE. ALL MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
- P.C.C. VALLEY GUTTER DETAIL FOR RESIDENTIAL OR COMMERCIAL ZONES ONLY FOR OTHER APPLICATIONS AN ENGINEERED DESIGN IS REQUIRED.
- VALLEY GUTTER SHALL HAVE WEAKENED PLANE JOINTS EVERY 10 FEET.
- LOCAL AND COLLECTOR STREETS, "W"=6' MIN. ARTERIAL STREETS (DRIVEWAYS ONLY), "W"=10' MIN.
- VALLEY GUTTER SECTIONS (SPANDRELS) ALONG CURB & GUTTER MAY BE A MONOLITHIC POUR AS SHOWN. DOWELS MATCHING REBAR SPACING SHOWN ARE REQUIRED FROM VALLEY GUTTER SECTION TO SPANDREL SECTION IF POURED SEPARATELY.



NOTES:

- RADIUS TO BE 1/2 INCH, OMIT ROUNDING IF CURBS ARE BACK TO BACK.
- FIBER-REINFORCED PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC.
- AGGREGATE BASE MATERIAL UNDER MEDIAN CURBS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.

3 P.C.C. MEDIAN CURB
C502 NTS



5 CURB OPENING
C502 NTS



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Sparks, Nevada

CONSTRUCTION DETAILS

PERMIT SET 05/29/2019

Issues

Project Number 222310634

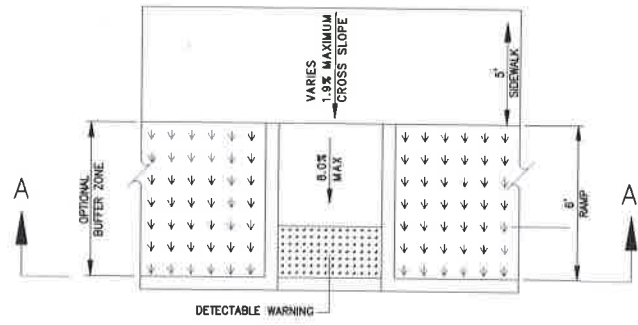
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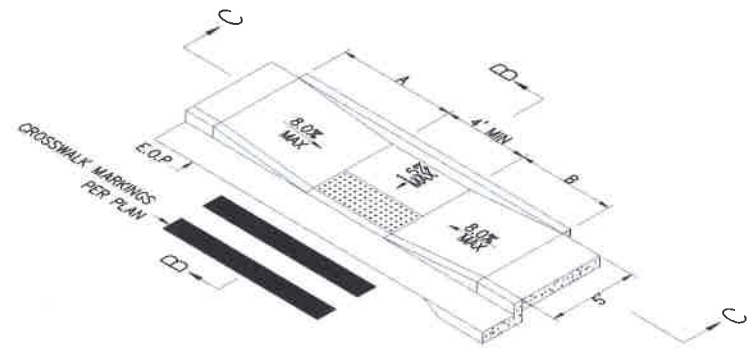
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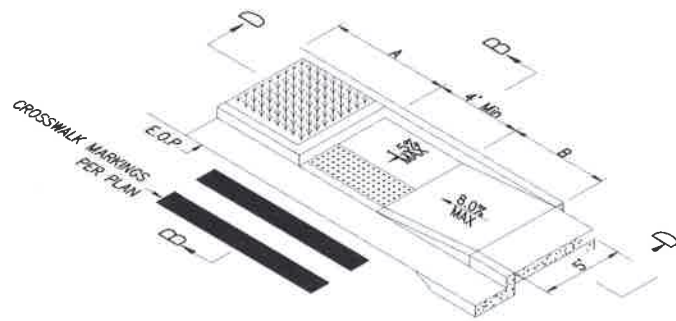
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CURB RAMP TYPE 1

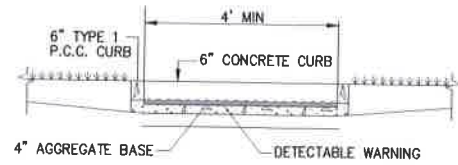


CURB RAMP TYPE 2

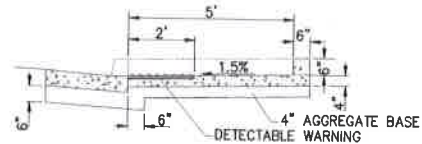


CURB RAMP TYPE 3

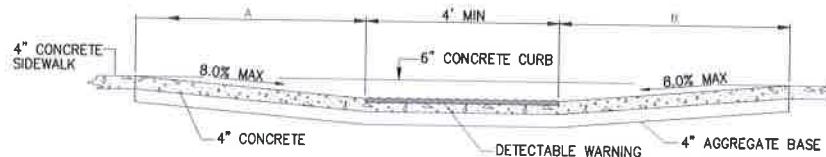
1 CURB RAMPS
C503 NTS



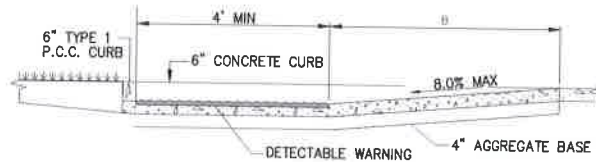
SECTION A-A



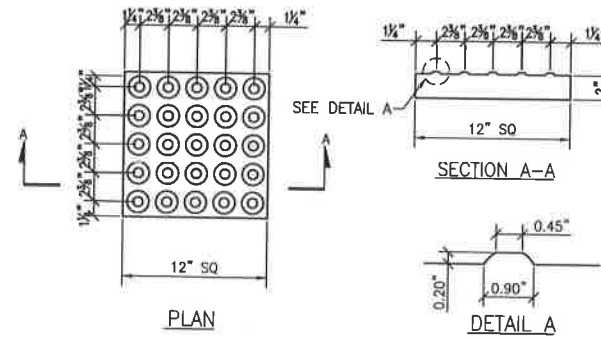
SECTION B-B
(WITH BACK CURB)



SECTION C-C



SECTION D-D



NOTE: FOR DETECTABLE TRUNCATED DOMES APPROVED MATERIALS SEE NOTE 8

TRUNCATED DOMES DETAIL

CURB RAMP NOTES:

1. EXTEND DETECTABLE WARNING THE FULL WIDTH OF THE CURB RAMP (EXCLUSIVE OF FLARED SIDES).
2. TRANSITIONS FROM RAMPS TO GUTTERS OR ROADWAY SURFACE SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
3. PLANTMIX BITUMINOUS OPEN-GRADED SURFACE SHALL BE FLUSH WITH THE EDGE OF THE GUTTER PAN.
4. ROUGH BROOM TEXTURE ON CURB RAMPS AND WINGS. TEXTURE SHALL PROVIDE A VISUAL CONTRAST TO THE SIDEWALK.
5. ALL RAMPS SHALL BE 8.0% OR FLATTER.
6. ALL SLOPE RATES ARE RELATIVE TO LEVEL.
7. CONCRETE SHALL BE CLASS A OR AA.
8. RAISE GUTTER FLOWLINE 2 INCH MAXIMUM, WHEN REQUIRED TO PREVENT PONDING AT THE RAMP AND MAINTAIN POSITIVE DRAINAGE.



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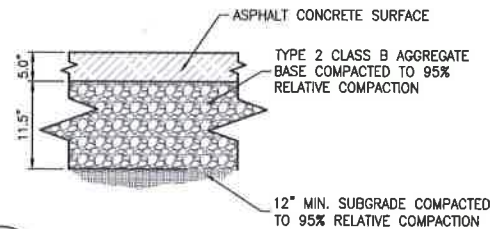
BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

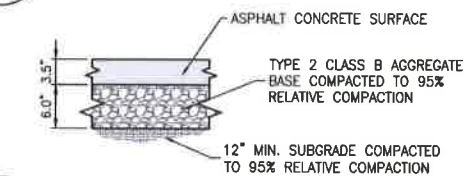
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PERMIT SET	05/29/2019
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Drawn By	TAS/HZ
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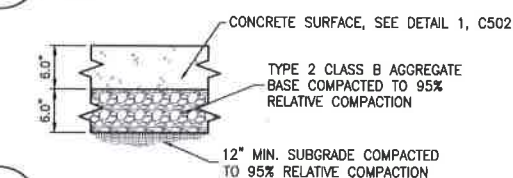
Drawing No. **C503**
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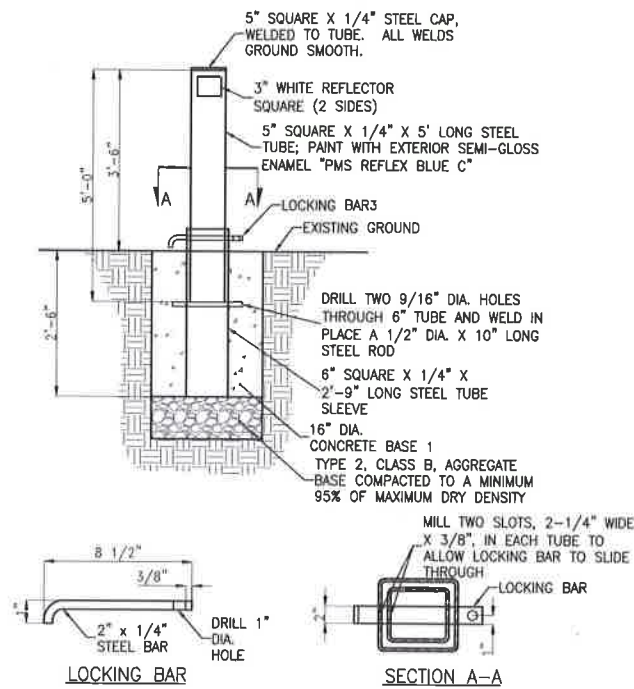
1 HEAVY DUTY AC PAVEMENT SECTION
C503 NTS



2 AC PAVEMENT SECTION
C503 NTS



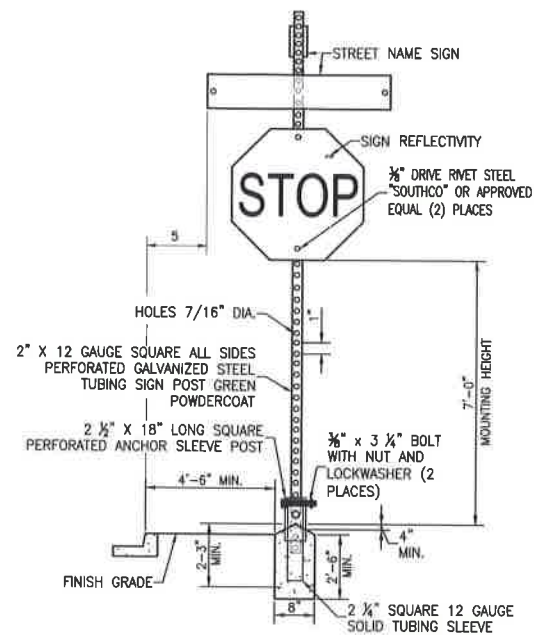
3 TYP. CONCRETE SECTION
C503 NTS



NOTES:

1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 3000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS, MINIMUM 6 SACKS OF CEMENT PER CUBIC YARD WITH SLUMP AT 1 TO 4 INCHES. ALL MATERIAL SHALL CONFORM TO SSPWC, SECTION 202.
2. ALL WELDS AND BENDS SHALL BE SMOOTH, EVEN AND PAINTED.
3. THE CITY OF RENO SHALL PROVIDE THE PADLOCK AND MAINTAIN THE KEYS.

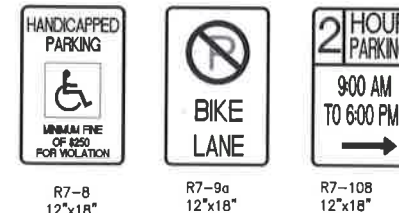
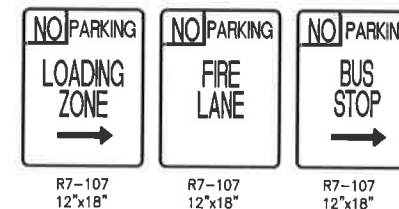
4 REMOVABLE BOLLARD
C503 NTS



NOTES:

1. SIGN MATERIALS, CONSTRUCTION AND PLACEMENT SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. ON STREETS WHERE CURBING DOES NOT EXIST, SET SIGN 6" MINIMUM FROM PAVEMENT EDGE.
3. CONCRETE BASE SHALL BE LOCATED AT BACK OF SIDEWALK, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
4. ALL REGULATORY SIGNS SHALL BE 3M DIAMOND GRADE (DG3) WITH A 3M CLEAR TRANSPARENT OVERLAY #1170 OR APPROVED EQUAL.
5. 2 FOOT MINIMUM FROM EDGE OF SIGN TO FACE OF CURB IN RESIDENTIAL, COMMERCIAL OR BUSINESS AREAS.

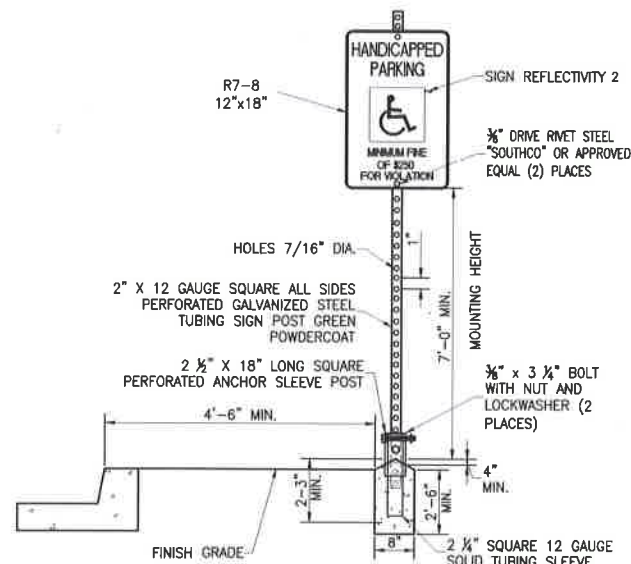
5 TRAFFIC SIGN INSTALLATION
C503 NTS



NOTES:

1. SIGN LETTERS, COLORS AND PLACEMENT SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. TIME RESTRICTED PARKING SIGNS ARE AVAILABLE IN 30 MINUTE, 1 HOUR, 2 HOUR, AND 5 HOUR INCREMENTS.
3. REFER TO STANDARD DETAIL 5 FOR MOUNTING AND POLE REQUIREMENTS, UNLESS OTHERWISE SPECIFIED.

6 TRAFFIC PARKING SIGNS
C503 NTS

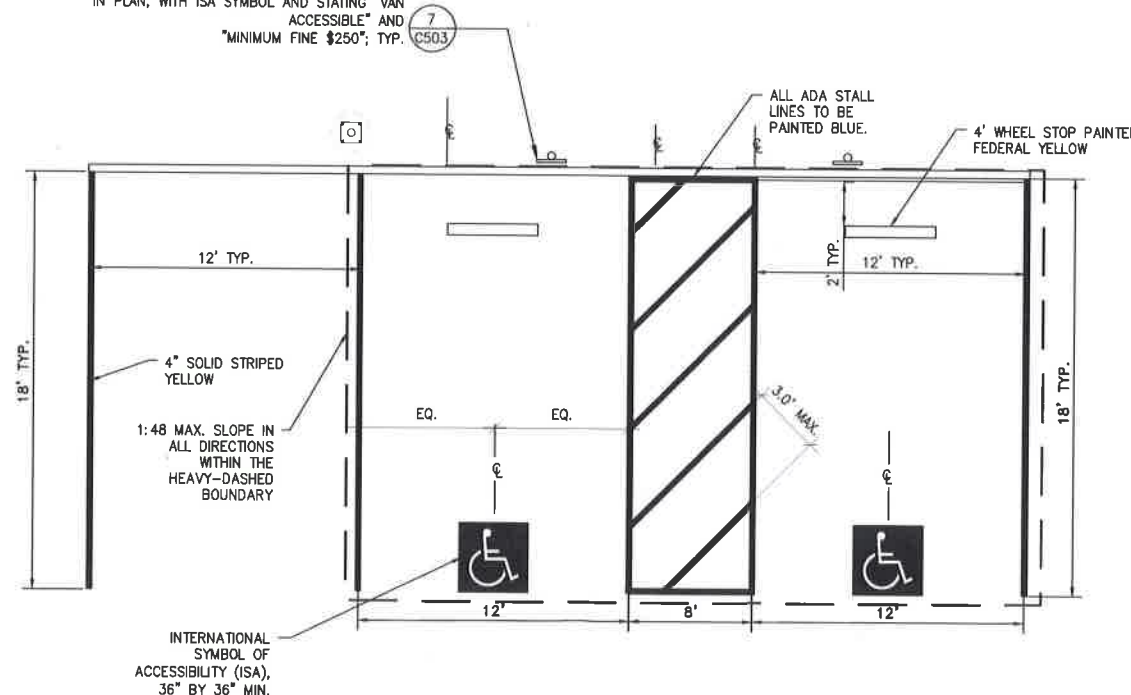


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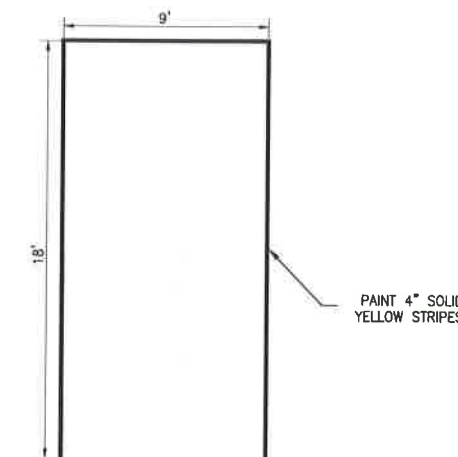
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7 HANDICAP PARKING SIGN INSTALLATION
C503 NTS

IDENTIFICATION SIGN TO BE POSTED AS SHOWN IN PLAN, WITH ISA SYMBOL AND STATING "VAN ACCESSIBLE" AND "MINIMUM FINE \$250"; TYP. C503



8 VACUUM PARKING STALLS W/ ADA OPTION
C503 NTS



NOTE:

1. ALL TRAFFIC PAINT SHALL HAVE A MINIMUM OF 2 COATS PER APPLICATION.
2. AT LEAST 24 HOURS SHALL ELAPSE BETWEEN AN APPLICATION OF BITUMINOUS SEAL COAT AND PERMANENT STRIPING AND MARKING.

9 PARKING STALL DESIGN
C503 NTS



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**BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS**

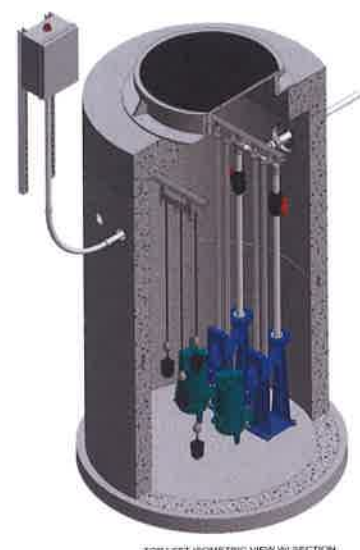
Client/Project
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MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

CONSTRUCTION DETAILS

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Drawn By TAS/HZ
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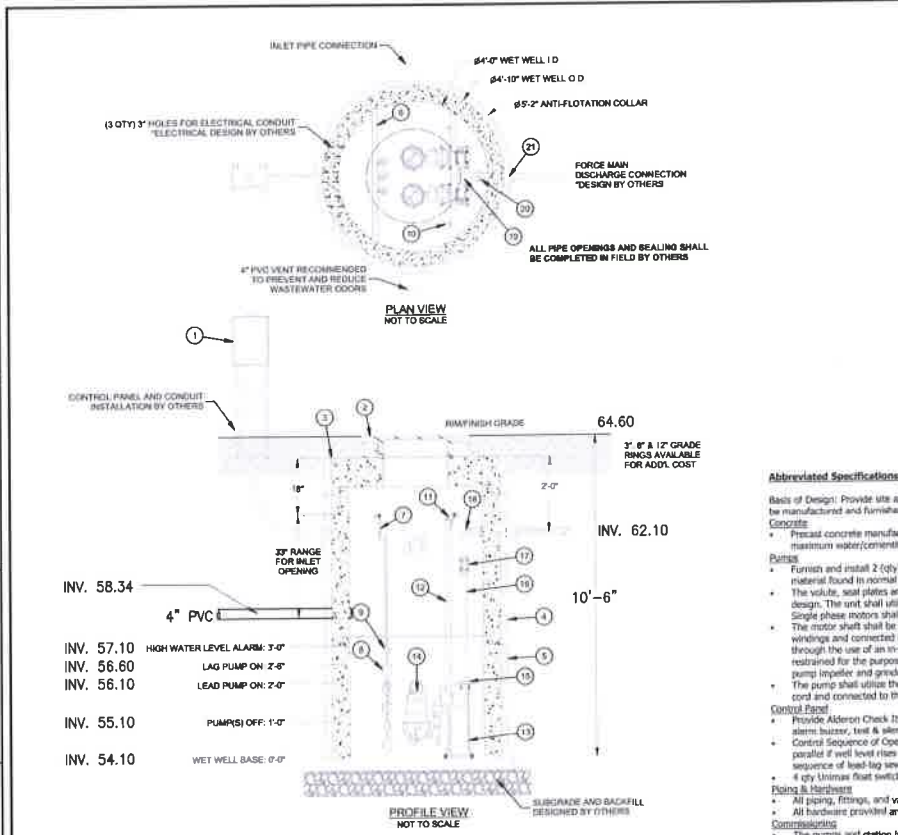
JENSEN RESI-PACK/G



DISCLAIMER, INCLUDING BUT NOT LIMITED TO:
 1) All elevations have been provided by others, and have not been verified by Jensen Precast. Contractor to verify all dimensions and elevations prior to installation.
 2) These layout drawings are intended to show overall system design only. All concrete component thicknesses, dimensions, and joint locations may vary across Jensen Precast's manufacturing facilities. Contractor to confirm all thicknesses, dimensions, and joint locations prior to installation.
 3) System design criteria has been provided to Jensen Precast. Others are responsible for verification that system meets intended application.
 4) Foundation, subgrade, and backfill to be designed by others.

JENSEN PRECAST PUMP STATIONS
 521 DUNN CIRCLE, SPARKS, NV 89431
 www.jensenprecast.com
 (855) 488-5600

DESCRIPTION:	JENSEN RESI-PACK/G	REV:	
TITLE:	JENSEN RESI-PACK/G	SHEET:	1 OF 2
DRAWN BY:	NC		
MODIFIED:	12/17/2018		
CREATED:	11/5/2018		



ITEM	QTY	DESCRIPTION
1	3	DUPLEX ALTERNATING CONTROL PANEL FOR 2 HP MOTORS
2	1	30" DIA. CAST IRON RING AND COVER WITH GASKET
3	1	48" DIA. JENSEN PRECAST MANHOLE FLAT TOP
4	1	48" DIA. JENSEN PRECAST CONCRETE MANHOLE BURNER, 4"
5	1	48" DIA. JENSEN PRECAST CONCRETE MANHOLE BASE, 2"
6	10	1/2" THICK STROUT C CHANNEL, CUT TO LENGTH AS NEEDED
7	1	88-3 HOOK FLOAT BRACKET
8	4	UBAMAAL CONTROL SWITCH
9	4	CORD WEIGHT CARRY
10	2	88-1 HOOK BRACKET
11	2	UPPER GUIDE RAIL BRACKET
12	40	1/2" DIA. 5000 PSI SCH 40 PIPE, CUT TO LENGTH AS NEEDED
13	2	STANDARD 1-20" AUTOCOUPLING WITH CHECK VALVE
14	2	SUBMERSIBLE PUMP WITH 1.25" NPT DISCHARGE AND 20' POWER CABLE
15	2	2" TO 1.25" PVC SCH 80 REDUCER BUSHING
16	20	1/2" PVC SCH 80 PIPE, CUT TO LENGTH AS NEEDED
17	2	1.25" PVC SCH 80 BALL VALVE
18	2	1.25" PVC SCH 80 90 DEGREE ELBOW
19	1	1.25" PVC SCH 80 TEE
20	1	1.25" PVC SCH 80 UNION
21	1	FLEXIBLE BOOT TYPE PIPE CONNECTOR FOR 2" PVC

PUMP CHARACTERISTICS	
DESCRIPTION	VALUE
DUTY POINT RANGE	LIFTED 40 GPM @ 30' TDH
MANUFACTURER	BARNEYS
MODEL NUMBER	200P
PUMP TYPE	SUBMERSIBLE UNDER
MOTOR SIZE	2 HP
POWER SUPPLY	200V SINGLE PHASE

Abbreviated Specifications:

Notes: Basis of Design: Provide site assembled precast wastewater pump station, including specified controls, pumps, valves, internal piping, and precast concrete wet well to be manufactured and furnished by Jensen Precast Stations, (855) 488-5600, PumpStations@jensenprecast.com, www.jensenprecast.com.

Concrete:

- Precast concrete manufacturer must be NCA-certified. Design shall be according to ACI 318/118R. Mix design shall be: 4,000 psi minimum, with 0.45 maximum water/cementitious materials ratio. Wet well designed per ASTM C 478, precast, reinforced concrete.

Pumps:

- Furnish and install 2 (2) barneys submersible grinder type centrifugal pump with a self-engaging, non-sparking lift out assembly, designed to reduce all material found in normal domestic and light industrial sewage.
- The valve, seal plates and motor housing shall be constructed of high quality ASTM A-48 class 30 cast iron. The pump impeller shall be of the recessed vane design. The unit shall utilize a tandem mechanical shaft seal arrangement and shall operate in an oil atmosphere. Single seal design shall not be accepted. Single phase motors shall be of the capacitor start, capacitor run design.
- The motor shaft shall be of 416 stainless steel. Protection against excessive temperature shall be provided by heat sensor thermostat attached to the stator windings and connected to wires with the conductor coil in the control panel. The single phase models shall provide protection against excessive temperature through the use of an in-line heat/current sensor. The pump shall have a three bearing design consisting of an upper ball bearing, an intermediate ball bearing restrained for the purpose of carrying the thrust loads, and a lower bronze sleeve bearing to carry radial loads and prevent shaft deflection imposed by the pump impeller and grinder operation.
- The pump shall utilize the Barnes 2212 break-away fitting which includes an integral check valve. The pump shall be equipped with 30 ft. of type SOW power cord and connected to the motor via quick disconnect pin terminals.

Control Panel:

- Provide Anderson Check It pump control panel for 1-phase duplex system. Check It panel is float switch operated and includes: NEMA 4X enclosure, beacon and alarm buzzer, test & alarm switches, HDA switches, pump run indicators and float switch indicators.
- Control Sequence of Operation: Cycle each pump on and off automatically to maintain well water level. Automatic control operates both pumps in parallel if well level rises above starting point of low-level pump, until shut-off level is reached. Automatic alternator, with manual disconnect switch, changes sequence of lead-lag sewage pumps at completion of each pumping cycle.
- 4 dry limit float switches shall be provided with control panel.

Fittings & Hardware:

- All piping, fittings, and valves shall be Schedule 80 and conforming to ASTM Standard D 1784.
- All hardware provided and used within wet well shall be 316SS quality.

Commissioning:

- The pumps and station integration shall be tested and confirmed at start-up by a qualified Jensen Pump Stations representative.

DISCLAIMER, INCLUDING BUT NOT LIMITED TO:
 1) All elevations have been provided by others, and have not been verified by Jensen Precast. Contractor to verify all dimensions and elevations prior to installation.
 2) These layout drawings are intended to show overall system design only. All concrete component thicknesses, dimensions, and joint locations may vary across Jensen Precast's manufacturing facilities. Contractor to confirm all thicknesses, dimensions, and joint locations prior to installation.
 3) System design criteria has been provided to Jensen Precast. Others are responsible for verification that system meets intended application.
 4) Foundation, subgrade, and backfill to be designed by others.

JENSEN PRECAST PUMP STATIONS
 521 DUNN CIRCLE, SPARKS, NV 89431
 www.jensenprecast.com
 (855) 488-5600

DESCRIPTION:	JENSEN RESI-PACK/G	REV:	
TITLE:	MECHANICAL DETAILS	SHEET:	2 OF 2
DRAWN BY:	NC		
MODIFIED:	12/17/2018		
CREATED:	11/5/2018		



6995 SIERRA CENTER PARKWAY
 Reno, Nevada 89511
 Tel: (775) 850-0777 Fax: (775) 850-0787
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BLUEWAVE
 MCCARRAN
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Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada

PERMIT SET	05/29/2019
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **C505**
 Revision Sheet
 0 15 of 24

CONSTRUCTION DETAILS
 V:\2223\cshwa\222310634\civil\drawing\shuman10634_MCBW_DT.dwg modified by thoscon on 5/17/2018 9:59 AM

PLANT SCHEDULE						
TREES	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY	
(+)	EXISTING		EXISTING		3	
(*)	ACER X FREEMANII 'JEFFSRED'	AUTUMN BLAZE MAPLE	2" CAL	50'X30'	8	
(*)	CUPRESSUS ARIZONICA 'BLUE PYRAMID'	BLUE PYRAMID CYPRESS	6' TALL	20'X10'	3	
(*)	JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	8' TALL	20'X8'	8	
(*)	MALUS X 'ADAMS'	CRAB APPLE	1" CAL	20'X20'	8	
(*)	PICEA PUNGENS	COLORADO SPRUCE	8' TALL	25'X10'	3	
(*)	PINUS NIGRA	AUSTRIAN BLACK PINE	8' TALL	40'X20'	4	
(*)	PLATANUS X ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	2" CAL	40'X35'	4	
(*)	QUERCUS COCCINEA	SCARLET OAK	2" CAL	40'X35'	4	
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY	
(*)	ACHILLEA MACROPHYLLA	YARROW	5 GAL	2'X2'	28	
(*)	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	5 GAL	4'X3'	77	
(*)	FORESTIERA NEOMEXICANA	NEW MEXICO PRIVET	5 GAL	12'X12'	8	
(*)	LAVANDULA ANGUSTIFOLIA 'HIDCOTE SUPERIOR'	HIDCOTE SUPERIOR LAVENDER	5 GAL	2.5'X2.5'	33	
(*)	MAHONIA REPENS	CREeping MAHONIA	5 GAL	1'X4'	12	
(*)	PENNISETUM ALOPECUROIDES 'KARLAY ROSE'	FOUNTAIN GRASS	5 GAL	5'X4'	16	
(*)	PEROVSKIA ATRIPICIFOLIA	RUSSIAN SAGE	5 GAL	4'X4'	42	
(*)	PINUS MUGO 'MOPS'	MUGO PINE	5 GAL	3'X3'	16	
(*)	PRUNUS BESSEYI 'PAMNEE BUTTES'	SAND CHERRY	5 GAL	3'X5'	36	
(*)	RHUS AROMATICA	FRAGRANT SUMAC	5 GAL	3'X6'	30	
(*)	RHUS GLABRA	SMOOTH SUMAC	5 GAL	10'X8'	18	
(*)	RIBES AUREUM	GOLDEN CURRANT	5 GAL	5'X8'	9	
(*)	SHEPHERDIA ARGENTEA	SILVER BUFFALOBERRY	5 GAL	10'X10'	18	

GROUNDPLANE		
SYMBOL	DESCRIPTION	QTY
(*)	Shadow Edge 1-1/2"	17,680 SF
(*)	Shadow Ridge 100% 1-1/2"	7,443 SF
(*)	25% Scatter 3"-10"	4,250 SF
(*)	River Rock 3"-8"	10,211 SF
(*)	Seeded Revegetation	8 EA
(*)	Boulders - 3" DIA	8 EA

SITE DATA & REQUIREMENTS			
ZONING: PO			
SITE AREA (DEVELOPED): 70,045 SF			
LANDSCAPE*:	(20%)	REQUIRED 14,009 SF	PROVIDED 30,621 SF
ONE TREE PER FIVE HUNDRED SF OF REQUIRED LANDSCAPE INCLUDES		28 EA	28 EA
ONE TREE PER 7 PARKING SPACES	(25)	4 EA	4 EA
TOTAL TREES REQUIRED		32 EA	32 EA
-INCLUDES ONE STREET TREE PER 30 LF FRONTAGE - 30 (WEDEKIND RD/ 500 LF - 17, McCARRAN BLVD/ 390 LF - 13)			
-50% REQ. DECID. TREES SHALL BE MIN. 1" CAL.		6	6
-50% REQ. DECID. TREES SHALL BE MIN. 2" CAL.		12	12
-EVERGREEN TREES SHALL BE MIN. 6' HT.		16	22
SHRUBS			
-60% SHRUBS SHALL BE MIN. 5 GAL SIZE		203	226
-40% SHRUBS SHALL BE MIN. 1 GAL. SIZE		X	113
GROUND COVERING OVER ENTIRE LANDSCAPE AREA IS PROVIDED WITH SHRUBS, ORNAMENTAL GRASSES, DECORATIVE ROCK MULCHES, AND SEEDED REVEGETATION.			
PROJECT ENTRY WITH SPECIAL LANDSCAPE ELEMENTS IS PROVIDED WITH SPECIMEN ORNAMENTAL TREES			
*PROVIDED LANDSCAPE INCLUDES 15,100 SF EAST OF DRIVEWAY WITH DRYLAND SEEDED REVEGETATION.			

LANDSCAPE SPECIFICATIONS

GENERAL:

- PLAN IS DIAGRAMMATIC ONLY. ALL LOCAL GOVERNING CODES SHALL BE MET. EXACT LOCATION OF TREES AND SHRUBS SHALL BE DETERMINED IN THE FIELD (INSTALL AS PER DETAILS) AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- A MINIMUM OF TWO WORKING DAYS BEFORE PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRIC CABLES, TELEPHONE CABLES, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND PROTECTION OF ALL UTILITIES, AND REPAIR OF ANY DAMAGE RESULTING FROM HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- DAMAGES: CONTRACTOR SHALL PROMPTLY REPAIR ALL DAMAGES TO EXISTING SITE AT NO COST TO OWNER.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES (I.E., PAVING, PLUMBING, ELECTRICAL, ETC.)
- THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION AND TO NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHOULD CONDITIONS EXIST WHICH PREVENT CONSTRUCTION AS PER THESE PLANS. COMMENCEMENT OF WORK SHALL CONSTITUTE ACCEPTANCE OF CONDITIONS AND RESPONSIBILITY FOR CORRECTIONS.
- CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE OWNER FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT.

REQUIRED SEQUENCE

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADING THROUGHOUT ALL LANDSCAPE AREAS SUCH THAT THERE ARE NO HUMPS OR DEPRESSIONS AND POSITIVE DRAINAGE OCCURS THROUGHOUT. THE TOP 18" OF ALL PLANTING BEDS SHALL BE CLEAN NATIVE SOIL, FREE OF ALL CONSTRUCTION DEBRIS AND NATIVE ROCKS OVER 6" IN DIAMETER. THE CONTRACTOR SHALL AMEND THE PLANTING BED OR PLANTING HOLES PER PLANS AND SPECIFICATIONS. FINAL GRADE OF ALL PLANTERS (I.E. MULCH SURFACE) SHALL BE FLUSH WITH ADJACENT HARDSCAPE SURFACES.
- THE CONTRACTOR SHALL OBTAIN SOIL TEST RESULTS AND RECOMMENDATIONS FOR EXISTING SITE SOIL INCLUDING TEXTURE CLASSIFICATION, PH, NITROGEN, POTASSIUM, MAGNESIUM, CALCIUM, PHOSPHORUS, SODIUM HAZARD, SALINITY HAZARD, BORON HAZARD, CATION EXCHANGE, AND FERTILIZATION MINERALS RECOMMENDATION FOR THE INTENDED USE. CONTRACTOR SHALL UTILIZE SOIL TEST RESULTS AND RECOMMENDATIONS AND SHALL PROVIDE SOIL AMENDMENTS ACCORDINGLY. CONTRACTOR SHALL PROVIDE COPIES OF SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER UPON REQUEST. RECOMMENDED SOIL TESTING LABS: MGS HARRIS, 621 ROSE ST., LINCOLN, NE 68502; (402) 476-2811, SUNLAND ANALYTICAL LAB, 11353 PYRITES WAY, SUITE 4, RANCHO CORDOVA, CA 95670; (916)-852-8557. ITP-2 MAJOR LANDSCAPE EVALUATION WITH BORON.
- INSTALL ALL PLANT MATERIALS AS PER DETAILS AND SOIL AND PLANT LAB REPORT. INSTALL SLOW RELEASE FERTILIZER TABLETS FOR ALL PLANTS. INFORMATION IN SOILS AND PLANT LAB REPORT SHALL PREVAIL OVER NOTES AND DETAILS.
- PLANTING MIX - SOIL AMENDMENT SHALL BE DOUBLE MIX COMPOSED OF TOPSOIL, BARK HUMUS, AND COMPOST. SUBMIT TO LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
- ALL PLANTING AREAS TO RECEIVE THREE-INCH MINIMUM DEPTH ROCK MULCH UNLESS OTHERWISE NOTED. SEE PLANS. PRIOR TO PLACEMENT SMOOTH AND COMPACT THE SUBGRADE TO 80% OF RELATIVE DENSITY. REMOVE WEEDS. INSTALL WOVEN WEED BARRIER FABRIC BENEATH ALL AREAS OF MULCH. LANDSCAPE FABRIC TO BE 'DEWITT' PRO-5 WEED BARRIER (OAK) INSTALLED IN ACCORDANCE WITH MFG'S SPECIFICATIONS. ANCHOR ALL EDGES PER MANUFACTURER'S SPECIFICATIONS.
- APPLY PRE-EMERGENT HERBICIDE TO ALL AREAS RECEIVING ROCK MULCH AND DECOMPOSED GRANITE. APPLY AFTER IRRIGATION AND PLANTING ARE COMPLETED, BEFORE AND AFTER INSTALLATION OF ROCK MULCH MATERIAL.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT MATERIAL PER SYMBOLS AND SPACING INDICATED ON PLAN AND IN LEGENDS. SYMBOLS PREVAIL OVER NUMBERS ON PLANT LIST. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT EXPRESSED WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. SEE SUBMITTALS.
- ALL PLANTS NOT MEETING OR EXCEEDING REQUIREMENTS AND RECOMMENDATIONS OF ANSI Z60.1 'AMERICAN STANDARD FOR NURSERY STOCK' WILL BE REJECTED. CONTRACTOR SHALL RECEIVE ON-SITE APPROVAL OF PLANT MATERIAL BY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING. FAILURE TO RECEIVE PRIOR APPROVAL MAY RESULT IN REJECTION OF PLANT MATERIAL AT ANY POINT DURING CONSTRUCTION OR THE PERIOD FOLLOWING INSTALLATION. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND EVALUATE PLANTS DURING THE MAINTENANCE PERIOD. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF FAILED PLANTS.
- ALL PLANT ROOTBALLS SHALL BE MUST UPON ARRIVAL AT SITE AND KEPT THAT WAY THROUGH PLANTING AND APPROVAL OF FINAL WORKING IRRIGATION SYSTEM WITH WHATEVER MEANS NECESSARY INCLUDING: HAND WATERING, HOSE, WATER TRUCK, TEMPORARY IRRIGATION SYSTEM.

MAINTENANCE/GUARANTEES

- ALL PLANTED AREAS SHALL BE MAINTAINED FOR A PERIOD OF SIXTY DAYS FOLLOWING WRITTEN ACCEPTANCE BY OWNER'S REPRESENTATIVE. LANDSCAPE CONTRACTOR WILL GUARANTEE ALL PLANT MATERIAL (INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, GROUND COVER, AND GRASSES) FOR A PERIOD OF ONE FULL YEAR FOLLOWING FINAL ACCEPTANCE OF THE LANDSCAPE INSTALLATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE. IN BIDDING AND INSTALLING THE PLANT MATERIAL SPECIFIED ON THESE PLANS, THE LANDSCAPE CONTRACTOR AGREES THAT THE PLANT MATERIAL SPECIFIED IS SUITABLE TO THE PROJECT SITE. FURTHERMORE, THE LANDSCAPE CONTRACTOR AGREES TO HONOR THE WARRANTY AND, IF NECESSARY, REPLACE SPECIES WITH MORE HARDY PLANT TYPE IF DEEMED NECESSARY DUE TO EXCESSIVE DIE OUT. IF THE LANDSCAPE CONTRACTOR DOES NOT BELIEVE CERTAIN PLANT MATERIAL IS SUITABLE FOR THE SITE AND/OR ITS MICRO-CLIMATE, THE LANDSCAPE CONTRACTOR SHALL REQUEST TO MAKE PLANT MATERIAL SUBSTITUTIONS IN WRITING TO THE LANDSCAPE ARCHITECT PRIOR TO THE START OF INSTALLATION. PROPOSED SUBSTITUTIONS WILL RESULT IN NO ADDED COST.

TREE PLANTING NOTES:

- REMOVE ALL NURSERY STAKES, TIES, AND TAGS ABOVE & BELOW GROUND TREES MUST STAND VERTICAL PRIOR TO STAKING TO BE ACCEPTABLE.
- TREES GROWN STAKED IN A NURSERY WILL NOT BE ACCEPTED ON THIS PROJECT UNLESS STAKES HAVE BEEN REMOVED FOR A MINIMUM OF TWO YEARS BEFORE THE TREES ARE DUG FROM THE NURSERY. A CERTIFICATION OF THIS CONDITION WILL BE PROVIDED AT OR BEFORE DELIVERY OF TREES TO THE SITE.
- REMOVE DAMAGED BRANCHES, RETAIN NATURAL GROWTH SHAPE CHARACTERISTICS OF SPECIES. DO NOT REMOVE OR CUT CENTRAL LEADER OR ANY LOWER BRANCHES. TREES WITH DAMAGED OR CUT CENTRAL LEADERS WILL NOT BE ACCEPTED. CUT STAKES IF NEEDED, TO PREVENT WIND DAMAGE TO LOWER BRANCHES. PRUNE ACCORDING TO CLASS 1 OR 11 STANDARDS OF THE NATIONAL ARBORISTS ASSOCIATION.
- TOP OF ROOT BALL IS DEFINED AT THE LOCATION OF THE UPPERMOST LATERAL ROOT, NOT THE SOIL LEVEL IN THE PLANT CONTAINER. TOP OF ROOT BALL TO BE 1" ABOVE EXISTING GRADE - NO NATIVE SOIL TO BE PLACED ON TOP OF ROOT BALL.
- CONDITIONS THAT WILL NOT BE ACCEPTED: TRUNK OR BARK WOUNDS; KINKED, GIRDLING, CIRCLING OR J ROOTS.
- DIG SQUARE OR RECTANGULAR HOLES FOR OPTIMUM ROOT GROWTH. SCARIFY EDGES OF PLANT HOLE: DEPTH TO BE SUCH THAT TREE CAN BE PLANTED AT SAME RELATIONSHIP TO FINISH GRADE AS GROWN OR 1" ABOVE.
- DIG PILOT HOLES FOR STAKES WITH ROT0-HAMMER INTO UNDISTURBED SOIL. PRESET STAKES IN EMPTY HOLES USING (2) 2" DIA LODGE POLE PINE STAKES, AFTER TREE IS LOWERED INTO HOLE. SET AND PLUM TREE FIRST, THEN USING BOLT CUTTERS AND UTILITY KNIFE REMOVE WIRE BASKET AND BURLAP TO BOTTOM OF ROOT BALL.
- BACKFILL HOLE WITH PLANTING MIX IN LAYERS, TAMP SOIL AT 50% TOTAL BACKFILL DEPTH AND WATER/SOAK BEFORE ADDING MORE SOIL. ROOTBALL NOT TO BE ALLOWED TO DRY OUT, EITHER BEFORE, DURING OR AFTER PLANTING.
- MINERAL SUPPLEMENTS TO BE ADDED TO SOIL AMENDMENTS PER RECOMMENDATION BASED ON SOIL ANALYSIS.
- BACKFILL W/PLANTING MIX OF NATIVE SOIL AND SOIL AMENDMENT. MIX SOIL AMENDMENT TO NATIVE SOIL AT 1:3 RATIO. NATIVE SOIL TO BE SCREENED FREE OF ROCKS, CLODS, AND DEBRIS GREATER THAN 6" DIA. TAMP TO REMOVE AIR POCKETS.
- CONSTRUCT WATER BASIN AROUND PERIMETER OF EXCAVATED PIT. GRADE BASIN SUCH THAT WATER COLLECTS AT THE EDGE OF BASIN, NOT AT TRUNK. FILL BASIN W/WOOD CHIP MULCH PER PLAN & SPECS. KEEP BARK 4" AWAY FROM TRUNK. DO NOT COVER TRUNK COLLAR WITH MULCH.
- CINCH BELT SECURE TO WOODEN STAKE WITH GALVANIZED NAIL DRIVEN THROUGH THE CINCH-BELT AND INTO THE STAKE TO PREVENT SLIPPAGE. FOR ATTACHMENT TO METAL STAKE WRAP AROUND TREE TRUNK AND DOUBLE-WRAP STAKE TO PREVENT SLIPPAGE. DO NOT USE WIRE OR CRIMP HOSE AROUND TRUNK.

OBSERVATIONS/APPROVALS/SUBMITTALS:

- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE, A MINIMUM OF 48 HOURS IN ADVANCE, FOR THE FOLLOWING SITE OBSERVATIONS AND/OR MEETINGS:
 - PRECONSTRUCTION MEETING WITH ALL PARTIES
 - PLANTING PIT EXCAVATION, PRIOR TO INSTALLATION
 - BOULDER LOCATIONS STAKED OUT, PRIOR TO PLACEMENT (IF SPECIFIED)
 - PLANT MATERIAL ON SITE, PRIOR TO INSTALLATION
 - PLANT LOCATIONS STAKED OUT, PRIOR TO PLANTING
 - SITE FURNISHINGS, PRIOR TO INSTALLATION (IF SPECIFIED)
 - FINAL PROJECT WALK-THROUGH
 - ADDITIONAL SITE OBSERVATIONS AS DEEMED NECESSARY BY THE LANDSCAPE ARCHITECT AND/OR CONTRACTOR
- SUBMIT THE FOLLOWING SAMPLES TO LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. ADDITIONAL SAMPLES MAY BE REQUIRED PRIOR TO FINAL APPROVAL. FAILURE TO COMPLY MAY RESULT IN REJECTION OF ITEM(S) PRIOR TO OR FOLLOWING INSTALLATION.
 - PLANTING MIX - SOIL AMENDMENT
 - SOIL/AMENDMENT TESTS
 - FERTILIZER TABLETS
 - WOOD CHIPS
 - ROCK MULCHES
 - DECOMPOSED GRANITE & AGGREGATE
 - TREE TIES & STAKES
 - WEED BARRIER FABRIC
 - BOULDERS
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROVIDE PLANT MATERIAL AS SPECIFIED ON THIS PLAN. THE CONTRACTOR MAY SUBMIT A REQUEST TO PROVIDE SUBSTITUTIONS FOR THE SPECIFIED PLANT MATERIAL UNDER THE FOLLOWING CONDITIONS:
 - ANY SUBSTITUTIONS PROPOSED SHALL BE SUBMITTED TO THE PROJECT LANDSCAPE ARCHITECT WITHIN TWO WEEKS OF THE AWARD OF CONTRACT. SUBSTITUTIONS MUST MEET EQUIVALENT DESIGN AND FUNCTIONAL GOALS OF THE ORIGINAL MATERIALS AS DETERMINED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. ANY CHANGES MUST HAVE THE APPROVAL OF THE LANDSCAPE ARCHITECT.
 - THE REQUEST WILL BE ACCOMPANIED BY AT LEAST THREE NOTICES FROM PLANT MATERIAL SUPPLIERS THAT THE PLANT MATERIAL SPECIFIED IS NOT AVAILABLE AND WILL NOT BE AVAILABLE PRIOR TO CONSTRUCTION.
- SUBMIT REQUIRED SOIL REPORT, AND SAMPLE OF PROPOSED SOIL AMENDMENTS TO LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- RECORD (AS-BUILT) DRAWINGS: FOLLOWING COMPLETION OF PROJECT INSTALLATION, AND PRIOR TO FINAL APPROVAL, CONTRACTOR SHALL PREPARE AND SUBMIT RECORD DRAWINGS DEPICTING A COMPLETE LANDSCAPE AND IRRIGATION INSTALLATION. PROCEDURE FROM LANDSCAPE ARCHITECT FULL-SIZE CONTRACT DRAWINGS. CONSTRUCTION DRAWINGS SHALL BE ON THE PROJECT SITE AT ALL TIMES DURING INSTALLATION. CONTRACTOR SHALL MAKE A DAILY RECORD OF ALL WORK INSTALLED DURING EACH DAY. ACTUAL LOCATION OF TREES AND SHRUB BEDS, IRRIGATION VALVES, AND ALL IRRIGATION AND DRAINAGE PIPING SHALL BE SHOWN ON THE PRINTS BY DIMENSIONS FROM EASILY IDENTIFIED PERMANENT FEATURES, SUCH AS BUILDING, CURBS, FENCES, WALKS, OR PROPERTY LINES. DRAWINGS SHALL SHOW MANUFACTURER'S NAME AND CATALOG NUMBER. THE DRAWINGS SHALL BE TO SCALE. ALL INFORMATION NOTED ON THE PRINT SHALL BE TRANSFERRED TO THE COPIES BY CONTRACTOR AND ALL INDICATIONS SHALL BE RECORDED IN A NEAT, ORDERLY MANNER. THE RECORD DRAWING SHALL BE TURNED OVER TO THE LANDSCAPE ARCHITECT, OR OWNER'S REPRESENTATIVE.



6995 SIERRA CENTER PARKWAY
Reno, Nevada 89511
Tel. (775) 850-0777 Fax (775) 850-0787
NVPE # F-20190 NVPLS # 20793

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6.19.2019

BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

PERMIT SET N/A

Project Number 222310634

Drawn By DM/JW/CM

Checked By BS

Drawing No. **C600**

Revision Sheet

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LANDSCAPE PLANTING LEGEND AND NOTES

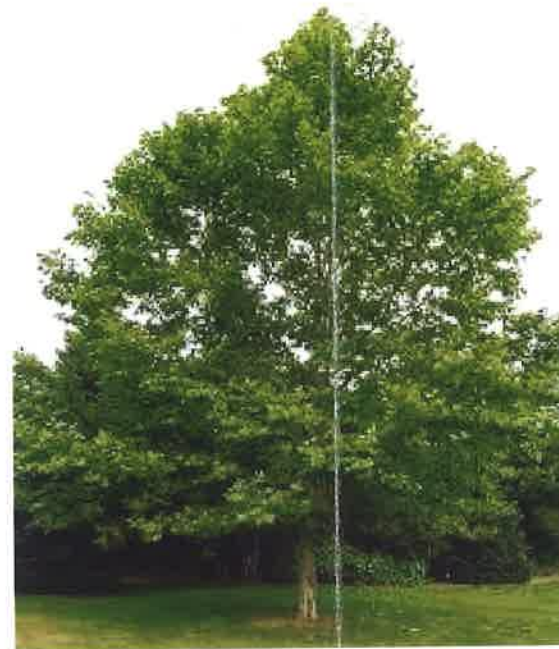
LANDSCAPE THEME – ENHANCED HIGH DESERT

- Drought resistant trees, shrubs, and ornamental grasses are designed for the required landscaped areas around the parking lot, driveways and structures.
- Large shade trees are located along Wedekind Road and internally at parking lot islands.
- Evergreen tree groups are located along N. McCarran at both sides of the building to buffer the views of the structure.
- Ornamental trees are located to accent the driveway locations.
- A cobble streambed feature meanders through out the landscaped areas.
- Within NDOT right of way small diameter decorative mulch called 'Shadow Ridge' is placed from the back of curb to a meandering line outside of NDOT's clear zone. This rock is recommended because landscape rock must be smaller than 4 inches in diameter to meet NDOT's clear zone requirements.
- Outside of the clear zone and inside the property the landscaped areas the Shadow Ridge small rock mulch is supplemented with a scatter of larger 3 – 10 inch rock to provide texture.
- Seeded revegetation is designed for the area east of the entrance driveway. This would be established as a dryland seed mix that contains grasses, flowers and shrubs which will have a meadow appearance once established. Topsoil is required to be salvaged and replaced prior to seeding and the area is required to be maintained for 2 years until established. This area is approximately 15,000 SF which is beyond the required amount of landscaping.

VEGETATION- PROPOSED TREES



Autumn Blaze Maple



Bloodgood London Planetree



Scarlet Oak



Austrian Black Pine



Blue Pyramid Cypress



Colorado Blue Spruce



Adams Crabapple

VEGETATION- PROPOSED SHRUBS, GRASSES AND FLOWERING PLANTS



Karl Forester Grass



Fountain grass



Hidcote Lavender



Moonshine Yarrow



Russian Sage



Smooth Sumac



Buffaloberry



New Mexico Privet

INERT MATERIALS AND SEEDED REVEGETATION



Dry Streambed Swale



Shadow Ridge 1-1/2 inch



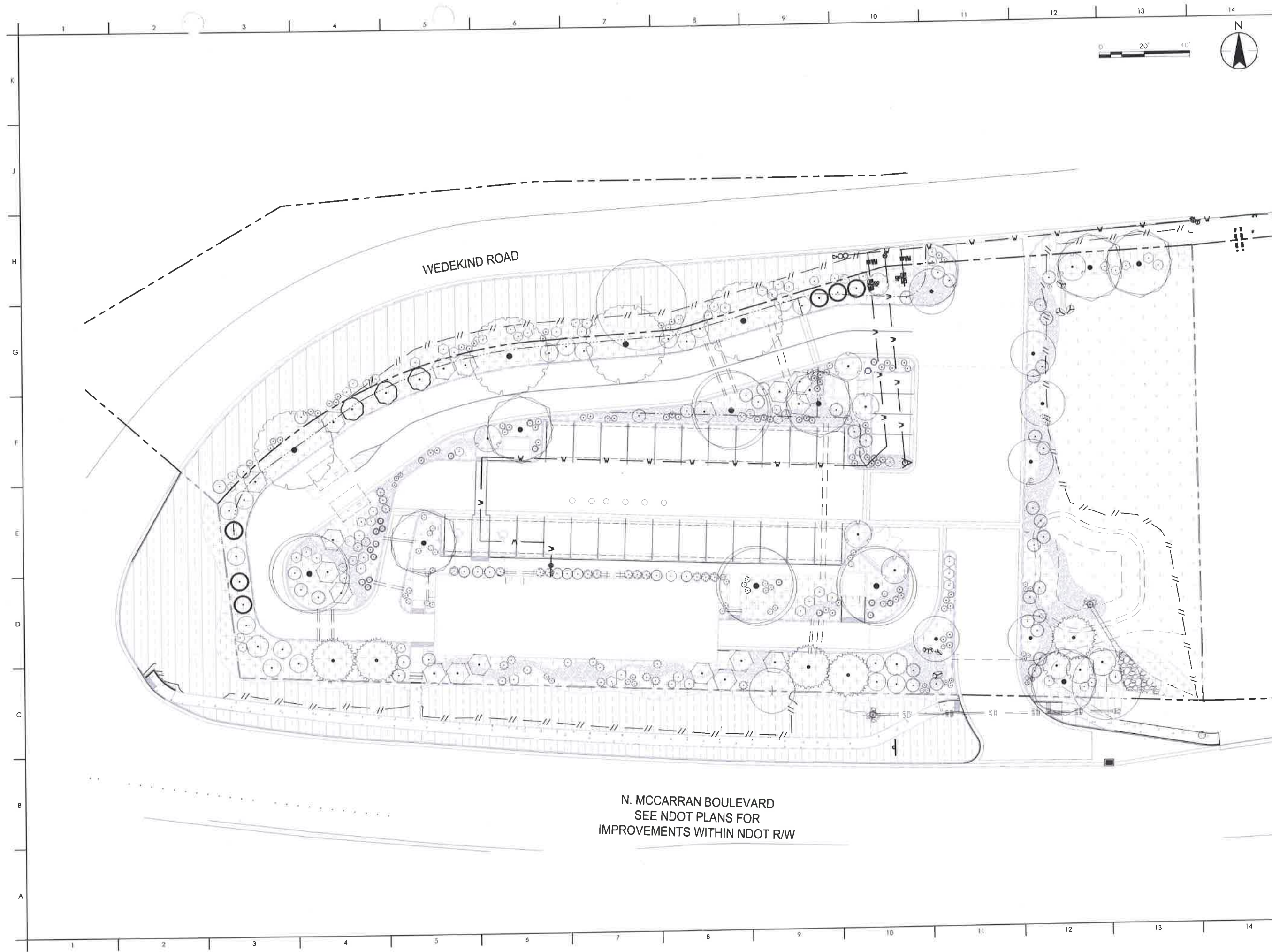
Shadow Ridge 3-10 inch



River Cobble 3-8 inch



Seeded Revegetation



Stantec
 6995 SIERRA CENTER PARKWAY
 Reno, Nevada 89511
 Tel. (775) 850-0777 Fax (775) 850-0787
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**BLUEWAVE
 MCCARRAN
 BOULEVARD
 SPARKS**

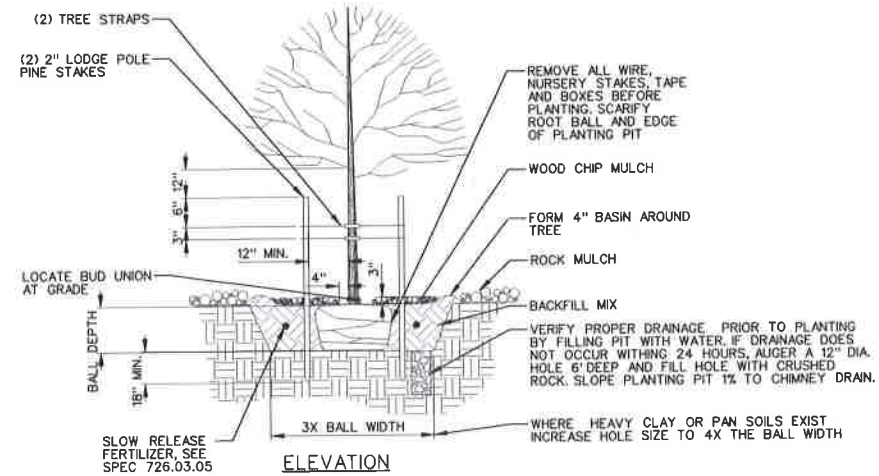
Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada
 LANDSCAPE PLANTING PLAN

PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

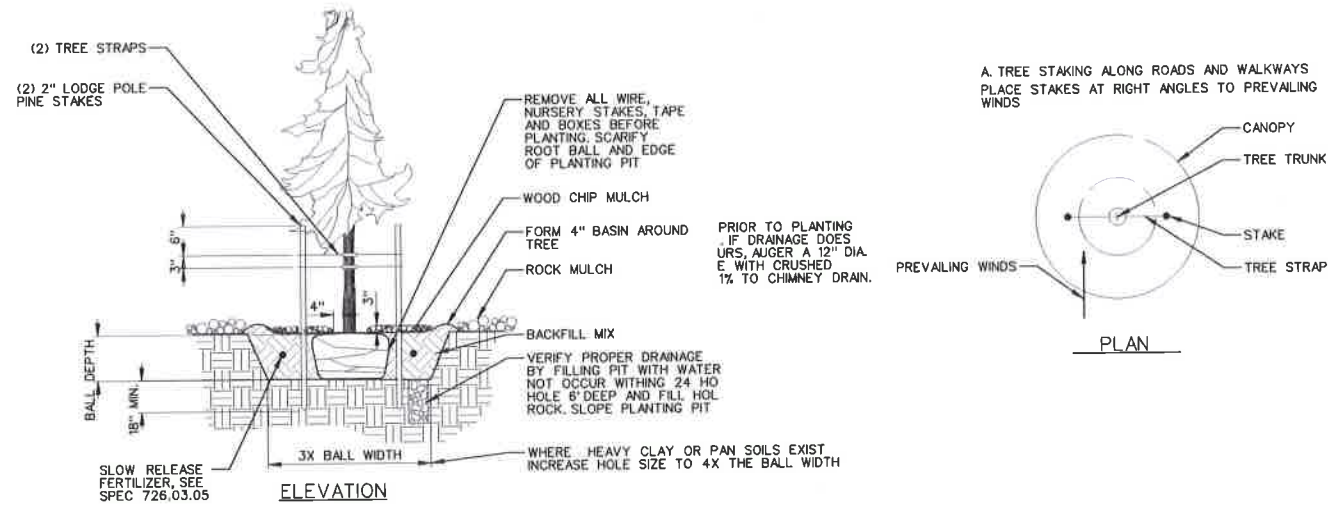
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 Revision Sheet
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N. MCCARRAN BOULEVARD
 SEE NDOT PLANS FOR
 IMPROVEMENTS WITHIN NDOT R/W

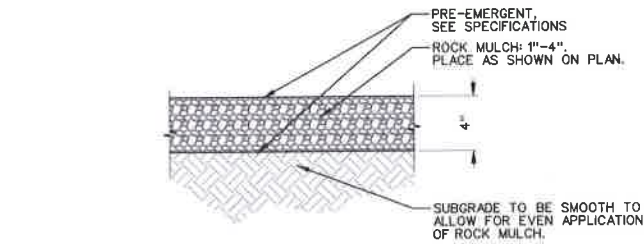
- PLANTING NOTES**
1. PLANT PIT, SCARIFY EDGES OF PLANT HOLE—HOLE PEDESTAL DEPTH TO BE SAME AS DEPTH OF ORIGINAL PLANT CONTAINER
 2. PLANTING MIX: 1/3 TRIPLE MIX TO 2/3 NATIVE SITE SOIL THOROUGHLY BLEND PRIOR TO PLACEMENT
 3. 4" DEEP WATERING BASIN, FILL W/4" DEPTH SHREDDED BARK, KEEP 4" FROM TRUNK
 4. PLANT TREE CROWN OR ROOT FLARE 1" ABOVE GRADE - NO NATIVE SOIL TO BE PLACED ON TOP OF ROOT BALL
 5. TREE STAKES: (2) 2" DIA X 8' LODGE POLE TREE STAVES - STAKE INTO UNDISTURBED SOIL OUTSIDE ROOTBALL, PERPENDICULAR TO PREVAILING WINDS
 6. TREE TIES: CINCH BELT - LEAVE 12" CLEAR BETWEEN BALL & STAKE ON ALL SIDES. STAKE TO IMMOBILIZE ROOT BALL & B & B OR BASKET, TURN DOWN TOP 1/3 - 1/2 BURLAP ON B&B MATERIAL, COMPLETELY REMOVE WIRE BASKET
 8. FERTILIZER TABLETS, "BEST" SLOW RELEASE 16-16-16 ALL PURPOSE FERTILIZER (OAE), INSTALL PER MFG'S APPLICATION RATES FOR NEW PLANTINGS
 9. REMOVE ALL NURSERY STAKES, TIES & TAGS - TREES MUST STAND UPRIGHT TO BE ACCEPTABLE. SEE NURSERY STOCK QUALITY STANDARDS. ALL TREES SHALL BE STAKED SO AS TO REMAIN UPRIGHT AND PLUMB FOLLOWING INSTALLATION
 10. REMOVE DAMAGED BRANCHES - DO NOT REMOVE CENTRAL LEADER OR ANY LOWER BRANCHES
 11. GRADE WATERING BASIN SUCH THAT WATER COLLECTS AT EDGE OF ROOT BALL, NOT AT TRUNK
 12. THOROUGHLY WATER IMMEDIATELY AFTER PLANTING
 13. ORIENT GRAFT UNION TO FACE NORTH
- *TOP OF ROOT BALL IS DEFINED AS THE LOCATION OF THE UPPERMOST LATERAL ROOT NOT THE SOIL LEVEL IN THE PLANT CONTAINER



1 TREE PLANTING AND STAKING



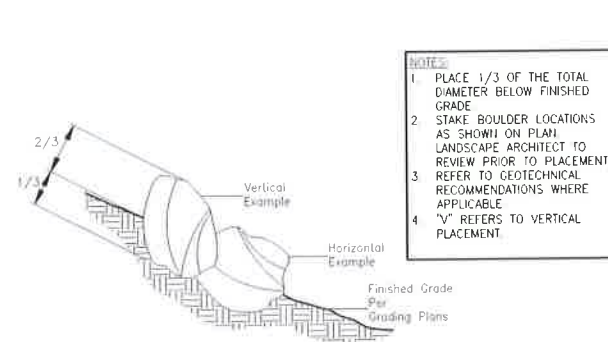
2 SHRUB PLANTING



NOTE: COMPACT SUBGRADE TO 90% (EXCEPT AROUND PLANTS) AND APPLY A PRE-EMERGENT HERBICIDE TO THE SOIL BEFORE PLACING ROCK MULCH AT REQUIRED DEPTH. KEEP TOP OF ROCK MULCH 1/2" BELOW ADJACENT WALKS, CURBS OR OTHER HARD SURFACES.

4 ROCK MULCH INSTALLATION (TYP.)

3 PINE PLANTING AND STAKING



- NOTE:**
1. PLACE 1/3 OF THE TOTAL DIAMETER BELOW FINISHED GRADE
 2. STAKE BOULDER LOCATIONS AS SHOWN ON PLAN, LANDSCAPE ARCHITECT TO REVIEW PRIOR TO PLACEMENT
 3. REFER TO GEOTECHNICAL RECOMMENDATIONS WHERE APPLICABLE
 4. "V" REFERS TO VERTICAL PLACEMENT.

5 DECORATIVE BOULDER



6995 SIERRA CENTER PARKWAY
Reno, Nevada 89511
Tel. (775) 850-0777 Fax (775) 850-0787
NVPE # F-20190 NVPLS # 20793

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**BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS**

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

LANDSCAPE PLANTING DETAILS

PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

Drawing No. **C602**
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REVEGETATION SPECIFICATIONS

1. GENERAL

1. THE WORK CONSISTS OF REFERENCE PLANT SURVEY, SOIL TESTING, WEED CONTROL, SALVAGING AND REPLACING TOPSOIL, SEEDING AND HYDROMULCHING ON GRADED AND DISTURBED AREAS.
2. COORDINATE EROSION CONTROL WORK WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
3. UNLESS THE PROJECT SITE IS IRRIGATED, PERFORM SEEDING BETWEEN SEPTEMBER 15, 2016 AND FEBRUARY 15 OF ANY YEAR.
4. DO NOT ALLOW CHEATGRASS (BROMUS TECTORUM) OR RED BROME (BROMUS RUBENS) OR NOXIOUS WEEDS WITHIN THE PROJECT AREA. REMOVE WEEDS BY HAND OR TREAT WITH HERBICIDES APPROVED FOR USE IN THE CITY OF SPARKS AND APPLY ACCORDING TO MANUFACTURER'S DIRECTIONS.

2. REFERENCE PLANT SURVEY AND SOIL TESTING

1. CONTRACTOR TO OBTAIN REFERENCE PLANT SURVEY OF EXISTING SPECIES AND COVER OF SITE THAT WILL BE DISTURBED AND REVEGETATED AND SUBMIT TO OWNER'S REPRESENTATIVE WITHIN 4 WEEKS OF CONTRACT AWARD. CONTRACTOR TO OBTAIN 3 REPRESENTATIVE SOIL SAMPLES EQUALLY DISTRIBUTED IN THE SITE TO BE DISTURBED AND REVEGETATED. SOIL SAMPLES SHALL BE SENT TO A LABORATORY EQUIPPED TO TEST SOILS FOR POSSIBLE AMENDMENTS NEEDED FOR NATIVE, ADAPTED SEEDING PLANT REVEGETATION. CONTRACTOR SHALL PROVIDE AMENDMENTS PER SOIL TEST RECOMMENDATIONS.

3. WEED CONTROL

1. PRIOR TO SALVAGING TOPSOIL APPLY GLYPHOSATE (ROUNDUP*, AQUAMASTER*, RODEO*, OR AQUAMASTER**) TO ELIMINATE CHEATGRASS, RED BROME, RUSSIAN THISTLE AND/OR ANY NOXIOUS WEEDS IN ALL AREAS TO BE SEEDING.
2. USE 1-1/2 PINTS TO 2 QUARTS ACCORDING TO LABEL RATES PLUS 2 QUARTS OF NONIONIC SURFACTANT PER ACRE.
3. APPLY WHEN PLANTS ARE ACTIVELY GROWING BEFORE FLOWER BUD FORMATION, REPEAT APPLICATIONS AS NECESSARY TO ELIMINATE AFORE MENTIONED WEEDS.
4. REMARKS: GLYPHOSATE IS A NONSELECTIVE HERBICIDE THAT KILLS MOST PLANTS, INCLUDING THOSE THAT COMPETE WITH NEW WEED SEEDLINGS.
5. WAIT 10 DAYS MINIMUM AFTER TREATMENT FOR SEEDING, OR LONGER BASED ON HERBICIDE MANUFACTURER RECOMMENDATIONS.
6. CAUTION: FOLLOW THE LABEL RECOMMENDATIONS AND PRECAUTIONS, ESPECIALLY FOR USE IN AND NEAR WATER.
7. REMOVE WEED DEBRIS AND DISPOSE OF OFFSITE.

4. TOPSOIL (SALVAGE)

1. TOPSOIL (SALVAGE) CONSISTS OF REMOVING EXISTING TOPSOIL, ROCK AND VEGETATION; STOCKPILING, TREATING IF REQUIRED, PREPARING AREAS FOR PLACEMENT, PLACING AT DESIGNATED AREAS, AND COMPACTING.
2. REMOVE EXISTING TOPSOIL TO A DEPTH OF 6 INCHES. STOCKPILE THIS MATERIAL IN APPROVED AREAS.
3. DO NOT STOCKPILE TOPSOIL MORE THAN 6 FEET IN HEIGHT AND DO NOT COMPACT STOCKPILES. STABILIZE STOCKPILES OF TOPSOIL THAT ARE IN PLACE FOR LESS THAN 1 MONTH WITH WATER OR DUST PALLIATIVE. DUST PALLIATIVE SHALL NOT INHIBIT VEGETATIVE GROWTH. FOR TOPSOIL STOCKPILES IN PLACE MORE THAN 1 MONTH, APPLY AN EROSION CONTROL TREATMENT TO THE STOCKPILE CONSISTING OF A SLURRY WITH SEED, SOIL INOCULANT, MULCH TACKIFIER, WATER AND AMENDMENTS AS SPECIFIED.
4. PREPARE FINAL PLACEMENT AREAS BY CULTIVATING AND ROUGHENING SLOPES WITH RIPPERS, DISCS OR OTHER APPROVED EQUIPMENT IN THE DIRECTION WITH THE CONTOURS WHERE POSSIBLE TO A DEPTH OF 6 INCHES.
5. DO NOT PERFORM CULTIVATION UNTIL ALL OTHER EQUIPMENT IS THROUGH WORKING IN THE AREA.
6. OPERATE EQUIPMENT SUCH THAT FURROWS ARE PRODUCED PERPENDICULAR TO THE NATURAL FLOW OF WATER.
7. TRANSPORT TOPSOIL DIRECTLY FROM THE STOCKPILE TO FINAL POSITION. EVENLY AND UNIFORMLY SPREAD TOPSOIL TO A DEPTH OF 4 INCHES. IF NEEDED, MOISTEN WITH WATER AS DIRECTED TO INCREASE THE BOND BETWEEN THE TOPSOIL AND SUBSOIL. THE TOPSOIL FINISHED SURFACE SHALL CONFORM TO THE FINISHED GRADE CONTOURS DEPICTED ON THE GRADING PLANS.
8. DO NOT PLACE TOPSOIL WHEN THE GROUND OR TOPSOIL IS FROZEN, EXCESSIVELY WET, OR NOT IN AN ACCEPTABLE CONDITION TO FACILITATE UNIFORM SPREADING.
9. COMPACT TOPSOIL IN ACCORDANCE WITH SECTION 5.

5. COMPACTION

1. COMPACT TOPSOIL BY SHEEPSFOOT ROLLER OR SIMILAR APPROVED EQUIPMENT WHICH WILL PRODUCE 150-300 PSI GROUND PRESSURE TO PRODUCE FINAL COMPACTION OF TOPSOIL THAT IS APPROXIMATELY 70-80 PERCENT OF THE RELATIVE MAXIMUM DENSITY. DESIGN AND CONSTRUCTION EQUIPMENT TO PRODUCE A UNIFORM ROUGH TEXTURED SURFACE CONSISTING OF SMALL UNGLAZED TILES THAT TRAP SURFACE RUNOFF AND BREAK UP SURFACE FLOW CONTINUITY, AND WHICH WILL BOND THE TOPSOIL TO THE UNDERLYING MATERIAL. OPERATE COMPACTION EQUIPMENT PARALLEL TO THE NATURAL FLOW OF WATER ON THE SLOPES OR PERPENDICULAR TO THE CONTOUR OF THE SLOPES, UNLESS OTHERWISE APPROVED. CONVEY THE ROLLER OR APPROVED EQUIPMENT UP AND DOWN THE SLOPES BY APPROVED MEANS. FINISH GRADE OF THE TOPSOIL TO BE 1 INCH BELOW THE TOP OF CURBS, CATCH BASINS, AND OTHER STRUCTURES.
2. TO CONDITION THE TOPSOIL FOR COMPACTION, FURNISH A SUITABLE AMOUNT OF WATER AND APPLY BY APPROVED METHODS. MOISTEN TOPSOIL WITH WATER TO BIND TOPSOIL TOGETHER.

6. SOIL AMENDMENTS AND INOCULANTS

1. APPLY INOCULANT AT A RATE OF 50 POUNDS PER ACRES. APPLY LIQUID HUMIC ACID AT A RATE OF 5 GAL/ACRE. APPLY AMENDMENTS RECOMMENDED IN SOIL TESTS AS DESCRIBED IN SECTION 2. SOIL TESTING.

7. SEEDING AREA - RA

1. SEEDING CONSISTS OF APPLYING SOIL AMENDMENTS AND INOCULANTS, PREPARING THE AREAS, APPLYING SEED AND APPLYING MULCH AND TACKIFIER.
2. FURNISH AND APPLY SOIL AMENDMENTS AND INOCULANTS AT THE RATES SPECIFIED IN SECTION 2 AND 6.
3. EVENLY APPLY SOIL AMENDMENTS AND INOCULANTS ON THE AREAS TO BE SEEDING. APPLY HYDRAULICALLY MIXING SOIL AMENDMENTS AND INOCULANTS IN A TANK EQUIPPED WITH AN AGITATOR SO THAT A UNIFORM SUSPENSION IS ACHIEVED AND MAINTAINED. THE AMENDMENTS AND INOCULANTS SHALL NOT REMAIN IN THE TANK LONGER THAN 1 HOUR.
4. MIX AMENDMENTS AND INOCULANTS INTO SOIL AND PREPARE THE SEEDING AREAS BY TILLING THE SOIL TO A MINIMUM DEPTH OF 6 INCHES. OPERATE EQUIPMENT SUCH THAT FURROWS ARE PRODUCED PERPENDICULAR TO THE NATURAL FLOW OF WATER. REMOVE AND DISPOSE OF ALL ROCKS LARGER THAN 6 INCHES IN SMALLEST DIMENSION FROM THE SURFACE TO SLOPES TO BE SEEDING.
5. GIVE A MINIMUM OF 48 HOURS NOTIFICATION IN ADVANCE OF ANY SEEDING OPERATIONS FOR APPROVAL OF THE SEEDING AREAS. AFTER APPROVAL, SEEDING OF THE APPROVED AREAS MAY BEGIN.
6. MATERIALS FOR SEEDING SHALL BE BATCHED ON SITE UNDER THE OBSERVATION OF THE OWNER'S REPRESENTATIVE.
7. PROVIDE QUALIFIED PERSONNEL EXPERIENCED IN ALL PHASES OF SEEDING, EQUIPMENT, AND METHODS AS HEREIN SPECIFIED.
8. DO NOT SEED WHEN THERE ARE SUSTAINED WINDS OF 13 MPH OR MORE, OR CONDITIONS THAT MAY CAUSE MATERIAL TO DISPERSE OR APPLY INACCURATELY. DO NOT SEED WHEN THE GROUND IS FROZEN.
9. DRILL SEED WITH APPROVED POWER-DRAWN DRILL WITH DOUBLE-DISC FRONT DELIVERY OPENERS AND DEPTH BANDS FOR POSITIVE DEPTH CONTROL. SET DEPTH CONTROL AT A DEPTH OF 4 INCH FOR CONSISTENT FURROW BOTTOM PLACEMENT. AN APPROVED DEEP FURROW DRILL MAY BE USED WHERE IT IS DETERMINED THE SEEDBED IS FIRM AND THERE IS LITTLE DANGER OF SOIL BLOWING. AN APPROVED SPREADER MAY BE USED FOR FERTILIZER PLACEMENT. CALIBRATE DRILLS AND SPREADERS USING AN APPROVED METHOD BEFORE USE. UNIFORMLY SPREAD SEED AT THE RATE AND MIX SPECIFIED.

8. MULCH AND TACKIFIER

1. WITHIN 24 HOURS AFTER EACH AREA IS SEEDING A SLURRY CONTAINING TACKIFIER AND MULCH SHALL BE APPLIED. APPLY SLURRY CONSISTING OF PLANT BASED TACKIFIER AT 200 POUNDS/ACRE AND RECYCLED PAPER MULCH AT 2000 POUNDS/ACRE. THE SLURRY SHALL CONTAIN A COLOR ADDITIVE WHICH WILL ASSIST THE APPLICATOR IN THE UNIFORM APPLICATION OF THE MIXTURE.
2. APPLY THE SLURRY WITH APPROVED HYDRAULIC EQUIPMENT. USE EQUIPMENT WITH A BUILT-IN AGITATION SYSTEM WITH AN OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND, AND HOMOGENEOUSLY MIX THE SPECIFIED PORTIONS OF THE SLURRY. DUMP DISTRIBUTION AND DISCHARGE LINES WITH A SET OF HYDRAULIC DISCHARGE SPRAY NOZZLES WITH TWILL PROVIDE A UNIFORM DISTRIBUTION FOR THE SLURRY.
3. DO NOT DISTURB SURFACE AREAS AFTER MULCHING AND TACKING IS COMPLETE. REPAIR DAMAGED AREAS AS DIRECTED.

9. SEED MIX

GRASSES/FORBS:	PLS (LBS/ACRE)
AGROPYRON FRAGILE/SIBERIAN WHEATGRASS/'VAILOV'	9.0
PSATHYRUSTACHYS JUNCEUS/RUSSIAN WILDRYE/'BOZISKY'	6.0
ELYMUS CINERUS/BASIN WILDRYE	5.0
ORYZOPSIS HYMENOIDES/INDIAN RICEGRASS/'NEZPAR'	4.0
PENSTEMON PALMERI/PALMER FENSTEMON	1.0
ACHILLEA MILLEFOLIUM/YARROW	0.10
HELIANTHUS ANNUUS/ANNUAL SUNFLOWER	0.50
SPHAERALCEA AMBIGUA/DESERT GLOBEMALLOW	0.50
SHRUBS:	
ATRIPLEX CANESCENS/FOURWING SALTBRUSH/'RINCON'	1.0
BOERHAAVIA FROSTATA/FOURGE KOCHIA/'IMMIGRANT'	2.0
TOTAL	29.1

10. CERTIFICATES AND SAMPLES

1. SEEDS. FURNISH SEEDS IN STANDARD CONTAINERS OR SEALED BAGS ON WHICH SHOW THE FOLLOWING INFORMATION:
 - 1.1. SEED NAME, SCIENTIFIC AND COMMON NAME, LOT NUMBER, NET MASS, PERCENTAGE OF PURE LIVE SEED INCLUDING HARD AND DOORMAT SEED, PERCENTAGE OF WEED SEED CONTENT AND INERT MATERIAL CLEARLY MARKED FOR EACH KIND OF SEED ACCORDING TO APPLICABLE STATE AND FEDERAL LAWS. WEED SEED OR SWEET CLOVER, CROP SEED SHALL NOT EXCEED 0.5% OF PURE LIVE SEED AND SHALL NOT INCLUDE ANY SEED OF CHEATGRASS OR SWEET CLOVER. CROP SEED SHALL NOT EXCEED 0.5% OF PURE LIVE SEED, NO NOXIOUS WEED SEED SHALL BE PRESENT. PRESENT CROP SEED, SUPPLIER NAME, ADDRESS AND PHONE NUMBER. DO NOT USE SEED WHICH HAS BECOME WET, MOULDY OR OTHERWISE DAMAGED IN TRANSIT OR STORAGE. PROVIDE SEED AT LEAST 95% PURE AND HAVING A MINIMUM OF 85% GERMINATION. STORE SEED IN A COOL, WATERPROOF FACILITY WITH TEMPERATURES LESS THAN 61 DEGREES F.
 - 1.2. FURNISH DUPLICATE COPIES OF A STATEMENT SIGNED BY THE VENDOR CERTIFYING THAT EACH LOT OF SEED HAS BEEN TESTED BY A RECOGNIZED SEED TESTING LABORATORY WITH 6 MONTHS BEFORE THE DATE OF SEEDING ON THE PROJECT. SUBMIT ORIGINAL LABORATORY SEED TESTS BY LOT NUMBER A MINIMUM OF 30 DAYS BEFORE APPLICATION. SEED-TAGS SHALL REFLECT THE MOST RECENT TEST DATE AND SHALL BE SUBMITTED FOR APPROVAL. ALL SEED IS SUBJECT TO INSPECTION. THE STATE DIVISION OF AGRICULTURE SHALL RANDOMLY SAMPLE AND TEST SEED BEFORE USE ON THE PROJECT. FURNISH A COPY OF THE STATE DIVISION OF AGRICULTURE'S APPROVAL LETTER.
2. SOIL INOCULANTS
 - 2.1. THE INOCULA SHALL CONTAIN AT A MINIMUM 120 LIVE SPORES PER GRAM. LABEL PRODUCT BAGS WITH A LOT NUMBER AND THE HARVEST DATE OF THE INOCULA. TRANSPORT AND STORE INOCULA IN AREAS WITH A TEMPERATURE LESS THAN 90 DEGREES F AND KEEP TEMPERATURES ABOVE FREEZING.
 - 2.2. PROVIDE 28 GRAM SAMPLES WITH PACKAGE LABELS 30 DAYS PRIOR TO APPLICATION FOR VERIFICATION OF SPECIES AND LIVE PROPAGULES. OBTAIN A COMPOSITE SAMPLE FROM THE TOP, MIDDLE AND BOTTOM OF THE BAG AND/OR MICRO-BAG SAMPLES PER CASE. SUBMIT SAMPLES TO A SOILS LABORATORY CAPABLE OF TESTING THESE SAMPLES USING THE MEAN INFECTION PERCENTAGE (MIP) ASSAY TEST METHOD. SUBMIT LAB TEST RESULTS FOR APPROVAL.
3. HERBICIDES. PROVIDE HERBICIDE CERTIFICATES WITH THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS CLEARLY MARKED, ALL CONFORMING TO STATE AND FEDERAL LAWS. HERBICIDES SHALL NOT CONTAIN SOIL STERILANTS.
4. MULCH. PROVIDE MULCH CERTIFICATION WITH THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS CLEARLY MARKED, ALL CONFORMING TO STATE AND FEDERAL LAWS.
5. TACKIFIER. PROVIDE TACKIFIER CERTIFICATION WITH THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS CLEARLY MARKED, ALL CONFORMING TO STATE AND FEDERAL LAWS. THE STANDARD SWELL VOLUME SHALL BE CONSIDERED AS 30 MILLILITERS PER GRAM. MATERIAL SHALL HAVE A SWELL VOLUME OF AT LEAST 24 MILLILITERS PER GRAM.

11. SUBMITTALS

1. SOIL TEST AND AMENDMENT RECOMMENDATIONS
2. SEED MIX
3. INOCULANT
4. HUMIC ACID
5. MULCH
6. TACKIFIER
7. EQUIPMENT FOR SOIL ROUGHENING
8. SHEEPSFOOT FOR COMPACTING
9. CONSTRUCTION SCHEDULE

12. WARRANTY

1. CONTRACTOR TO ACHIEVE 70% OF PRE-CONSTRUCTION PLANT COVER BEFORE WARRANTY IS ACHIEVED WITHIN 2 YEARS OF INITIAL TREATMENT. IF ADEQUATE COVERAGE IS NOT ACHIEVED, REAPPLY ALL COMPONENTS OF EROSION CONTROL TREATMENT WITHIN 1 YEAR OF INITIAL TREATMENT AND ADDITIONALLY AS NEEDED.



6995 SIERRA CENTER PARKWAY
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**BLUEWAVE
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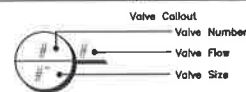
Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

REVEGETATION SPECIFICATIONS

PERMIT SET	N/A
Issues	
Project Number	222310634
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IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL ZONE KIT. 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. FLOW RANGE: 0.3GPM TO 20GPM.
	RAIN BIRD WDCPCAP (NOT SHOWN ON PLAN) DRIPLINE FLUSH VALVE FOR NON-POTABLE WATER USE. PURPLE CAP IN COMPRESSION FITTING COUPLER. LOCATE AT ENDS OF DRIP TUBE.
	DRIP TREE RING RAIN BIRD XB-PC EACH TREE SHALL RECEIVE EIGHT (8) 2.0 GPH EMITTERS, SEE CONSTRUCTION DETAILS.
	AREA TO RECEIVE DRIP EMITTERS RAIN BIRD XB-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5GPH=BLUE, 1.0GPH=BLACK, AND 2.0GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. SEE CONSTRUCTION DETAILS.
	EMITTER NOTES: 1 GAL PLANT = TWO (2) 1.0 GPH EMITTERS 5 GAL PLANT = TWO (2) 2.0 GPH EMITTERS
	DASHED OUTLINE SHOWS PLANTER AREAS ZONED TOGETHER.
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD 33-DLRC 3/4" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, DOUBLE TRACK KEY LUG, AND 2-PIECE BODY.
	MAIN LINE DRAIN VALVE (NOT SHOWN ON PLAN) INSTALL IN VALVE BOX AT EACH VALVE LOCATION. SEE CONSTRUCTION DETAILS.
	BUCKNER-SUPERIOR 3200 1-1/2" NORMALLY CLOSED BRASS MASTER VALVE THAT PROVIDES DIRTY WATER PROTECTION AND NO MINIMUM FLOW FEATURE, WHICH ENSURES RELIABLE OPENING AND CLOSING OF THE VALVE IN EXTREME HIGH OR LOW FLOW SCENARIOS.
	HUNTER PRO-HC HYDRAWISE CONTROLLER PHC-1200I WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN, 12-STATION FIXED CONTROLLER, 120 VAC, INDOOR MODEL. INSTALL INSIDE MAINTENANCE ROOM OF BUILDING.
	HUNTER RFC-SGM RAIN AND FREEZE SENSOR, WITH CONDUIT INSTALLATION, MOUNT ON ROOF LINE OF BUILDING WITH SOUTHERN EXPOSURE. NORMALLY OPEN SWITCH WITH GUTTER MOUNT.
	HUNTER FLOW METER HC-100-FLOW FLOW SENSOR FOR USE WITH HYDRAWISE CONTROLLER, 1" SCHEDULE 40 SENSOR BODY, 24 VAC, 2 AMP. FLOW RANGE: 0.3GPM TO 30GPM.
	IRRIGATION POINT OF CONNECTION (1.5" SERVICE) 1" METER AND 1.5" BACKFLOW FROM CIVIL, INSTALL FREEZE-PROOF LOCKABLE BACKFLOW COVER, SEE CONSTRUCTION DETAILS.
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40 PIPE SLEEVE SIZE SHALL 2 X THE DIAMETER OF ALL PIPE BEING SLEEVED. INSTALL SEPARATE 4" SLEEVE FOR WIRING. EXTEND SLEEVES 12 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.



IRRIGATION NOTES:

GENERAL:

- THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE. THE POINT-OF-CONNECTION SHALL BE AS INDICATED ON THE PLAN UTILIZING THE EXISTING IRRIGATION MAIN LINE.
- THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND ENSURE THAT ALL LOCAL CODES ARE MET.
- THE CONTRACTOR SHALL APPLY AND PAY FOR ALL PERMITS REQUIRED FOR INSTALLATION OF THE IRRIGATION SYSTEM AS DEPICTED ON THESE PLANS.
- CONTRACTOR SHALL VERIFY AVAILABLE FLOW AND PRESSURE DOWNSTREAM FROM THE POINT-OF-CONNECTION PRIOR TO SYSTEM INSTALLATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE IMMEDIATELY IF AVAILABLE FLOW IS LESS THAN REQUIRED TO RUN THE LARGEST ZONE. CONTRACTOR SHALL NOT PROCEED ANY FURTHER WITH INSTALLATION OF THE SYSTEM UNTIL NECESSARY DESIGN REVISIONS HAVE BEEN DETERMINED BY LANDSCAPE ARCHITECT. SYSTEM DESIGN BASED ON ASSUMED AVAILABLE PRESSURE OF 40 PSI. FUTURE PRESSURES MAY VARY DUE TO NEW DEVELOPMENT AND/OR OTHER UNFORESEEN CIRCUMSTANCES. LANDSCAPE ARCHITECT SHALL BEAR NO RESPONSIBILITY FOR FUTURE DEVIATIONS IN PRESSURE AND ANY RESULTING EFFECTS ON THE PERFORMANCE OF THE IRRIGATION SYSTEM.
- THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR DIFFERENCES IN DIMENSIONS EXIST THAT MIGHT HAVE BEEN UNKNOWN DURING ENGINEERING. SUCH OBSTRUCTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO OWNER.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, STRUCTURES, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
- ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL IRRIGATION MATERIALS, INCLUDING PIPE, WITH THE LANDSCAPE DRAWINGS TO AVOID INTERFERING WITH THE PLANTING OF TREES, SHRUBS, OR OTHER PLANTINGS.
- ALL VALVES ARE TO BE LOCATED IN PLANTING AREAS WHEREVER POSSIBLE. THE IRRIGATION CONTRACTOR SHALL FLUSH ALL EMITTER LATERALS AND TUBING PRIOR TO INSTALLATION OF EMITTER HEADS.
- ALL ELECTRICAL WIRE FROM CONTROLLER TO VALVES SHALL BE 14 GAUGE UL DIRECT BURIAL OR LARGER AS REQUIRED BY LENGTH PER MANUFACTURER'S SPECIFICATIONS.
- BACKFILL FOR TRENCHING, AFTER SAND BEDDING, SHALL BE COMPACTED TO A DRY DENSITY EQUAL TO THE UNDISTURBED ADJACENT SOIL AND SHALL CONFORM TO ADJACENT GRADES WITHOUT DIPS, HUMPS, OR OTHER IRREGULARITIES.
- A MINIMUM OF TWO WORKING DAYS PRIOR TO PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT AT 1-800-642-2444 FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRICAL CABLES, TELEPHONE CABLES, ETC.
- CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
- INSTALL ALL PIPE AND CONTROL WIRES IN LANDSCAPE BEDS AND IN COMMON TRENCHES WHEREVER POSSIBLE. 120 VAC ELECTRICAL POWER SOURCE AT CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE ELECTRICAL CONTRACTOR TO ASSURE IRRIGATION SYSTEM IS FULLY FUNCTIONING BEFORE PLANTING OR SEEDING COMMENCES. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE TO MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER.
- ALL PIPING AND CONTROL WIRES UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES. ALL STREET CROSSINGS SHALL HAVE MINIMUM OF 2 SLEEVES. INSIDE DIAMETER OF SLEEVE SIZE SHALL BE A MINIMUM OF TWICE (2X) THE OUTSIDE DIAMETER OF THE PIPE TO BE SLEEVED. ALL CONTROL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES UNDER PAVING. ALL SLEEVES SHALL BE IDENTIFIED ABOVE GROUND BY PRESSING 90 DEGREE FITTINGS ON TO THE SLEEVE ENDS AND EXTENDING THE PVC PIPE UPWARDS 18" ABOVE GRADE. THESE PIPES SHALL BE CAPPED. EXTEND ALL WIRES AND PIPES TO LIMITS OF WORK FOR FUTURE PHASES IF INDICATED. OWNER'S REPRESENTATIVE SHALL OVERSEE PLACEMENT AND SIZE OF CONTROLLERS FOR ENTIRE PROJECT.

FLUSHING AND TESTING:

- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE FOR COMPLETE DRAINAGE OF THE MAINLINES BY INSTALLING MANUAL DRAINS AS INDICATED ON PLAN AND AT ALL SYSTEM LOW POINTS. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT THE TIME OF SAID REJECTION. FINAL LOCATION OF THE AUTOMATIC CONTROLLER SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE.
- PIPING SHALL BE COMPLETELY FLUSHED OF FOREIGN PARTICLES BEFORE ATTACHING IRRIGATION COMPONENTS AND DRAIN VALVES.
- AFTER FLUSHING, AND WHEN ALL VALVES AND QUICK COUPLERS ARE IN PLACE, ALL MAIN SUPPLY LINES SHALL BE TESTED AT 100 POUNDS PER SQUARE INCH (100 PSI) WITH VALVES CLOSED. MAINTAIN PRESSURE FOR A PERIOD OF NOT LESS THAN (4) CONSECUTIVE HOURS. ALL JOINTS SHOWING LEAKS SHALL BE CLEANED, REMADE, AND TESTED.
- AFTER FLUSHING, LATERAL PIPES SHALL BE TESTED WITH RISERS CAPPED AND DRAIN VALVES CLOSED. THE TEST SHALL BE MADE AT MAXIMUM OPERATING PRESSURE FOR A PERIOD OF NOT LESS THAN (1) HOUR. ALL JOINTS SHOWING LEAKS SHALL BE CLEANED, REMADE, AND TESTED. ALL TESTING SHALL BE DONE IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE PRIOR TO BACKFILLING OVER PIPING.
- OPERATIONAL TESTING: PERFORM OPERATIONAL TESTING AFTER HYDROSTATIC TESTING IS COMPLETED. DEMONSTRATE TO THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE THAT THE SYSTEM MEETS COVERAGE REQUIREMENTS (100%) AND THAT AUTOMATIC CONTROLS FUNCTION PROPERLY.
- AFTER COMPLETION OF CONSTRUCTION CAREFULLY ADJUST EMITTERS FOR FULL COVERAGE.

SUBMITTALS:

- MATERIALS LIST: WITHIN (15) DAYS AFTER AWARD OF CONTRACT, SUBMIT TO LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE (3) COPIES OF A COMPLETE MATERIALS LIST (PARTIAL LIST NOT ACCEPTABLE) OF ALL MATERIALS TO BE USED ON THE PROJECT, SPECIFYING MANUFACTURER, GRADE, TRADE NAME, CATALOG NUMBER, SIZE, ETC. THIS SHALL IN NO WAY BE CONSTRUED AS ALLOWING A SUBSTITUTION FOR ANY ITEM SPECIFIED ON THE PLANS. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE THE MATERIALS AT HIS OWN EXPENSE.
 - INSTALLATION AND PERFORMANCE OF APPROVED SUBSTITUTIONS ARE THE CONTRACTOR'S RESPONSIBILITY. ANY CHANGES REQUIRED FOR INSTALLATION OF ANY APPROVED SUBSTITUTION MUST BE MADE TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE WITHOUT ADDITIONAL COST TO OWNER.
 - PRIOR TO SYSTEM INSTALLATION CONTRACTOR SHALL VERIFY AND SUBMIT TO LANDSCAPE ARCHITECT IN WRITING, AVAILABLE FLOW AND PRESSURE AT POINT-OF-CONNECTION AS DESCRIBED IN SPECIFICATION #4 ABOVE.
 - COMPLETE WARRANTY CARDS FOR AUTOMATIC CONTROLLER AND OTHER IRRIGATION MATERIAL (CONTROLLER KEYS, ETC.) SHALL BE DELIVERED TO THE LANDSCAPE ARCHITECT AT FINAL PROJECT WALK-THROUGH.
 - CONTRACTOR SHALL PREPARE AND ISSUE TO THE OWNER (AT COMPLETION OF THE INSTALLATION) AN ANNUAL CHART INDICATING LOCATION, OPERATING DATES, CYCLES, AND TIME FOR EACH ZONE.
 - AS-BUILT IRRIGATION DRAWINGS: CONTRACTOR SHALL FURNISH AS-BUILTS OF THE COMPLETE IRRIGATION SYSTEM. PROCURE FROM LANDSCAPE ARCHITECT FULL-SIZED PLANS OF CONTRACT DRAWINGS. CONSTRUCTION DRAWINGS SHALL BE ON THE CONSTRUCTION SITE AT ALL TIMES WHILE THE IRRIGATION SYSTEM IS BEING INSTALLED. CONTRACTOR SHALL MAKE A DAILY RECORD OF ALL WORK INSTALLED DURING EACH DAY. ACTUAL LOCATION OF VALVES AND ALL IRRIGATION AND DRAINAGE PIPING SHALL BE SHOWN ON THE PRINTS BY DIMENSIONS FROM EASILY IDENTIFIED PERMANENT FEATURES, SUCH AS BUILDINGS, CURBS, FENCES, WALKS OR PROPERTY LINES. DRAWINGS SHALL SHOW APPROVED MANUFACTURER'S NAME AND CATALOG NUMBER. THE DRAWINGS SHALL BE TO SCALE AND ALL INDICATIONS SHALL BE NEAT. ALL INFORMATION NOTED ON THE PRINT SHALL BE TRANSFERRED TO THE COPIES BY CONTRACTOR AND ALL INDICATIONS SHALL BE RECORDED IN A NEAT, ORDERLY WAY. RECORD SEPIAS SHALL BE TURNED OVER TO THE LANDSCAPE ARCHITECT AT OR BEFORE FINAL ACCEPTANCE/APPROVAL OF THE PROJECT.
- GUARANTEE / FINAL ACCEPTANCE**
- CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE THE IRRIGATION SYSTEM FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. MANUFACTURER WARRANTIES SHALL NOT SUPERSEDE THIS GUARANTEE AS CONTRACTOR SHALL BE FULLY LIABLE FOR REPAIRS/REPLACEMENT OF FAILED MATERIALS/WORKMANSHIP.



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Reno, Nevada 89511
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**BLUEWAVE
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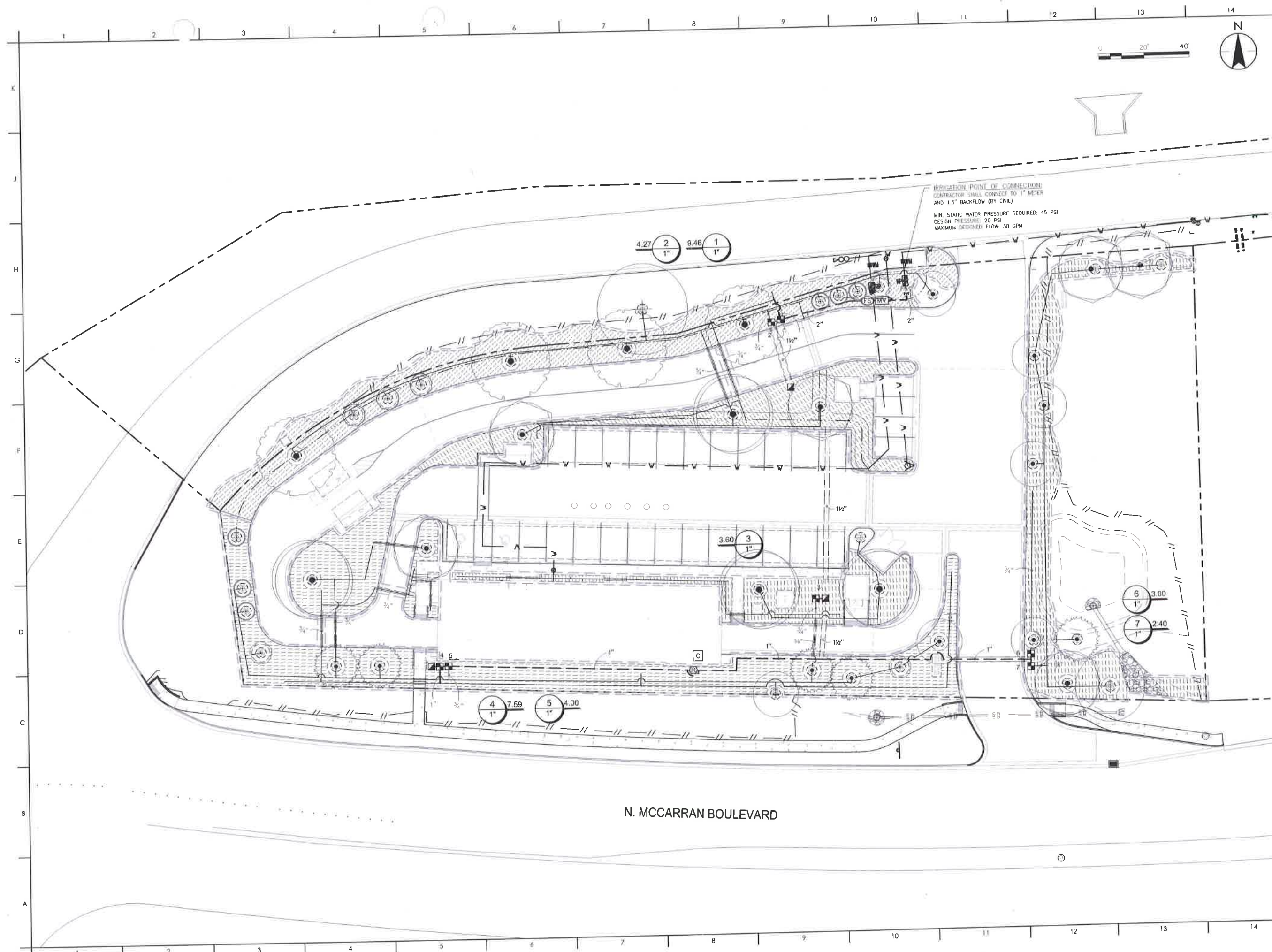
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LANDSCAPE IRRIGATION LEGEND AND NOTES

PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

Drawing No. **C800**
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 Reno, Nevada 89511
 Tel. (775) 850-0777 Fax (775) 850-0787
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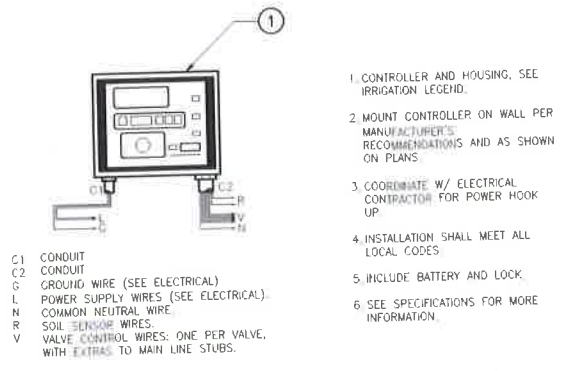
Client/Project
 BLUE WAVE CAR WASH

MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada

PERMIT SET N/A
 Issues
 Project Number 222310634
 Drawn By DM/JW/CM
 Checked By BS

Drawing No. **C801**
 Revision Sheet
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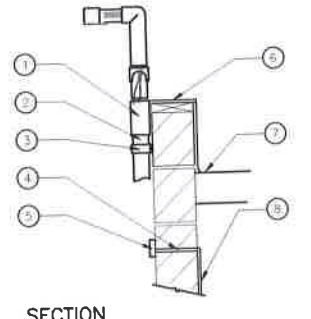
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- C1 CONDUIT
- C2 CONDUIT
- G GROUND WIRE (SEE ELECTRICAL)
- L POWER SUPPLY WIRES (SEE ELECTRICAL)
- N COMMON NEUTRAL WIRE
- R SOIL SENSOR WIRES
- V VALVE CONTROL WIRES: ONE PER VALVE, WITH EXTRAS TO MAIN LINE STUBS.

1. CONTROLLER AND HOUSING. SEE IRRIGATION LEGEND.
2. MOUNT CONTROLLER ON WALL PER MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON PLANS.
3. COORDINATE W/ ELECTRICAL CONTRACTOR FOR POWER HOOK UP.
4. INSTALLATION SHALL MEET ALL LOCAL CODES.
5. INCLUDE BATTERY AND LOCK.
6. SEE SPECIFICATIONS FOR MORE INFORMATION.

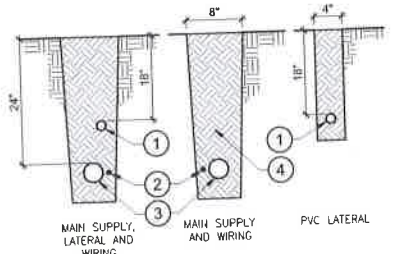
1 WALL MOUNT CONTROLLER
SCALE: 1 1/2" = 1'-0"



1. 3/4" PVC SLIP COUPLING.
2. 3/4" SCH. 40 PVC PIPE.
3. CLAMP.
4. CONDUIT THROUGH WALL BY CONTRACTOR.
5. J-BOX BY ELECTRICAL CONTRACTOR.
6. PARAPET COPING.
7. BUILDING ROOF.
8. CONDUIT W/ PULL WIRE TO CONTROLLER BY ELECTRICAL CONTRACTOR.

SECTION

2 RAIN SENSOR
SCALE: NONE

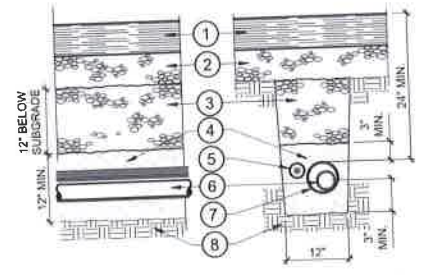


SECTION

PLAN

3 TRENCHING
SCALE: NOT TO SCALE

- 1 IRRIGATION LATERAL PIPE.
 - 2 WIRING: TAPE AND BUNDLE WIRING AT 10'-0" INTERVALS. COMMON TRENCHING OF IRRIGATION PIPE AND REMOTE CONTROL VALVE WIRES TO BE DONE WHERE POSSIBLE (INSTALL TRACE WIRE ALONG ALL MAIN LINE PIPE THAT DOES NOT HAVE CONTROL WIRES ADJACENT TO PIPE).
 - 3 MAIN LINE: ALL MAIN LINE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. MAINTAIN MIN. 4" SPACE BETWEEN PARALLEL PIPE LINES AND 6" VERTICAL SPACE BETWEEN MAIN LINE AND LATERAL LINE. WIRING AND MAIN LINE TO BE AT SAME MIN. DEPTH OF 24".
 - 4 BACKFILL.
 - 5 ALL PVC PIPE TO BE SNAKED IN TRENCH AS SHOWN.
- NOTES:
1. ALL PIPING UNDER PAVING SHALL BE SLEEVED.



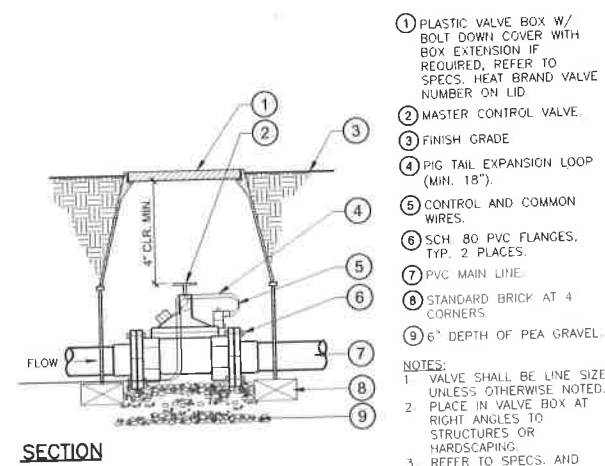
SECTION

CROSS SECTION

- 1 ASPHALT OR CONCRETE SECTION
- 2 BASE ROCK SECTION
- 3 ASPHALT BASE BACKFILL COMPACTED TO MEET SUBGRADE SPECS
- 4 SAND BACKFILL, COMPACTED TO MEET SUBGRADE SPECS
- 5 REMOTE CONTROL VALVE WIRES IN SCH. 40 PVC SLEEVE (MINIMIZE SPLICING).
- 6 MAIN LINE OR LATERAL PIPING
- 7 SCH. 40 SLEEVE, SIZE MINIMUM 2 X DIAMETER OF INTERIOR PIPE.
- 8 UNDISTURBED SUBGRADE.

NOTES:
1. TRENCH SHALL BE BACKFILLED AND COMPACTED PRIOR TO BASE PREPARATION.
2. IRRIGATION CONTRACTOR SHALL COORDINATE W/ PAVING CONTRACTOR FOR INSTALLATION OF SLEEVES UNDER PAVING.

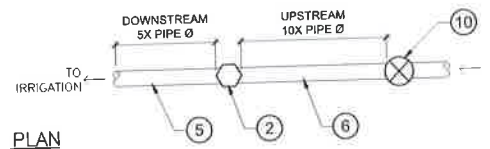
4 TRENCH UNDER PAVING
SCALE: NOT TO SCALE



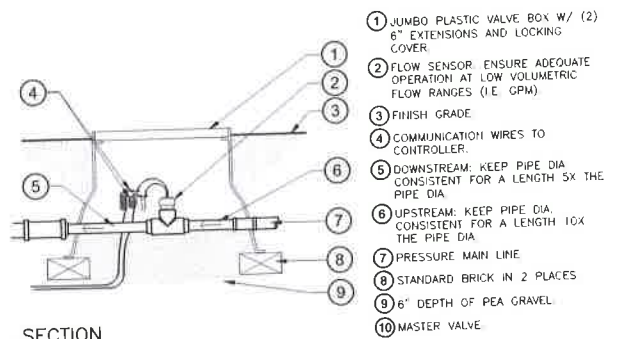
SECTION

6 MASTER VALVE
SCALE: 1" = 1'-0"

- 1 PLASTIC VALVE BOX W/ BOLT DOWN COVER WITH BOX EXTENSION IF REQUIRED. REFER TO SPECS. HEAT BRAND VALVE NUMBER ON LID.
 - 2 MASTER CONTROL VALVE.
 - 3 FINISH GRADE.
 - 4 PIG TAIL EXPANSION LOOP (MIN. 18").
 - 5 CONTROL AND COMMON WIRES.
 - 6 SCH. 80 PVC FLANGES, TYP. 2 PLACES.
 - 7 PVC MAIN LINE.
 - 8 STANDARD BRICK AT 4 CORNERS.
 - 9 6" DEPTH OF PEA GRAVEL.
- NOTES:
1. VALVE SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
2. PLACE IN VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
3. REFER TO SPECS. AND PLAN SHEETS FOR MORE INFORMATION.



PLAN



SECTION

7 FLOW SENSOR (SINGLE)
SCALE: NOT TO SCALE

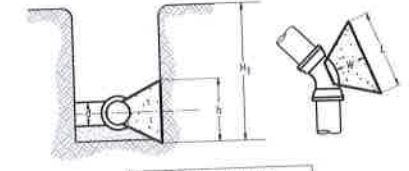
- 1 JUMBO PLASTIC VALVE BOX W/ (2) 6" EXTENSIONS AND LOCKING COVER.
- 2 FLOW SENSOR. ENSURE ADEQUATE OPERATION AT LOW VOLUMETRIC FLOW RANGES (I.E. GPM).
- 3 FINISH GRADE.
- 4 COMMUNICATION WIRES TO CONTROLLER.
- 5 DOWNSTREAM: KEEP PIPE DIA. CONSISTENT FOR A LENGTH 5X THE PIPE DIA.
- 6 UPSTREAM: KEEP PIPE DIA. CONSISTENT FOR A LENGTH 10X THE PIPE DIA.
- 7 PRESSURE MAIN LINE.
- 8 STANDARD BRICK IN 2 PLACES.
- 9 6" DEPTH OF PEA GRAVEL.
- 10 MASTER VALVE.

STEP 1: STRIP WIRES 1/2" FROM ENDS.

STEP 2: APPLY SPEARS DRI-SPLICE DS-500 WIRE NUT IN A CLOCKWISE DIRECTION.

STEP 3: ALIGN WIRE NUT WINGS WITH ARROWS AND INSERT FULLY INTO SPEARS DRI-SPLICE DS-500 BODY. CHECK TO MAKE SURE CONNECTOR HAS BEEN PUSHED PAST LOCKING FINGERS AND IS SEATED AT BOTTOM OF BODY.

8 DRI-SPLICE CONNECTOR KIT
SCALE: NOT TO SCALE



MAIN SIZE, INCHES	GEOMETRY GUIDELINES			
	TEE BRANCH/ DEAD END	90° ELBOW	45° ELBOW	22.5° ELBOW
4	1.9	2.7	1.4	0.7
6	4.2	6.0	3.2	1.7
8	7.5	10.7	5.8	2.9
10	11.8	16.7	9.0	4.6
12	17.0	24.0	13.0	6.6

- NOTES:
1. BEARING AREAS PROVIDED ARE BASED ON THE FOLLOWING TEST PRESSURE AND SOIL BEARING CAPACITY. IF DEVIATIONS IN FIELD ARE NEEDED, CONTACT ENGINEER TO DETERMINE ADJUSTMENTS. TEST PRESSURE PSI = 150 SOIL BEARING CAPACITY, LBS/FT² = 1500. SAFETY FACTOR = 1.5.
2. USE MINIMUM 4 SACK, 3,000 PSI CONCRETE.
3. PLACEMENT OF THRUST BLOCKS TO BE INSPECTED/APPROVED BY TMAA INSPECTOR PRIOR TO BACKFILL.
4. PLACEMENT OF BLOCKS AGAINST DISTURBED SOIL SHALL REQUIRE PRIOR COMPACTION TO 95% RELATIVE DENSITY.

9 THRUST BLOCK SCHEDULE - IRRIGATION ONLY
SCALE: NONE



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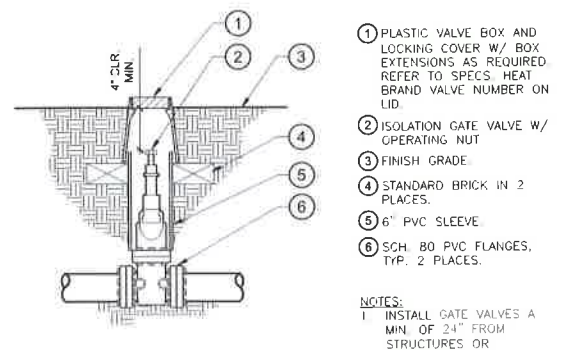
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BOULEVARD
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Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

LANDSCAPE IRRIGATION DETAILS

PERMIT SET	N/A
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

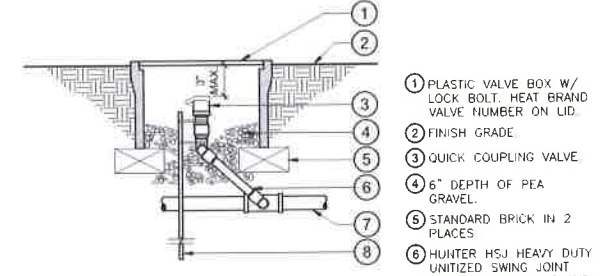
Drawing No. **C802**
Revision Sheet
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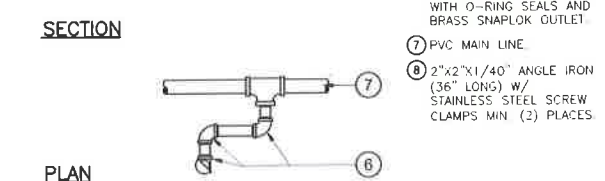
- 1 PLASTIC VALVE BOX AND LOCKING COVER W/ BOX EXTENSIONS AS REQUIRED REFER TO SPECS. HEAT BRAND VALVE NUMBER ON LID.
- 2 ISOLATION GATE VALVE W/ OPERATING NUT
- 3 FINISH GRADE
- 4 STANDARD BRICK IN 2 PLACES.
- 5 6" PVC SLEEVE
- 6 SCH 80 PVC FLANGES, TYP. 2 PLACES.

NOTES:
 1. INSTALL GATE VALVES A MIN. OF 24" FROM STRUCTURES OR HARDSCAPING.
 2. REFER TO SPECS. AND PLAN SHEETS FOR MORE INFORMATION.

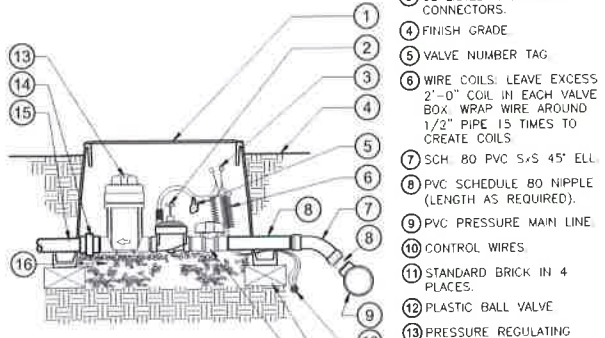
1 ISOLATION GATE VALVE
 SCALE: 1" = 1'-0"



- 1 PLASTIC VALVE BOX W/ LOCK BOLT. HEAT BRAND VALVE NUMBER ON LID.
- 2 FINISH GRADE
- 3 QUICK COUPLING VALVE
- 4 6" DEPTH OF PEA GRAVEL.
- 5 STANDARD BRICK IN 2 PLACES
- 6 HUNTER HSJ HEAVY DUTY UNITIZED SWING JOINT WITH O-RING SEALS AND BRASS SNAPLOK OUTLET
- 7 PVC MAIN LINE
- 8 2"x2"x1/40" ANGLE IRON (36" LONG) W/ STAINLESS STEEL SCREW CLAMPS MIN. (2) PLACES



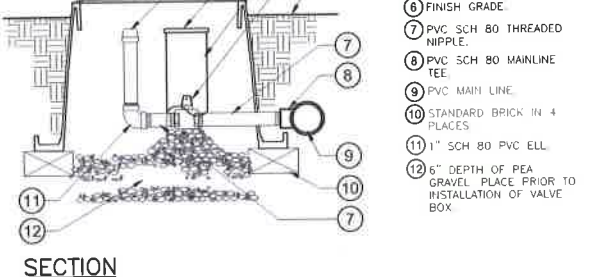
2 QUICK COUPLING VALVE
 SCALE: 1 1/2" = 1'-0"



- 1 PLASTIC VALVE BOX W/ BOLT DOWN LID. HEAT BRAND VALVE NUMBER ON LID.
- 2 REMOTE CONTROL DPIP VALVE.
- 3 UL LISTED WATERPROOF CONNECTORS.
- 4 FINISH GRADE
- 5 VALVE NUMBER TAG
- 6 WIRE COILS. LEAVE EXCESS 2'-0" COIL IN EACH VALVE BOX. WRAP WIRE AROUND 1/2" PIPE 15 TIMES TO CREATE COILS.
- 7 SCH 80 PVC SxS 45° ELL.
- 8 PVC SCHEDULE 80 NIPPLE (LENGTH AS REQUIRED).
- 9 PVC PRESSURE MAIN LINE
- 10 CONTROL WIRES
- 11 STANDARD BRICK IN 4 PLACES
- 12 PLASTIC BALL VALVE
- 13 PRESSURE REGULATING DRIP FILTER WITH INDICATOR
- 14 PVC UNION
- 15 PVC LATERAL
- 16 6" DEPTH OF PEA GRAVEL

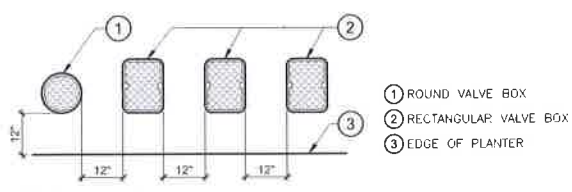
NOTES:
 1. ALL WIRE TO BE INSTALLED AS PER LOCAL CODE.

3 DRIP REMOTE CONTROL VALVE
 SCALE: 1" = 1'-0"



- 1 PLASTIC VALVE BOX W/ BOLT DOWN LID. 14" x 19"
- 2 1" SCH 80 PVC THREADED CAP
- 3 4" TORO CAP
- 4 4" SDR 35 PIPE RISER
- 5 1" MUELLER CURB STOP
- 6 FINISH GRADE
- 7 PVC SCH 80 THREADED NIPPLE
- 8 PVC SCH 80 MAINLINE TEE
- 9 PVC MAIN LINE
- 10 STANDARD BRICK IN 4 PLACES
- 11 1" SCH 80 PVC ELL
- 12 6" DEPTH OF PEA GRAVEL. PLACE PRIOR TO INSTALLATION OF VALVE BOX.

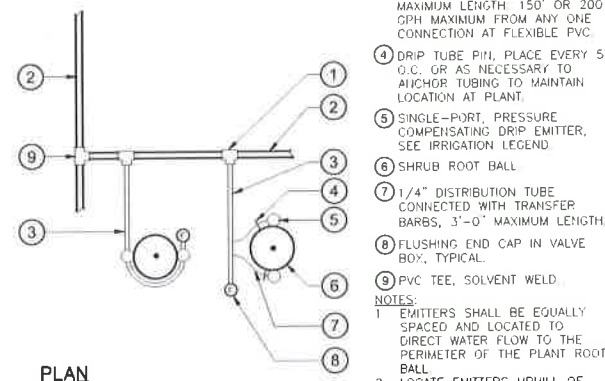
4 MANUAL DRAIN VALVE
 SCALE: NONE



- 1 ROUND VALVE BOX
- 2 RECTANGULAR VALVE BOX
- 3 EDGE OF PLANTER

NOTES:
 1. CENTER VALVE BOXES DIRECTLY OVER VALVES TO FACILITATE SERVICING.
 2. FINISH GRADE AROUND BOXES TO BE KEPT BELOW VALVE BOX LID. 1/2" IN SEED 1-1/2" IN SOG 3" IN PLANTER BED.
 3. SET VALVES IN GROUNDCOVER/SHRUB AREAS WHENEVER POSSIBLE. INSTALL IN TURF ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO TURF.
 4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
 5. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE OR DEFORMATION OF VALVE BOX SIDES.

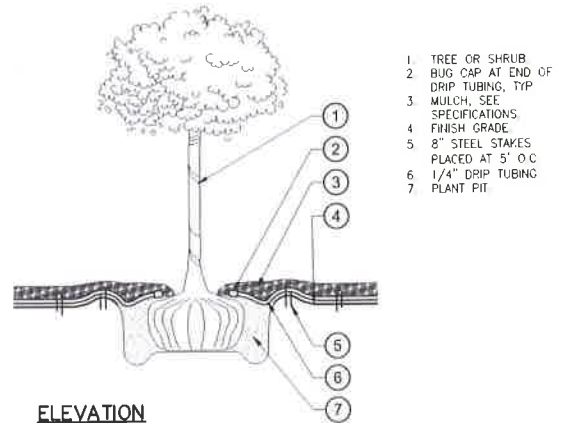
5 VALVE BOX LAYOUT
 SCALE: 1/2" = 1'-0"



- 1 INSERT PVC TEE AT INDIVIDUAL PLANTS, NO BARBED CONNECTORS IN FLEXIBLE PVC PIPE PERMITTED.
- 2 3/4" DIA FLEXIBLE PVC PIPE.
- 3 EMITTER SUB-LATERAL (TYP) 1/2" DIA FLEXIBLE DRIP DISTRIBUTION TUBE. 3'-0" MAXIMUM LENGTH. 150' OR 200 GPH MAXIMUM FROM ANY ONE CONNECTION AT FLEXIBLE PVC.
- 4 DRIP TUBE PIN. PLACE EVERY 5' O.C. OR AS NECESSARY TO ANCHOR TUBING TO MAINTAIN LOCATION AT PLANT.
- 5 SINGLE-PORT, PRESSURE COMPENSATING DRIP EMITTER. SEE IRRIGATION LEGEND.
- 6 SHRUB ROOT BALL
- 7 1/4" DISTRIBUTION TUBE CONNECTED WITH TRANSFER BARBS, 3'-0" MAXIMUM LENGTH.
- 8 FLUSHING END CAP IN VALVE BOX, TYPICAL.
- 9 PVC TEE, SOLVENT WELD.

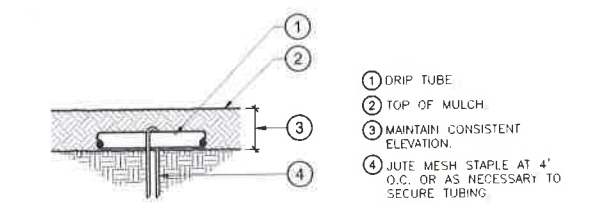
NOTES:
 1. EMITTERS SHALL BE EQUALLY SPACED AND LOCATED TO DIRECT WATER FLOW TO THE PERIMETER OF THE PLANT ROOT BALL.
 2. LOCATE EMITTERS UPHILL OF PLANT CENTER.
 3. USE CONNECTORS SPECIFIED BY TUBE MANUFACTURER.

6 DRIP EMITTER LAYOUT
 SCALE: NOT TO SCALE



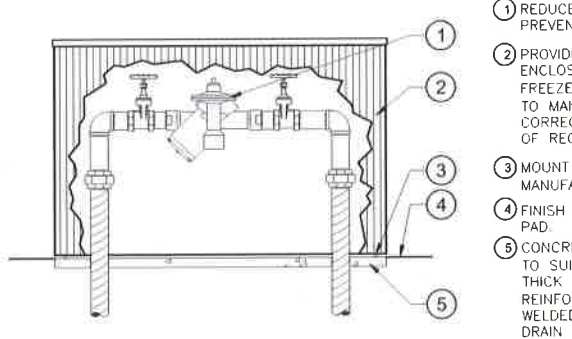
- 1 TREE OR SHRUB
- 2 BUG CAP AT END OF DRIP TUBING, TYP
- 3 MULCH. SEE SPECIFICATIONS
- 4 FINISH GRADE
- 5 8" STEEL STAKES PLACED AT 5' O.C
- 6 1/4" DRIP TUBING
- 7 PLANT PIT

7 DRIP EMITTER AT PLANT (ELEVATION)
 SCALE: NONE



- 1 DRIP TUBE
- 2 TOP OF MULCH
- 3 MAINTAIN CONSISTENT ELEVATION.
- 4 JUTE MESH STAPLE AT 4' O.C. OR AS NECESSARY TO SECURE TUBING.

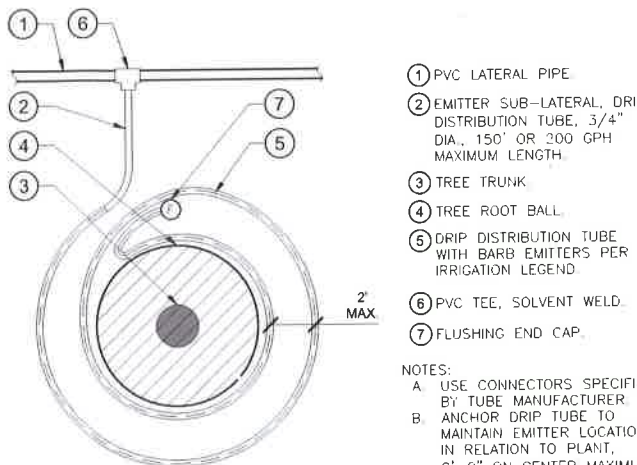
8 DRIP TUBE STAPLING
 SCALE: 1 1/2" = 1'-0"



- 1 REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY
- 2 PROVIDE AN INSULATED BACKFLOW ENCLOSURE WHICH IS VANDAL AND FREEZE/WEATHER RESISTANT REFER TO MANUFACTURER'S CATALOG FOR CORRECT DIMENSION TO FIT SIZE OF REQUIRED BACKFLOW DEVICE.
- 3 MOUNT ENCLOSURE PER MANUFACTURER'S DIRECTION.
- 4 FINISH GRADE 1" BELOW CONCRETE PAD.
- 5 CONCRETE FOUNDATION DIMENSIONS TO SUIT INDIVIDUAL INSTALLATION. 4" THICK CONCRETE PAD TO BE REINFORCED WITH 6" X 6" 10/10 WELDED WIRE MESH. CROWN TO DRAIN AND FLOAT FINISH.

NOTES:
 A. WHEN DEVICE IS INSTALLED AND PRIOR TO ACCEPTANCE BY THE OWNER, DEVICE MUST BE INSPECTED BY A STATE CERTIFIED INSPECTOR IN ACCORDANCE WITH TITLE 17 AND THE UNIFORM PLUMBING CODE.

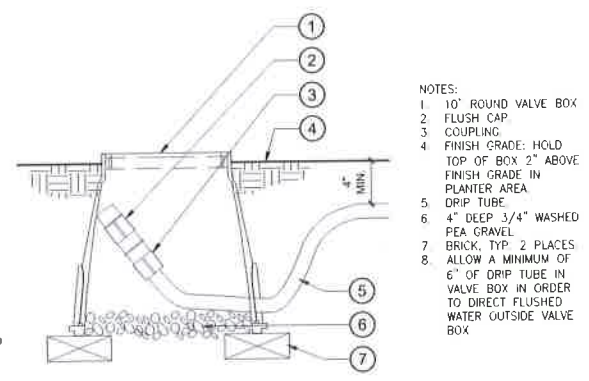
9 BACKFLOW FREEZE COVER
 SCALE: NONE



- 1 PVC LATERAL PIPE
- 2 EMITTER SUB-LATERAL, DRIP DISTRIBUTION TUBE, 3/4" DIA., 150' OR 200 GPH MAXIMUM LENGTH.
- 3 TREE TRUNK
- 4 TREE ROOT BALL
- 5 DRIP DISTRIBUTION TUBE WITH BARB EMITTERS PER IRRIGATION LEGEND
- 6 PVC TEE, SOLVENT WELD.
- 7 FLUSHING END CAP.

NOTES:
 A. USE CONNECTORS SPECIFIED BY TUBE MANUFACTURER.
 B. ANCHOR DRIP TUBE TO MAINTAIN EMITTER LOCATION IN RELATION TO PLANT, 8'-0" ON CENTER MAXIMUM.

10 DRIP TREE RING
 SCALE: NONE



- NOTES:
 1. 10" ROUND VALVE BOX
 2. FLUSH CAP
 3. COUPLING
 4. FINISH GRADE: HOLD TOP OF BOX 2" ABOVE FINISH GRADE IN PLANTER AREA
 5. DRIP TUBE
 6. 4" DEEP 3/4" WASHED PEA GRAVEL
 7. BRICK, TYP. 2 PLACES
 8. ALLOW A MINIMUM OF 6" OF DRIP TUBE IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX

11 MANUAL FLUSH VALVE
 SCALE: NOT TO SCALE



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BLUEWAVE
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 SPARKS

Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada

PERMIT SET	N/A
Issue	
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

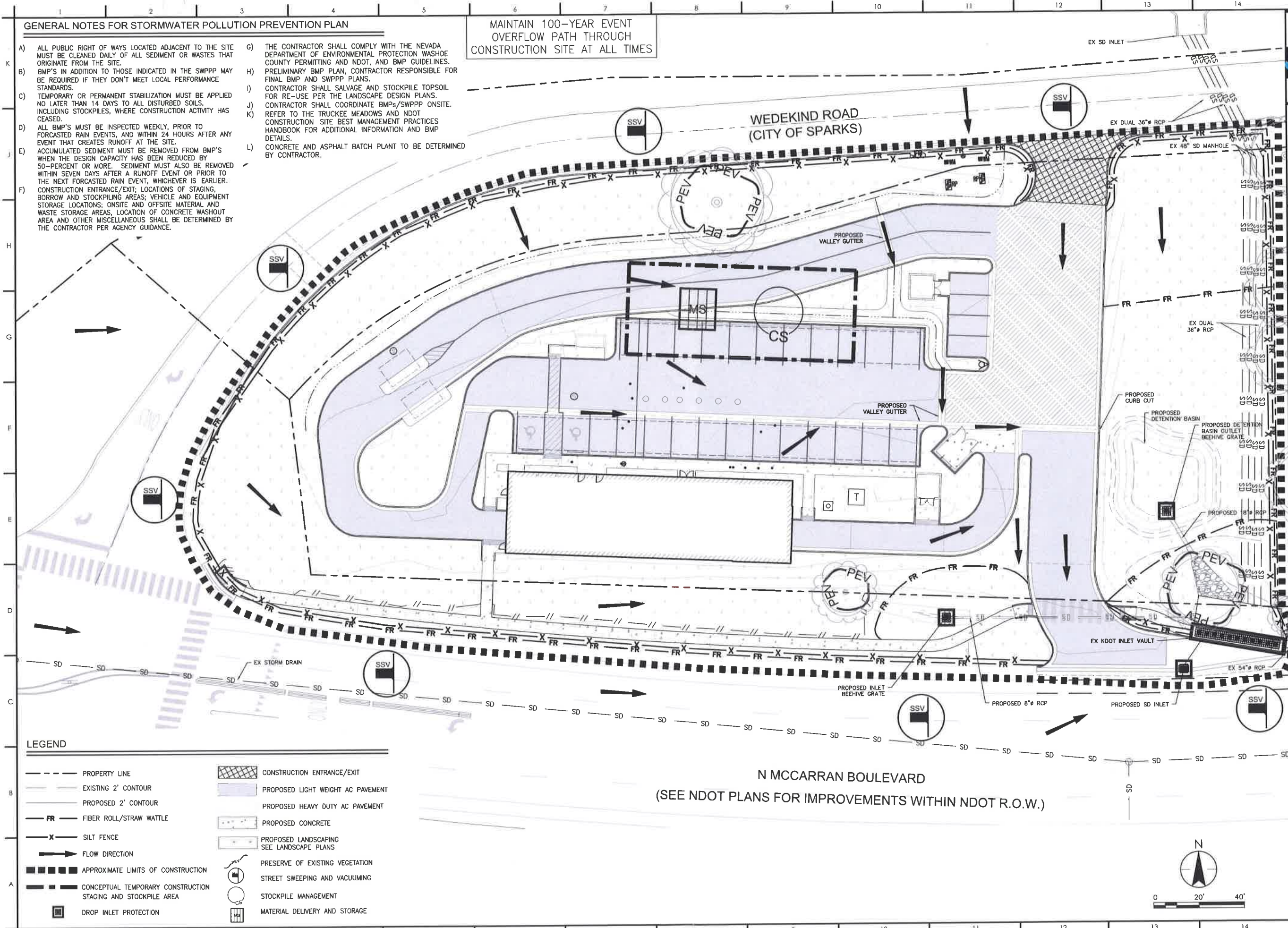
Drawing No. **C803**
 Revision Sheet
 0 23 of 24

LANDSCAPE IRRIGATION DETAILS
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GENERAL NOTES FOR STORMWATER POLLUTION PREVENTION PLAN

- A) ALL PUBLIC RIGHT OF WAYS LOCATED ADJACENT TO THE SITE MUST BE CLEANED DAILY OF ALL SEDIMENT OR WASTES THAT ORIGINATE FROM THE SITE.
- B) BMP'S IN ADDITION TO THOSE INDICATED IN THE SWPPP MAY BE REQUIRED IF THEY DON'T MEET LOCAL PERFORMANCE STANDARDS.
- C) TEMPORARY OR PERMANENT STABILIZATION MUST BE APPLIED NO LATER THAN 14 DAYS TO ALL DISTURBED SOILS, INCLUDING STOCKPILES, WHERE CONSTRUCTION ACTIVITY HAS CEASED.
- D) ALL BMP'S MUST BE INSPECTED WEEKLY, PRIOR TO FORECASTED RAIN EVENTS, AND WITHIN 24 HOURS AFTER ANY EVENT THAT CREATES RUNOFF AT THE SITE.
- E) ACCUMULATED SEDIMENT MUST BE REMOVED FROM BMP'S WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50-PERCENT OR MORE. SEDIMENT MUST ALSO BE REMOVED WITHIN SEVEN DAYS AFTER A RUNOFF EVENT OR PRIOR TO THE NEXT FORECASTED RAIN EVENT, WHICHEVER IS EARLIER.
- F) CONSTRUCTION ENTRANCE/EXIT; LOCATIONS OF STAGING, BORROW AND STOCKPILING AREAS; VEHICLE AND EQUIPMENT STORAGE LOCATIONS; ONSITE AND OFFSITE MATERIAL AND WASTE STORAGE AREAS, LOCATION OF CONCRETE WASHOUT AREA AND OTHER MISCELLANEOUS SHALL BE DETERMINED BY THE CONTRACTOR PER AGENCY GUIDANCE.
- G) THE CONTRACTOR SHALL COMPLY WITH THE NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION WASHOE COUNTY PERMITTING AND NDOT, AND BMP GUIDELINES. PRELIMINARY BMP PLAN, CONTRACTOR RESPONSIBLE FOR FINAL BMP AND SWPPP PLANS.
- H) CONTRACTOR SHALL SALVAGE AND STOCKPILE TOPSOIL FOR RE-USE PER THE LANDSCAPE DESIGN PLANS.
- I) CONTRACTOR SHALL COORDINATE BMPs/SWPPP ONSITE.
- J) REFER TO THE TRUCKEE MEADOWS AND NDOT CONSTRUCTION SITE BEST MANAGEMENT PRACTICES HANDBOOK FOR ADDITIONAL INFORMATION AND BMP DETAILS.
- K) CONCRETE AND ASPHALT BATCH PLANT TO BE DETERMINED BY CONTRACTOR.

MAINTAIN 100-YEAR EVENT OVERFLOW PATH THROUGH CONSTRUCTION SITE AT ALL TIMES



LEGEND

- PROPERTY LINE
- - - EXISTING 2' CONTOUR
- - - PROPOSED 2' CONTOUR
- FR FIBER ROLL/STRAW WATTLE
- X SILT FENCE
- FLOW DIRECTION
- █ APPROXIMATE LIMITS OF CONSTRUCTION
- █ CONCEPTUAL TEMPORARY CONSTRUCTION STAGING AND STOCKPILE AREA
- █ DROP INLET PROTECTION
- ▨ CONSTRUCTION ENTRANCE/EXIT
- ▨ PROPOSED LIGHT WEIGHT AC PAVEMENT
- ▨ PROPOSED HEAVY DUTY AC PAVEMENT
- ▨ PROPOSED CONCRETE
- ▨ PROPOSED LANDSCAPING SEE LANDSCAPE PLANS
- PRESERVE OF EXISTING VEGETATION
- STREET SWEEPING AND VACUUMING
- STOCKPILE MANAGEMENT
- MATERIAL DELIVERY AND STORAGE



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Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

CONCEPTUAL STORM WATER
POLLUTION PREVENTION PLAN

PERMIT SET	05/29/2019
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **C900**
Revision Sheet
0 24 of 24

WORK ORDER NO. 19-6882
 DESIGNED BY
 DRAWN BY/DATE
 DATE 2018.12.21
 CHECKED BY
 SUBMITTED 2018.12.21
 RECOMMENDED
 APPROVED

TRUCKEE MEADOWS WATER
 R U T M O R I T Y
 1365 CAPITAL BLVD. / PO BOX 30013
 RENO, NEVADA 89502-3013
 PH 775-854-9000 / FX 775-854-9003

Truckee Meadows Water Authority
 Approved For Construction
 Water Facilities Only
 Jason Feagan 3/27/19 Date
 Engineering
 James W. Wacker 3-28-19 Date
 Backflow



22 MARCH 2019

WCHD PERMITTING
 PURPOSES ONLY



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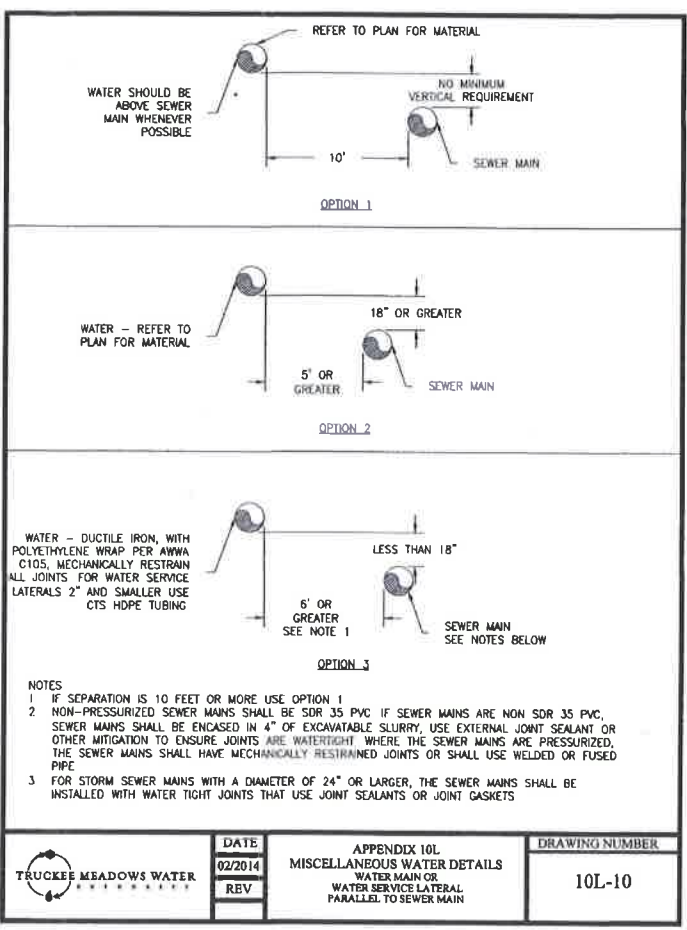
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FOR TMWA USE ONLY
 NEW BUSINESS WATER

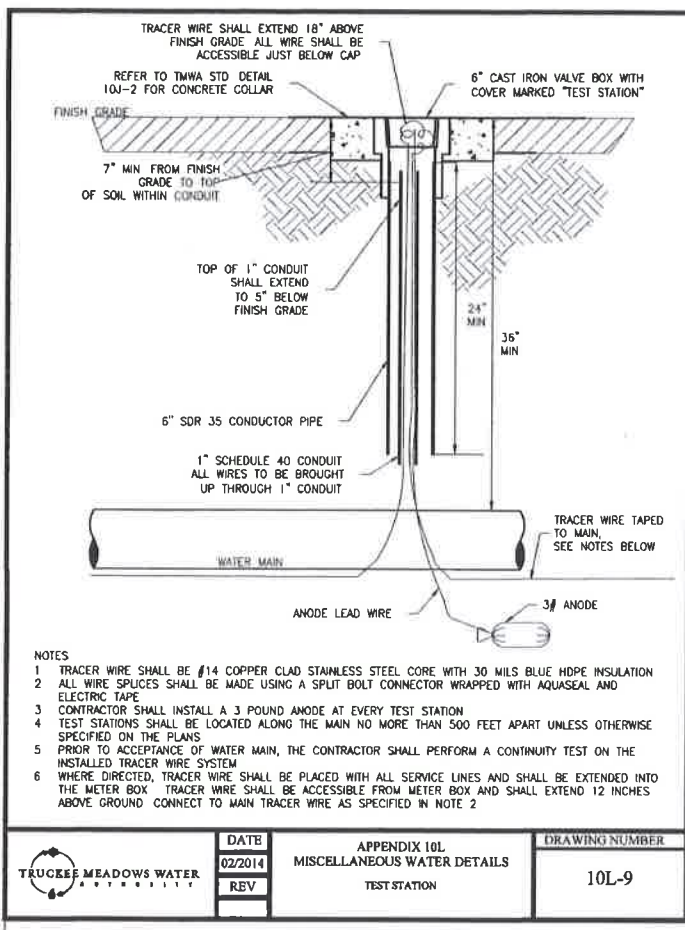
WO#	Map #		
Date Installed:	Depth:		
Pressure Test Date:	PSI		
Inspector:	Hours Tested:		
Contractor:			
Feet Laid	Size	Type	Main/Svc
Retired/ Abandoned/Removed			
Feet Ret.	Size	Type	Main/Svc
# of Meter boxes Inst./Size:			
# of Setters Inst./Size:			

**WEDEKIND RD. COM MAIN
 BLUEWAVE MCCARRAN**

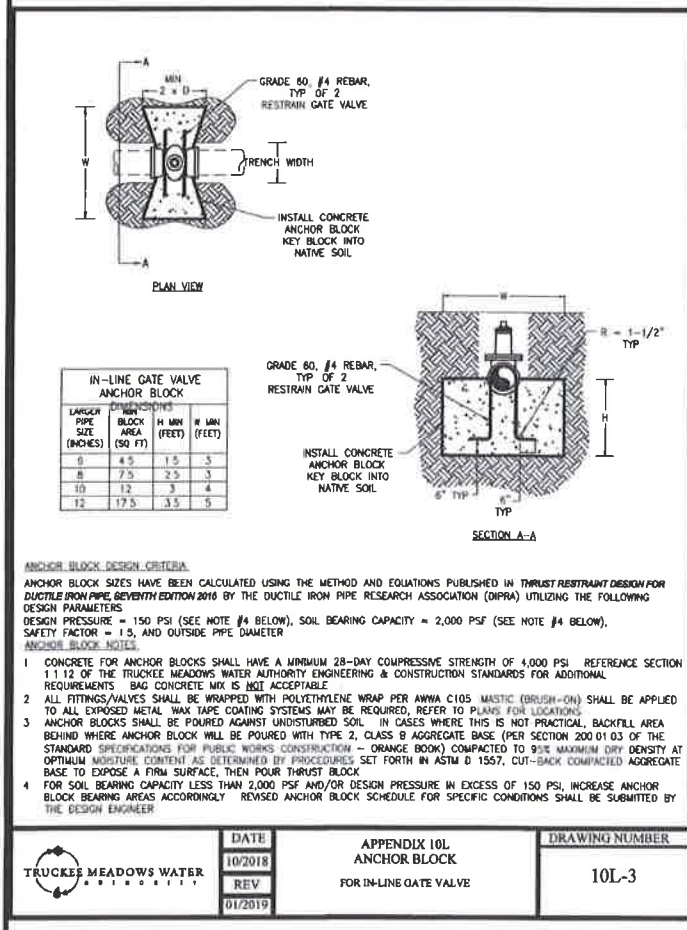
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W-3
 3 OF 4



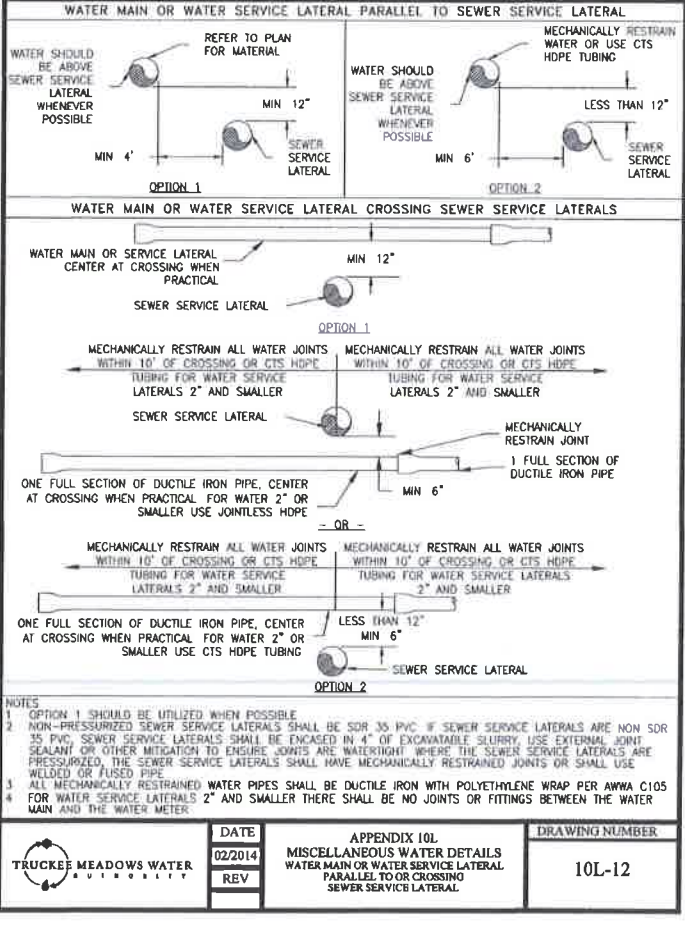
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02/2014	MISCELLANEOUS WATER DETAILS	
REV	WATER MAIN OR WATER SERVICE LATERAL PARALLEL TO SEWER MAIN	10L-10



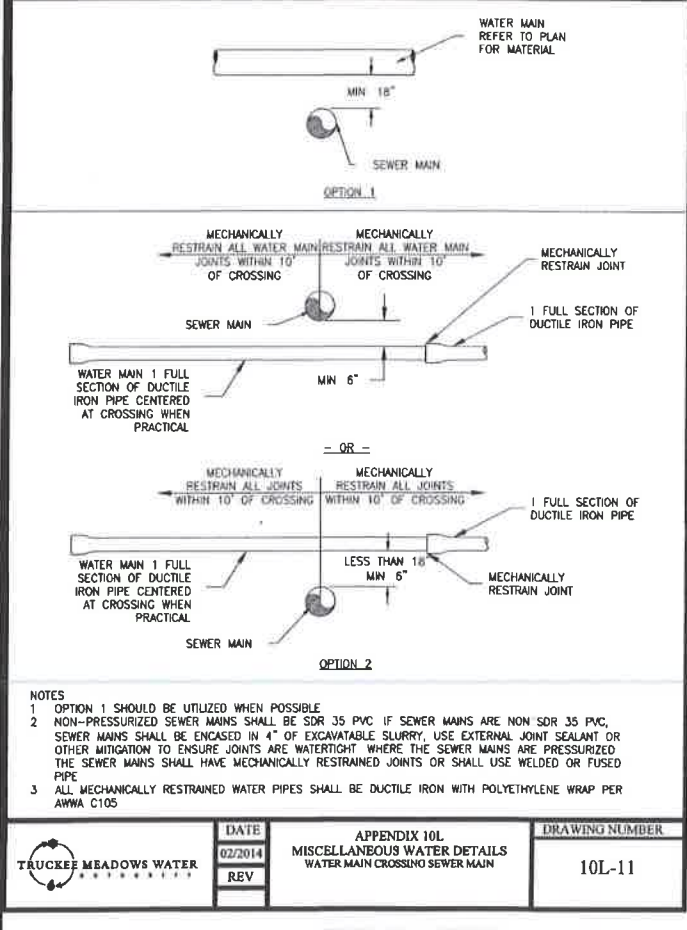
DATE	APPENDIX 10L	DRAWING NUMBER
02/2014	MISCELLANEOUS WATER DETAILS	
REV	TEST STATION	10L-9



DATE	APPENDIX 10L	DRAWING NUMBER
10/2018	ANCHOR BLOCK	
01/2019	FOR IN-LINE GATE VALVE	10L-3



DATE	APPENDIX 10L	DRAWING NUMBER
02/2014	MISCELLANEOUS WATER DETAILS	
REV	WATER MAIN OR WATER SERVICE LATERAL PARALLEL TO OR CROSSING SEWER SERVICE LATERAL	10L-12

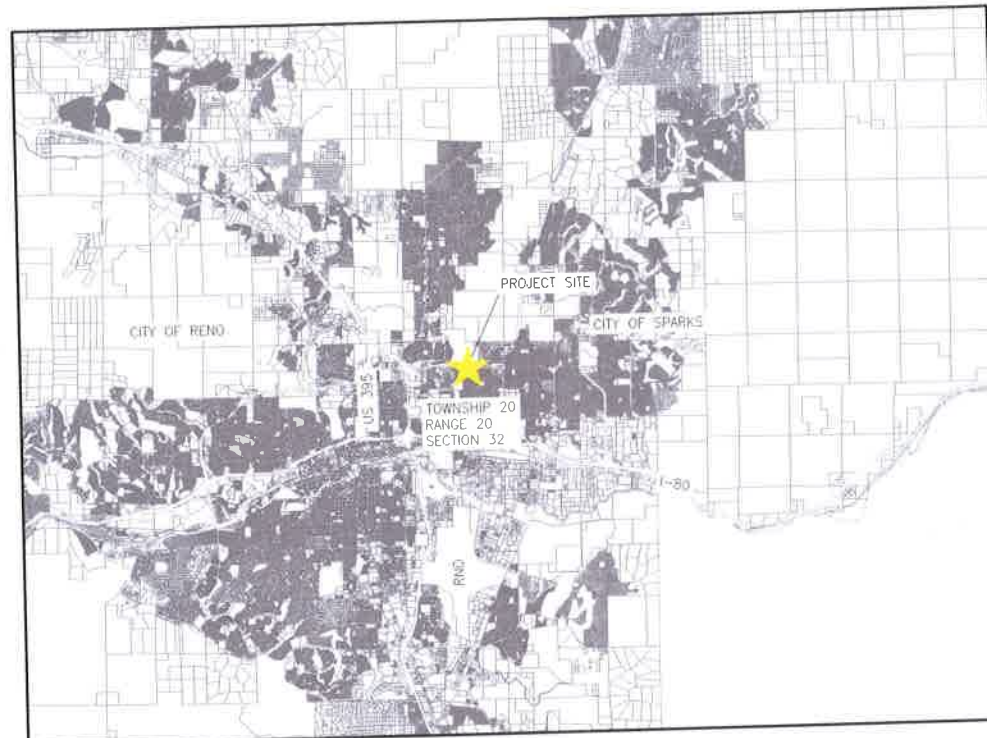


DATE	APPENDIX 10L	DRAWING NUMBER
02/2014	MISCELLANEOUS WATER DETAILS	
REV	WATER MAIN CROSSING SEWER MAIN	10L-11

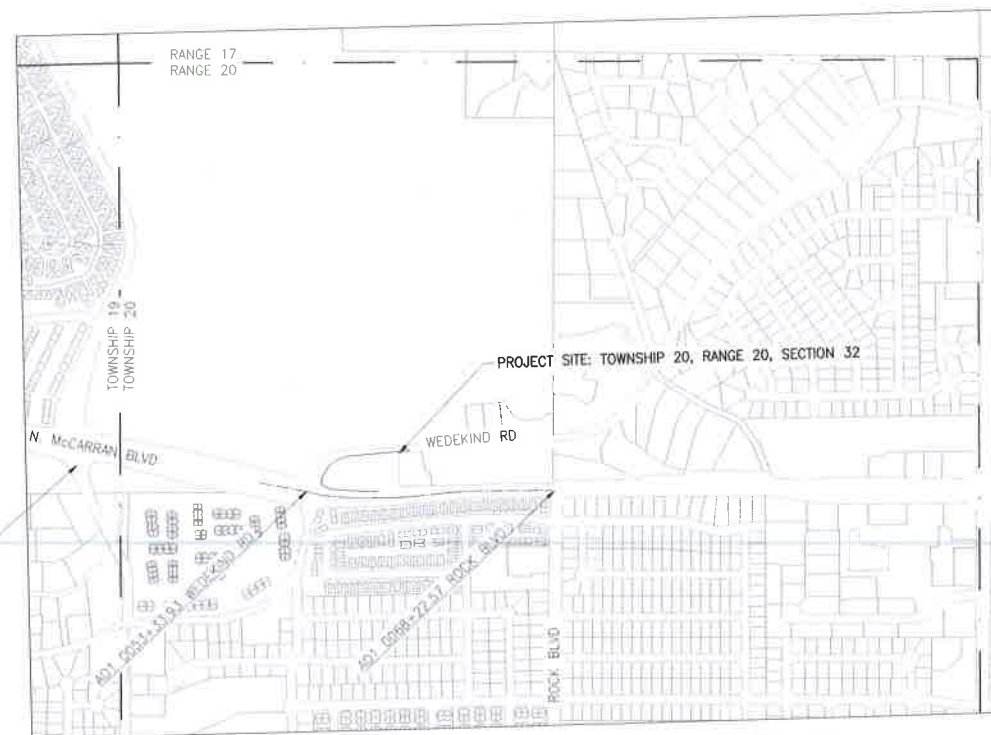
**CIVIL IMPROVEMENT PLANS
FOR
SPARKS, NEVADA
BLUEWAVE EXPRESS CARWASH**

GENERAL NOTES

1. ALL WORK DONE AND MATERIALS FURNISHED SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS STATE OF NEVADA DEPARTMENT OF HIGHWAYS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," AND "THE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" CURRENT EDITION INCLUDING ALL ADDENDUMS.
2. TRAFFIC CONTROL PLANS SHALL CONFORM TO THE MUTCD, CURRENT EDITION AND NDOT STANDARD PLANS. CONTRACTOR TO SUBMIT PLANS TO NDOT PRIOR TO ENCROACHMENT PERMIT RELEASE.
3. LOCATION OF ALL UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND WERE NOT DETERMINED BY FIELD INVESTIGATION. EXISTING UTILITIES ARE SHOWN BASED UPON AVAILABLE RECORDED DRAWINGS. ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IN THE FIELD THE LOCATION OF THEIR INSTALLATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL UTILITY STRUCTURES FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT SHALL BE BORNE SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REQUEST FIELD MARKING OF EXISTING UTILITIES AT LEAST 48 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION BY CALLING UNDERGROUND SERVICE ALERT AT 811 OR (800) 227-2600. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO RETAIN AND PROTECT ALL CULVERTS DURING CONSTRUCTION.
4. TOPOGRAPHIC INFORMATION CONTAINED WITHIN THESE CONSTRUCTION DOCUMENTS WAS PREPARED BY MEYER SURVEYING, M4D 83 (94), NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE (2703), BASED ON GPS RTK OBSERVATIONS UTILIZING THE NORTHERN NEVADA COOPERATIVE REAL TIME NETWORK (NRS). THE DISTANCES AND COORDINATES SHOWN HEREON ARE GROUND VALUES. THE COMBINED GRID TO GROUND SCALE FACTOR = 1.000197939.
5. THE CONTRACTOR SHALL COOPERATE WITH ANY OTHER CONTRACTORS OR UTILITY COMPANY FORCES WORKING ON THE SITE.
6. ALL SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF CONSTRUCTION. ALL REMOVED MATERIALS SHALL BE DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.
7. AT LOCATIONS WHERE NEW UNDERGROUND FACILITIES CROSS EXISTING FACILITIES THE CONTRACTOR SHALL EXPOSE THE EXISTING FACILITY AND VERIFY THAT SUFFICIENT HORIZONTAL AND VERTICAL CLEARANCE EXISTS FOR THE NEW FACILITY TO BE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE PLANS. AT LOCATIONS WHERE NEW UNDERGROUND FACILITIES ARE TO BE CONNECTED TO EXISTING FACILITIES THE CONTRACTOR SHALL EXPOSE THE EXISTING FACILITY AND VERIFY THAT THE CONNECTION CAN BE MADE AS SHOWN ON THE PLANS. THIS VERIFICATION SHALL BE PERFORMED PRIOR TO ANY CONSTRUCTION. ANY CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION AS SOON AS THEY ARE DISCOVERED.
8. ALL DIMENSIONS TO CURBS OR CURB AND GUTTERS ARE TO THE FRONT FACE OF CURB UNLESS NOTED OTHERWISE ON THE DRAWINGS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND IMPLEMENTING A STORM WATER POLLUTION PREVENTION PLAN (IF REQUIRED), INCLUDING ALL FEES, PERMITS, AND NOTICES. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK. EXISTING DRAINAGE FACILITIES SHALL BE KEPT IN SERVICE AT ALL TIMES DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS, BUILDINGS OR OTHER STRUCTURES RESULTING FROM HIS CONSTRUCTION ACTIVITIES. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE CITY OF SPARKS, NDOT AND THE ENGINEER AT NO ADDITIONAL COST.
11. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THESE DRAWINGS AND THE EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL COMPARE ALL DRAWINGS AND VERIFY THE FIGURES BEFORE STARTING THE WORK AND WILL BE RESPONSIBLE FOR ANY ERRORS WHICH MIGHT HAVE BEEN AVOIDED THEREBY. IF THE CONTRACTOR FAILS TO NOTIFY THE OWNER OR THEIR REPRESENTATIVE IN A TIMELY MANNER OF ANY APPARENT ERROR OR OMISSION ON THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING WORK INCORRECTLY DONE AT THE CONTRACTOR'S EXPENSE.
12. CONSTRUCTION WATER USED FOR COMPACTION AND DUST CONTROL SHALL BE OBTAINED FROM A SOURCE APPROVED BY WASHOE COUNTY AND THE CITY OF SPARKS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING STAGING AREA LOCATIONS.
14. FOR THE ENTIRE DURATION OF THIS CONSTRUCTION CONTRACT, THE CONTRACTOR SHALL IMPLEMENT STRINGENT DUST CONTROL MEASURES IN ACCORDANCE WITH THE TERMS OF THE ENCROACHMENT PERMIT, WASHOE COUNTY AND THE CITY OF SPARKS. THE CONTRACTOR IS REQUIRED TO SUPPRESS DUST AT ALL TIMES, 24 HOURS A DAY, SEVEN (7) DAYS A WEEK, REGARDLESS OF WHEN CONSTRUCTION ACTIVITIES ARE OCCURRING.
15. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO EXISTING LANDSCAPING DAMAGED BY OR THROUGH CONSTRUCTION ACTIVITIES. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE ENGINEER AND THE OWNER RESPONSIBLE FOR THE MAINTENANCE. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK.
16. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE NDOT ENCROACHMENT AGREEMENT, WASHOE COUNTY AND THE CITY OF SPARKS.

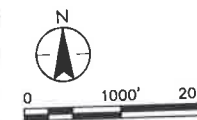


VICINITY MAP



TOWNSHIP 20 RANGE 20 SECTION 32

LOCATION MAP



DEVELOPER

BLUEWAVE EXPRESS CAR WASH
NEIL HORNE
6630 ROXBURGH DRIVE, SUITE 120
HOUSTON, TEXAS 77041
(281) 65-5455 EXT. 720

CIVIL ENGINEER

STANTEC CONSULTING INC.
JAMES PRINGLE, PE
6995 SIERRA CENTER PARKWAY
RENO, NEVADA 89511
(775) 850-0777

LAND SURVEYOR

MEYER SURVEYING
1248 BONREA WAY
RENO, NEVADA 89511
(775) 786-1166

INDEX OF SHEETS

SHEET NO.	DESCRIPTION OF SHEET
1 OF 9	NDOT1 COVER SHEET
2 OF 9	NDOT2 DEMOLITION PLAN
3 OF 9	NDOT3 HORIZONTAL CONTROL AND GRADING PLAN
4 OF 9	NDOT4 HORIZONTAL CONTROL AND GRADING DETAILS
5 OF 9	NDOT5 UTILITY PLAN
6 OF 9	NDOT6 STRIPING AND SIGNAGE PLAN
7 OF 9	NDOT7 TRUCK TURNING PLAN
8 OF 9	NDOT8 LANDSCAPE PLANTING LEGEND AND NOTES
9 OF 9	NDOT9 LANDSCAPE PLANTING PLAN

REFERENCE DRAWINGS:

BLUEWAVE EXPRESS CAR WASH	
SHEET NO.	DESCRIPTION OF SHEET
C200	HORIZONTAL CONTROL
C300	PRECISE GRADING PLAN
C400	WET UTILITY PLAN
C500	CONSTRUCTION DETAILS
C900	PRELIMINARY SWPPP



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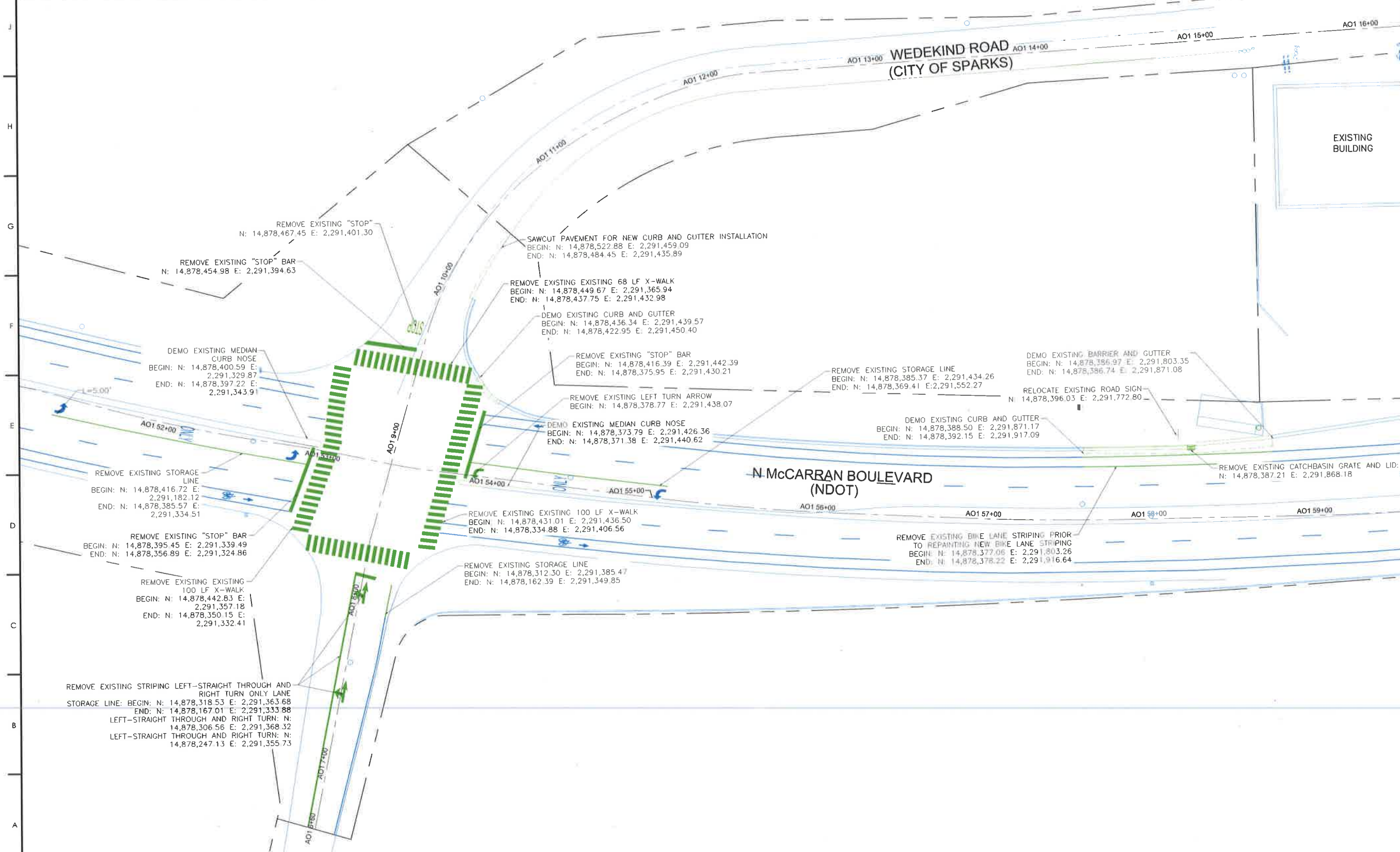
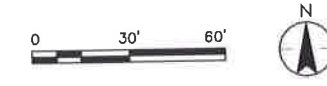
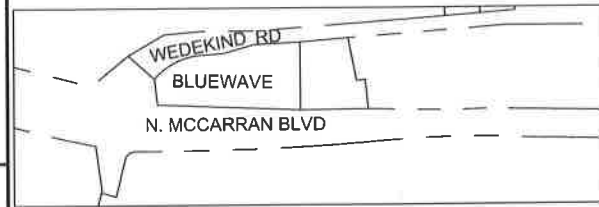
COVER SHEET

PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **NDOT1**
Revision Sheet
1 of 9

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OVERVIEW



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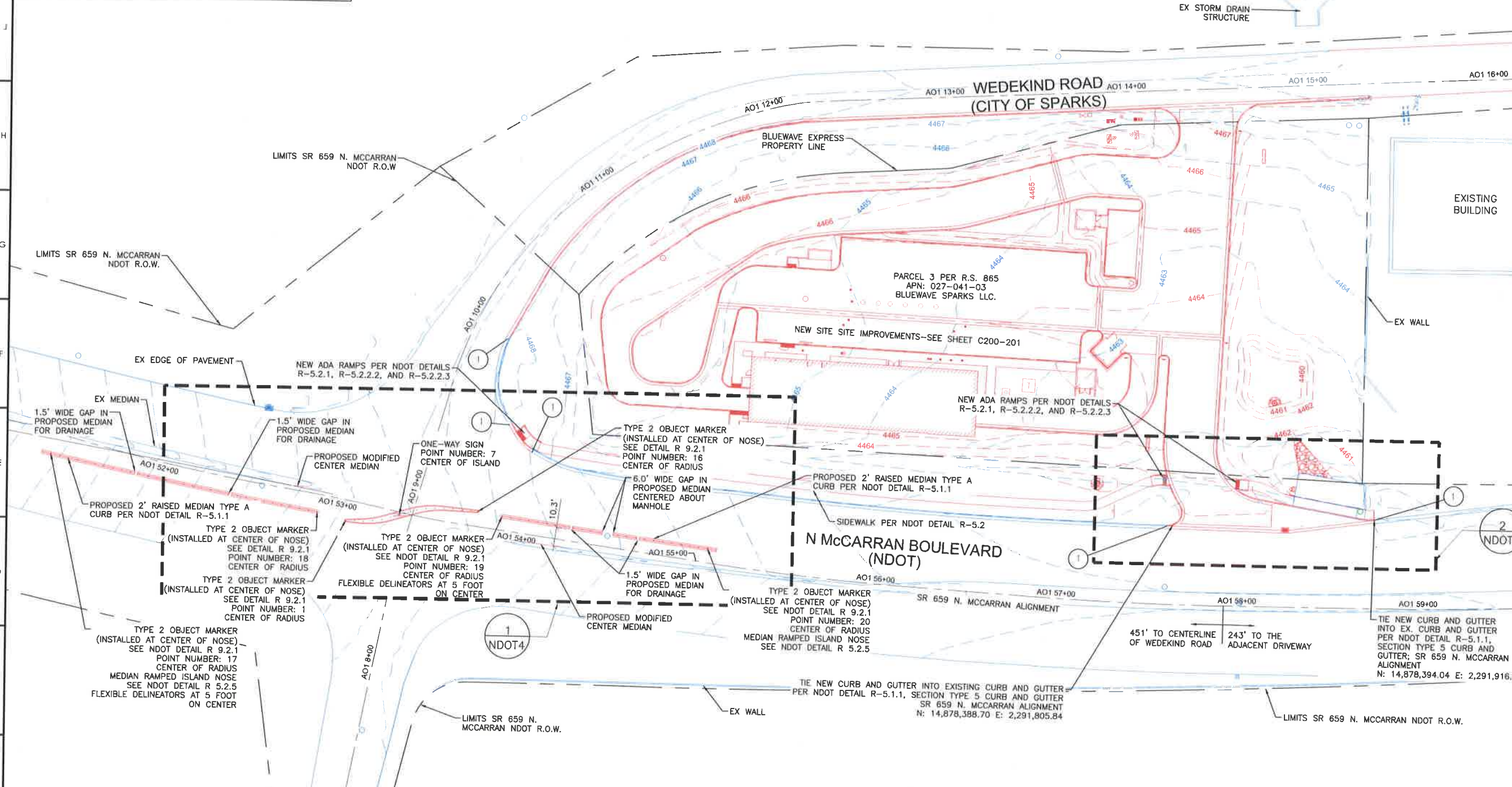
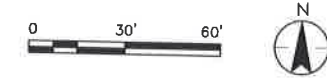
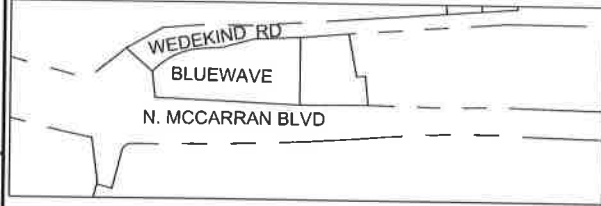
**BLUEWAVE
 MCCARRAN
 BOULEVARD
 SPARKS**

Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada

DEMOLITION PLAN
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PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP
Drawing No.	NDOT2
Revision	Sheet
	2 of 9

OVERVIEW



CONSTRUCTION NOTES

ITEM	DESCRIPTION
1	TIE THE NEW CURB AND GUTTER INTO EXISTING CURB AND GUTTER MATCH EXISTING GRADES. PER NDOT DETAIL R-5.1.1, SECTION TYPE 5 CURB AND GUTTER.



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HORIZONTAL CONTROL AND GRADING PLAN

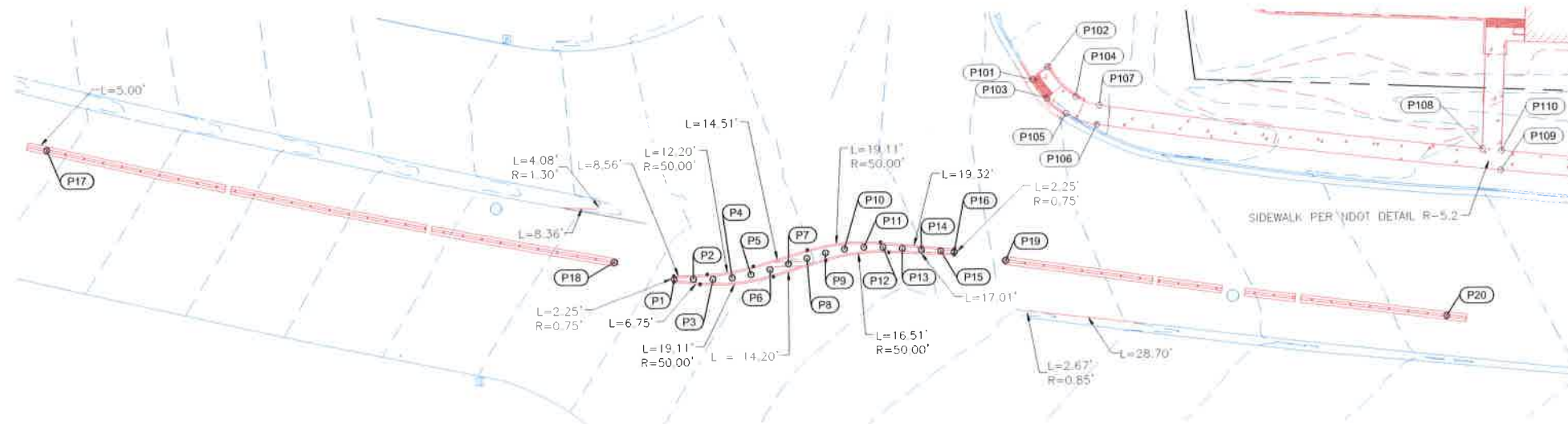
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Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **NDOT3**
 Revision Sheet
 3 of 9

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MEDIAN ISLANDS POINT TABLE

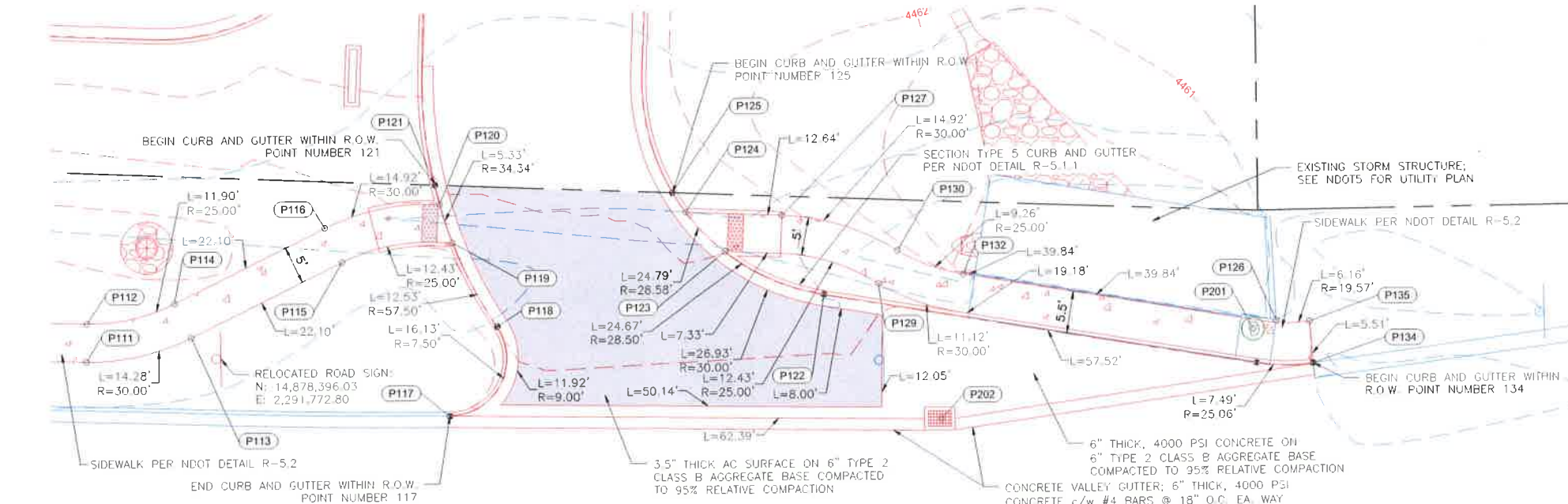
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2	14,878,381.14	2,291,354.27	FLEXIBLE DELINEATOR
3	14,878,381.07	2,291,359.27	FLEXIBLE DELINEATOR
4	14,878,381.39	2,291,364.26	FLEXIBLE DELINEATOR
5	14,878,382.20	2,291,369.19	FLEXIBLE DELINEATOR
6	14,878,383.49	2,291,374.02	FLEXIBLE DELINEATOR
7	14,878,384.90	2,291,378.81	ONE-WAY SIGN
8	14,878,386.31	2,291,383.61	FLEXIBLE DELINEATOR
9	14,878,387.66	2,291,388.43	FLEXIBLE DELINEATOR
10	14,878,388.59	2,291,393.34	FLEXIBLE DELINEATOR
11	14,878,389.02	2,291,398.32	FLEXIBLE DELINEATOR
12	14,878,388.95	2,291,403.31	FLEXIBLE DELINEATOR
13	14,878,388.59	2,291,408.30	FLEXIBLE DELINEATOR
14	14,878,388.23	2,291,413.29	FLEXIBLE DELINEATOR
15	14,878,387.87	2,291,418.27	FLEXIBLE DELINEATOR
16	14,878,387.62	2,291,421.77	TYPE 2 MARKER
17	14,878,415.73	2,291,186.57	TYPE 2 MARKER
18	14,878,385.75	2,291,333.53	TYPE 2 MARKER
19	14,878,385.23	2,291,435.24	TYPE 2 MARKER
20	14,878,369.80	2,291,549.20	TYPE 2 MARKER



1 MEDIAN ISLAND AND WESTERN ADA RAMP HORIZONTAL CONTROL PLAN
SCALE: 1:20

PATHWAY AND CURB AND GUTTER POINT TABLES

POINT #	NORTHING	EASTING	DESCRIPTION
101	14,878,431.79	2,291,442.75	SW
102	14,878,435.03	2,291,446.66	SW
103	14,878,426.97	2,291,446.36	SW
104	14,878,427.29	2,291,453.85	SW
105	14,878,423.00	2,291,451.26	SW
106	14,878,420.08	2,291,459.15	SW
107	14,878,425.03	2,291,459.87	SW
108	14,878,412.72	2,291,558.86	SW
109	14,878,407.21	2,291,563.58	SW
110	14,878,412.21	2,291,563.84	SW
111	14,878,395.73	2,291,755.72	SW
112	14,878,400.73	2,291,755.81	SW
113	14,878,398.80	2,291,769.52	SW
114	14,878,403.29	2,291,767.32	SW
115	14,878,408.55	2,291,789.35	SW
116	14,878,413.04	2,291,787.15	SW
117	14,878,388.22	2,291,803.34	FOC
118	14,878,399.98	2,291,809.63	FOC
119	14,878,411.00	2,291,803.78	FS
120	14,878,416.08	2,291,802.16	FS
121	14,878,418.60	2,291,801.58	FOC
122	14,878,403.84	2,291,852.68	FOC
123	14,878,409.55	2,291,839.79	FS
124	14,878,414.77	2,291,834.68	FS
125	14,878,417.33	2,291,832.86	FOC
126	14,878,399.80	2,291,912.04	SW
127	14,878,414.25	2,291,847.27	SW
128	14,878,402.40	2,291,701.04	SW
129	14,878,405.20	2,291,859.82	SW
130	14,878,409.50	2,291,862.38	SW





2 McCARRAN RIGHT-IN ENTRANCE HORIZONTAL CONTROL PLAN
SCALE: 1:10

POINT #	NORTHING	EASTING	DESCRIPTION
131	14,878,397.32	2,291,703.07	SW
132	14,878,406.32	2,291,871.03	SW
133	14,878,503.22	2,292,198.42	FOC
134	14,878,394.13	2,291,916.86	FOC
135	14,878,399.63	2,291,916.44	SW
201	14,878,398.70	2,291,908.98	SDMH
202	14,878,387.38	2,291,867.99	CB

CONSTRUCTION NOTES


- 1. DIMENSIONS SHOWN ARE TO FLOWLINE OR EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
- 2. SEE NDOT DETAIL R 9.2.1 TYPE 2 OBJECT MARKER.
- 3. SEE SHEET NDOT3 FOR WESTERN ADA RAMP POINT TABLE.
- 4. SEE NDOT DETAIL R 5.2.5 FOR RAMPED MEDIAN ISLAND NOSE.





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Reno, Nevada 89511
Tel. (775) 850-0777 Fax (775) 850-0787
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811/1-800-227-2600



17 JUNE 2019

BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

PERMIT SET N/A

Issues

Project Number 222310634

Drawn By TAS/HZ

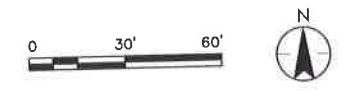
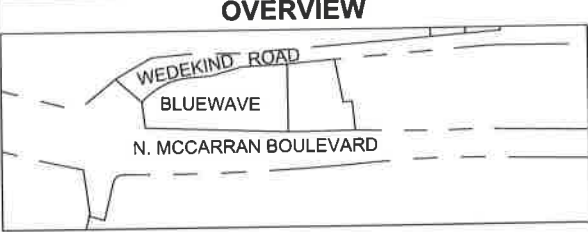
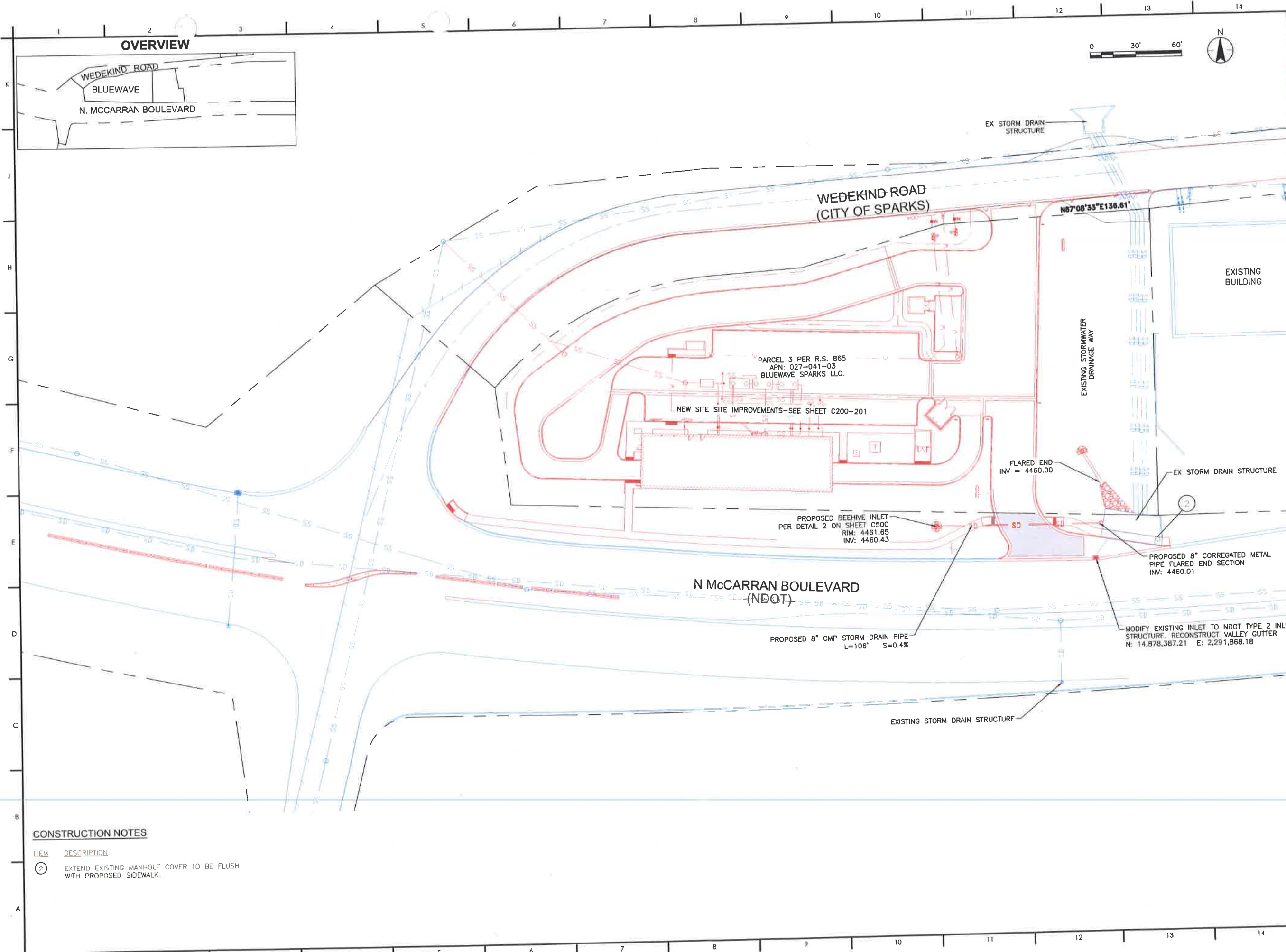
Checked By JRP

Drawing No. **NDOT4**

Revision Sheet

HORIZONTAL CONTROL AND GRADING DETAILS

4 of 9



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**BLUEWAVE
 MCCARRAN
 BOULEVARD
 SPARKS**

Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada

UTILITY PLAN

PERMIT SET	N/A
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

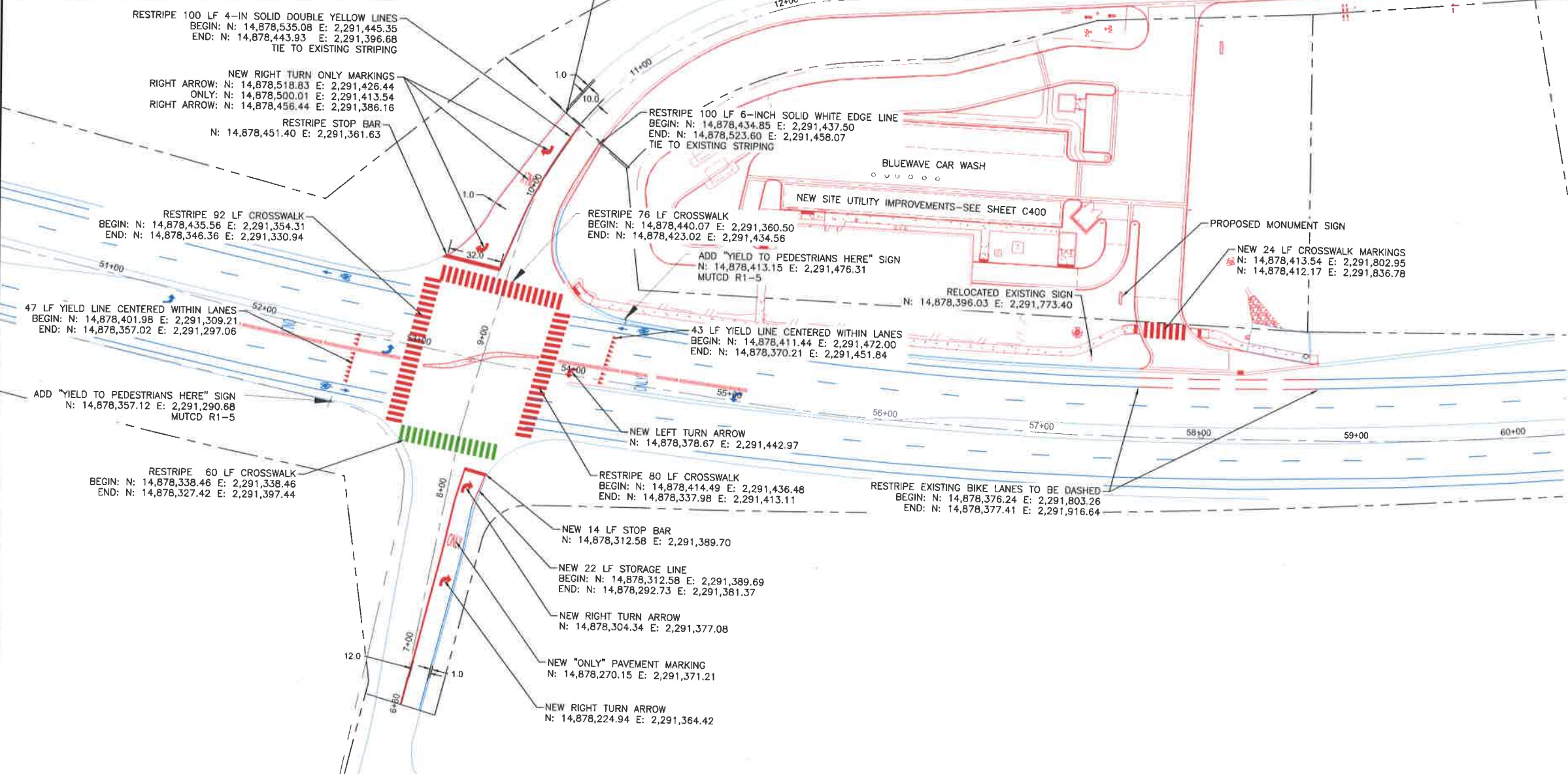
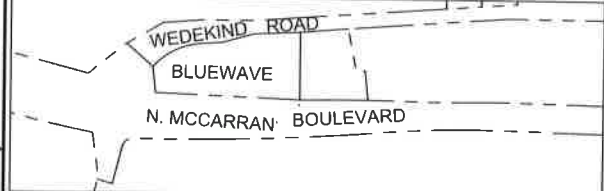
Drawing No. **NDOT5**
 Revision Sheet
 5 of 9

CONSTRUCTION NOTES

ITEM	DESCRIPTION
②	EXTEND EXISTING MANHOLE COVER TO BE FLUSH WITH PROPOSED SIDEWALK.

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OVERVIEW



CONSTRUCTION NOTES

- | ITEM | DESCRIPTION |
|------|---|
| 1. | DIMENSIONS FOR EDGE STRIPE ARE FROM EDGE OF PAVEMENT OR FLOW LINE. |
| 2. | CONTRACTOR TO ENSURE EXISTING STREET STRIPING HAS BEEN COMPLETELY REMOVED. |
| 3. | EXISTING STREET STRIPING IS BASED UPON AERIAL PHOTOGRAPHY. ACTUAL DISTANCES TO BE VERIFIED BY THE CONTRACTOR. |
| 4. | FOR STRIPING REFERENCES CONTRACTOR IS TO USE HDOT DETAILS T-38.1.1, T-38.1.2, T-38.1.3, AND T-38.1.4 |



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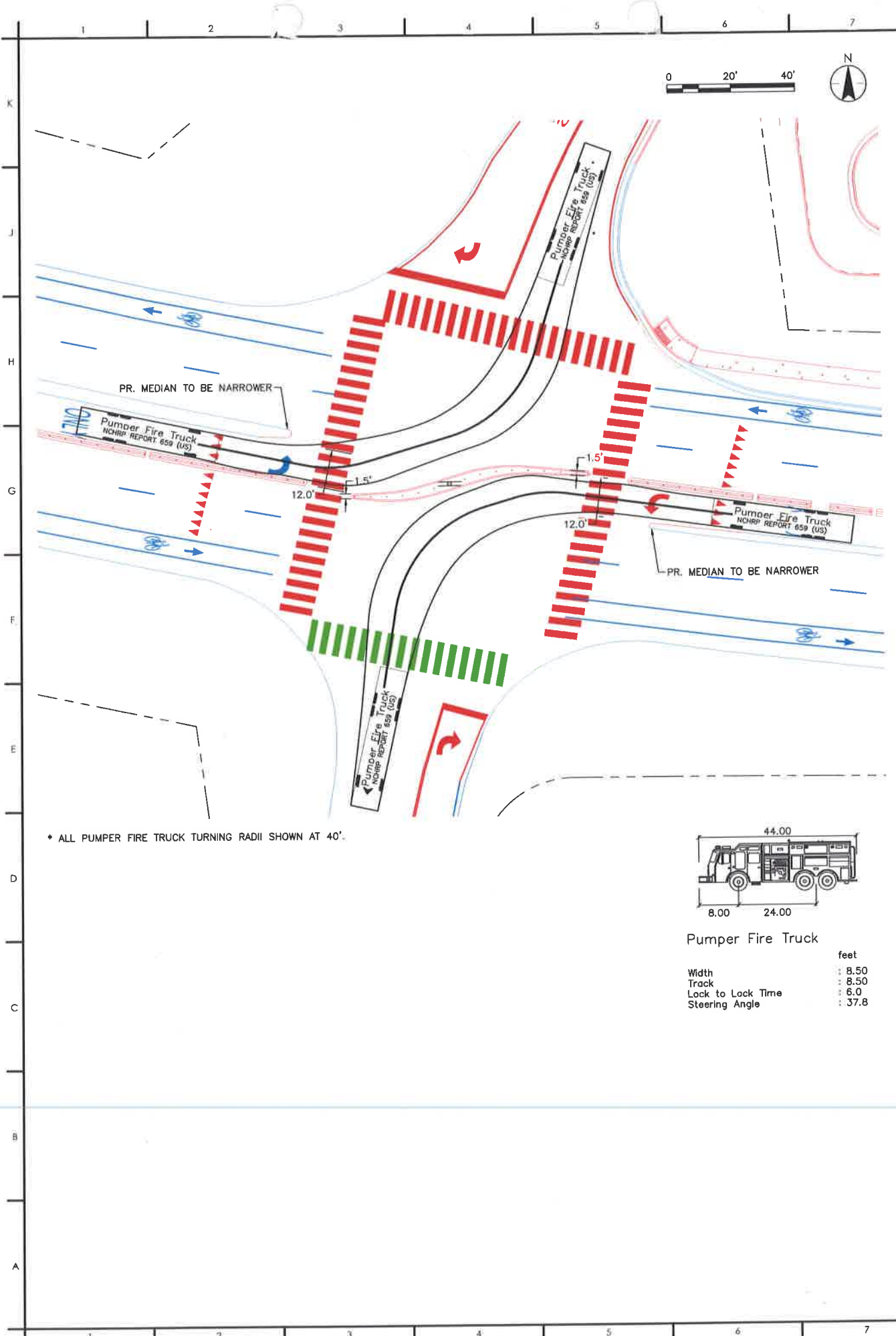
**BLUEWAVE
MCCARRAN
BOULEVARD
SPARKS**

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

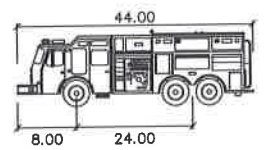
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Issues	
Project Number	222310634
Drawn By	TAS/HZ
Checked By	JRP

Drawing No. **NDOT6**
Revision Sheet
6 of 9

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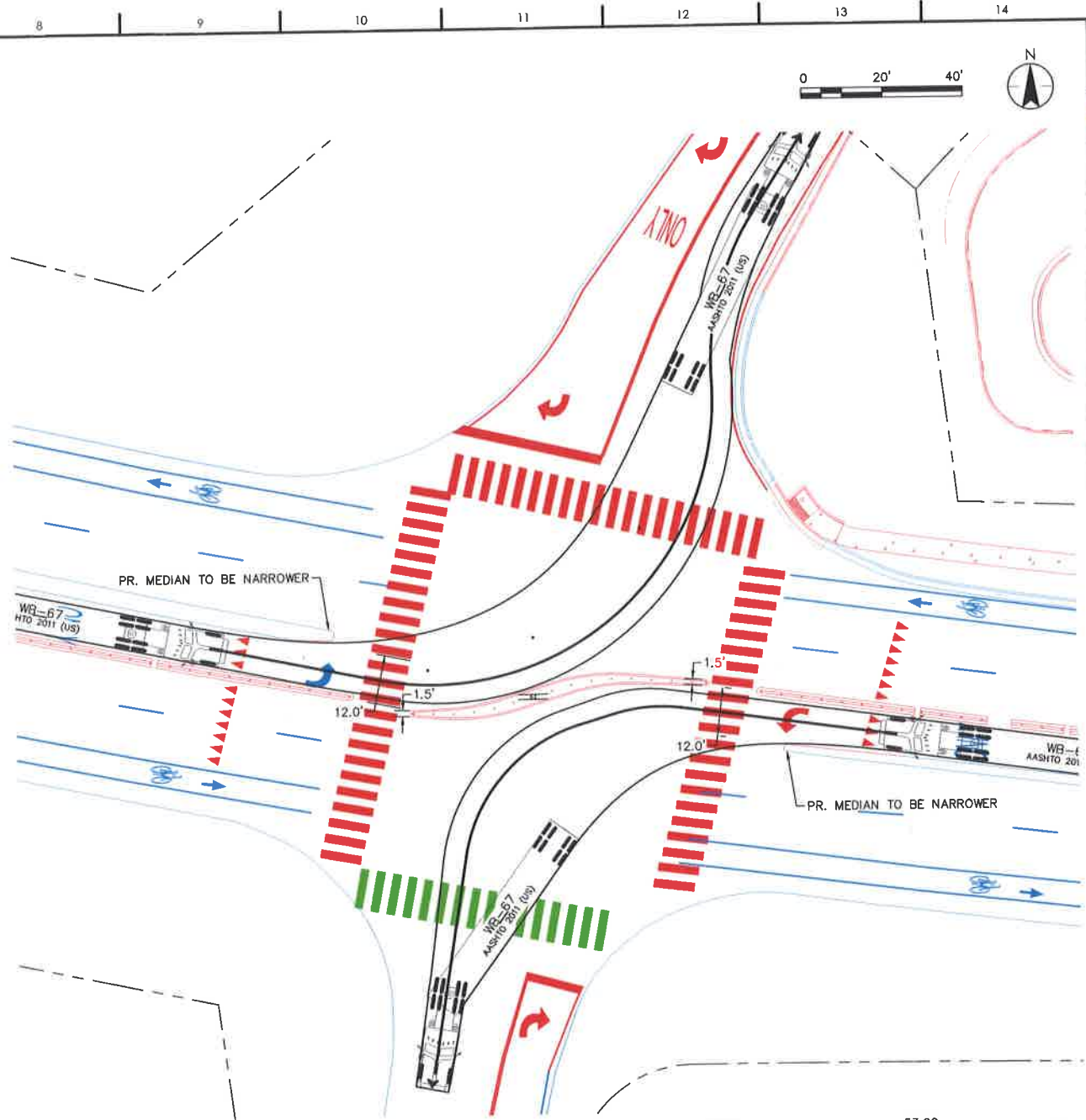


* ALL PUMPER FIRE TRUCK TURNING RADII SHOWN AT 40°.

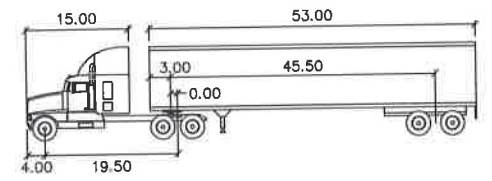


Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8



* ALL WB-67 TRUCK TURNING RADII SHOWN AT 70°.



WB-67

	feet		feet
Tractor Width	: 15.00	Lock to Lock Time	: 6.0
Tractor Track	: 4.00	Steering Angle	: 28.4
Tractor Wheelbase	: 19.50	Articulating Angle	: 75.0
Trailer Width	: 3.00		
Trailer Track	: 0.00		
Trailer Wheelbase	: 45.50		
Total Length	: 53.00		

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17 JUNE 2019

BLUEWAVE MCCARRAN BOULEVARD SPARKS

Client/Project
BLUE WAVE CAR WASH
MCCARRAN BLUE WAVE
SITE CIVIL IMPROVEMENTS PROJECT
Sparks, Nevada

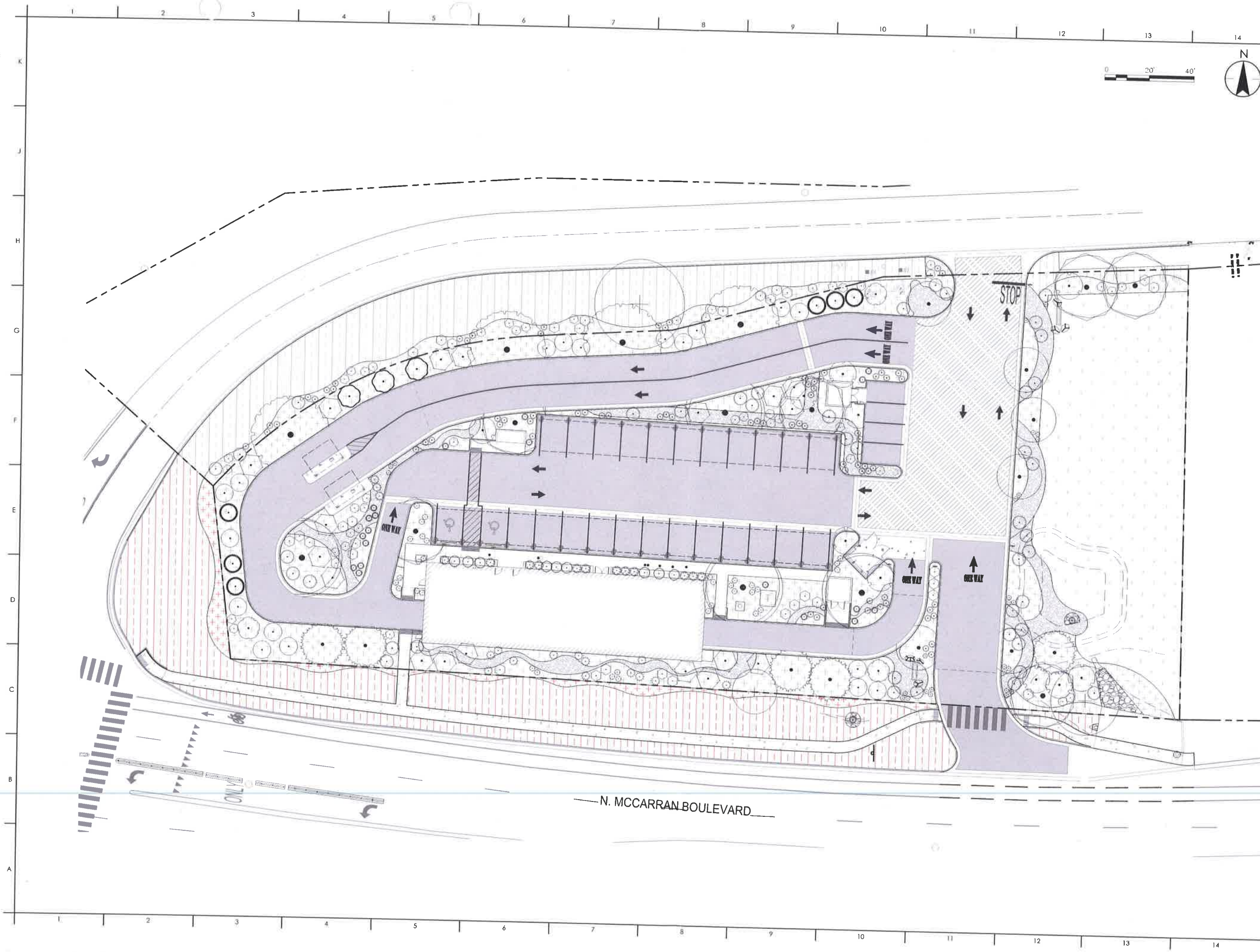
PERMIT SET N/A
Issues

Project Number 222310634
Drawn By TAS/HZ
Checked By JRP

Drawing No. **NDOT7**
Revision Sheet
7 of 9

TRUCK TURNING PLAN

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5.16.2019

**BLUEWAVE
 MCCARRAN
 BOULEVARD
 SPARKS**

Client/Project
 BLUE WAVE CAR WASH
 MCCARRAN BLUE WAVE
 SITE CIVIL IMPROVEMENTS PROJECT
 Sparks, Nevada
 LANDSCAPE PLANTING PLAN

PERMIT SET	N/A
Issues	
Project Number	222310634
Drawn By	DM/JW/CM
Checked By	BS

Drawing No. **NDOT9**
 Revision Sheet
 0 9 of 24

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BLUEWAVE

**N MCCARRAN BLVD
SPARKS, NV 89431**

Job Name:



Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash
Location:
N. McCarran Blvd.
Sparks, NV 89431
Salesperson: James Chappel
Prj. Mngr.: Michelle Corbin
Date: 04 / 22 / 2019

Designer: Jay Yoo
File Name: 47663 BlueWave -
Sparks, NV - PKG
Proposal #: 47663
Job #: n/a

Revision Note:



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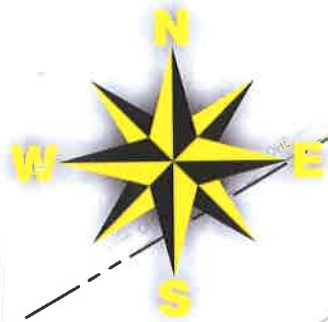
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Dallas, TX 75235
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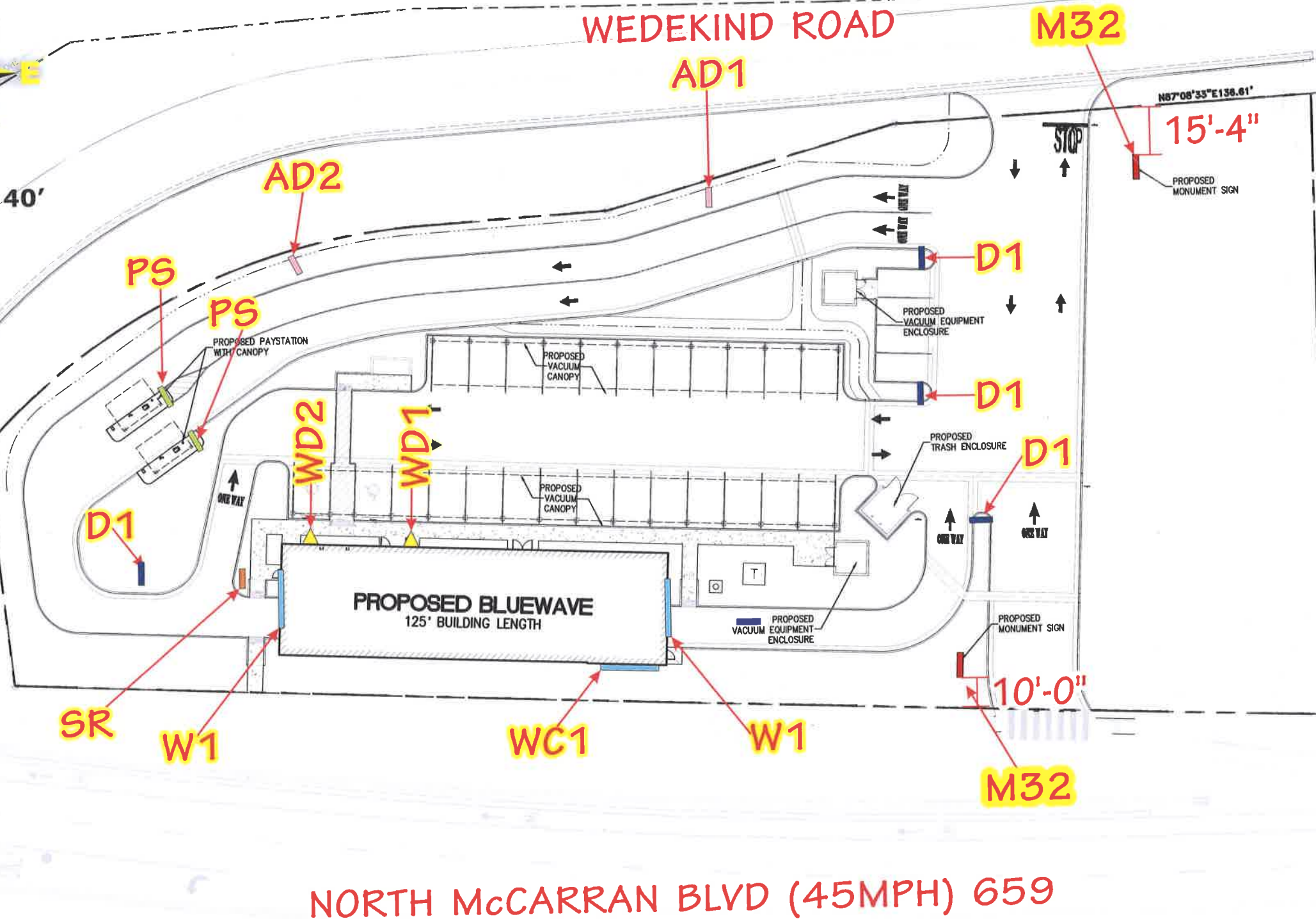
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Tyler (Design Center Signs)
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Tyler, TX 75703
(903) 561-4995



SCALE: 1" = 40'



W1		MAIN ID WALL SIGN
WC1		"CAR WASH" CABINET
WD1		WALL DIRECTIONAL SIGN; "RESTROOM".
WD2		WALL DIRECTIONAL SIGN; "CUSTOMER CARE".
D1		GROUND DIRECTIONAL SIGNS
AD1		FREE-STANDING ADVERTISING SIGNS
AD2		FREE-STANDING ADVERTISING SIGNS
SR		SAFETY RULES SIGNS
PS		PAY STATION SIGN
M		MONUMENT SIGNS
P		PYLON SIGNS

Job Name:

Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash
 Location: N. McCarran Blvd. Sparks, NV 89431
 Salesperson: James Chappel
 Prj. Mngr.: Michelle Corbin
 Date: 04 / 22 / 2019

Designer: Jay Yoo
 File Name: 47663 BlueWave - Sparks, NV - PKG
 Proposal #: 47663
 Job #: n/a

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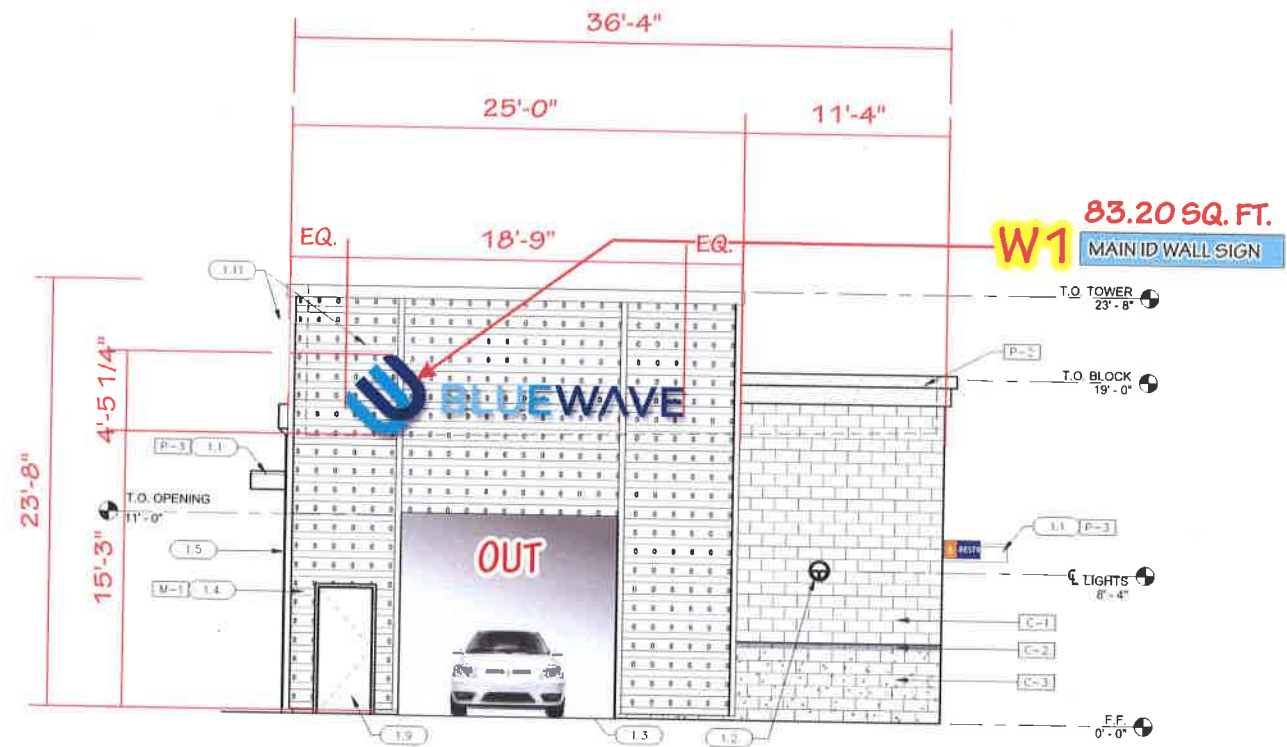
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 (903) 561-4995



WEST/ENTRANCE ELEVATION

SCALE: 3/32" = 1'-0"



EAST/EXIT ELEVATION

SCALE: 3/32" = 1'-0"

W1 83.20 SQ. FT.
MAIN ID WALL SIGN

Job Name:

Proposal Drawing
 Final Drawing

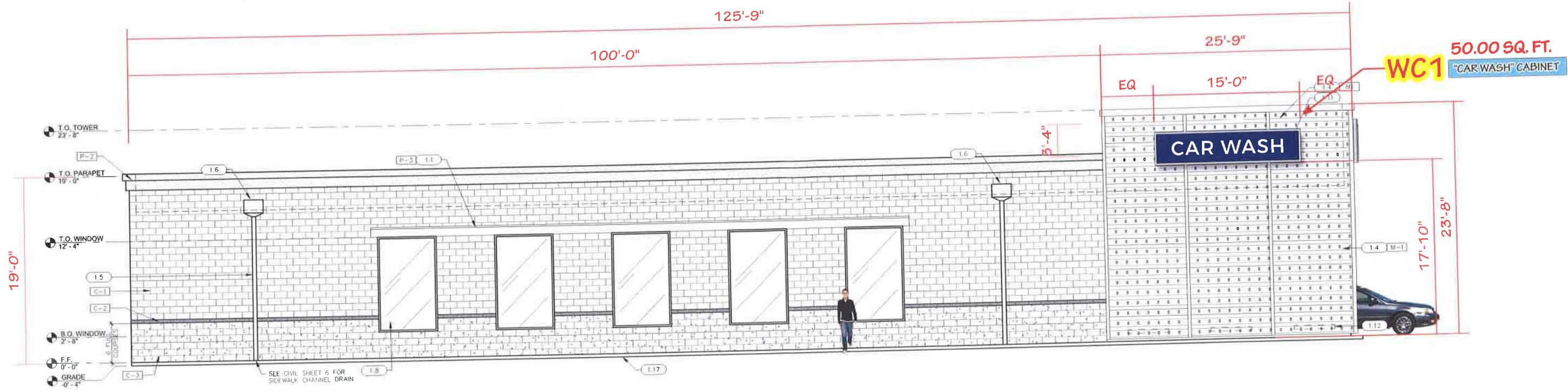
Client: BlueWave Express Car Wash	Designer: Jay Yoo
Location: N. McCarran Blvd. Sparks, NV 89431	File Name: 47663 BlueWave - Sparks, NV - PKG
Salesperson: James Chappel	Proposal #: 47663
Prj. Mngr.: Michelle Corbin	Job #: n/a
Date: 04 / 22 / 2019	

Revision Note:

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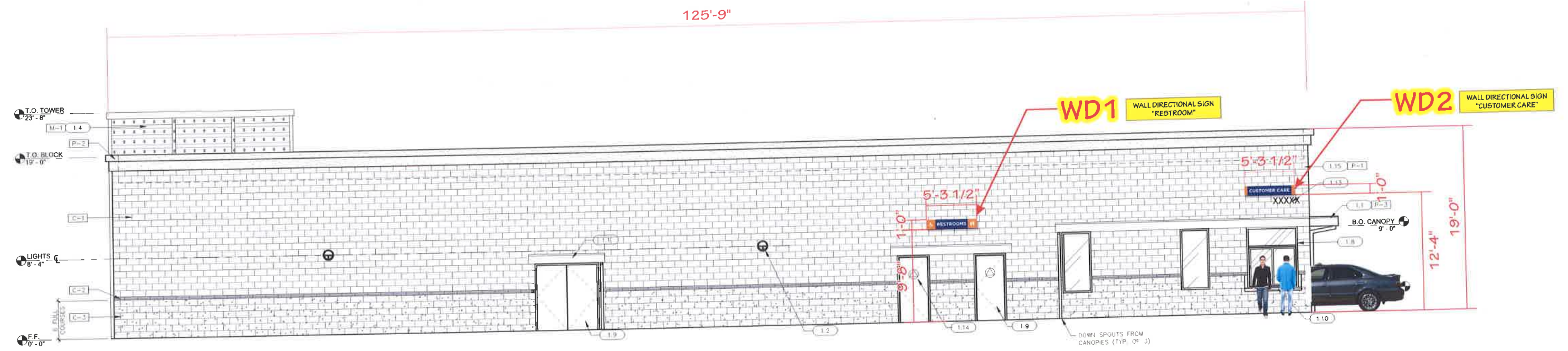
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SOUTH/BACK ELEVATION

SCALE: 3/32" = 1'-0"



NORTH/OFFICE ELEVATION

SCALE: 3/32" = 1'-0"

Job Name:

Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash
 Location: N. McCarran Blvd. Sparks, NV 89431
 Salesperson: James Chappel
 Prj. Mngr.: Michelle Corbin
 Date: 04 / 22 / 2019

Designer: Jay Yoo
 File Name: 47663 BlueWave -
 Sparks, NV - PKG
 Proposal #: 47663
 Job #: n/a

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MAIN ID CHANNEL LETTER SET



FRONT VIEW



SIDE VIEW

83.20 SQ. FT.

SCALE: 3/8" = 1'-0"

W1

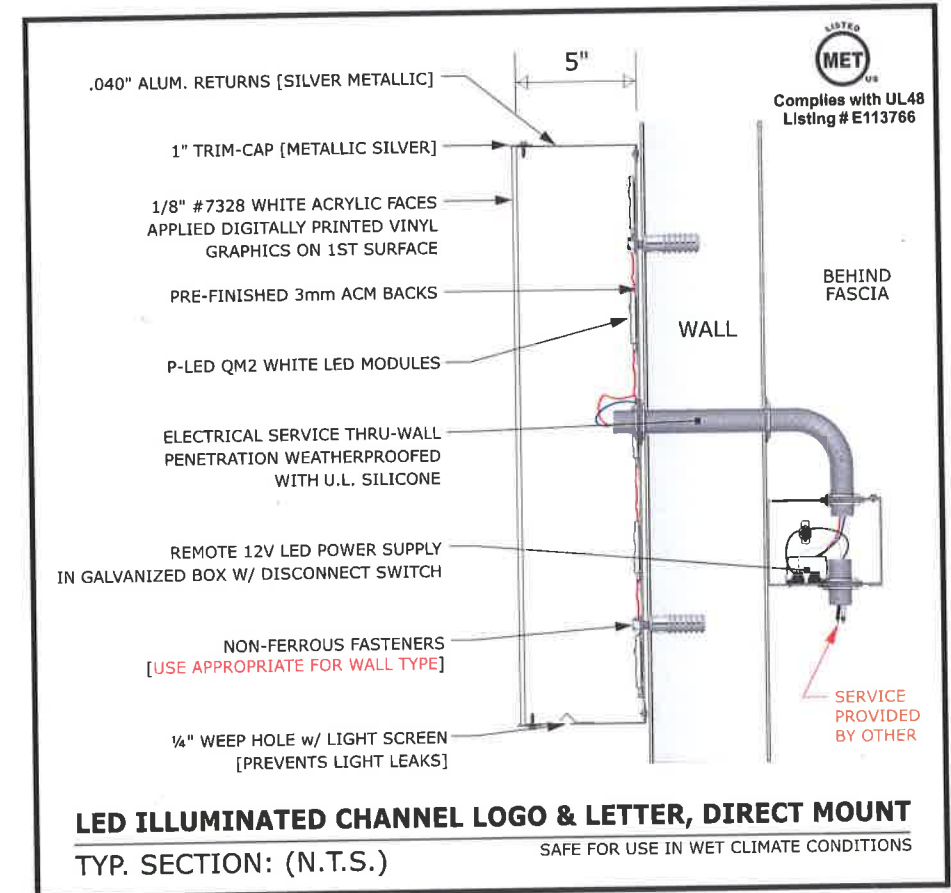
FRONT LIT CHANNEL LOGO AND LETTER SET, DIRECT MOUNT
(2) REQUIRED

SCOPE OF WORK:

MANUFACTURE AND INSTALL (2) INTERNALLY LED ILLUMINATED FRONT LIT CHANNEL LOGO AND LETTER SETS, DIRECT MOUNT.

- SEE SECTION DETAIL FOR SPECIFICATIONS.
- DIGITALLY PRINTED VINYL GRAPHIC ON 1ST SURFACE.

COLORS: ■ PMS 311C ■ PMS REFLEX BLUE C ■ PMS 655C □ SILVER



LED ILLUMINATED CHANNEL LOGO & LETTER, DIRECT MOUNT
TYP. SECTION: (N.T.S.)
SAFE FOR USE IN WET CLIMATE CONDITIONS

Job Name:

Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash	Designer: Jay Yoo
Location:	File Name: 47663 BlueWave -
N. McCarran Blvd.	Sparks, NV - PKG
Sparks, NV 89431	Proposal #: 47663
Salesperson: James Chappel	Job #: n/a
Prj. Mngr.: Michelle Corbin	
Date: 04 / 22 / 2019	

Revision Note:

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Page 5 of 12

"CAR WASH" CABINET SIGN



Job Name:



Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash

Location:

N. McCarran Blvd.

Sparks, NV 89431

Salesperson: James Chappel

Prj. Mngr.: Michelle Corbin

Date: 04 / 22 / 2019

Designer: Jay Yoo

File Name: 47663 BlueWave -

Sparks, NV - PKG

Proposal #: 47663

Job #: n/a

Revision Note:



License #: 18010



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Tyler, TX 75703
(903) 561-4995

DIRECTIONAL SIGNS

***EXACT COPY PER SIGN: TBD.**

- NON-ILLUMINATED DIRECTIONAL SIGNS.
- STACKED CUBES W/ 45° VERTICALLY TILTING STRUCTURE.
- ALUMINUM FRAME AND FABRICATED ALUMINUM SHEET.
- PAINT COLOR AS SHOWN.
- CAD-CUT ORACAL 751-010 VINYL GRAPHIC ON 1ST SURFACE
- GRAPHICS ON FRONT SIDE ONLY.
- PIPE, FOOTING AND CONCRETE BASE PROVIDE BY COMET SIGNS.

COLORS: ■ PMS 311C ■ PMS REFLEX BLUE C ■ PMS 1575C
 ■ PMS 032C □ ORACAL 751-010 WHITE



SAMPLE

SCALE: NTS



2" X 2" X 3/16" STEEL SQ. TUBE SUPPORT
 12" X 30" CONCRETE FOOTING

CONCRETE BASE

FRONT VIEW, GRAPHIC AND COLOR VARIATION

EACH
8.85 SQ. FT.

D1 DIRECTIONAL SIGN - EXACT COPY TBD.
 (4) REQUIRED - MANUFACTURE AND INSTALL

SCALE: 3/4" = 1'-0"

Job Name: **BLUEWAVE**

Client: BlueWave Express Car Wash
 Location: N. McCarran Blvd. Sparks, NV 89431
 Salesperson: James Chappel
 Prj. Mngr.: Michelle Corbin
 Date: 04 / 22 / 2019

Designer: Jay Yoo
 File Name: 47663 BlueWave - Sparks, NV - PKG
 Proposal #: 47663
 Job #: n/a

Legend:
 ■ Proposal Drawing
 □ Final Drawing

Revision Note:

Comet SIGNS
 License #: 18010

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 Tyler (Design Center Signs): 3245 W. Grande Blvd., Tyler, TX 75703 (903) 561-4995

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SINGLE SIDED STANDING SIGN

- .125" ROUTED ALUMINUM FACE PAINTED B81-P SILVER.
- DIGITALLY PRINTED VINYL GRAPHIC APPLIED ON 1ST SURFACE.
- STEEL 3" x 3" x 14 GAUGE (.083") SQUARE TUBE SUPPORTS PAINTED B81-P S
- FOOTING: 9" DIA. x 2'-6" DEEP EACH.

COLORS: ■ PMS REFLEX BLUE C ■ PMS 1575C □ WHITE □ B81-P SILVER
 ■ 75% BLACK ■ BLACK



FRONT VIEW

REAR VIEW

SIDE VIEW

1/2" FREESTANDING SIGN - AD2

1) REQUIRED - MANUFACTURE AND INSTALL

SCALE: 3/4" = 1'-0"

Job Name:	Client: BlueWave Express Car Wash	Designer: Jay Yoo
BLUEWAVE	Location:	File Name: 47663 BlueWave -
■ Proposal Drawing □ Final Drawing	N. McCarran Blvd. Sparks, NV 89431	Sparks, NV - PKG
	Salesperson: James Chappel	Proposal #: 47663
	Prj. Mngr.: Michelle Corbin	Job #: n/a
	Date: 04 / 22 / 2019	

Revision Note:

License #: 18010

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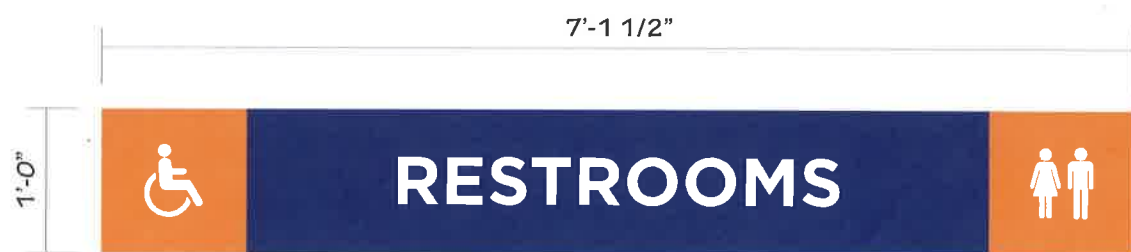
TEXAS SIGN ASSOCIATION

INTERNATIONAL SIGN ASSOCIATION

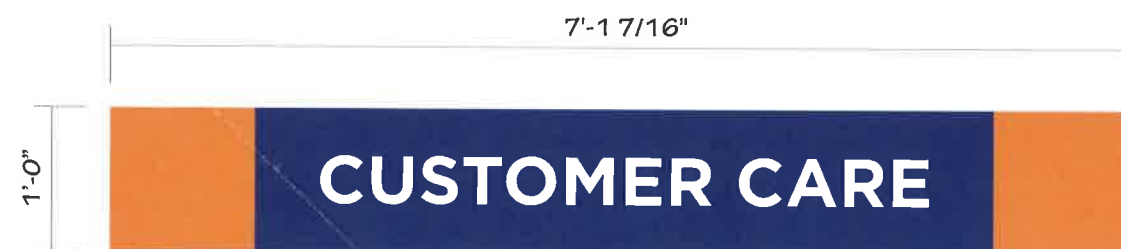
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Austin (Custom Sign Creations) 1130 Rutherford, Suite 180 Austin, TX 78753 (512) 374-9300	Tyler (Design Center Signs) 3245 W. Grande Blvd. Tyler, TX 75703 (903) 561-4996	

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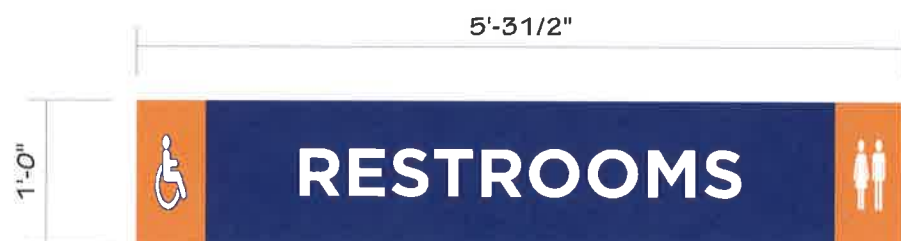
WALL DIRECTIONAL SIGNS



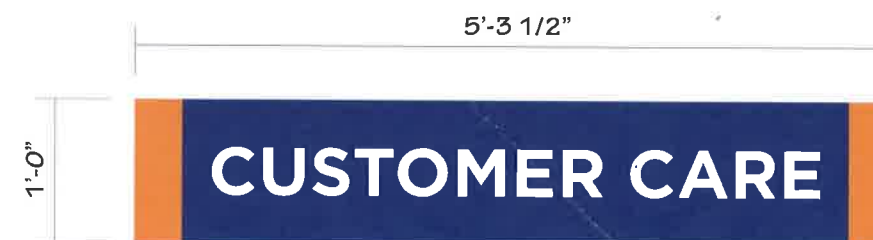
REAL SIZE



REAL SIZE



CURVED SIZE



CURVED SIZE

WD1 WALL DIRECTIONAL SIGN - RESTROOM

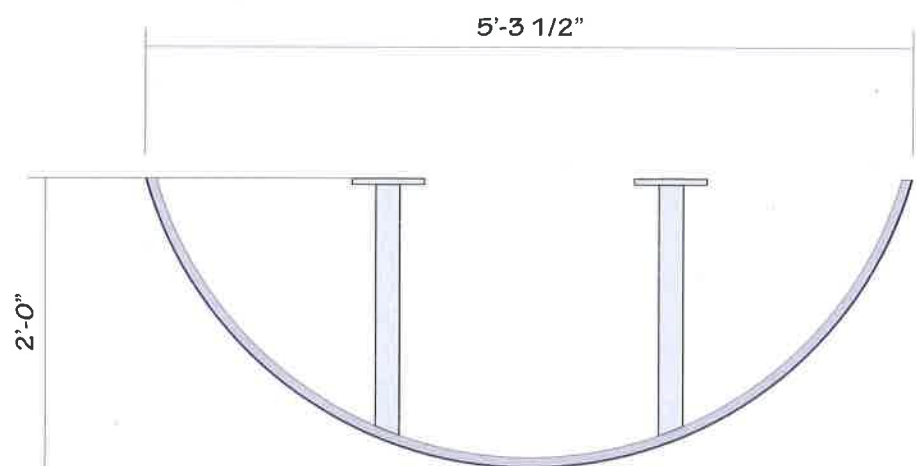
(1) REQUIRED - MANUFACTURE AND INSTALL

SCALE: 3/4" = 1'-0"

WD2 WALL DIRECTIONAL SIGN - CUSTOMER CARE

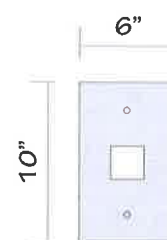
(1) REQUIRED - MANUFACTURE AND INSTALL

SCALE: 3/4" = 1'-0"



WALL DIRECTIONAL SIGN - TOP VIEW

SCALE: 3/4" = 1'-0"



MOUNTING PLATE
SCALE: 1" = 1'-0"

- 3/4" ROLLED ALUMINUM SQUARE TUBE FRAME AND 2" ALUMINUM SQUARE TUBE SUPPORT WITH 6"X10"X1/2" ALUMINUM MOUNTING PLATE, ALL PAINTED B81-P SILVER.
- .125" ALUMINUM FACE PAINTED COLOR AS SHOWN.
- CAD-CUT WHITE VINYL GRAPHIC ON 1ST SURFACE.

COLORS: ■ PMS 311C ■ PMS REFLEX BLUE C ■ PMS 1575C □ ORACAL 751-010 WHITE
□ B81-P SILVER



CONCEPTUAL DRAWING

SCALE: NTS

Job Name:

Proposal Drawing
□ Final Drawing

Client: BlueWave Express Car Wash	Designer: Jay Yoo
Location: N. McCarran Blvd. Sparks, NV 89431	File Name: 47663 BlueWave - Sparks, NV - PKG
Salesperson: James Chappel	Proposal #: 47663
Prj. Mngr.: Michelle Corbin	Job #: n/a
Date: 04 / 22 / 2019	

Revision Note:

License #: 18010

Corporate Office
5003 Stout Drive
San Antonio, TX 78219
(210) 341-7244

Dallas
2703 Mockingbird Ln
Dallas, TX 75235
(872) 870-1584

Houston (State Sign)
7630 Hansen Rd.
Houston, TX 77061
(713) 943-1831

Austin (Custom Sign Creations)
1130 Rutherford, Suite 180
Austin, TX 78753
(512) 374-9300

Tyler (Design Center Signs)
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REAR VIEW

SIDE VIEW

Job Name:



Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash
 Location:
 N. McCarran Blvd.
 Sparks, NV 89431
 Salesperson: James Chappel
 Prj. Mngr.: Michelle Corbin
 Date: 04 / 22 / 2019

Designer: Jay Yoo
 File Name: 47663 BlueWave -
 Sparks, NV - PKG
 Proposal #: 47663
 Job #: n/a

Revision Note:



License #: 18010



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 3245 W. Grande Blvd.
 Tyler, TX 75703
 (903) 561-4995



ALL

Job Name:



Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash
 Location: N. McCarran Blvd.
 Sparks, NV 89431
 Salesperson: James Chappel
 Prj. Mngr.: Michelle Corbin
 Date: 04 / 22 / 2019

Designer: Jay Yoo
 File Name: 47663 BlueWave -
 Sparks, NV - PKG
 Proposal #: 47663
 Job #: n/a

Revision Note:



License #: 18010



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 5003 Stout Drive
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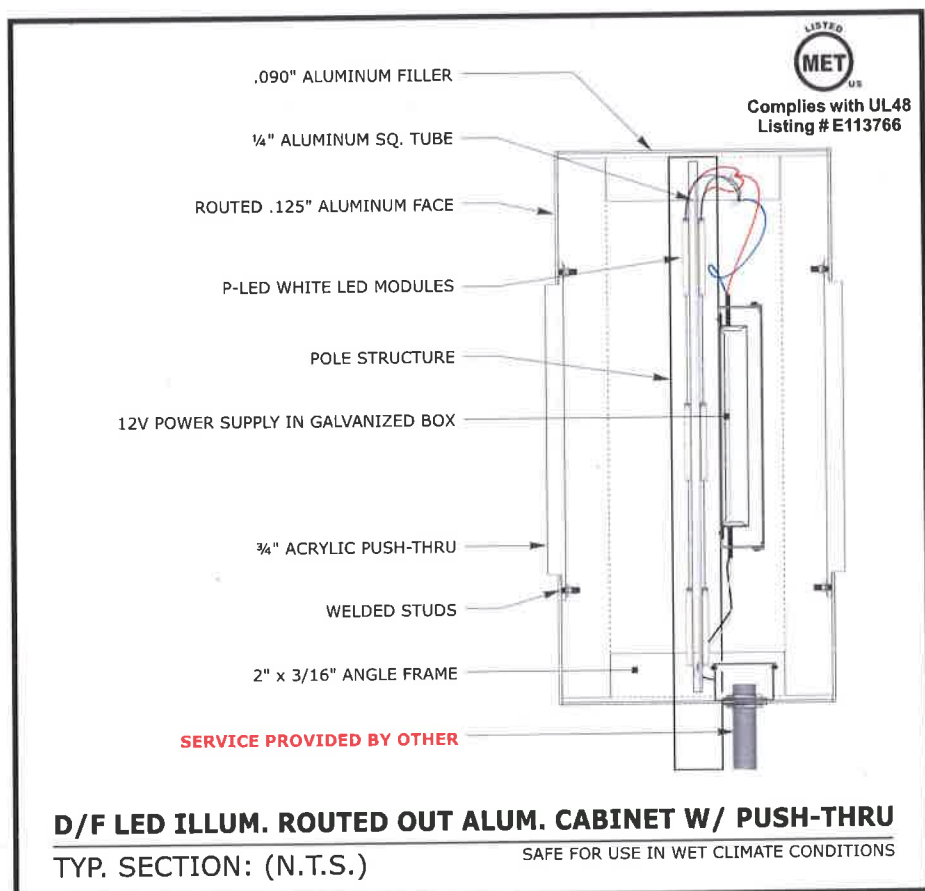
Austin (Custom Sign Creations)
 1130 Rutherford, Suite 180
 Austin, TX 78753
 (512) 374-8300

Tyler (Design Center Signs)
 3245 W. Grande Blvd.
 Tyler, TX 75703
 (903) 661-4995

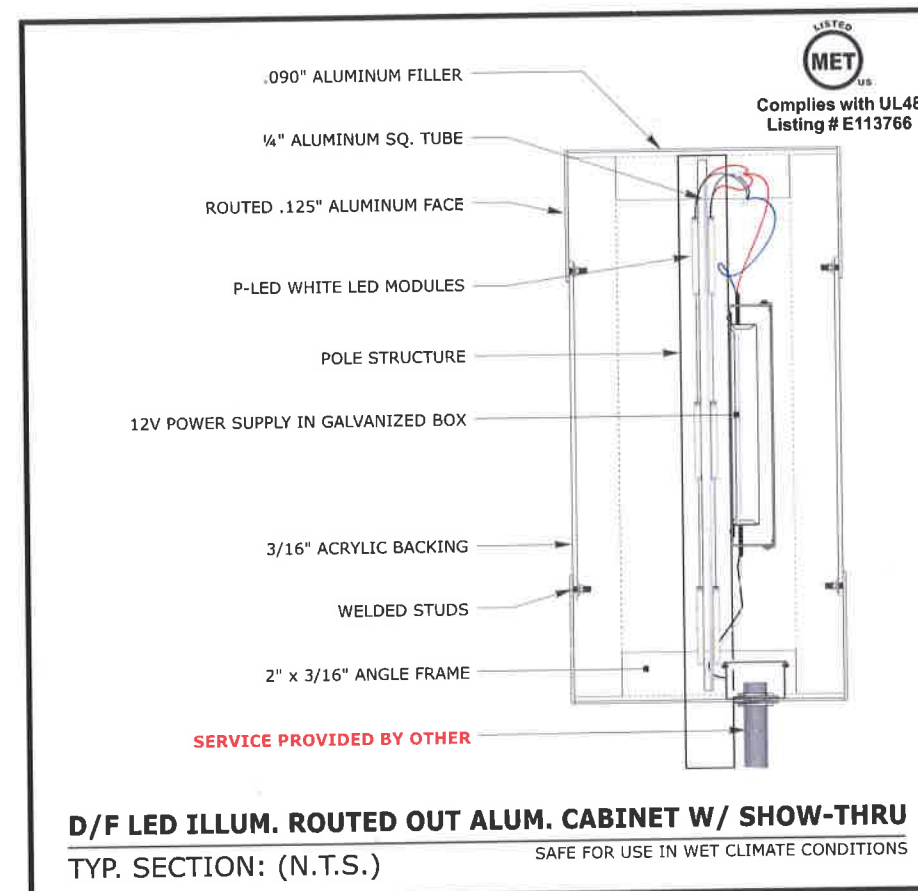
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D/F CABINET SIGN SECTION DETAIL

"LOGO & BLUE WAVE"



"CAR WASH"



Job Name:



Proposal Drawing
 Final Drawing

Client: BlueWave Express Car Wash
 Location:
 N. McCarran Blvd.
 Sparks, NV 89431
 Salesperson: James Chappel
 Prj. Mngr.: Michelle Corbin
 Date: 04 / 22 / 2019

Designer: Jay Yoo
 File Name: 47663 BlueWave -
 Sparks, NV - PKG
 Proposal #: 47663
 Job #: n/a

Revision Note:



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Stantec Consulting Services Inc.
6995 Sierra Center Parkway, Reno NV 89511-2213

July 3, 2019
File: 222310634

Attention: Karen L. Melby, Development Services Manager
City of Sparks
Community Services Department
431 Prater Way
Sparks, Nevada 89431

Reference: BlueWave Express Car Wash
City of Sparks PCN19-0023/CU19-0008

Dear Ms. Melby,

Enclosed, please find supplemental documentation for the above-referenced project located at the northeast corner of McCarran Boulevard and Wedekind Road. Your comments received on June 21, 2019, are included herein with our responses for your reference in reviewing our supplemental package. Please let us know if you should have any additional questions or concerns

1. Please provide a check in the amount of \$3,798 for payment of the City of Sparks and Washoe County Health fees.
 - a. Check is included with this submittal.
2. Provide a color and materials board.
 - a. Provided with this package.
3. There is a lack of building elevation articulation. Please provide/illustrate improved building elevations and be prepared to discuss how they meet the design standards in the PO (Professional Office) zoning district.
 - a. Please see the color elevations provided with this supplemental package.
4. Provide color elevations.
 - a. Provided with this package.
5. Be prepared to discuss landscaping, especially "seeded revegetation" and "shadow ridge" areas.
 - a. The landscape theme is 'Enhanced High Desert'.
 - b. Drought resistant trees, shrubs, and ornamental grasses are designed for the required landscaped areas around the parking lot, driveways and structures.
 - c. Large shade trees are located along Wedekind Road and internally at parking lot island



Ms. Karen Melby
City of Sparks
Re: BlueWave Express Car Wash PCN19-0023/CU19-0008
Page 2

- d. Evergreen tree groups are located along N. McCarran at both sides of the building to buffer the views of the structure.
 - e. Ornamental trees are located to accent the driveway locations.
 - f. A cobble streambed feature meanders through out the landscaped areas.
 - g. Within NDOT right of way small diameter decorative mulch called 'Shadow Ridge' is placed from the back of curb to a meandering line outside of NDOT's clear zone. This rock is recommended because landscape rock must be smaller than 4 inches in diameter to meet NDOT's clear zone requirements.
 - h. Outside of the clear zone and inside the property the landscaped areas the Shadow Ridge small rock mulch is supplemented with a scatter of larger 3 – 10 inch rock to provide texture.
 - i. Seeded revegetation is designed for the area east of the entrance driveway. This would be established as a dryland seed mix that contains grasses, flowers and shrubs which will have a meadow appearance once established. Topsoil is required to be salvaged and replaced prior to seeding and the area is required to be maintained for 2 years until established. This area is approximately 15,000 SF which is beyond the required amount of landscaping
6. Describe in more detail the materials used in the proposed landscaping.
- a. See attached exhibits with images of proposed trees, shrubs, ornamental grasses, flowering plants, rock mulches and seeded revegetation. As noted above the plant material was selected for seasonal color and drought resistant. Several inert rock mulches are used to provide erosion control and texture in landscaped areas

Should you need any additional information, we would be happy to provide. We look forward to working with you on this project.

Kind Regards,

Stantec Consulting Services Inc.

Cynthia Albright, AICP CUD, GISP
Principal, Planning & Urban Design
Phone: 775 398 1270
cynthia.albright@stantec.com

MC:cja
Enclosures