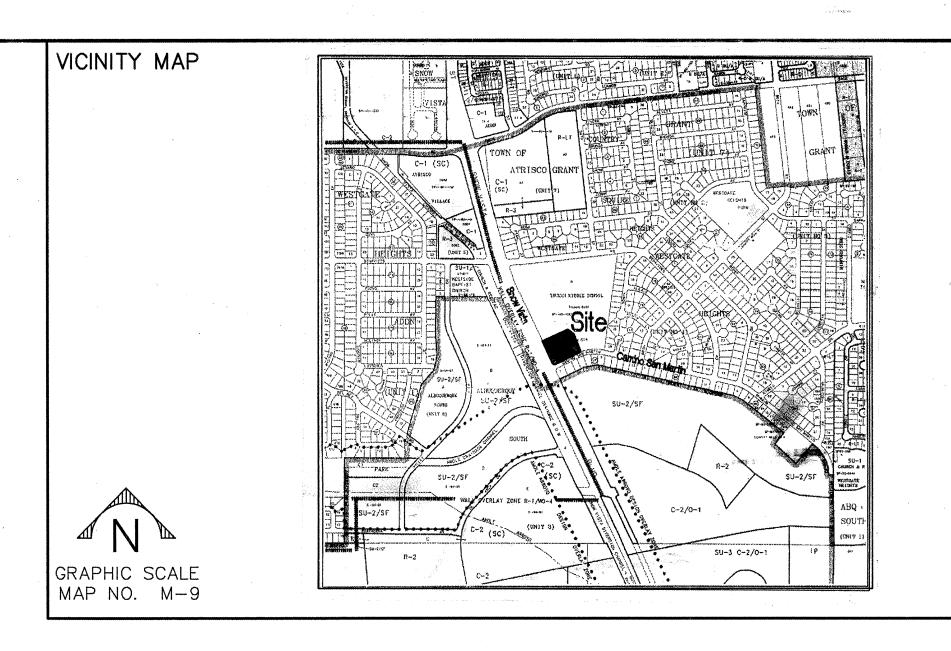


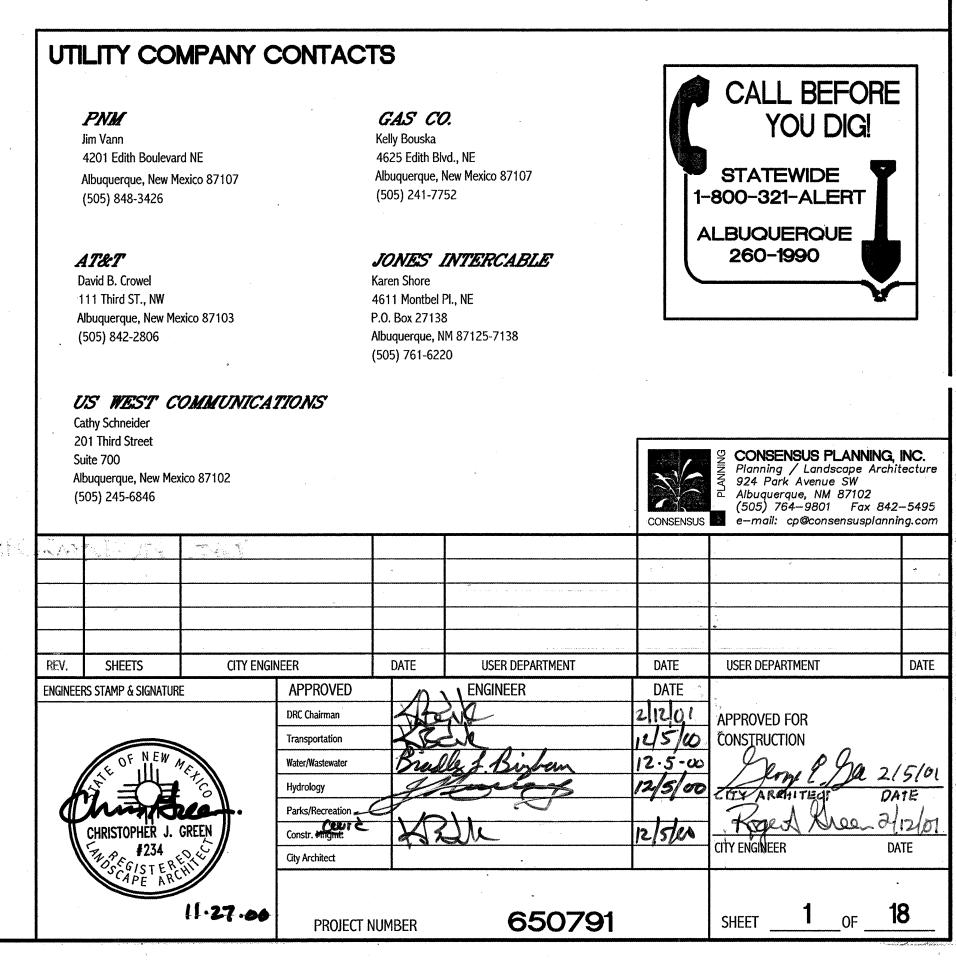
CITY OF ALBUQUERQUE PARKS AND RECREATION DEPARTMENT

TRUMAN MIDDLE SCHOOL BASKETBALL COURT WESTGATE C.C. AQUATIC PLAYGROUND 1400 Snow Vista Boulevard SW

SHEET INDEX

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- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A DETAILED CONSTRUCTION SCHEDULE TO THE CITY CONSTRUCTION COORDINATION DIVISION. TWO (2) DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768—2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF SPECIFICATIONS.
- THE CONTRACTOR WILL NOTIFY THE FIELD ENGINEER NOT LESS THAN SEVEN (7)
 DAYS PRIOR TO STARTING WORK, IN ORDER THAT THE FIELD ENGINEER MAY TAKE
 NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. THE
 CONTRACTOR WILL NOTIFY THE ENGINEER IF A MONUMENT IS DISTURBED,
 REPLACEMENT WILL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS
 MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A
 PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR WILL, AT HIS OWN
 EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE
 SPECIFIED. REFER TO SECTION 4 OF SPECIFICATIONS.
- THE SPECIFICATIONS USED FOR THIS PROJECT ARE THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1994 EDITION, UPDATE NO.6.
- 4 ALL NEW MANHOLES SHALL BE TYPE "E" (COA DWG. 2102) UNLESS OTHERWISE NOTED ON THE PLANS.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS, INCLUDING, BUT NOT LIMITED TO HAZARDOUS WASTE AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIALS.
- 6 ALL WATER VALVE BOXES AND MANHOLES IN THE STREET CONSTRUCTION ARE TO BE ADJUSTED TO FINISH GRADE AND WILL BE MEASURED AND PAID PER EACH.
- 7 SUBGRADE PREPARATION UNDER SIDEWALKS AND DRIVE PADS, AND SUBGRADE AND SUBBASE PREPARATION UNDER CURB AND GUTTER IS CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF SUCH, AND NO DIRECT PAYMENT SHALL BE MADE FOR THOSE ITEMS OF WORK.
- THE WATER SYSTEMS DIVISION (857-8200) WILL BE NOTIFIED BY THE CONTRACTOR FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK WHICH MAY AFFECT THE EXISTING PUBLIC WATER FACILITIES. REFER TO SECTION 18 OF SPECIFICATIONS.
- 9 ALL EXCAVATION WILL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL SIGNS AND CODING WILL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION.
- THE CONTRACTOR IS TO EXERCISE CARE TO AVOID DISTURBING ANY EXISTING UNDERGROUND UTILITIES. IT WILL BE HIS RESPONSIBILITY TO COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION. SEE SECTION 18 "UTILITIES", CITY OF ALBUQUERQUE, STANDARD SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS.
- WHEN ABUTTING NEW PAVEMENT TO EXISTING INTERSECTING STREETS, SAW CUT EXISTING PAVEMENT TO A STRAIGHT LINE AND AT RIGHT ANGLES AND REMOVE ANY BROKEN OR CRACKED PAVEMENT. NO DIRECT PAYMENT WILL BE MADE FOR SAW CUTTING.
- ALL GAS VALVES, GAS MANHOLES, ELECTRICAL MANHOLES, TELEPHONE MANHOLES, AND UTILITY POLES WILL BE ADJUSTED TO GRADE BY EACH UTILITY COMPANY. CONTRACTOR WILL COORDINATE THROUGH CITY UTILITY COORDINATOR.
- WHEN REMOVAL OF EXISTING CURB AND GUTTER OR SIDEWALK IS REQUIRED, REMOVE BACK TO NEAREST SUITABLE JOINT UNLESS OTHERWISE DIRECTED BY THE CITY FIELD ENGINEER.
- THE CONTRACTOR WILL NOTIFY THE UTILITY COMPANIES BY CALLING NEW MEXICO ONE CALL SYSTEM 260-1990 TWO (2) WORKING DAYS PRIOR TO COMMENCING WORK IN NEW AREAS.
- 16 CONTRACTOR WILL MAKE ALL WATER VALVES AND MANHOLES ACCESSIBLE TO THE CITY AT ALL TIMES.
- 17 CONTRACTOR WILL PLACE BITUMINOUS MATERIAL WITH THE USE OF A LAYDOWN MACHINE WHERE PAVEMENT IS 8 FEET IN WIDTH OR WIDER.
- ALL SUBGRADE AND SUBBASE MATERIAL ENCOUNTERED IN PAVEMENT REMOVAL AND REPLACEMENT THAT IS DETERMINED BY THE FIELD ENGINEER TO MEET THE SPECIFICATIONS, CAN BE REUSED. HOWEVER, THE MATERIAL WILL BE PROCESSED AND COMPACTED TO MEET MOISTURE CONTENT AND PERCENT COMPACTION REQUIRED BY THE SPECIFICATIONS.
- 19 CONTRACTOR WILL NOT PAVE OVER ANY SURFACE FEATURE, I.E., GAS VALVE, MANHOLE COVER, ETC. WITHOUT PRIOR APPROVAL FROM THE CITY FIELD ENGINEER.
- CONTRACTOR WILL CONFINE HIS WORK WITHIN THE CONSTRUCTION EASEMENT
 LIMITS AND/OR RIGHT-OF-WAY, OR PROVIDE COPIES OF AGREEMENTS WITH ADJACENT
 LANDOWNERS TO THE CITY OF ALBUQUERQUE.
- 21 ALL WATER VALVES AND FIRE HYDRANTS REMOVED TO BE SALVAGED AND RETURNED TO THE C.O.A.
- MINIMUM BOTTOM WIDTH OF TRENCHES FOR RIGID PIPE SHALL BE EQUAL TO THE OUTSIDE DIAMETER PLUS 16 INCHES. BEDDING MATERIAL SHALL BE CLASS II, III, OR IV UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.
- MINIMUM BOTTOM WIDTH OF TRENCHES FOR NON-RIGID PIPE SHALL BE EQUAL TO THE OUTSIDE DIAMETER PLUS 12 INCHES. BEDDING MATERIAL SHALL BE CLASS I, II, OR III.
- THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES, WALKS AND BRIDGES.
- 25 ALL STRUCTURAL CONCRETE TO BE 4000 PSI UNLESS OTHERWISE NOTED ON PLANS.
- 26 ALL REINFORCING STEEL TO BE GRADE 60.
- 27 ALL EXPOSED EDGES ON CAST—IN—PLACE CONCRETE STRUCTURES WILL HAVE A 1" CHAMFER UNLESS OTHERWISE NOTED.
- 28 ALL SPLICES IN REINFORCING STEEL TO BE 2-FOOT 6-INCH MINIMUM UNLESS OTHERWISE NOTED.

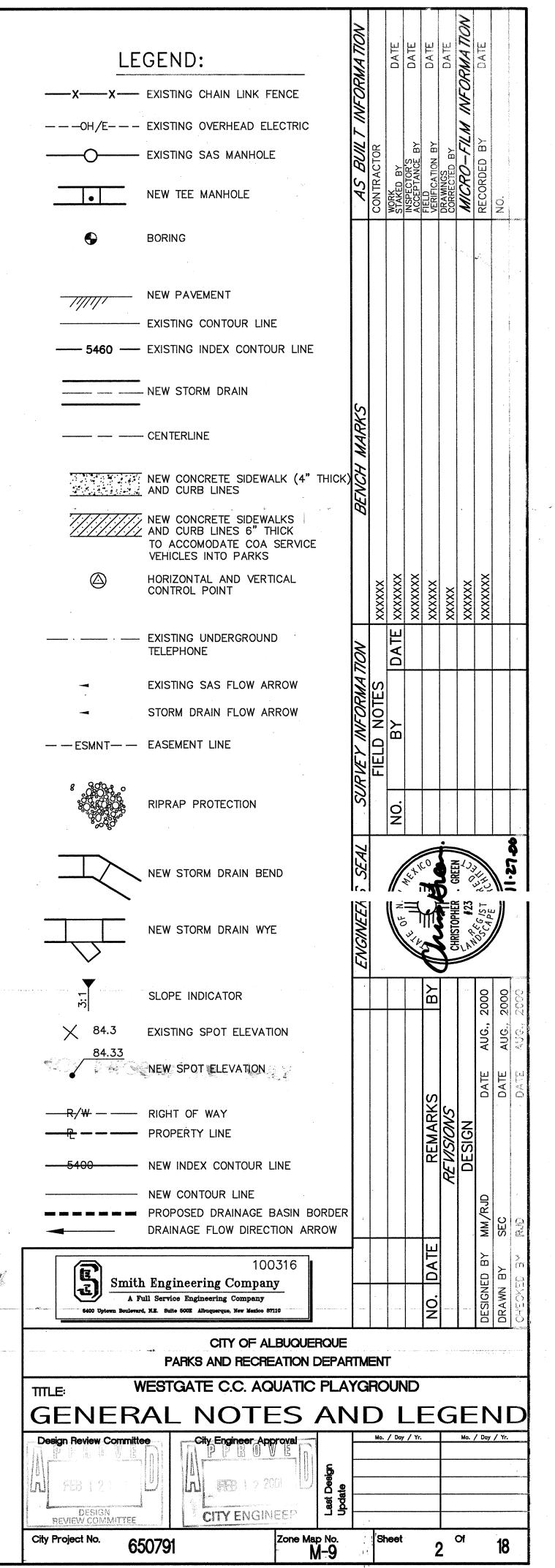
- PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL CONFLICTING UTILITIES. SHOULD A CONFLICT EXIST BETWEEN THE FIELD INFORMATION AND THE PLANS, THE CONTRACTOR WILL NOTIFY THE CITY FIELD ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
- THE REPLACEMENT OF THE EXISTING UTILITIES AND THE INSTALLATION OF NEW UTILITY LINES WILL BE COMPLETED IN ADVANCE OF STARTING THE PAVEMENT WORK. TEMPORARY PAVEMENT WILL BE PLACED IN ALL TRENCHES REQUIRED FOR THE UTILITY REPLACEMENTS IN THOSE AREAS THAT MUST MAINTAIN TRAFFIC UNTIL THE FINAL PAVEMENT WORK STARTS IN EACH AREA. TEMPORARY STRIPING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. MAINTENANCE OF THE TEMPORARY PAVING AND STRIPING WILL BE AT THE CONTRACTOR'S EXPENSE.
- TACK COAT FOR SURFACE COURSE REQUIREMENTS WILL BE DETERMINED BY THE CITY FIELD ENGINEER.
- THE CONTRACTOR WILL CONTACT THE CITY OF ALBUQUERQUE TRAFFIC DIVISION 764—1599, ONE (1) WEEK IN ADVANCE OF ANY CHANGES REQUIRED IN THE TRAFFIC SIGNALIZATION OF THIS PROJECT. ALL WORK ASSOCIATED WITH NEW TRAFFIC SIGNALIZATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 33 ALL NEW STREET PAVING, DRIVEWAYS, SIDEWALKS, AND CURB AND GUTTERS, ABUTTING EXISTING AREAS SHALL MATCH THE ELEVATION OF THOSE AREAS.
- PERMANENT PAVEMENT STRIPING AND MARKINGS WILL BE PLACED BY THE CONTRACTOR. ROAD SHALL NOT BE OPENED TO TRAFFIC UNTIL IT IS STRIPED. ALL STRIPING, PAVEMENT MARKINGS INCLUDING CROSSWALKS, ARROWS AND LINE MARKINGS ARE TO BE CONSTRUCTED OF HOT PLASTIC OR COLD PLASTIC IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 35 ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO BE REUSED MUST BE REMOVED FROM THE PROJECT AREA WITHIN FOUR DAYS OF EXCAVATION. SPOIL PILES WILL BE ALLOWED ONLY AS DIRECTED BY THE CITY FIELD ENGINEER.
- THE CONTRACTOR WILL COORDINATE THE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND UTILITY COMPANIES WORKING IN THE SAME AREA. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE THEIR ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCE CAUSED BY UTILITY COMPANY WORK CREWS. A CONTRACT EXTENSION MAY BE ALLOWED AS DELINEATED IN CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS.
- ALL CONSTRUCTION EASEMENTS ON PRIVATE PROPERTY WILL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.
- EXISTING MEDIAN CURB AND GUTTER AND STANDARD CURB AND GUTTER, NOT DISTURBED BY CONTRACTOR, BUT OUT OF ALIGNMENT, DISPLACED VERTICALLY, BADLY BROKEN AND/OR DETERIORATED, WILL BE REPLACED AS DIRECTED BY THE CITY FIELD ENGINEER AND PAID FOR AT CONTRACT UNIT PRICES.
- ALL TRAFFIC CONTROL DEVICES REQUIRED FOR DRIVEWAY CLOSURES, UTILITY CONSTRUCTION OR FOR OTHER REASONS AND NOT SHOWN ON THE SIGNING PLANS WILL BE FURNISHED BY THE CONTRACTOR AND WILL BE PAID AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS AND BID PROPOSAL. PRIOR TO PLACING THE TRAFFIC CONTROL DEVICES, THE CONTRACTOR WILL NOTIFY THE AFFECTED OWNERS IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR MUST MAKE PROVISIONS TO PROVIDE ACCESS TO PROPERTIES. REFER TO SECTION 19 OF THE SPECIFICATIONS.
- ALL UTILITY LINES WHICH ARE NOT SPECIFICALLY DESIGNATED TO BE REMOVED AND REPLACED ON THE PLANS, WILL BE MAINTAINED IN SERVICE. SHORING, SHEETING AND OTHER MEANS OF SUPPORT SHALL BE EMPLOYED BY THE CONTRACTOR TO PREVENT DAMAGE OR LOSS OF THESE EXISTING UTILITIES. BEAM AND CABLE OR OTHER ADEQUATE SUPPORTS WILL BE USED FOR TEMPORARY SUPPORT OF ALL UTILITY LINES WHICH CROSS THE TRENCH. ANY DAMAGE TO EXISTING UTILITIES WILL PROMPTLY BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SIGNIFICANT DEVIATION OF EXPOSED UTILITIES FROM THE LOCATIONS SHOWN ON THE PLANS SO THAT CONFLICTS CAN BE RESOLVED IN A TIMELY MANNER.
- THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING COA INFRASTRUCTURE (C & G, PAVING, ETC.) DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS, AND WILL REPAIR OR REPLACE SAME AT HIS OWN EXPENSE. HE WILL SUITABLY PROTECT THE CURB AND GUTTER FROM INCIDENTAL SPLASHING DURING THE TACK COAT APPLICATION AND WILL BE RESPONSIBLE FOR CLEANING SAME AT HIS OWN COST SHOULD SPLASHING OCCUR.
- 42 ALL INTERFERING PORTIONS OF ABANDONED UTILITY LINES WHICH ARE EXPOSED AS A RESULT OF CONSTRUCTION WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- 43 STATIONS OF STORM DRAIN INLETS ARE TO THE CENTER OF GRATE. ALL STORM DRAIN INLETS WILL BE TYPE "A" UNLESS OTHERWISE NOTED ON THE PLANS.
- 44 SHORING COSTS WILL BE CONSIDERED INCIDENTAL TO THE TRENCH AND BACKFILL
- THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING NPDES PERMITS REQUIRED BY APPLICABLE CITY, STATE, AND FEDERAL REGULATIONS.
- 46 ALL STORM DRAIN AND CONNECTOR PIPE WILL BE CLASS IV REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED ON THE PLANS.
- THE TERM REMOVE USED IN THIS PLAN SET INCLUDES THE DISPOSAL OF SAID MATERIAL IN ACCORDANCE WITH CITY OF ALBUQUERQUE SPECIFICATIONS,

LATEST EDITION.

ON THE PLANS.

- CONTRACTOR WILL SURVEY AND LOG EXISTING ELEVATIONS OF CURB-AND-GUTTER, SIDEWALK, AND PAVEMENT WHICH WILL BE REMOVED FOR CONSTRUCTION OF IMPROVEMENTS. CONTRACTOR WILL REPLACE REMOVED CURB-AND-GUTTER, SIDEWALK, DRIVE PADS, AND PAVEMENT TO ELEVATIONS PRIOR TO REMOVAL UNLESS OTHERWISE INDICATED
- CONTRACTOR WILL CONSTRUCT TEMPORARY ASPHALT PAVEMENT AS DIRECTED BY THE COA ENGINEER TO PROVIDE ACCESS TO LOCAL BUSINESS, ETC. TEMPORARY PAVEMENT SHALL BE REMOVED AND DISPOSED OF PRIOR TO PLACEMENT OF FULL WIDTH PAVEMENT SECTION. TEMPORARY PAVING SHALL BE PER COA STD. DWG. 2415 AND PAID FOR PER COA STD. SPECIFICATIONS.

- 50 ALL CLASSES OF SEEDING SHALL BE DRY LAND MIX PLACED AT 1.5 LBS/1000 S.F. WITH FERTILIZER 21-12-12 PLACED AT 5 LBS/1000 S.F.
- PRE—WETTING OF THE EMBANKMENT FOUNDATION AND KEY TRENCH SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE EMBANKMENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
- 52 ALL ASPHALTIC CONCRETE SHALL BE MINIMUM 1800 LB. STABILITY AND COMPACTED TO 95% MODIFIED MARSHALL DENSITY UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL RIP—RAP MATERIAL USED ON THIS PROJECT SHALL BE A NATURAL ROCK MATERIAL CONFORMING TO THE SIZE AND MATERIAL PROPERTY REQUIREMENTS SET FORTH IN THE COA STANDARD SPECIFICATIONS, NO BROKEN CONCRETE OR RUBBLE WILL BE ACCEPTED.



CONSENSUS PLANNING, INC.

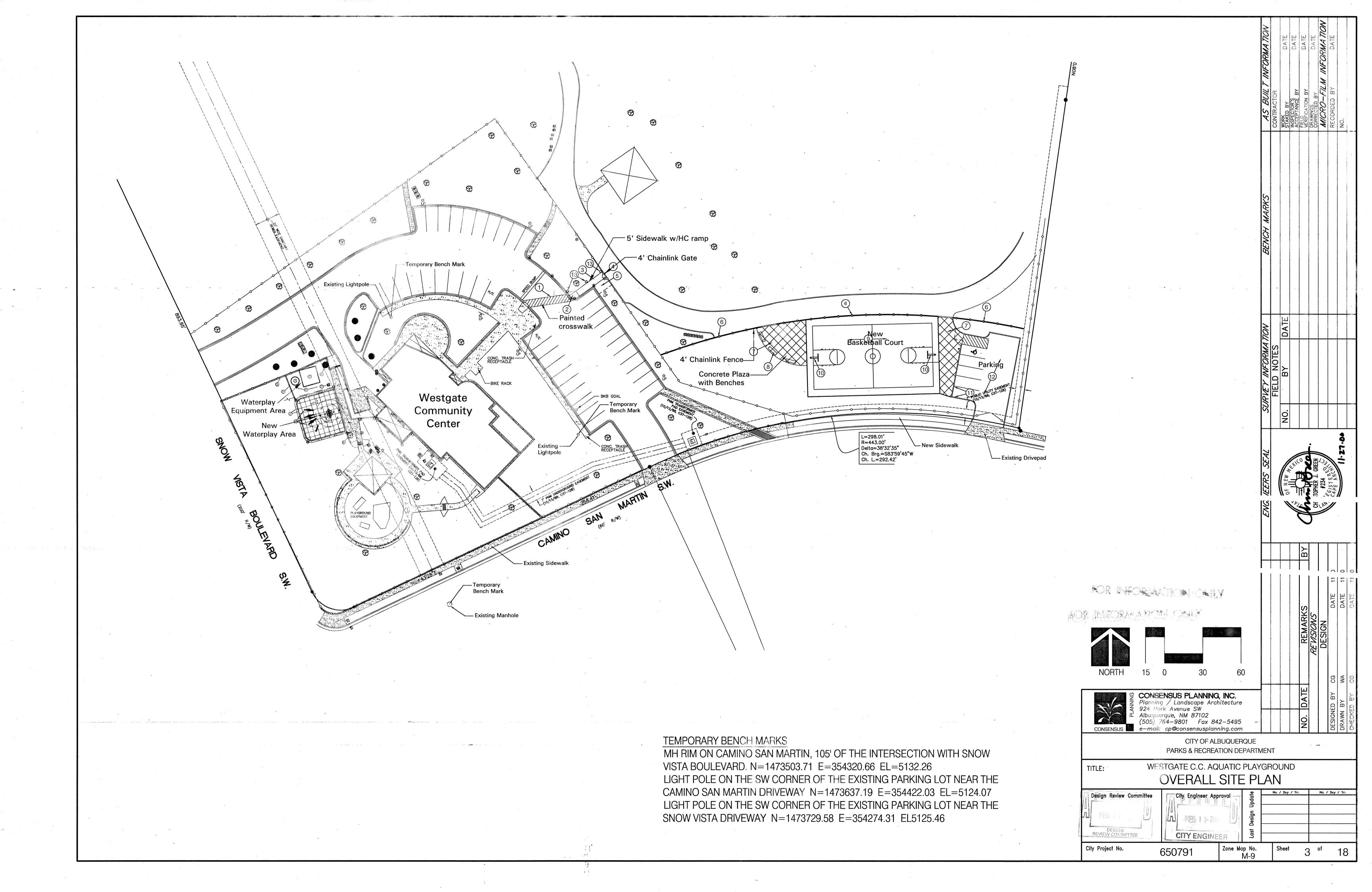
Planning / Landscape Architecture

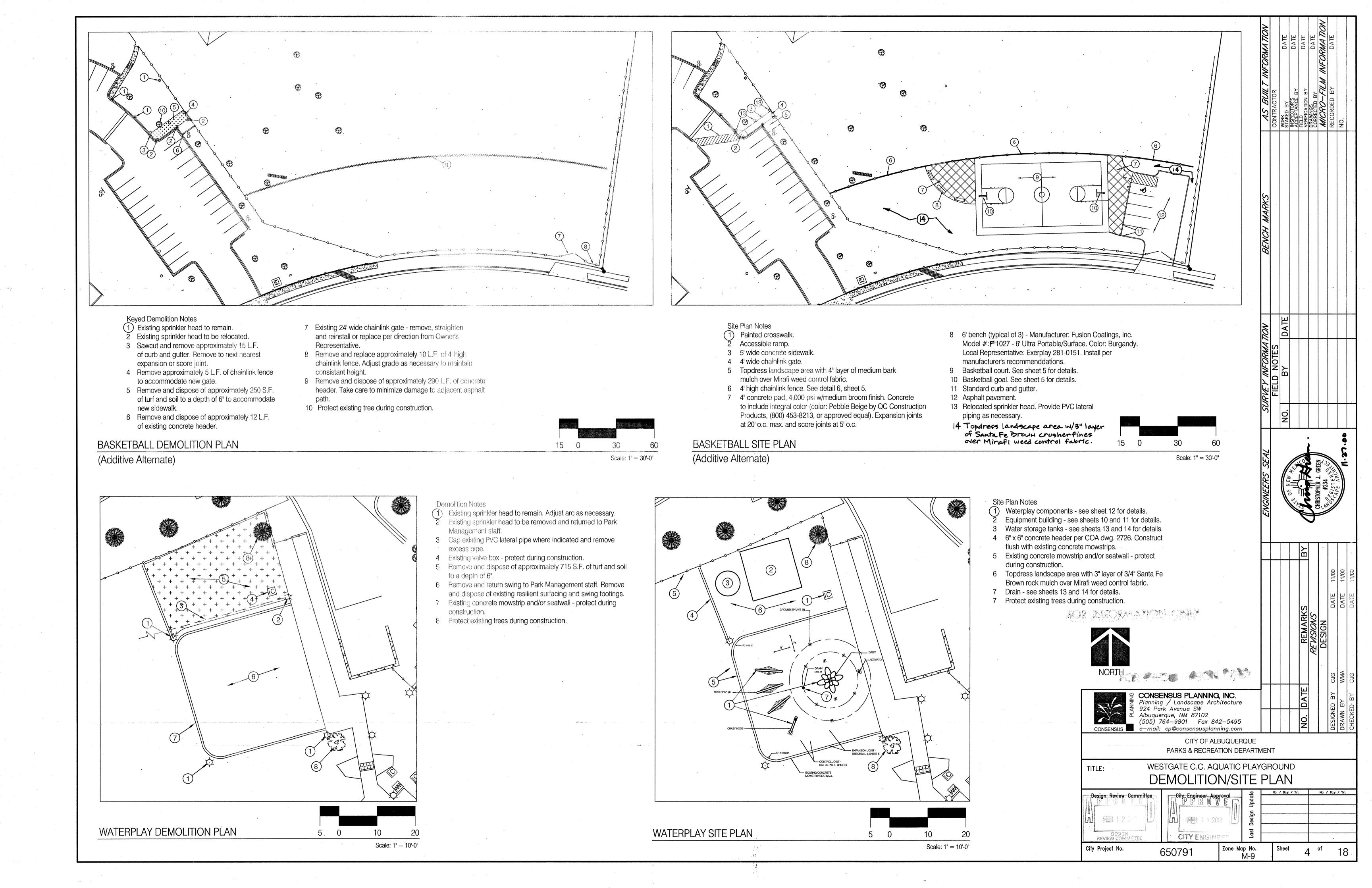
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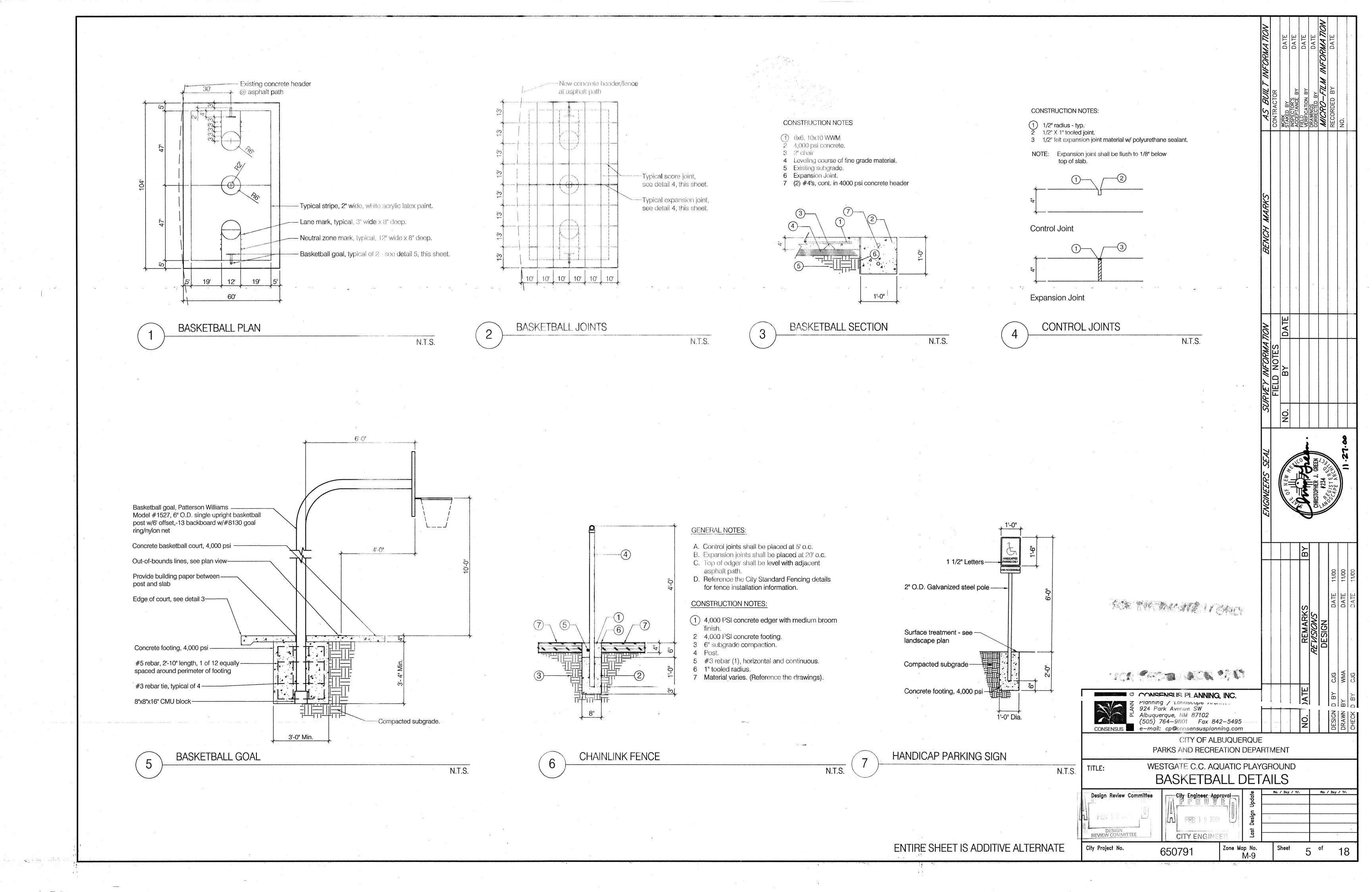
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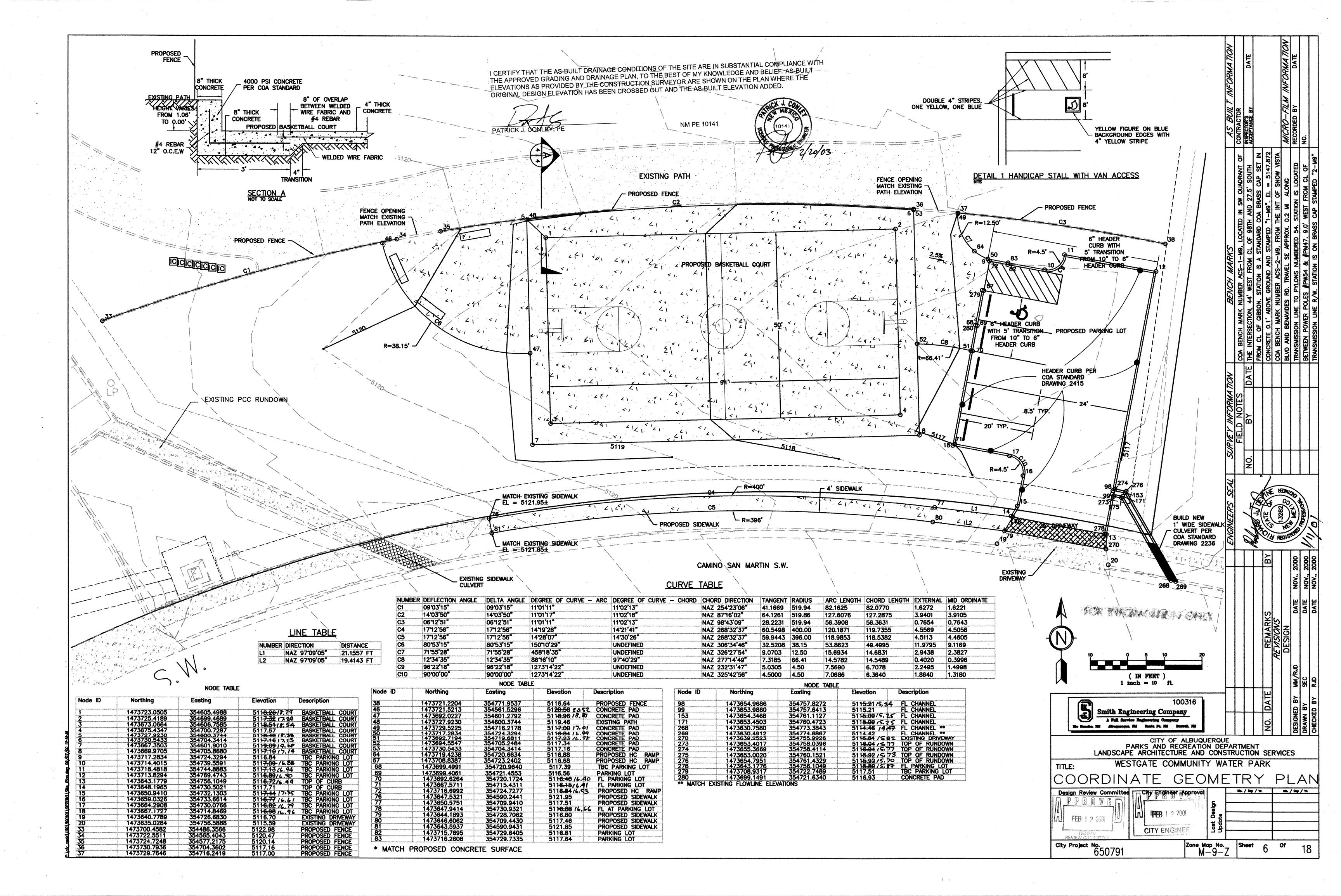
(505) 764-9801 Fax 842-5495

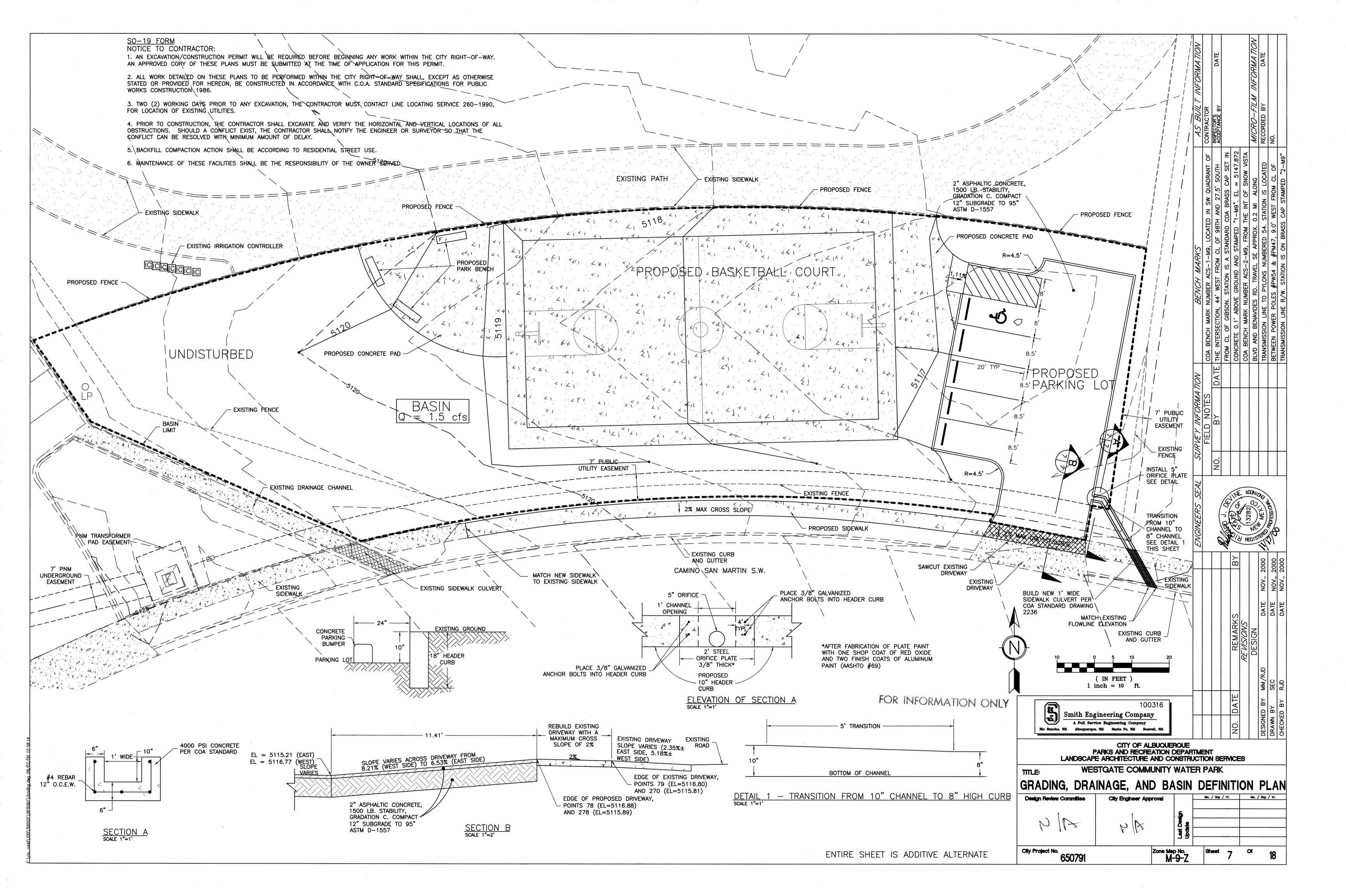
e-mail: cp@consensusplanning.com











EXISTING HYDROLOGIC ANALYSIS

From Jeff Mortensen & Associates July 7, 1994 submittal of The Master Drainage Plan for Truman Middle School, sheet 2 of 2, Drainage Plan and Calculations; Vicinity & FEMA Maps Basin "C" the developed conditions - Calculations for additional basin area designated as "Future Parking Lot" the following were their results:

 $A_{TOTA} = 20,100 \text{ sf} = 0.46 \text{ Ac}$ Roof Area = 0 sf(0)Pave Area=15,600 sf (0.22) Landscaped Area=0 sf (0) Undeveloped Area=4,500 sf (0.22) C=0.83 (weighted average per Emergency Rule, 1/14/86) Q₁₀₀=CiA=0.83(4.56)(0.46)=1.8 cfs A_{ims}=15,600sf; % impervious = 78% Composite CN = 93 (DMP Plate 22.2 C-2) DRO=1.5 in (DPM Plate 22.2 C-4) V₁₀₀=3630 (DRO) A=2,505 cf

 $A_{\text{tota}} = 2.03 + 0.46 = 2.49 \text{ Ac}$

 $\Sigma Q_{100} = 6.60 - 4.8 = 1.8 \text{ cfs (increase)}$ ΣV_{100} =4,275 - 1,770 = 2,505 cf (increase)

EXISTING 4' RUNDOWN

For the existing school site, existing 4' rundown

POND VOLUME and DISCHARGE CALCULATIONS

Emergenc	y Spillway	Elevation =	0.00				
Devation	Incremental Volume	Cumulative volume	Emergency Equals	Spillway Primary	Discharge		Total Discharge
and consequences to the second se	and a till great from the character and a second	Before the medical production is a sound removed only burst due to a good to be (in	Discharge Coefficient "C"	Length "L"	Head (h)	Q= CL(h)^1.5	
(ft)	(ac-ft)	(ac-ft)	and graph the specific transport in the same of the straight of the straight contribution of the straight contribution of the same of the	(ft)	(ft)	(cfs)	(cfs)
(a)	(b)	the first and Miller Control to the control to the second of the	(e)		** ***********************************	The commence of the second commence of the second	er och ett med had de set som generale i d
0.10	0.00140	0.00140	1.50	4.00	0.10	0.19	0.190
0.20	0.00260	0.00400	1.50	4.00	0.20	0.54	0.537
0.30	0.00380	0.00780	1.50	4.00	0.30	0.99	0.986
0.40	0.00500	0.01280	1.50	4.00	0.40	1.52	1.518
0.50	0.00620	0.01900	1.50	4.00	0.50	2.12	2.121
0.60	0.00740	0.02640	1.50	4.00	0.60	2.79	2.789
0.70	0.00860	0.03500	1.50	4.00	0.70	3.51	3.514
0.80	0.00860	0.04360	1.50	4.00	08.0	4.29	4.293
0.90	0.00860	0.05220	1.50	4.00	0.90	5.12	5.123
1.00	0.00860	0.06080	1.50	4.00	1.00	6.00	6.000

(a) Elevations and areas measured on .25"= survey shots (b) Obtained from Autocad basemap drawing (c) From "Handbook of Hydraulics" Brater, King, Lindell, Wei. 7th ed. page 4.7

(e) From "Handbook of Hydraulics" Brater, King, Lindell, Wei. 7th ed. page 5.25

PROPOSED 4' CHAIN LINK GATE EXISTING TBC EL = 5124.16PROPOSED 5' SIDEWALK EXISTING FL RELOCATE EXISTING /EL = 5123.67SPRINKLER HEAD RELOCATE EXISTING TO BACK OF NEW SPRINKLER HEAD TO BACK OF NEW SPEED BUMP EXISTING TBC EL = 5123.80 EXISTING FL EL = 5123.28REFLECTORIZED PAINTED WHITE STRIPE 10" WIDE PROPOSED 6' PAINTED CROSS WALK

WESTGATE COMMUNITY CENTER PROPOSED PARKING LOT/ BASKETBALL COURT DRAINAGE ANALYSIS

WESTGATE COMMUNITY CENTER WATER PARK & PROPOSED PARKING LOT/BASKETBALL COURT

The Westgate Community Center proposed parking lot/basketball court is located on a 0.46 acre parcel of undeveloped land located in the southwest quadrant of Albuquerque. The site borders the existing Westgate Community Center on the west, Camino San Martin on the south, and a grass field on the north. See sheet 3 of 8 of the plans for the location. The site slopes vary from 2% to 3%. The climate in this area is considered semi-arid and is hot and dry with an average rainfall of 8 inches. The project is classified as zone x on the flood insurance rate map firm #35001c0336d. The proposed Water Park shall be located behind the Westgate Community Center within an existing walled area. See sheet 3 of 8 for water park location.

HYDROLOGIC ANALYSIS

The City of Albuquerque's Development Process Manual (DPM) Section 22.2 was used to compute the 100-yr 6-hr peak flows and runoff volumes for the onsite basin. Precipitation is in zone 1. Tables A-8 and A-9 were used for these calculations. The site was analyzed as one basin based on developed runoff patterns. The existing condition flows were computed for comparison purposes only. There are no off-site flows entering the site for either existing or developed conditions.

A. Existing Conditions - onsite

1. Basketball/parking lot

There is no off-site drainage entering the site. The existing site is mostly undeveloped and is vegetated with native grasses and sagebrush. The water naturally drains to the southeast corner of the lot where it ponds approximately where the proposed parking lot is located. The average slope is between 3% and 4%. The existing conditions were calculated using the entire site as one basin. An estimated 0.9 cubic feet per second was calculated for the existing 100 year event. Land treatment "B" was used for undeveloped site. The existing Westgate Community Center (including the existing parking lot and the area behind the community center) was previously analyzed (see Westgate Community Center Drainage Plan, Hydrology File No. M9/D11, and the Master Drainage Plan Truman Middle School studied by Jeff Mortensen & Associates, Inc.

- 2. Water park. As stated above, the Water Park is being constructed with an existing wall area. No grading will be necessary.
- B. Developed Conditions
- 1. Basketball/parking lot

The developed park will have paved impermeable areas including concrete sidewalks, basketball courts, bench sites, and an asphalt parking lot. The following is a summary of the site. As the above mentioned drainage study stated, the allowable peak discharge is through a 4" pipe. The site could release 0.4 cfs to Camino San

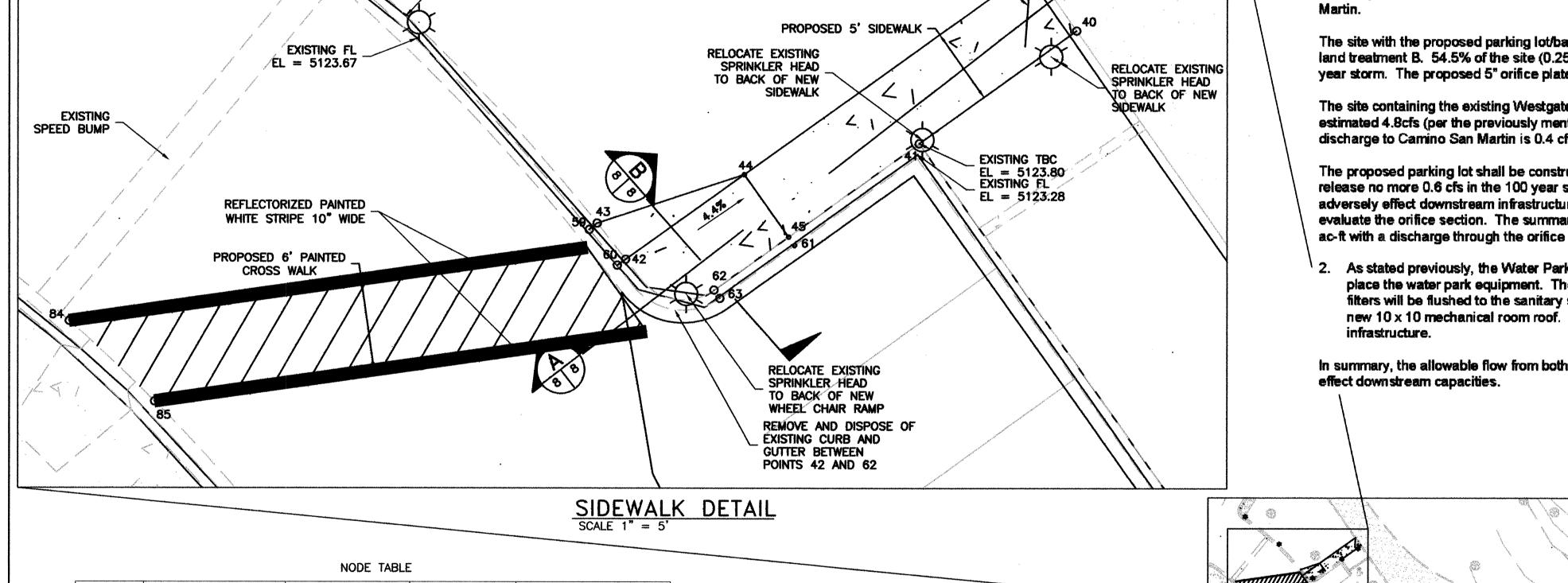
The site with the proposed parking lot/basketball court encompasses 0.46 acres. 45.5% of the site (0.2094 ac) and has either native grasses or weeds, and is considered. land treatment B. 54.5% of the site (0.2504 ac) is either concrete or asphalt and is considered land treatment D. This basin will discharge an estimated 1.5 cfs in the 100 year storm. The proposed 5" orifice plate will restrict the flow to 0.6 cfs, with ponding contained in the proposed parking lot.

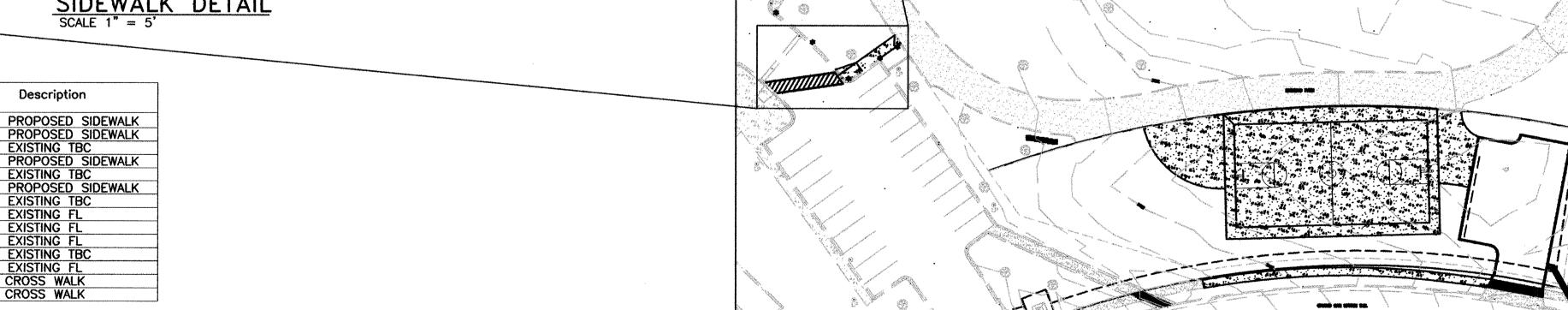
The site containing the existing Westgate Community Center and the proposed water park (includes the parking lot and area behind the community center) discharges an estimated 4.8cfs (per the previously mentioned reports). Therefore the total proposed discharge to Carrino San Martin is 0.6 cfs + 4.8 cfs = 5.4 cfs. The allowable discharge to Camino San Martin is 0.4 cfs + 4.8 cfs = 5.2 cfs.

The proposed parking lot shall be constructed to intercept all the runoff from the site. A concrete rectangular weir, with a 5" orifice plate section shall be constructed to release no more 0.6 cfs in the 100 year storm. This is 0.2 cfs more that the maximum allowable peak discharge from this site but we do not believe this minor amount will adversely effect downstream infrastructure. See pond and outlet structure details on sheet 4 of the plans set for details. An AHYMO run was routed through the pond to evaluate the orifice section. The summary of this run is shown on this page. As you can see the peak entering the pond from the site is 1.5 cfs. The pond volume is 0.012 ac-ft with a discharge through the orifice of 0.6 cfs. Note that we have raised the curb height in the parking lot to 10" around the ponding area.

2. As stated previously, the Water Park will be located on the western side of the Westgate Community Center within an enclosed area. No grading will be necessary to place the water park equipment. The water play units will drain to a proposed 10 x 10 mechanical room for filtering, and re-circulation back out to the play units. The filters will be flushed to the sanitary sewer system. The only impermeable surface that will contribute runoff to the existing rundown onto Camino San Martin will be the new 10 x 10 mechanical room roof. The increased discharge -less than 0.01 cfs for the 100-year event- is negligible and should not significantly impact down stream

In summary, the allowable flow from both of the above areas is 5.2 cfs. We are discharging 5.4 cfs. We believe that the 0.2 cfs is a negligible amount and will not adversely





* PAINT ON EXISTING PAVEMENT SURFACE

Northing

473749.5487

1473752.7302 1473748.6598 1473749.1297 1473746.7997 1473748.1171 1473745.1753

1473737.8734

Easting

354421.5141 354424.4179

354382.9284

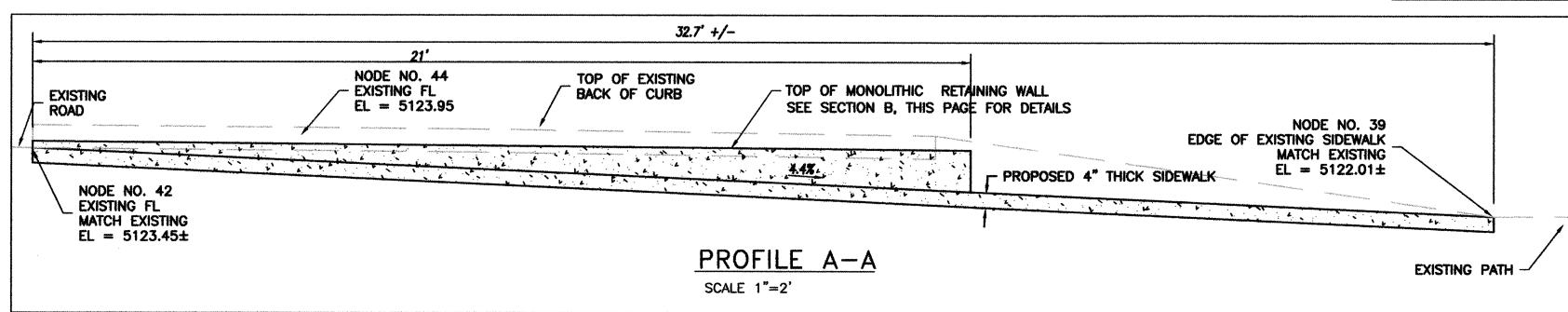
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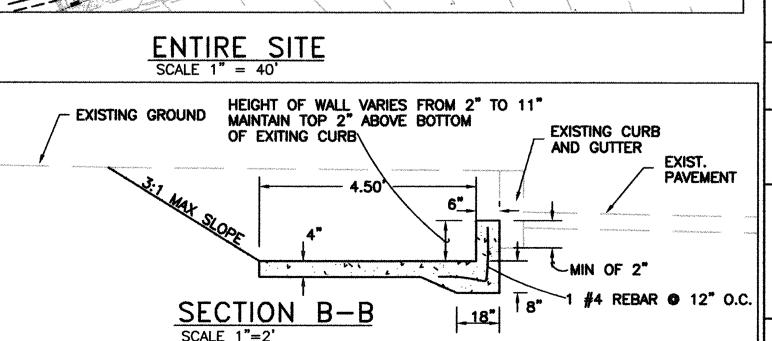
5122.0100 5122.0700 5123.8100 5123.4500 5123.9500 5123.9500 5123.9500 5123.5000 5123.5000 5123.4700 5123.4700

Description

CROSS WALK CROSS WALK

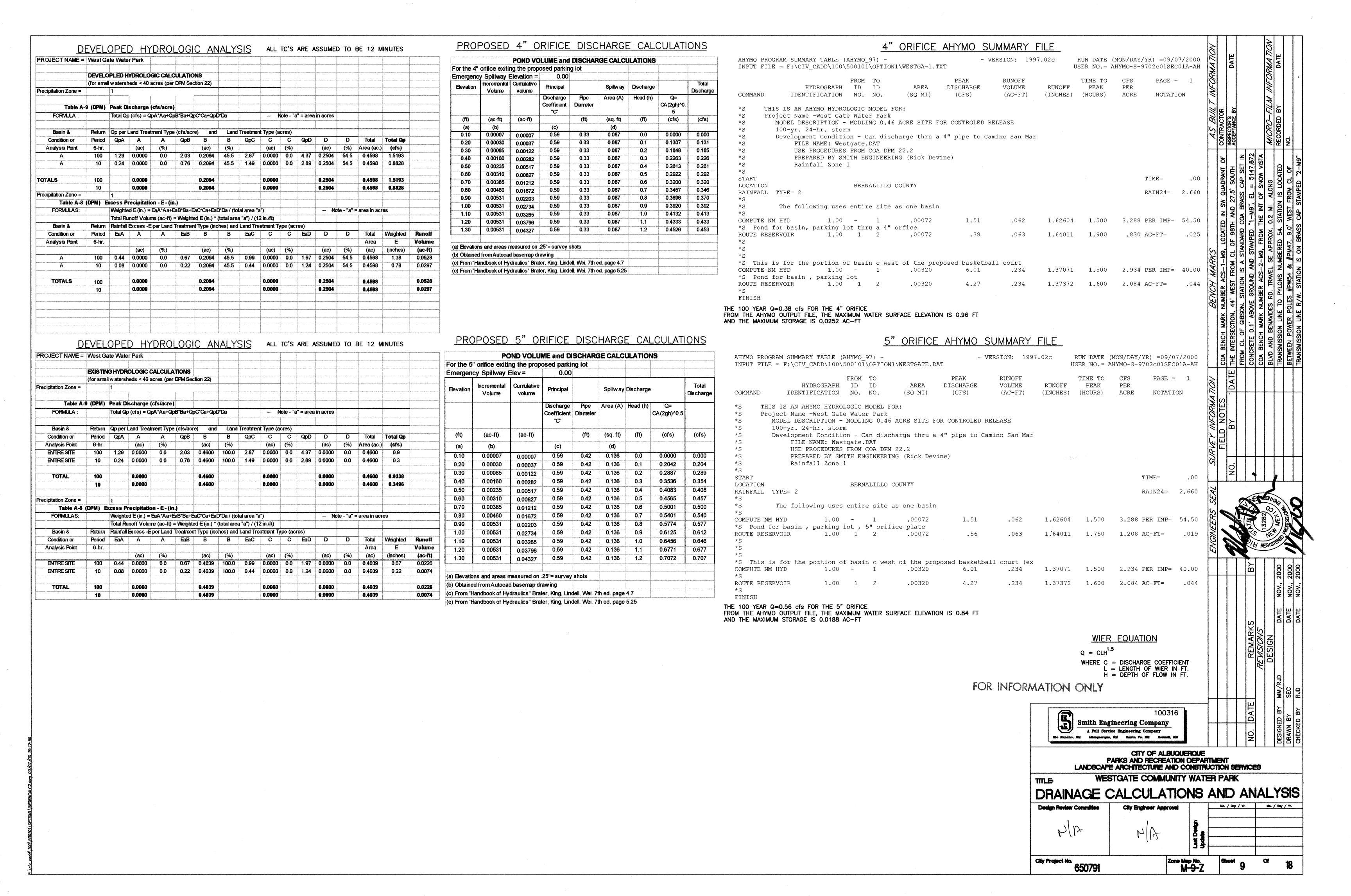
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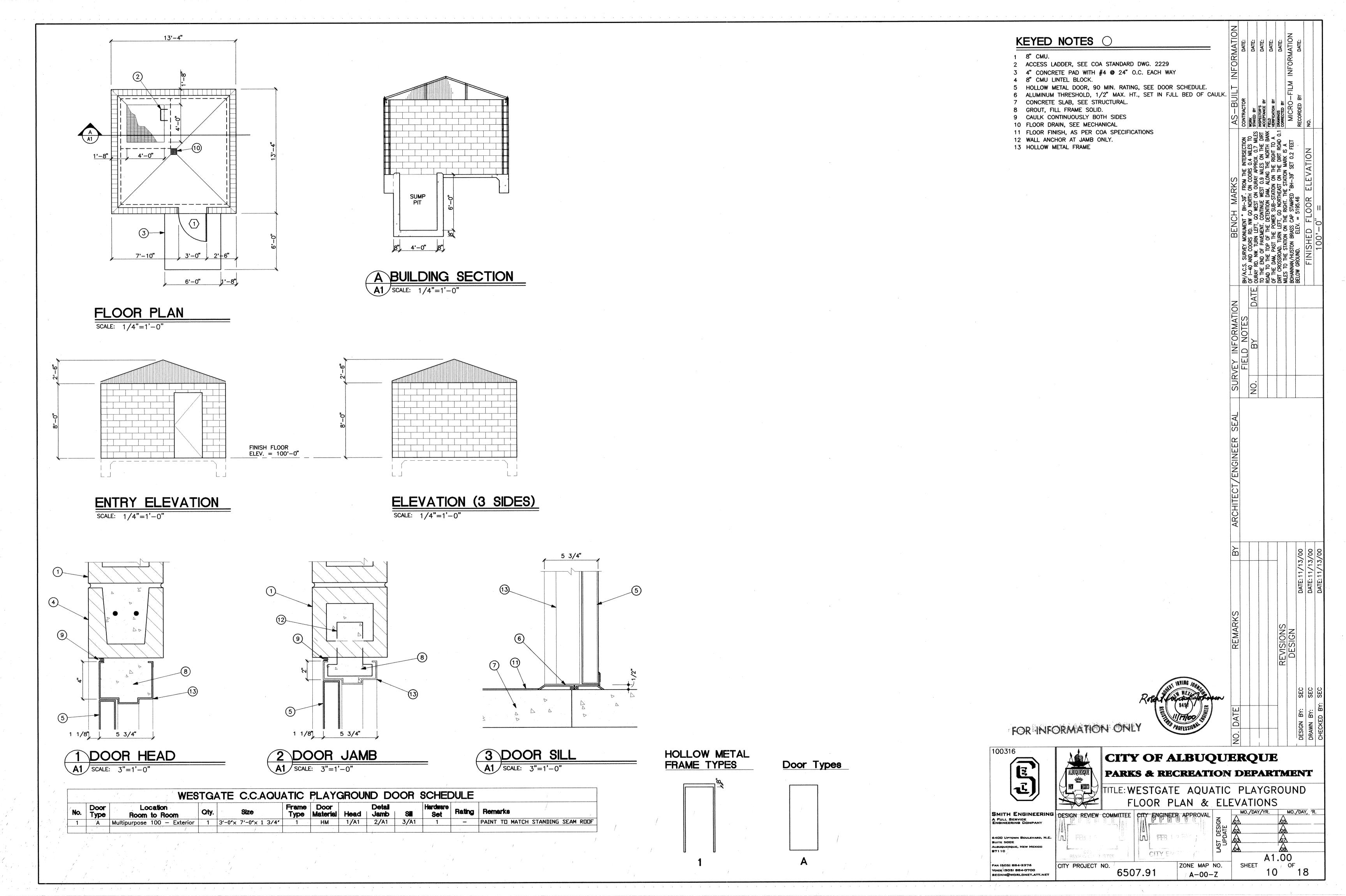


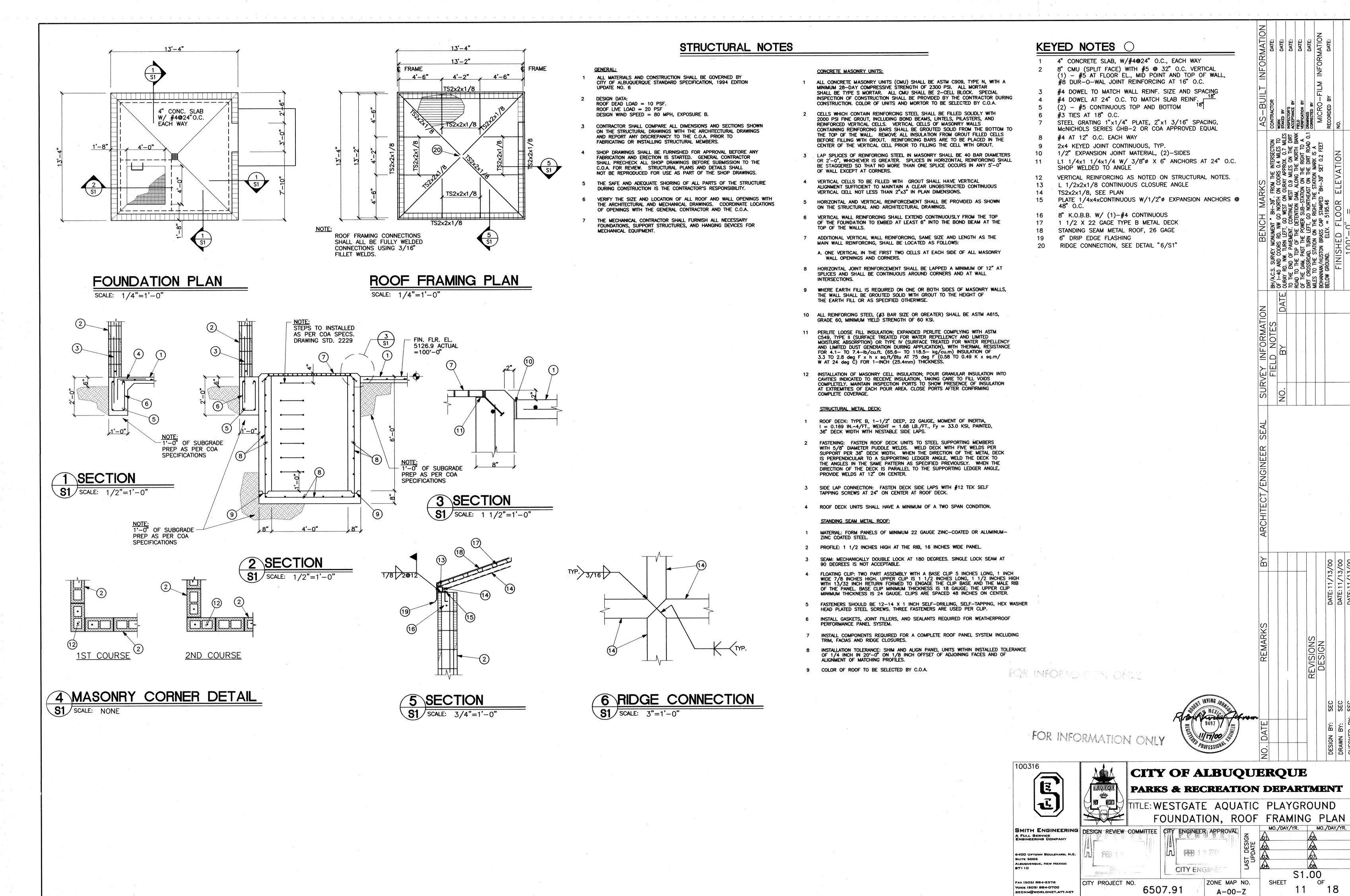


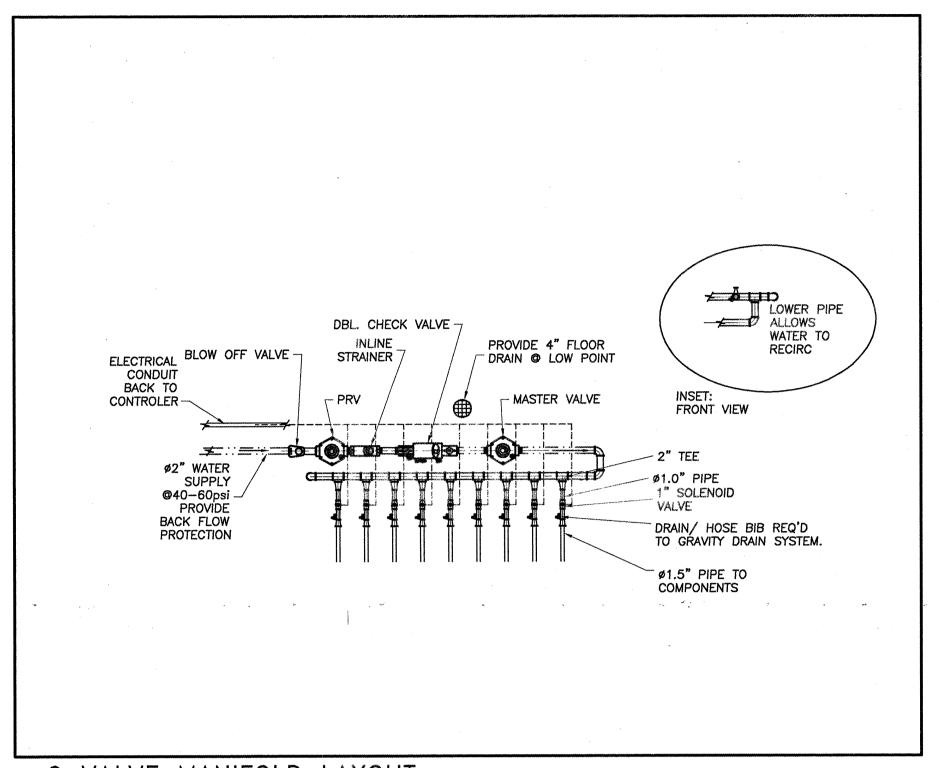
Smith Engineering Company CITY OF ALBUQUEROUE PARKS AND RECREATION DEPARTMENT LANDSCAPE ARCHITECTURE AND CONSTRUCTION SERVICES WESTGATE COMMUNITY WATER PARK MLB DRAINAGE CALCULATIONS AND ANALYSIS Mo. / Day / Yr. Mo. / Day / Yr. **City Engineer Approval** City Project No. Zone Map No. M-9-Z 650791

FOR INFORMATION ONLY



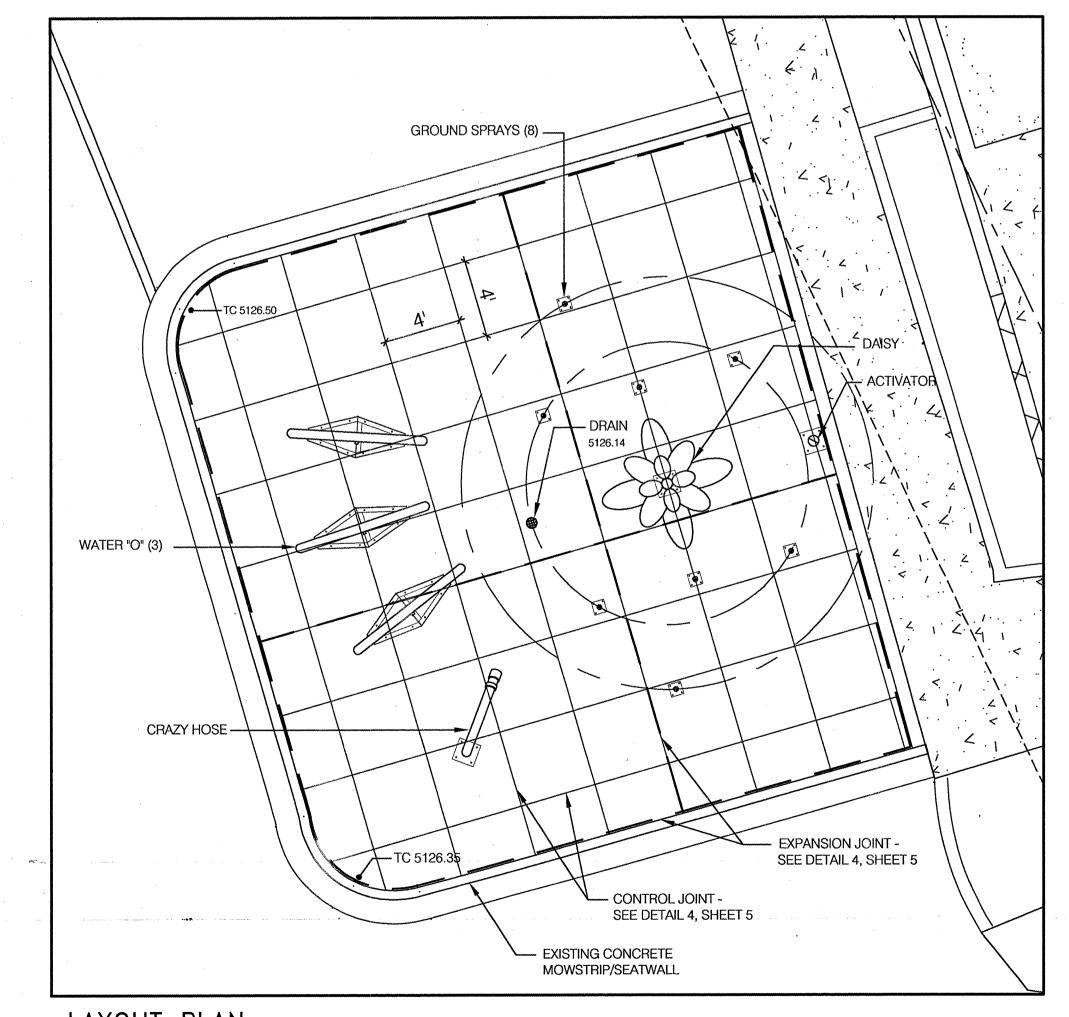




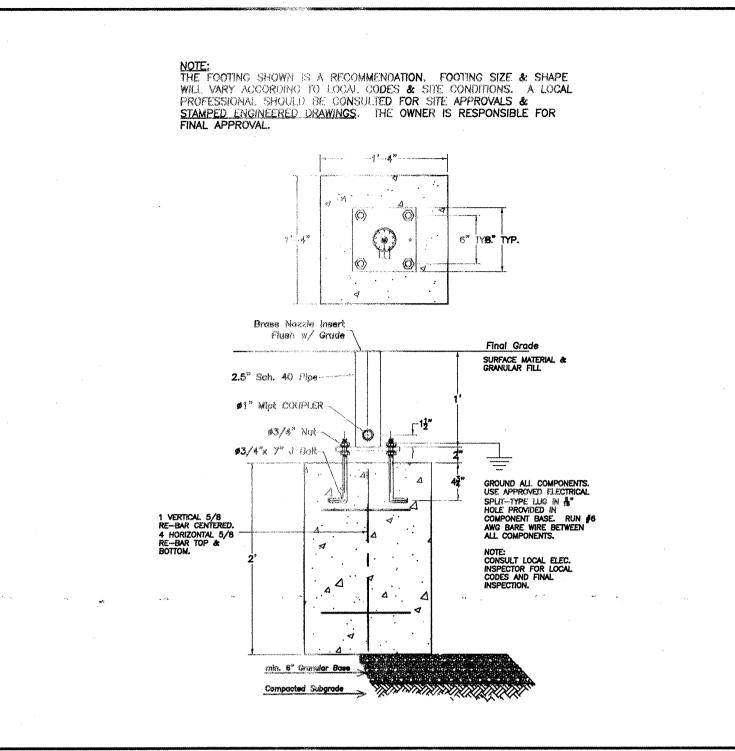


9 VALVE MANIFOLD LAYOUT

SCALE: 1"= 3'



LAYOUT PLAN
SCALE: 1"= 5'



WATERPLAY GROUND SPRAY FOOTING

SCALE: 1"= 1'

GENERAL GRADING/PAVEMENT NOTES:

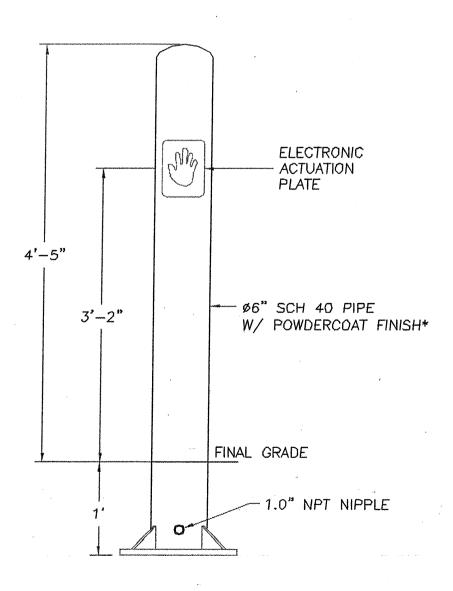
1. SLOPES TO BE NO GREATER THAN 1:15 (6.6%)

2. MINIMUM SLOPE SHALL BE GREATER THAN 1:66 (1.5%)

3. ENSURE THAT THERE ARE NO LOW POINTS TO CAUSE POOLING OF WATER.

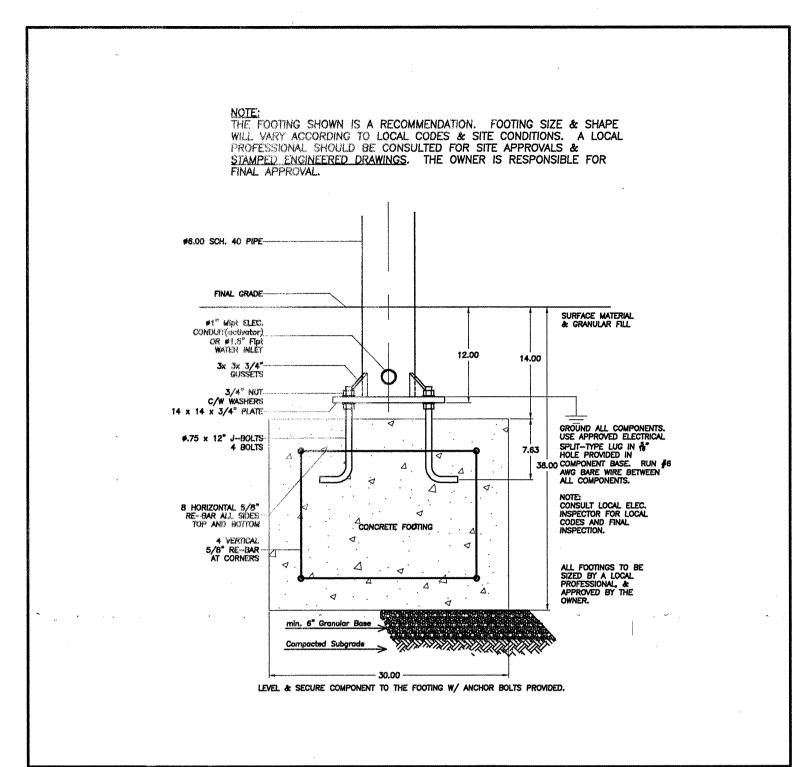
4. EXPANSION JOINTS AND CONTROL JOINTS PER DETAIL 4, SHEET 5. 5. CONCRETE TO BE 4,000 PSI WITH MEDIUM BROOM FINISH AND 1" SMOOTH TROWEL EDGE AROUND EACH PANEL, CONCRETE TO INCLUDE INTEGRAL COLOR (COLOR: PEBBLE BEIGE BY QC CONSTRUCTION PRODUCTS (800) 453-8213,

OR APPROVED EQUAL). 6. NEW CONCRETE SHALL BE PLACED FLUSH WITH EXISTING CONCRETE SIDEWALK.

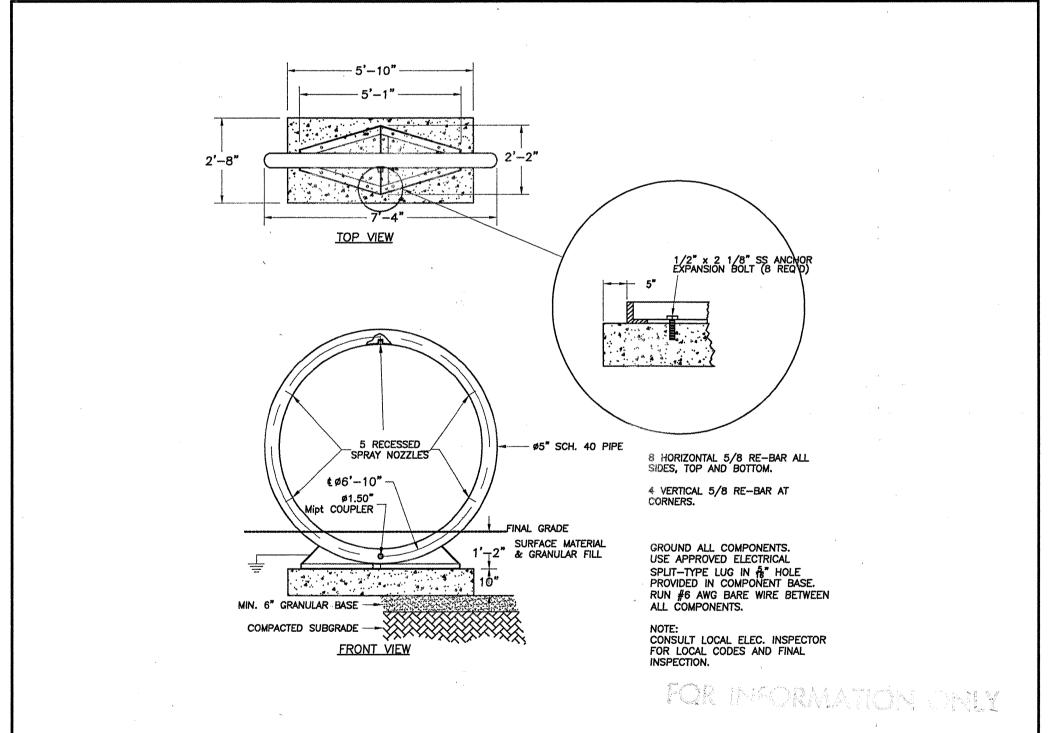


ACTIVATOR BOLLARD

N.T.S.



WATERPLAY STD COMPONENT FOOTING SCALE: 1"= 1"

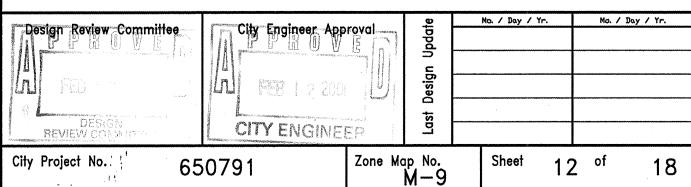


WATERPLAY WATER "O" FOOTING

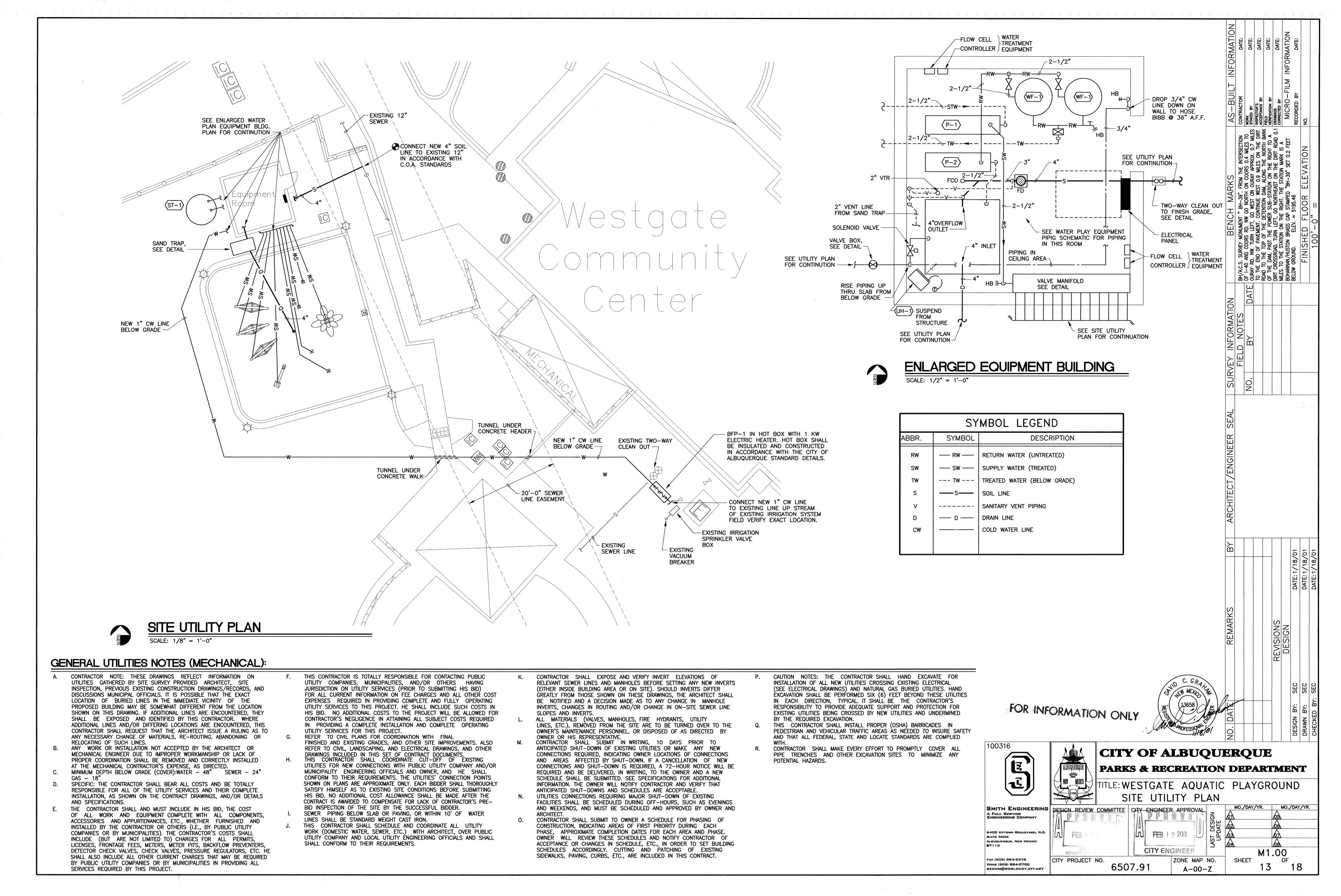
SCALE: 1"= 3'

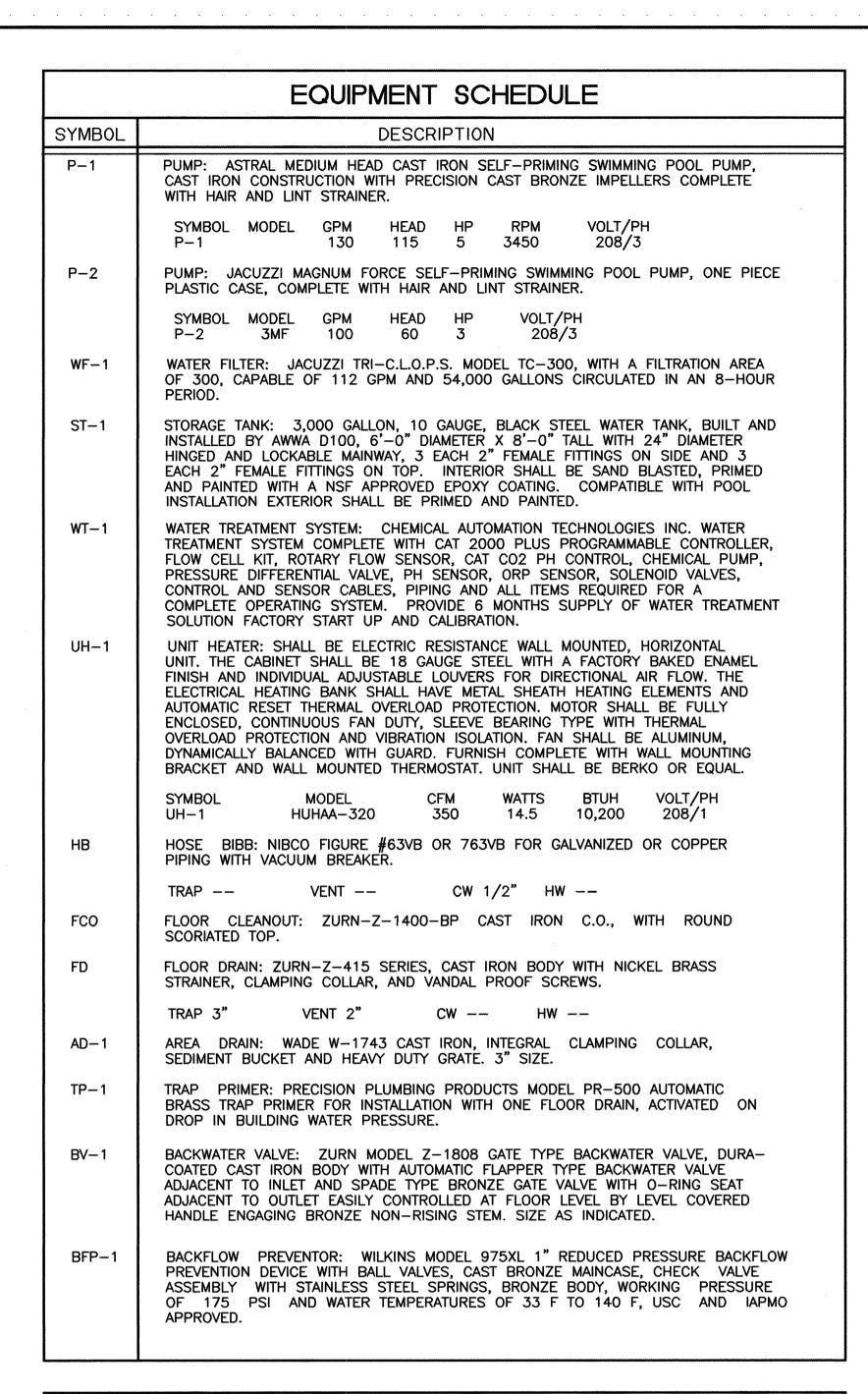


WESTGATE C.C. AQUATIC PLAYGROUND WATERPLAY LAYOUT AND DETAILS







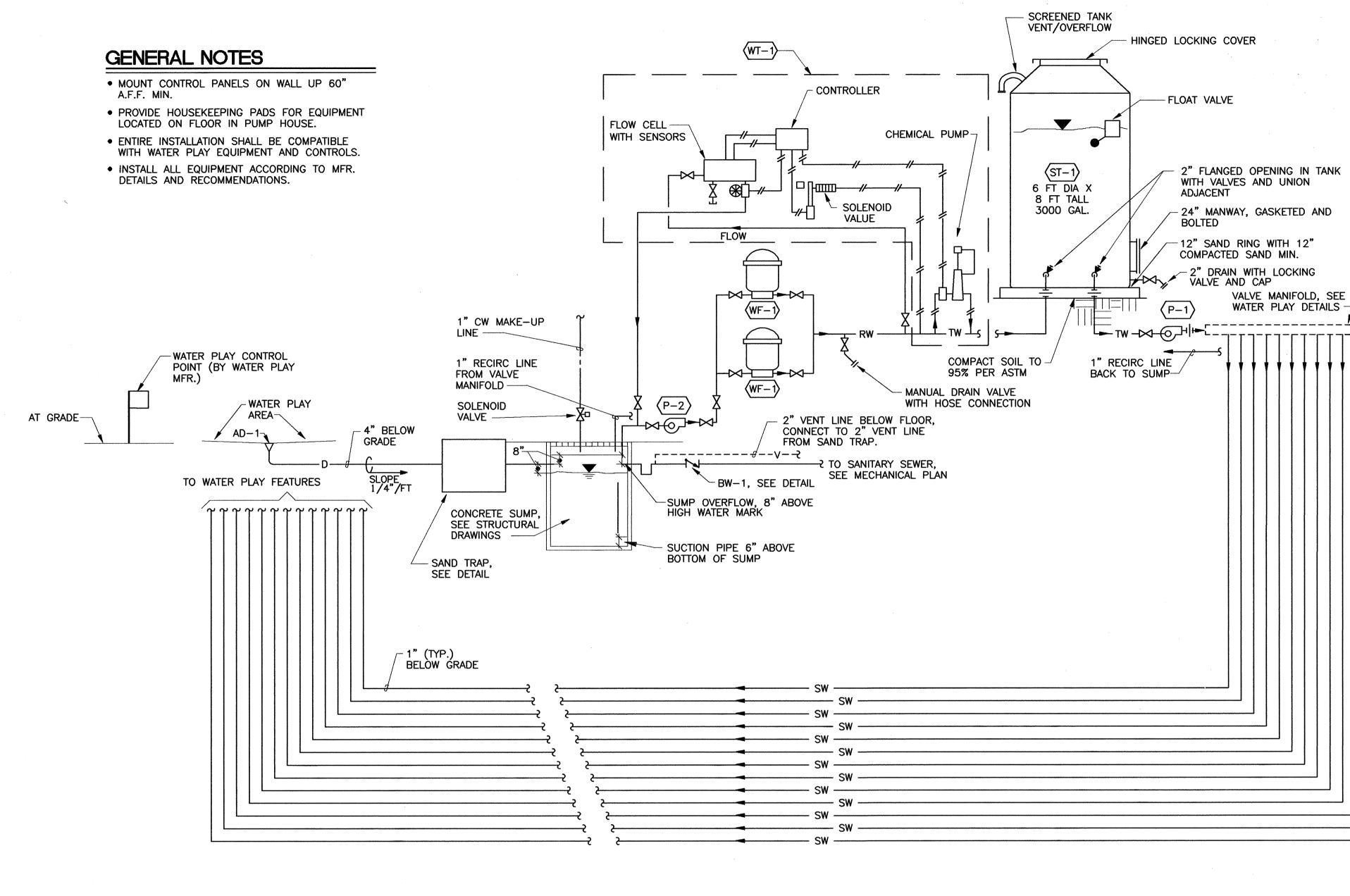


SEQUENCE OF CONTROL

- 1) THE WATER PLAY FEATURES SHALL CONTROL PUMP P-1 AND VALVES TO OPERATE TOGETHER AS PART OF ITS OWN CONTROLS. FLOAT VALVE IN STORAGE TANK ST-1 SHALL OVERRIDE OPERATION OF P-1 WHEN WATER LEVEL IN TANK IS LESS THAN 25% OF TANK VOLUME THE FLOAT SHALL BE A CONTINUOUS LEVEL MONITORING UNIT UTILIZING ELECTRIC SENSORS ITS ENTIRE LENGTH. FLOAT SHALL BE CALIBRATED FOR THE STORAGE TANK.
- 2 THE WATER SUPPLY PUMP P-2 SHALL OPERATE WHEN FLOAT IN SUMP REACHES NORMAL WATER LEVEL (BASED ON DRAIN FROM WATER PLAY AREA) AND IS SHUT DOWN WHEN FLOAT IN STORAGE TANK (ST-1) REACHES IT WATER LEVEL.
- THE FLOAT IN THE SUMP SHALL HAVE 4 LEVELS, (HIGH WATER LEVEL WITH ALARM PUMP (P-2) ON, PUMP (P-2) OFF AND LOW LEVEL). AT LOW LEVEL THE SOLENOID VALVE SHALL <u>OPEN UNTIL THE WATER LEVEL IN THE SUMP REACHES ITS NORMAL LEVEL AS DESCRIBED.</u> IN (2) ABOVE THE SOLENOID VALVE SHALL CLOSE. THE FLOAT SHALL BE A CONTINUOUS LEVEL MONITORING UNIT WHICH USES ELECTRIC SENSORS ITS ENTIRE LENGTH. FLOAT SHALL BE CALIBRATED FOR SUMP.
- (4) THE WATER TREATMENT SYSTEM SHALL CONTROL DISINFECTANT SUPPLIED TO THE SYSTEM BY THE CONNECTION SUPPLY PIPING. THE SYSTEM SHALL BE SELF CONTAINED AND SHALL NOT DELIVER DISINFECTANT WHEN WATER IS NOT BEING DELIVERED BY PUMP (P-2) DISINFECTANT SHALL BE ACCORDANCE WITH THE UNIFORM SPA AND POOL CODE AND THE STATE OF NM ENVIRONMENTAL CODES AND ORDINANCES.
- (5) A TIME CLOCK SHALL BE INSTALLED TO SHUT DOWN ENTIRE SYSTEM AFTER HOURS.

MISC NOTES FOR SEQUENCE OF CONTROL

- CONTROLS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR FOR A COMPLETE AND AND OPERATIONAL SYSTEM. SHOP DRAWINGS AND CATALOG CUT SHEETS SHALL BE SUBMITTED FOR REVIEW BY THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
- CONTROL DEVICES SHALL BE PROVIDED WHERE REQUIRED INCLUDING CONTROL PANELS, RELAYS, WIRING ETC. AS REQUIRED.
- ALL CONTROL WIRING SHALL BE INSTALLED IN CONDUIT (1/2" MIN. SIZE) AND IN ACCORDANCE WITH SPECIFICATIONS.
- ALL CONTROLS SHALL BE COMPATIBLE WITH WATER PLAY INTERCONNECTIONS.
- THE CONTRACTOR SHALL CAREFULLY COORDINATE CONTROLS WITH WATER PLAY AND PROVIDED ALL REQUIRED LABOR, DEVICES ETC FOR A COMPLETE AND OPERATIONAL SYSTEM. NO ALLOWANCES SHALL BE MADE FOR CONTRACTOR'S NOT PROVIDING A COMPLETE AND OPERATIONAL CONTROL SYSTEM FOR ALL COMPONENTS.



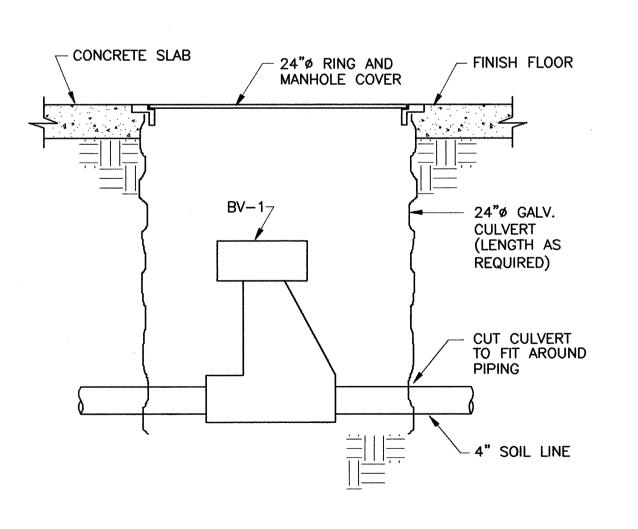
WATER PLAY EQUIPMENT PIPING SCHEMATICS

GENERAL PLUMBING NOTES (APPLICABLE TO ALL MECHANICAL AND PLUMBING SHEETS)

- ALL PIPING SHALL BE CONCEALED WHERE POSSIBLE. ALL EXPOSED PIPING, WHERE CONCEALMENT IS NOT POSSIBLE, SHALL BE INSTALLED AND PAINTED AS DIRECTED BY THE ARCHITECT.
- ALL PIPING SHALL BE INSULATED. SEE SPECIFICATIONS.
- ALL PIPING SHALL PITCH TO DRAIN, AND CONTRACTOR SHALL PROVIDE VALVING FOR SYSTEM DRAINAGE. CONTRACTOR SHALL DELIVER A MARKED-UP SET OF PLANS TO THE OWNER (PRIOR TO FINAL PAYMENT) SHOWING ALL BRANCH VALVES AND ALL DRAINAGE
- CARE SHALL BE TAKEN TO AVOID MECHANICAL ELECTRICAL EQUIPMENT AND AIR HANDLING EQUIPMENT ABOVE CEILING. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ROUTING OF PIPING WITH CONTRACTOR. RELOCATION OF PIPING AS A RESULT OF POOR COORDINATION BY THIS CONTRACTOR SHALL BE AT OWN EXPENSE.
- NO WATER PIPING SHALL BE LOCATED IN OUTSIDE WALLS, UNLESS SHOWN TO BE AND THEN PIPING TO BE INSULATED AND LOCATED AS CLOSE AS POSSIBLE TO INSIDE OF WALL CAVITY WITH ADDITIONAL INSULATION BETWEEN PIPING AND EXTERIOR OF WALL.
- WRITTEN PRIOR APPROVAL REQUIRED FOR ALL PROPOSED SUBSTITUTIONS OF EQUIPMENT AND MATERIALS, RECEIVED BY ENGINEER, 10 DAYS PRIOR TO BID DATE OF PROJECT TO ALLOW ADEQUATE TIME FOR REVIEW AND RESPONSE.
- ALL TRENCHING AND BACKFILL FOR PIPING SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
- HUB AND SPIGOT CAST IRON.

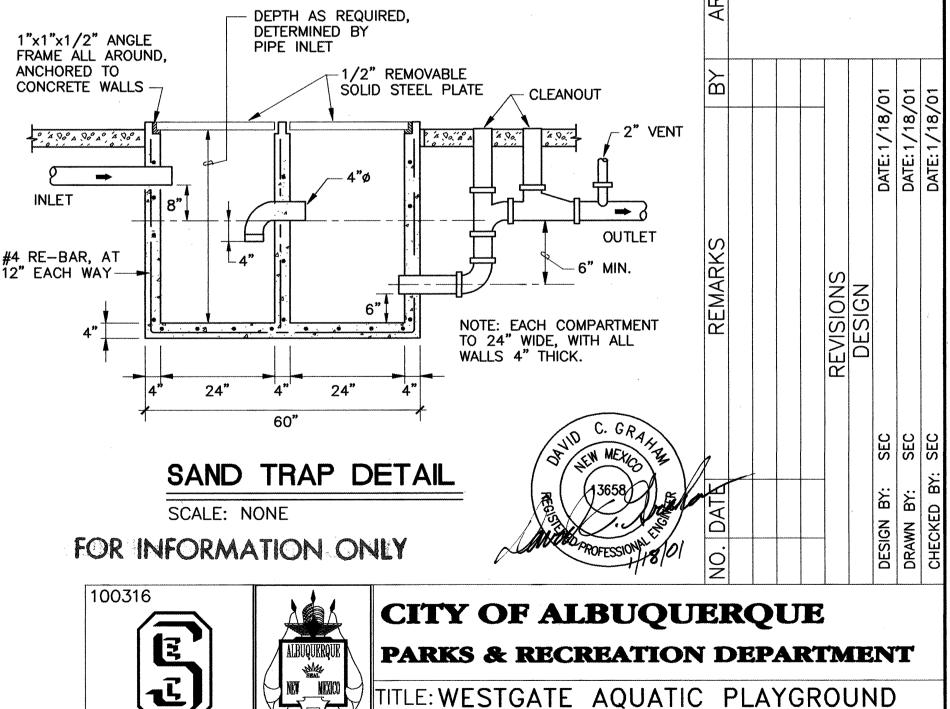
ALL SEWER PIPING BELOW FLOOR SLAB (BELOW GRADE) SHALL BE STANDARD WEIGHT

SECURE ALL PIPING TO WALLS FOR A RIGID INSTALLATION WITH UNISTRUT BRACKETS AND GASKETED PIPE CLAMPS.



BACKWATER VALVE DETAIL

SCALE: NONE



SMITH ENGINEERING DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL

era | 2 200

REVIEW COMMIT

CITY PROJECT NO.

A FULL SERVICE ENGINEERING COMPANY

FAX (505) 884-2376

Voice (505) 884-0700

SUITE SOOE

6400 UPTOWN BOULEVARD, N.

PIPING SCHEMATIC

FEB | 2 2001

CITY ENGINEER

6507.91

ZONE MAP NO.

A-00-Z

MO./DAY/YR.

SHEET

M2.00

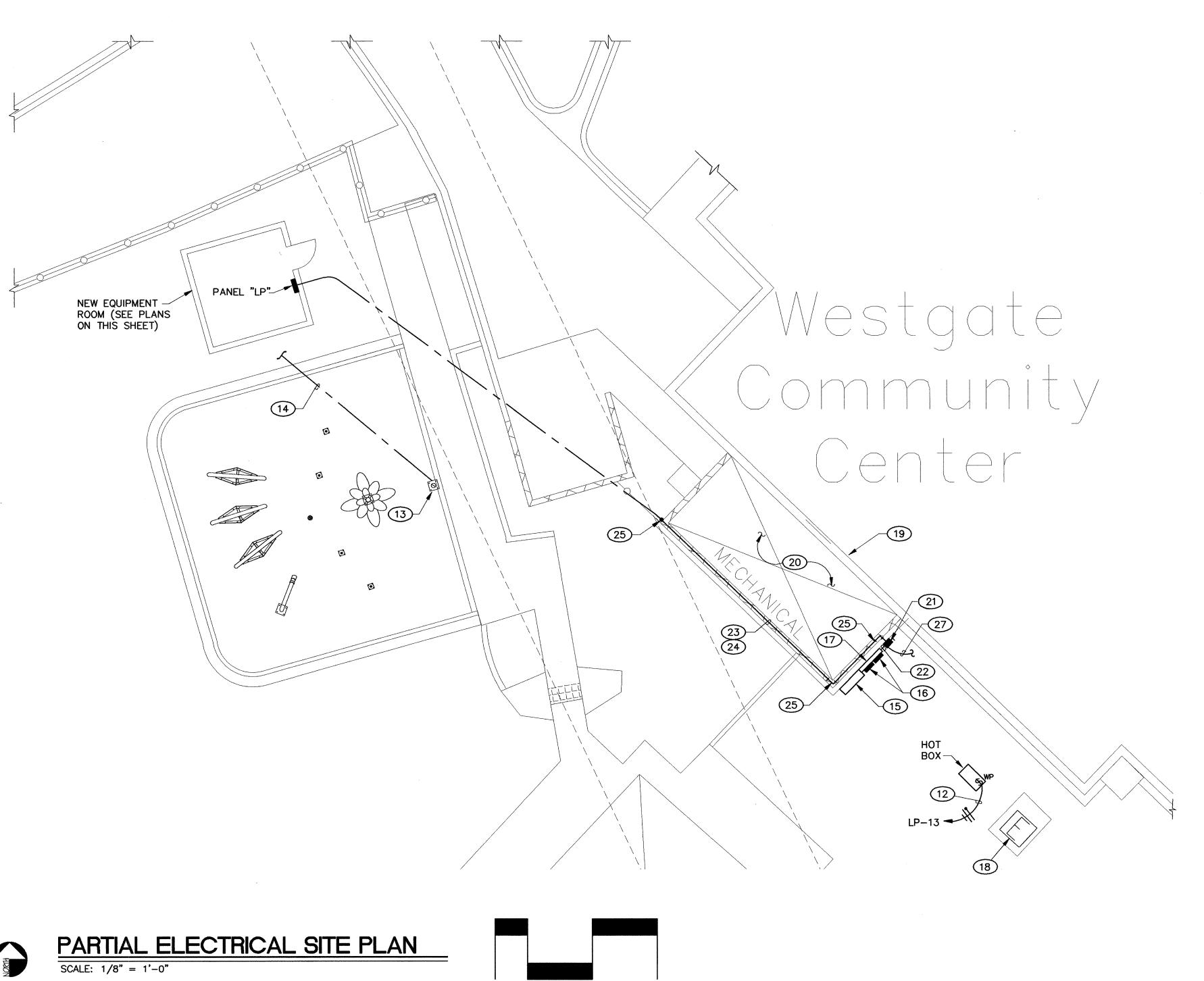
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MANUAL DRAIN

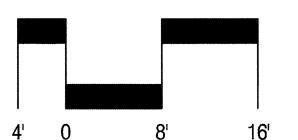
CONNECTION

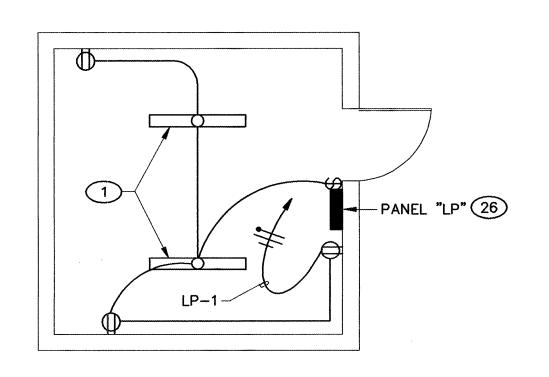
VALVE WITH HOSE

DA

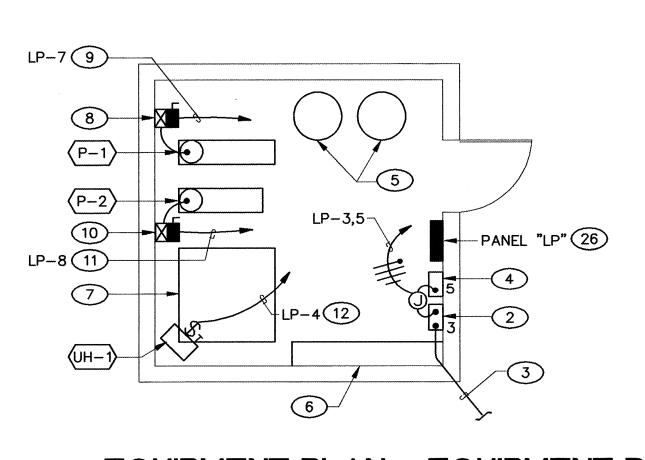




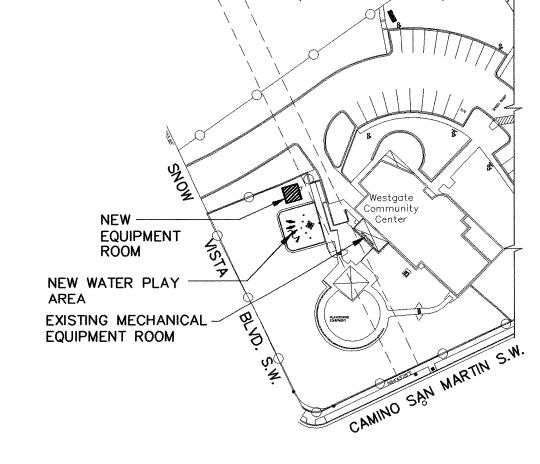




LIGHTING AND POWER PLAN - EQUIP. ROOM SCALE: 1/4" = 1'-0"



EQUIPMENT PLAN - EQUIPMENT ROOM SCALE: 1/4" = 1'-0"



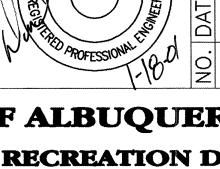
KEY PLAN

SCALE: NONE

KEYED NOTES

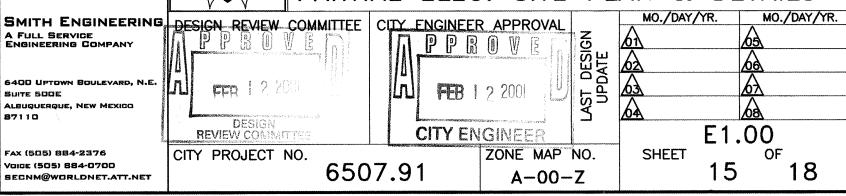
- 1 4'-2L SURFACE MOUNTED FLUORESCENT STRIP WITH 2/F32T8 SP35/RS LAMPS AND WIREGUARD, LITHONIA #C-232-120-GEB10-WGCUN OR APPROVED EQUAL.
- 2 FEATURE CONTROL PANEL.
- 3 1-1" EMPTY UNDERGROUND CONDUIT TO BOLLARD FEATURE CONTROL ACTIVATOR FOR CONTROL WIRING. CONTROL WIRING BY OTHERS. FOR CONTINUATION, SEE KEYED NOTE #14 ON THIS SHEET.
- 4 WATER TREATMENT CONTROL PANEL.
- 5 FILTER.
- 6 SUPPLY MANIFOLD.
- 7 SUMP.
- 8 COMBINATION STARTER 30A 3P 240V NEMA 1 FUSIBLE DISCONNECT SWITCH WITH 25A FUSES AND A SIZE 1 STARTER.
- 9 3 #10, 1 #10 GND, 3/4°C.
- 10 COMBINATION STARTER 30A 3P 240V NEMA 1 FUSIBLE DISCONNECT SWITCH WITH 15A FUSES AND A SIZE "0" STARTER.
- 11 3 #12, 1 #12 GND, 1/2"C.
- 12 2 #12, 1 #12 GND, 1/2"C.
- 13 BOLLARD FEATURE CONTROL ACTIVATOR.
- 14 CONTROL WIRING CONDUIT TO FEATURE CONTROL PANEL, FOR CONTINUATION, SEE KEYED NOTE #3 ON THIS SHEET.
- 15 EXISTING C/T AND METER CABINET.
- 16 EXISTING INCOMING SERVICE DISCONNECT SWITCH.
- 17 EXISTING WIREWAY MOUNTED ABOVE EXISTING INCOMING SERVICE DISCONNECT
- 18 EXISTING POWER COMPANY PAD MOUNTED TRANSFORMER.
- 19 EXISTING BUILDING.
- 20 EXISTING MECHANICAL EQUIPMENT ROOM.
- 21 60A 3P 240V, NEMA 3R FUSIBLE DISCONNECT SWITCH WITH 60A FUSES.
- 22 4 #4, 1 #10 GND, 1-1/4"C., TAP (AS REQUIRED) TO EXISTING #500kcmil CONDUCTORS IN WIREWAY.
- 23 4 #4, 1 #10 GND, 1-1/4°C.
- 24 ROUTE NEW CONDUIT EXPOSED ON TOP OF WALL.
- 25 PROVIDE (AS REQUIRED) CONDUIT BODY.
- 26 SEE SHEET E2.00 FOR PANEL SCHEDULE.
- 27 1 #8, 1/2"C. SERVICE GROUND. SEE SERVICE GROUNDING DETAIL ON SHEET E2.00.

FOR INFORMATION ONLY



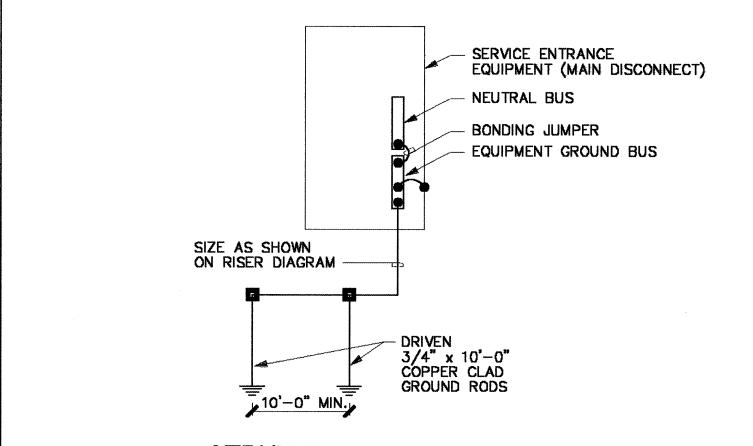
CITY OF ALBUQUERQUE PARKS & RECREATION DEPARTMENT

PARTIAL ELEC. SITE PLAN & DETAILS



GENERAL NOTES (Applies to all electrical sheets)

- THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH PROJECT PRIOR TO THE BID OPENING, TO ALLOW HIM TO SUBMIT A COMPLETE BID WITHIN THE SCOPE OF THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS ARISING DURING THE BID PERIOD, IN REGARD TO THE CONTRACTOR'S FUNCTIONS. THE SCOPE OF THE WORK OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE ENGINEER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN
- IT WILL BE THE CONTRACTOR'S OBLIGATION TO INCLUDE, IN HIS BID, THE COSTS FOR INSTALLING JUNCTION BOXES, PROVIDING MISCELLANEOUS COVERS, WORK WITH OTHER DISCIPLINES WHERE THE CONTRACT INVOLVES ELECTRICAL POWER OR CONTROL CONNECTIONS, SWITCHES, ETC. ALL OF THIS WORK SHALL BE PART OF THIS CONTRACT.
- LOCATION OF EQUIPMENT AND OTHER DEVICES SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
- D. THE CONDUIT RUNS AS SHOWN ON PLANS INDICATE APPROXIMATE ROUTING. EXACT LOCATION OF CONDUIT RUNS SHALL BE AS FIELD CONDITIONS DICTATE.
- CONTRACTOR SHALL INSTALL PULL AND JUNCTION BOXES WHEREVER REQUIRED BY N.E.C. OR JOB CONDITIONS. ALL NEW WIRING SHALL BE TAGGED AT ALL PULL BOXES, JUNCTION BOXES, EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS. ACTION CRAFT, BRADY OR APPROVED EQUAL.
- SHOULD CONTRACTOR AT ANY TIME NOTICE THAT THE ACTUAL FIELD CONDITIONS DO NOT CORRESPOND TO THE INFORMATION GIVEN ON THE DRAWINGS, THEN IT WILL BE HIS RESPONSIBILITY TO NOTIFY THE ENGINEER AS SOON AS POSSIBLE FOR CLARIFICATION, NOT AFTER IT IS COMPLETE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH ALL TRADES FOR THE EXACT LOCATION OF EQUIPMENT AND APPURTENANCES THAT REQUIRE ELECTRICAL CONNECTIONS.
- REMOVE AND INSTALL CEILING SUPPORTS AND TILES AS REQUIRED FOR THE COMPLETION OF THIS PROJECT. THIS CONTRACTOR SHALL INCLUDE REPLACEMENT OF CEILING TILES DAMAGED IN THE PROCESS OF THIS INSTALLATION WITH NEW MATCHING TILES. THE SAME APPLIES TO DAMAGE DONE TO OTHER KINDS OF CEILINGS.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO WALLS CEILINGS, ETC. IN A PROFESSIONAL MANNER. SEAL ALL WALL OR CEILING OPENINGS WITH MATCHING MATERIAL. THIS SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL MAKE AS-BUILT DRAWINGS DOCUMENTING ANY AND ALL WIRING AND EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS CONTRACT. PROVIDE UPDATED TYPEWRITTEN DIRECTORIES FOR ALL PANELS AND LABEL ALL PANELS WITH PLASTIC LAMINATED NAMEPLATES.
- K. INSTALL BLANK DEVICE PLATES ON ALL UNUSED JUNCTION BOXES IN FINISHED AREAS.
- L. ALL ELECTRICAL WIRING SHALL BE ROUTED IN CONDUIT.
- M. REFER TO POWER PLANS FOR DETAILED LAYOUTS OF ELECTRICAL GEAR.
- AFTER THE CONTRACTOR HAS RECEIVED APPROVED SHOP DRAWINGS FOR THE ELECTRICAL GEAR, HE SHALL BE RESPONSIBLE FOR PROVIDING SCALED LAYOUTS OF ALL ELECTRICAL EQUIPMENT TO THE ENGINEER FOR APPROVAL TO ENSURE THAT ALL CLEARANCE REQUIREMENTS ARE MET. IT WILL BE IN THE BEST INTEREST OF THE CONTRACTOR TO PROVIDE THIS INFORMATION EARLY SO AS NOT INTERFERE WITH THE TIMELY EXECUTION OF THE ROUGH-IN WORK THAT WILL BE REQUIRED.
- O. INTERRUPTION OF ANY ELECTRICAL SERVICES SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AT LEAST SEVEN DAYS PRIOR TO THE INTENDED OUTAGE AND SHALL BE REQUESTED IN WRITING.
- P. WHEREVER REQUIRED. FURNISH AND INSTALL ON WALL OR CEILING FREESTANDING UNISTRUT CHANNELS. ANGLE IRONS OR ANY OTHER SUPPORT STRUCTURE WITH THREADED ROD HANGERS AS REQUIRED FOR THE SUPPORT OF ELECTRICAL EQUIPMENT OF ANY KIND TO ENSURE PROPER INSTALLATION.
- Q. ALL NEW WIRING SHALL BE COPPER.
- ALL HOME RUN CIRCUITING TO PANELS SHALL BE .75" CONDUIT, MINIMUM.
- MOUNTING HEIGHTS INDICATED ON THE DRAWINGS ARE APPROXIMATE. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CO-ORDINATING WITH OTHER TRADES FOR EXACT HEIGHT REQUIRED. THIS REQUIREMENT ALSO APPLIES TO THE LOCATION OF WALL BOXES FOR HVAC SENSORS, T-STATS, ETC. ANY THIS NOTE APPLIES TO ALL ELECTRICAL SHEETS IN THESE DRAWINGS: OUTLET DEVICES THAT HAVE TO BE RELOCATED DUE TO COUNTERTOP, CHALKBOARD, TACKBOARD, TYPE CONFLICTS WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- T. ALL MECHANICAL CONTROLS SHALL BE PROVIDED AND INSTALLED BY CONTROLS CONTRACTOR, INCLUDING ALL STARTERS, CONTACTORS, RELAYS CONDUIT AND WIRE (HIGH AND LOW VOLTAGE, ETC.).



SERVICE GROUNDING DETAIL SCALE: NONE

	ELECTRICAL SYMBOL LEGEND
SYMBOL	DESCRIPTION
	KEYED NOTE SYMBOL - ELECTRICAL.
	MECHANICAL EQUIPMENT DESIGNATION - SEE MECHANICAL EQUIPMENT SCHEDULE.
AFF	ABOVE FINISH FLOOR.
	FLUORESCENT FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
θ	SINGLE POLE WALL SWITCH. FLUSH MOUNTED UP 44" UNLESS OTHERWISE INDICATED. (LOWER CASE LETTER, WHEN USED, DENOTES FIXTURES CONTROLLED).
\$	THERMAL SWITCH. WEATHERPROOF IF INSTALLED OUTSIDE. FLUSH MOUNTED UP 44" UNLESS OTHERWISE INDICATED.
ØH	JUNCTION BOX FLUSH IN WALL. HEIGHT AS INDICATED FOR CONNECTION TO EQUIPMENT.
⊖	20 AMP DUPLEX CONVENIENCE RECEPTACLE, UP 18" OR AS INDICATED.
WP	WEATHERPROOF.
	SPECIAL CABINET, TELEPHONE TYPE OR AS NOTED.
	LIGHTING BRANCH CIRCUIT PANEL, SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	POWER DISTRIBUTING PANEL, SEE PANEL SCHEDULE FOR CHARACTERISTICS.
2	MOTOR CONNECTION WITH HP INDICATED.
Ē	MOTOR CONNECTION FOR FRACTIONAL HP MOTOR (LESS THAN 1/3 HP). PROVIDE THERMAL O.L. SWITCH ADJACENT TO ALL MOTORS UNLESS SWITCH IS SHOWN ELSEWHERE ON PLAN.
⊠	MOTOR STARTER, SIZE AND POLES FOR MOTOR FURNISHED.
Ч <u></u> 30/3	DISCONNECT SWITCH, NON-FUSED, SUBSCRIPT INDICATES SWITCH AMPERAGE AND NUMBER OF POLES, BE NEMA 3R IF INSTALLED OUTDOORS. VOLTAGE RATING AS REQUIRED BY SYSTEM.
L aga 30/3/20	DISCONNECT SWITCH, FUSED, SUBSCRIPT INDICATES SWITCH AMPERAGE, NUMBER OF POLES AND FUSE SIZE. TO BE NEMA 3R IF INSTALLED OUTDOORS. PROVIDE FUSES AT 125% F.L.A. OF UNIT UNLESS OTHERWISE INDICATED. VOLTAGE RATING AS REQUIRED BY SYSTEM.
Ĺ <mark>⊠</mark>	COMBINATION MOTOR STARTER / DISCONNECT SWITCH.
	BRANCH CIRCUIT CONDUIT IN WALL OR CEILING WITH CONDUCTORS INDICATED.
	BRANCH CIRCUIT CONDUIT UNDER FLOOR OR UNDERGROUND WITH CONDUCTORS INDICATED.
+ A−2,4	HOME RUN CONDUIT TO PANEL WITH BRANCH CIRCUIT NUMBERS INDICATED.
	POWER CONDUIT, CONDUCTORS TYPICALLY SHOWN AT CIRCUIT BEGINNING ONLY.

PAN	EL " " [_]	P"		V, 3PH, 4W ED, DOOR-						RFACE			
		•	Sub-Feed										
CCT VO.	LOAD CODE	Load Code	LOAD DESCRIPTION	BKR SIZE	LOAD (VA)	PHASE A	PHASE B	PHASE C	LOAD (VA)	BKR SIZE	LOAD Load DESCRIPTION Code	LOAD	
1	2	LIGI	HTING & RECEPTACLES	20A/1P	690	690				20A/1P	SPARE		2
3	6	FEA	TURE CONTROL PANEL	20A/1P	500		2008		1508	20A/2P	UNIT HEATER UH-1	6	4
5	6	WATER	R TREAT. CONTROL PANEL	20A/1P	500			2008	1508	***	* * * *	6	6
7	6	······································	PUMP P-1	30A/3P	2021	3292		***************************************	1271	20A/3P	PUMP P-2	6	8
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11	6	***************************************	**	***	2021			3292	1271	***	***	6	12
13		***************************************	нот вох	20A/1P	1000	1000				20A/1P	SPARE		14
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LIGHTING CONDUIT, CONDUCTORS TYPICALLY SHOWN AT CIRCUIT BEGINNING ONLY. SWITCH

TIC MARKS REPRESENT NEUTRAL, HOT, SWITCH LEG AND GROUND CONDUCTORS

LEGS SHOWN AS REQUIRED FOR CLARITY.

LOAD SUMMARY: 120/208V, 3 PHASE

CONNECTED LOAD CODE DEMAND LOAD

14.6 KVA 15.0 KVA

14.6 KVA TOTAL 15.0 KVA

SHORT CIRCUIT CURRENT ANALYSIS

BASED ON MAXIMUM TRANSFORMER LET THROUGH WITH UNLIMITED PRIMARY SHORT CIRCUIT CURRENT (S.C.C.):

ESTIMATED BUILDING TRANSFORMER SIZE = 150 KVA NOMINAL TRANSFORMER IMPEDANCE (%Z) = 2%

S.C.C. AVAILABLE AT TRANSFORMER SECONDARY = 23,166A. S.C.C. AVAILABLE AT LINE SIDE OF MAIN DISCONNECT = 18,069A.

S.C.C. AVAILABLE AT LOAD SIDE OF 60A RKI FUSES = 1820A.

PANEL "LP" SHALL HAVE A MINIMUM OF 10,000 A.I.C. AND BRACING.

ENERGY CODE ANALYSIS

THE PLANS AND SPECIFICATIONS ARE DESIGNED IN CONFORMANCE WITH MODEL ENERGY CODE LIGHTING LEVELS.

INTERIOR LIGHTING LOAD ---- 150 W/ 144 SQ. FT. = 1 W/SQ.FT.

LOAD CALCULATIONS

EXISTING CONNECTED LOAD NEW ADDED LOAD

= 69,892VA = 15.000VA

EXISTING CONNECTED LOAD @ 125% NEC 220-35 (USING CONNECTED LOAD IN LIEU OF MAX. DEMAND LOAD)

= 87,365VA

EXISTING CONNECTED LOAD NEW ADDED LOAD

= 87,365VA= 15,000VA= 102,365VA

102,365VA @ 208/3ø

TOTAL NEW LOAD

NEW BLDG.

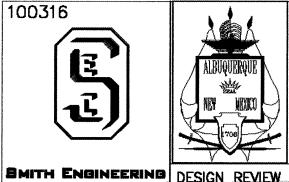
= 284A

EXISTING SERVICE IS 400A (#500kcmil Thw)

9



FOR INFORMATION ONLY



CITY OF ALBUQUERQUE PARKS & RECREATION DEPARTMENT

TITLE: WESTGATE AQUATIC PLAYGROUND SCHEDULES, LOAD SUM, & DETAILS

A-00-Z

A FULL BERVICE

Voice (608) 884-0700 BEONN@WORLDNET.ATT.N

DESIGN VIEW COMMITTEE PROJECT NO.	CITY ENGINEER ZONE MAP	NO.
FR 1 2 2001 LY		LAST
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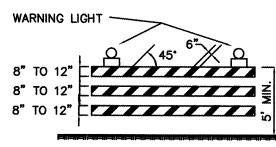
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CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

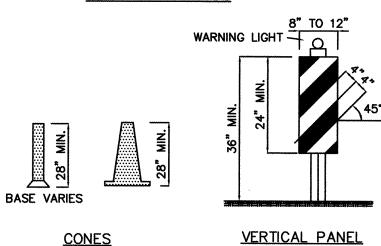
- 1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
- 2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
- 3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS. AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
- 4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- 5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
- 6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
- 8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
- 9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
- 10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
- 11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24-HOUR PER DAY BASIS UNTIL COMPLETED.
- 12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
- 13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- 14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
- 15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- 16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- 17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
- 18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 19. 48-HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
- 20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

- 21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- 22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING: 1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. 2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
- 23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
- 24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.
- 25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.
- 26. ADVANCE WARNING SIGNS SHALL BE 36"x36" WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48-INCH SIGN AS INDICATED IN THE MUTCD.

27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.



TYPE III BARRICADE

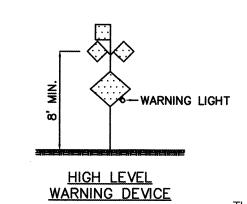


BARREL

8" TO 12"

TYPE I BARRICADE

COLLAPSIBLE



LEGEND

WORK	AREA
	WORK

- BARRICADE TYPE I, TYPE II, OR BARREL
- BARRICADE TYPE III
- VERTICAL PANEL
- WARNING SIGN
- DISTANCE BETWEEN SIGNS A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET

TAPER REQUIREMENTS

125

180

320

540

TAPER LENGTH (L) | MINIMUM | MAXIMUM DEVICE

LANE LANE FOR TAPER TAPER TAPER

DEVICES

13

NUMBER | SPACING IN FEET

20

25

30

35

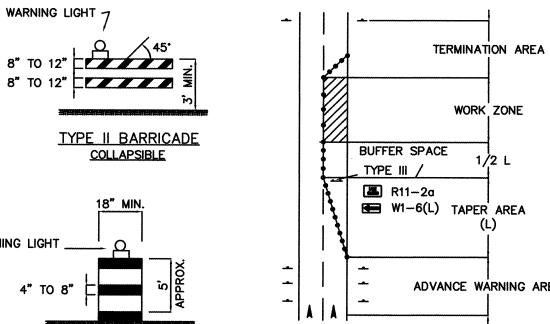
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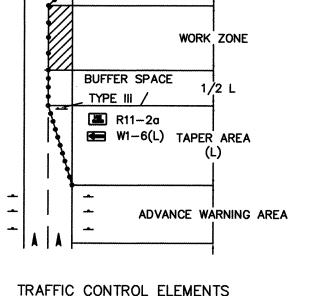
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ALONG AFTER

- TAPER LENGHT SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.



TRAFFIC CONTROL ELEMENTS



RECOMMENDED SIGN SPACING(D) FOR

75

115

165

225

295

495

550

55 550 605 660 13

105

150

270

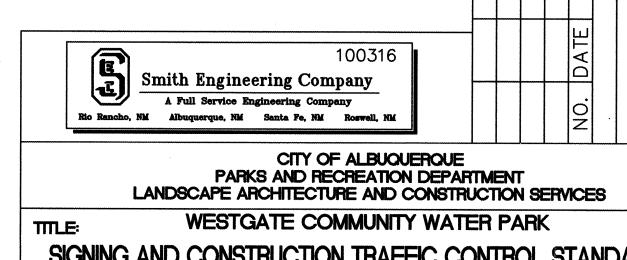
450

ADVANC	E WARNING SI	GN SERIES
SPEED	MINIMUM DIS	TANCE IN FEET
MILES	BETWEEN	FROM LAST
PER HOUR	SIGNS	SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT

10 X SPEED LIMIT 10 X SPEED LIMIT

TAPER CRITERI	A
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER: MERGING TAPER SHIFTING TAPER SHOULDER TAPER TWO-WAY TRAFFIC TAPER	L MINIMUM 1/2 L MINIMUM 1/2 L MINIMUM 100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE
TAPER LENGTH COMP	UTATION
SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$
L = TAPER LENGTH W = WIDTH OF OFFSET IN	landar kar akr

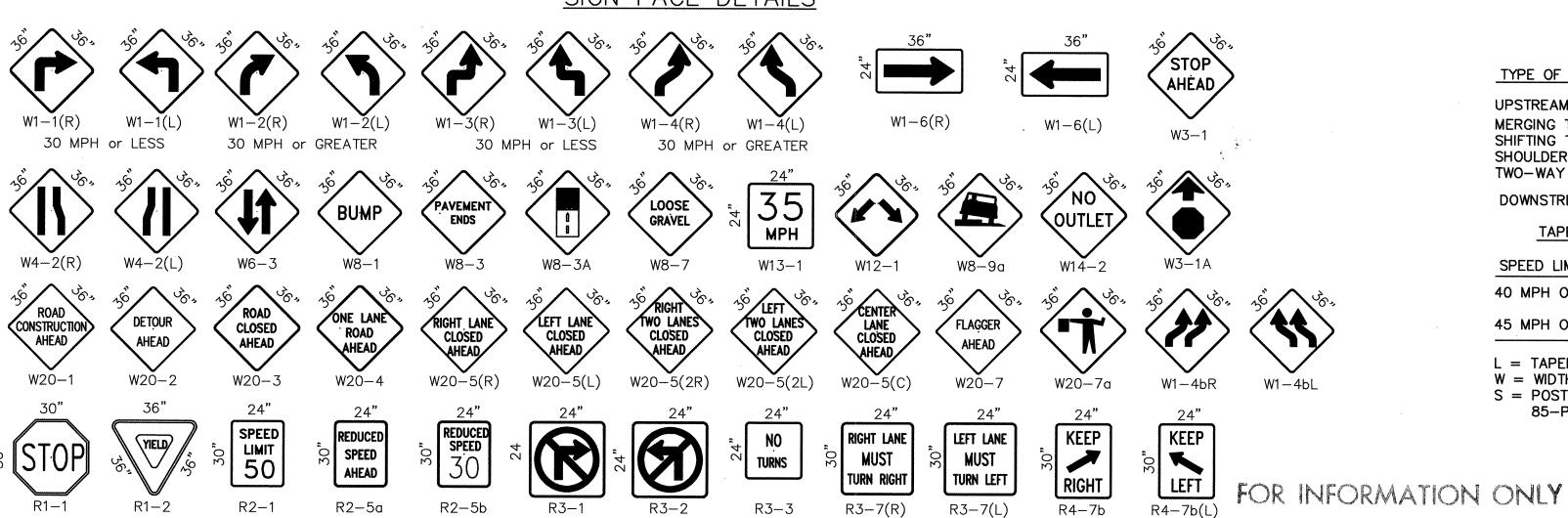
W = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH



CICATINA AND CONSTRUCTION TRAFFIC CONTROL OTANDADDO

SIGNING AND CO	NSTRUCTION TRAF		NTROL STA	NDARD	S
Design Review Committee	City Engineer Approval		Mo. / Day / Yr.	Mo. / Day	/ Yr.
COP	510	Design			
Other Product A No.		Last D.	La		
City Project No. 650791	Zone	Map No. M-9-7	Sheet 17	Of	18

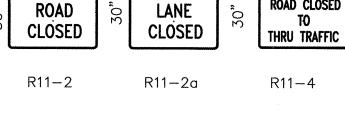
SIGN FACE DETAILS

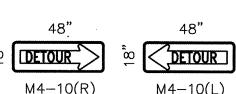


ALL CONSTRUCTION WARNING SIGNS

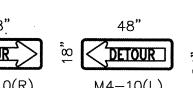
ORANGE BACKGROUND.

DO NOT PARKING ANY ONE WAY ONE WAY ENTER WAY R5-1 R5-1a R6-1(R)R6-1(L) R11 - 2





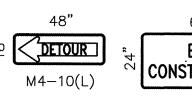
R3 - 7(L)



END

DETOUR

M4-8a



M4-10(R)

R3 - 7(R)

ROAD CLOSED

CONSTRUCTION G20-2

M4-9(L)

M4-9(R)

THRU TRAFFIC KEEP LEFT BE PREPARED TO STOP SPECIAL SPECIAL SIGN SIGN

SIGN

SIGN 50

SHALL HAVE A BLACK LEGEND ON A

R3-3

