

**HILGARTWILSON STANDARD ENGINEERING NOTES**

- THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE PRESENTED TO THE ENGINEER, ANYONE WHO TAKES IT UPON THEMSELVES THE INTERPRETATION OF THE DRAWINGS OR MAKES REVISIONS TO THE SAME WITHOUT CONFERRING WITH THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE CONSEQUENCES THEREOF.
- THE ESTIMATED QUANTITIES SHOWN ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETENESS AND ACCURACY OF A DETAILED ESTIMATE BASED ON THESE PLANS, CURRENT CODES, AND SITE VISITATION.
- ALL EARTHWORK CONSTRUCTION SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAILS AND/OR SPECIFICATIONS INCLUDING ANY SUPPLEMENTS THERETO, AND ALL ADDENDA. THE CONTRACTOR IS TO FOLLOW THE RECOMMENDATION OF THE SOIL INVESTIGATION REPORT AND LETTER, AS PREPARED BY VANDI ENGINEERING INC., PHONE NO. (602) 943-6997, PROJECT NO. 27601, DATED 06-26-2020.
- PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, REQUIREMENTS OF THE WORK AND EXCESS OR DEFICIENCY IN QUANTITIES. NO CLAIMS SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.
- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.
- THE CONTRACTOR SHALL MAKE NO CLAIM AGAINST THE OWNER OR THE SURVEYOR REGARDING ALLEGED INACCURACY OF CONSTRUCTION STAKES SET BY THE SURVEYOR UNLESS ALL SURVEY STAKES SET BY THE ENGINEER ARE MAINTAINED INTACT AND CAN BE VERIFIED AS TO THEIR ORIGIN. IF, IN THE OPINION OF THE SURVEYOR, THE STAKES ARE NOT MAINTAINED INTACT AND CANNOT BE VERIFIED AS TO THEIR ORIGIN, ANY REMEDIAL WORK REQUIRED TO CORRECT ANY ITEM OF IMPROPER CONSTRUCTION WORK SHALL BE PERFORMED AT THE SOLE EXPENSE OF THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR.
- THE SURVEYOR WILL MAKE FIELD AS-BUILT MEASUREMENTS OF THE WORK UPON NOTIFICATION BY THE CLIENT OR HIS REPRESENTATIVE THAT THE WORK IS COMPLETE AND READY FOR AS-BUILT SURVEY. FOR PIPE WORK, THE CONTRACTOR IS RESPONSIBLE FOR LEAVING TRENCHES OPEN SO THAT AS-BUILTS CAN BE PERFORMED TO COMPLY WITH THE AGENCY'S REQUIREMENTS. (IF THE TRENCHES ARE BACKFILLED AND OBSCURED TO THE POINT THAT AS-BUILT MEASUREMENTS CANNOT BE PERFORMED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POTHOLE UTILITY TRENCHES AS NECESSARY TO COMPLETE AN AS-BUILT SURVEY.)
- THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION, CONDITION, AND PAVEMENT CROSS-SLOPE OF ALL EXISTING SURFACES AT POINTS OF TIE-IN AND MATCHING, PRIOR TO COMMENCEMENT OF GRADING, PAVING CURB AND GUTTER OR OTHER SURFACE CONSTRUCTION. SHOULD EXISTING LOCATIONS, ELEVATIONS, CONDITIONS, OR PAVEMENT CROSS-SLOPES DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THESE PLANS NOT BEING ABLE TO BE CONSTRUCTED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AGENT IMMEDIATELY FOR DIRECTION ON HOW TO PROCEED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL COSTS ASSOCIATED WITH CORRECTIVE ACTION IF THESE PROCEDURES ARE NOT FOLLOWED.
- EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED ACCORDING TO INFORMATION PROVIDED BY THE AGENCY OPERATING EACH UTILITY. LOCATIONS SHOWN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. CALL BLUE STAKE FOR FIELD LOCATION AT (602) 263-1100. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING, SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN LIKE KIND.
- PRIOR TO CONSTRUCTION, THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE ANY ALTERATION, OR VARIANCE FROM THESE PLANS. ANY VARIATIONS FROM THESE PLANS SHALL BE PROPOSED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE ENGINEER.
- ANY INSPECTION BY THE CITY, COUNTY, ENGINEER, OR OTHER JURISDICTIONAL AGENCY, SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH APPLICABLE CODES AND AGENCY REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL STORM DRAIN PIPES, STORM WATER RETENTION PIPES AND DRAINAGE FACILITIES FROM DAMAGE DURING ALL STAGES OF CONSTRUCTION. THE DEPTH OF COVER ON THE STORM DRAIN PIPE IS DESIGNED FOR FINAL GRADE. THEREFORE, EXTRA CARE SUCH AS BERMING OVER PIPES, FLACING OR SIGNAGE SHOULD BE USED DURING CONSTRUCTION TO MAINTAIN COVER OR PROTECT THE PIPES.
- THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO THE VARYING FIELD CONDITIONS, CHANGING SOIL TYPES, ALLOWABLE CONSTRUCTION TOLERANCES AND CONSTRUCTION METHODS THAT ARE BEYOND THE CONTROL OF THE ENGINEER.
- IF PAD CERTIFICATIONS ARE PERFORMED, IT IS UNDERSTOOD THAT THE CERTIFICATION PROVIDES ONLY A REPRESENTATIVE ELEVATION OF THE AVERAGE GRADE OF EACH LOT, BUILDINGS OR UNIT PAD, AND SHALL NOT BE CONSTRUED TO INCLUDE YARD AND STREET SUB-GRADE CERTIFICATION OR CERTIFICATION THAT THE ENTIRE PAD IS LEVEL, THAT IT WAS CONSTRUCTED IN THE DESIGNED LOCATION OR WAS GRADED TO THE CROSS-SECTION SET FORTH ON THE PLANS OR AS DESIGNATED IN THE SOILS REPORT.
- FINISH GRADES SHOWN ON THESE PLANS ARE THE FINAL FINISH GRADES. CONTRACTOR IS RESPONSIBLE FOR OVER-EXCAVATING LANDSCAPE AREAS TO ALLOW FOR PLANTING AND UTILITY TRENCHING SPOILS AND FOR THE FINAL LANDSCAPE TREATMENT (DECOMPOSED GRANITE, LAWN, ETC.).
- UNDERGROUND UTILITIES SHALL BE MARKED IN ACCORDANCE WITH SECTION 40-360 OF THE ARIZONA REVISED STATUTES AND LOCAL MUNICIPALITY REQUIREMENTS.
- SEWER SERVICES SHALL BE INSTALLED TO 5 FEET OF COVER AT 2 FEET BEHIND THE PUE, WHERE POSSIBLE.

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**CITY OF GLENDALE SWPPP NOTES**

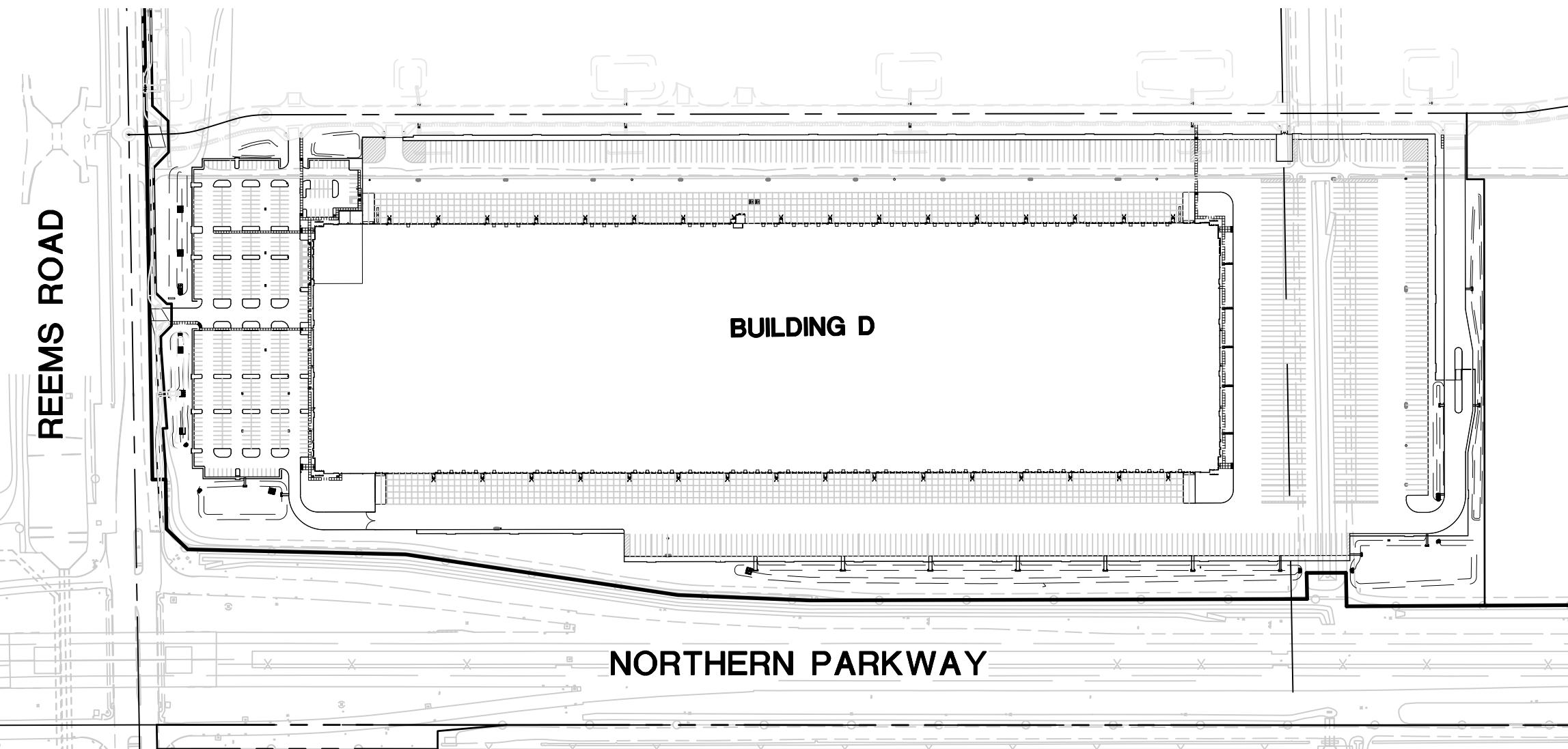
- A COPY OF THE CONTRACTOR'S NOI AND TWO (2) COPIES OF THE REVIEWED AND SIGNED SWPPP MUST BE RECEIVED BY THE CITY'S DEVELOPMENT SERVICES CENTER PRIOR TO ANY PERMIT BEING ISSUED. A COPY OF THE APPROVED GRADING AND DRAINAGE PLAN, TOGETHER WITH A COPY OF THE NOTICE OF INTENT (NOI) AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW. THOSE ELEMENTS OF THE GRADING AND DRAINAGE PLAN PERTINENT TO OR REFERENCED ON THE SWPPP SHALL BE CONSIDERED A PART OF THE SWPPP. ALL STORM WATER POLLUTION PREVENTION PLANS SHALL FOLLOW THE DRAINAGE DESIGN MANUAL FOR MARICOPA COUNTY, ARIZONA VOLUME III - EROSION CONTROL.
- THE CITY'S REVIEW OF ALL AZDES SUBMISSIONS INCLUDING NOI, NOI & SWPPP IS INTENDED AS REVIEW ONLY, AND DOES NOT CONSTITUTE APPROVAL OF THE METHODS OR PLANS FOR MANAGING THE STORM WATER AND PROTECTING THE WATERS OF THE UNITED STATES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL REQUIREMENTS OF THE CLEAN WATER ACT ARE ADHERED TO.
- THE CITY'S ENGINEERING DIVISION SHALL BE NOTIFIED 48 HOURS BEFORE ANY ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS. PHONE: 623-390-3630.
- THE OPERATOR SHALL OBTAIN A DUST CONTROL PERMIT FROM MARICOPA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES AND PERFORM MEASURES TO PREVENT EXCESS DUST.
- THE OPERATOR SHALL PERFORM, AT A MINIMUM, A VISUAL INSPECTION OF THE CONSTRUCTION SITE ONCE EVERY MONTH AND WITHIN 24 HOURS OF RAINFALL GREATER THAN OR EQUAL TO ONE-HALF INCH. THE OPERATOR SHALL PREPARE A REPORT DOCUMENTING HIS/HER FINDINGS ON THE CONDITIONS OF THE SWPPP CONTROLS AND NOTE ANY EROSION PROBLEMS.
- THE OPERATOR'S REPORT IS TO BE SUBMITTED TO THE CITY'S INSPECTOR FOR REVIEW. FACILITIES SHALL BE MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED.
- THE OPERATOR SHALL AMEND THIS PLAN AS NECESSARY DURING THE COURSE OF CONSTRUCTION TO RESOLVE ANY PROBLEM AREAS, WHICH BECOME EVIDENT DURING THE CONSTRUCTION AND/OR DURING RAINFALLS. ALL CHANGES TO THE SWPPP MUST CONFORM TO THE DRAINAGE DESIGN MANUAL FOR MARICOPA COUNTY - VOLUME III, EROSION CONTROL.
- THE PERMITTEE SHALL FILE A NOTICE OF TERMINATION (NOT) AFTER COMPLETION OF CONSTRUCTION AND PLACEMENT OF FINAL LANDSCAPE MATERIALS. A COPY OF THE NOT IS TO BE SUBMITTED TO THE CITY'S ENGINEERING DIVISION TO CLOSE THE SWPPP PERMIT.
- THE PERMITTEE SHALL SAVE ALL RECORDS, INCLUDING THE NOI, SWPPP, NOT, AND INSPECTION REPORTS, ON FILE FOR A MINIMUM OF THREE YEARS FROM THE DATE OF FILING THE NOT.
- THE IMPLEMENTATION OF THESE PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED AND THE NOT IS SUBMITTED TO THE CITY'S ENGINEERING DIVISION.
- THE FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO INSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE CITY'S DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. THE FACILITIES MUST BE INSTALLED AND IN OPERATION PRIOR TO ANY GRADING OR LAND CLEARING.

# STORMWATER POLLUTION PREVENTION PLAN

## LEXINGTON 420 - BUILDING D

GLENDALE, ARIZONA

THE NORTH HALF OF SECTION 32, TOWNSHIP 3 NORTH,  
RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN,  
MARICOPA COUNTY, ARIZONA.



**TOTAL DISTURBED AREA**

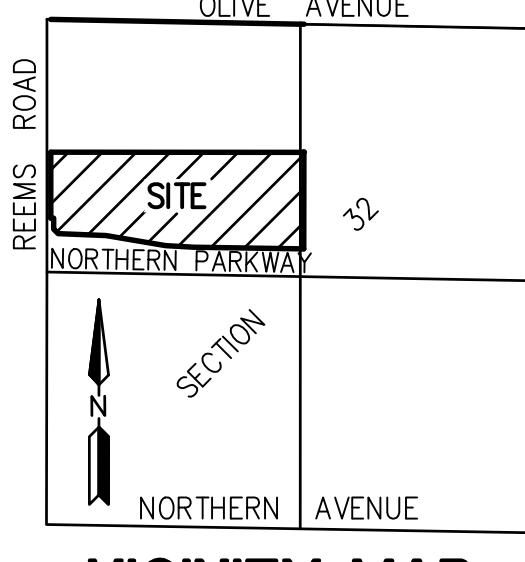
64.3 AC

**AREA MAP**

NTS

**OWNER/DESIGNER**

MERIT PARTNERS, INC  
2555 E. CAMELBACK ROAD  
SUITE 180  
PHOENIX, AZ 85016  
480-483-0360, 602-630-5970  
CONTACT: NIC FISCHER  
NIC@MPIAZ.COM

**ARCHITECT**

BUTLER DESIGN GROUP  
5017 E. WASHINGTON ST, #107  
PHOENIX, AZ 85034  
PHONE: (602) 760-7188  
CONTACT: ABBY MADRIGAL

VICINITY MAP  
NTS

REV.:

**ENGINEER**

COLLIERS ENGINEERING & DESIGN  
4742 N. 24TH ST., SUITE #270  
PHOENIX, AZ 85016  
PHONE: (602) 490-0535  
CONTACT: CASEY WHITEMAN, PE  
EMAIL: CWHITEMAN@HILGARTWILSON.COM

**BENCHMARK**

FOUND ALUMINUM CAP LOCATED AT THE NORTH QUARTER CORNER OF SECTION 29, T3N, R1W  
ELEVATION: 1144.135 PER BOOK 668, PAGE 41, MCR  
(GDACS - NAVD88 DATUM)

TEMPORARY BENCHMARK#1:  
FOUND BRASS CAP IN HAND HOLE LOCATED IN THE WEST QUARTER CORNER OF SECTION 29, T3N, R1W, ELEVATION 1134.65 PER BOOK 668, PAGE 41, MCR  
(GDACS - NAVD 88 DATUM)

TEMPORARY BENCHMARK#2:  
2" MARICOPA COUNTY ALUMINUM CAP LOCATED AT THE NORTH QUARTER CORNER OF SECTION 31, T3N, R1W, PER BOOK 668, PAGE 41, MCR, ELEVATION: 1136.392  
(GDACS - NAVD88 DATUM)

**BASIS OF BEARING**

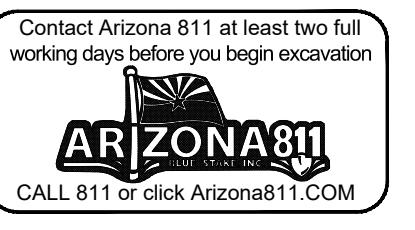
BASIS OF BEARING IS S88°53'42"E ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA.

**FLOOD PLAIN DESIGNATION**

PORTIONS OF THE SUBJECT PROPERTY LIE WITHIN SHADED ZONE "X" WITH A DEFINITION OF: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINS AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAPS 04013C1660L, 04013C1670L, 04013C1680L, 04013C1690L, PANEL NUMBERS 1660, 1670, 1680 & 1690 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

PORTIONS OF THE SUBJECT PROPERTY LIE WITHIN ZONE "A" WITH A DEFINITION OF: AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT-ANNUAL-CHANCE FLOOD EVENT GENERALLY DETERMINED USING APPROXIMATE METHODOLOGIES. BECAUSE DETAILED HYDRAULIC ANALYSES HAVE NOT BEEN PERFORMED, NO BASE FLOOD ELEVATIONS (BFE'S) OR FLOOD DEPTHS ARE SHOWN. MANDATORY FLOOD INSURANCE PURCHASE REQUIREMENTS AND FLOODPLAIN MANAGEMENT STANDARDS APPLY. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAPS 04013C1660L, 04013C1670L, 04013C1680L, 04013C1690L, PANEL NUMBERS 1660, 1670, 1680 & 1690 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

REQUIRED ON: STORM WATER POLLUTION PREVENTION PLANS COVER SHEET	REVIEWED BY:  LAND DEVELOPMENT ENGINEER
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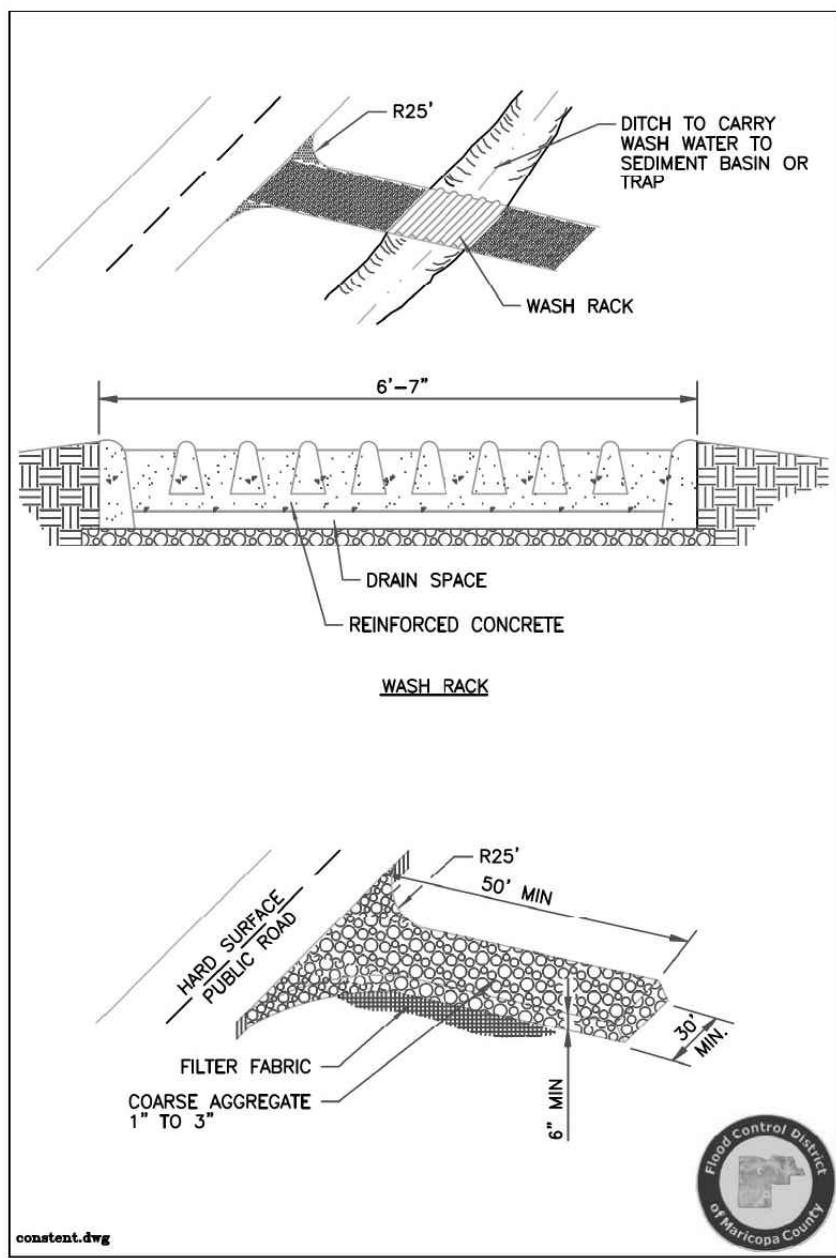


**LEXINGTON 420 - BUILDING D**  
NEC REEMS RD & NORTHERN PKWY  
GLENDALE, ARIZONA

**SWPPP COVER SHEET**

PROJ NO.: 1033.02	DATE: SEP 2025	SCALE: NTS	DRAWN: CM	DESIGNED: DB	APPROVED: CW
C5.0					

## EC-5 Stabilized Construction Entrance Drawing



5-44 Erosion Control - 5 August 15, 2013

STABILIZED CONSTRUCTION ENTRANCE-EC5

## EC-7 Dust Control Table

TABLE 5.2  
COMMONLY USED DUST SUPPRESSANTS (CONTINUED)

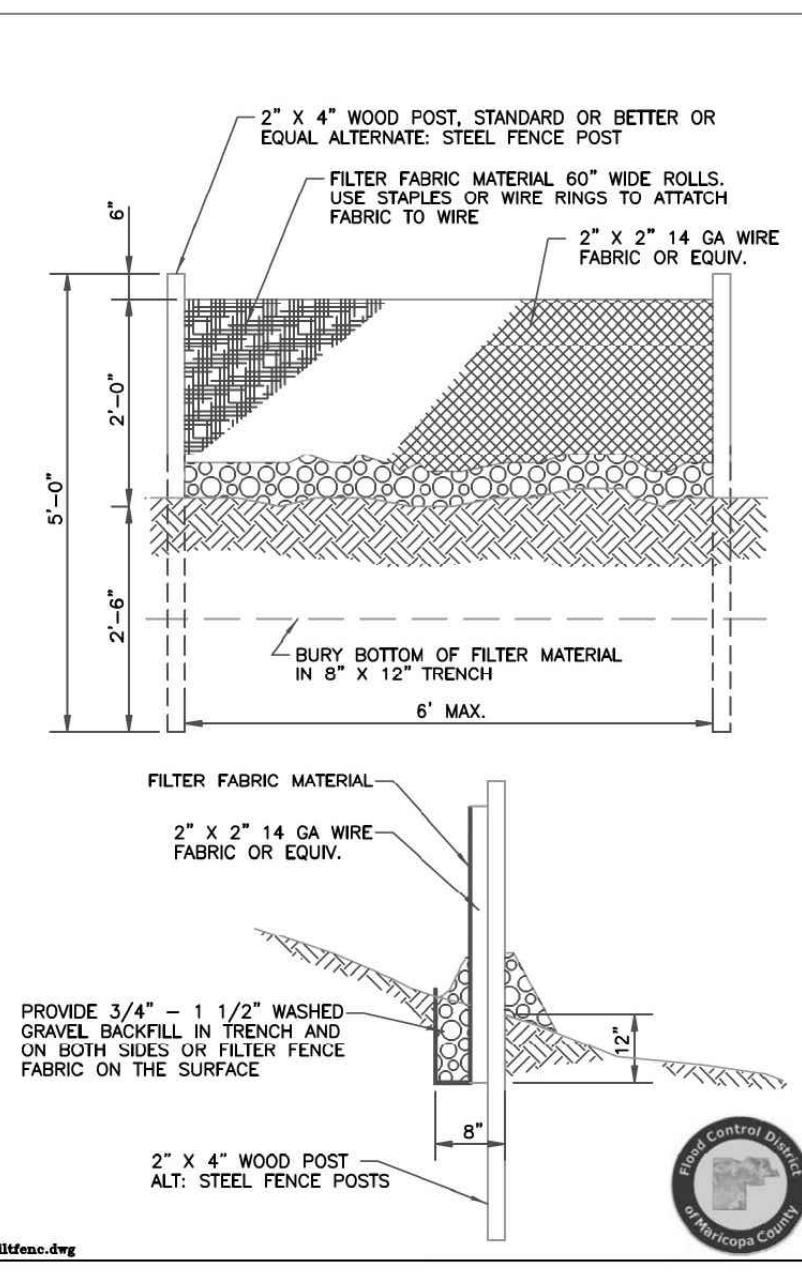
Types	Ideal Soil Characteristics	Relative Cost Comparison (average life expectancy)	Environmental Considerations
Freshwater	None	Low initial cost, high long-term maintenance cost (0 months)	Minimal environmental hazard. If applied excessively, may result in erosion and sediment runoff. Supply may be limited in some areas and, depending on the source, may require a water right permit.
Calcium Chloride	Plasticity index > 6 10-20 percent fines passing the No. 200 sieve (by weight)	Low initial cost, medium long-term maintenance cost (1-6 months)	Repeated applications and long term use may harm adjacent vegetation (See the manufacturer's product information).
Magnesium Chloride	Plasticity index > 6 10-20 percent fines passing the No. 200 sieve (by weight)	Low initial cost, medium long-term maintenance cost (1-6 months)	Reduces evaporation rate of surface moisture, lowers the freezing point of water, which reduces frost heave and freeze-thaw cycles, thereby reducing required road maintenance. Magnesium Chloride also increases the compacted density of existing soil. Effectiveness is retained after regrading.
Lignite Derivatives	Plasticity index < 8 10-20 percent fines passing the No. 200 sieve (by weight)	Medium initial cost, low long-term maintenance cost (3-12 months)	Lignite produces high BOD (biological oxygen demand) in acidic systems. It can reduce infiltration and groundwater may create low dissolved oxygen conditions resulting in fish kills or habitat loss in streams. It contains iron, sulfur compounds and other pollutants. (See the product MSDS for specific information).
Tree Resin Emulsions (tall oil)	Plasticity index < 3 5-20 percent fines passing the No. 200 sieve (by weight)	Medium initial cost, low long-term maintenance cost (1-6 months)	(See the manufacturer's product information)
Synthetic Polymer	Plasticity index < 3 5-20 percent fines passing the No. 200 sieve (by weight)	High initial cost, low long-term maintenance cost (1-3 months)	(See the manufacturer's product information)
Bitumens, Tars, and Resins	Plasticity index < 20 percent fines passing the No. 200 sieve (by weight)	High initial cost, high long-term maintenance cost (1-3 months)	Use of used oils prohibited. Some petroleum based products may contain chemicals that are toxic to aquatic life (hydrocarbons (PAHs)). (See the manufacturer's product information)
Cementitious Based Binders	Depending on the type of cementitious based binder, will work with high and low plasticity index soils.	Low initial cost, medium long-term maintenance cost (3-6 months)	Water insoluble when dry, provides a degree of surface waterproofing. Good residual effectiveness.

## EC-7 Dust Control Table

TABLE 5.2  
COMMONLY USED DUST SUPPRESSANTS

Types	Functional Mechanism	Advantages	Limitations
Freshwater	Moisture wets particles, thereby increasing their mass and binding them together.	Usually readily available, low material cost, and easy to apply.	Frequent light applications may be necessary during hot weather and can be costly. Over application can result in loss of traction, erosion, or points of road failure.
Calcium Chloride	At a relative humidity greater than approximately 30% (77°F), it will pull moisture from the air above and retain it in the soil.	Reduces evaporation rate of surface moisture, lowers the freezing point of water, which reduces frost heave and freeze-thaw cycles, thereby reducing required road maintenance. Calcium Chloride also increases the compacted density of existing soil. Effectiveness is retained after regrading.	Effectiveness in arid and semi-arid regions may be limited due to low relative humidity. It is very corrosive to aluminum alloys and slightly corrosive to steel. It is also slightly corrosive in leaching during heavy precipitation. Releases heat when mixed with water.
Magnesium Chloride	At a relative humidity greater than approximately 30% (77°F), the salts within the soil will pull moisture from the air above and retain it in the soil.	Reduces evaporation rate of surface moisture, lowers the freezing point of water, which reduces frost heave and freeze-thaw cycles, thereby reducing required road maintenance. Magnesium Chloride also increases the compacted density of existing soil. Effectiveness is retained after regrading.	Effectiveness in arid and semi-arid regions may be limited due to low relative humidity. It is very corrosive to aluminum alloys and slightly corrosive to steel. Effectiveness of calcium chloride results in leaching during heavy precipitation.
Lignite Derivatives	Reduces evaporation rate of surface moisture, lowers the freezing point of water, which reduces frost heave and freeze-thaw cycles, thereby reducing required road maintenance.	Greatly increases dry strength of soil, non-soil-dependent, imparts some plasticity to soil. Lignite derivatives lowers freezing point of road surface and base.	High solubility results in leaching during heavy precipitation. It is corrosive to aluminum alloys due to acidity ( $\text{CaCO}_3$ can neutralize the acidity). Proper aggregate mix is important to performance. Requires curing when wet and brittle when dry.
Tree Resin Emulsions (tall oil)	Act as adhesives by binding soil particles together and curing.	Low solubility after curing minimizes leaching and provides degree of surface waterproofing. Imparts some plasticity to soil.	No residual effectiveness after regrading. Equipment requires prompt cleanup to avoid curing of resin in hoses and pipes.
Synthetic Polymer	Bind soil particles together by forming a polymerizing matrix, a function similar to adhesives.	Applicable to a range of erosion sources from construction to sandy soil conditions. Some types allow seed vegetation to grow through the polymer matrix.	Requires proper weather and time to cure. Water repellent. May be subject to UV (sunlight) degradation. Application equipment must be cleaned after use. There is no residual effectiveness after regrading.
Bitumens, Tars, and Resins	Asphalt and resinous products are adhesive binding soil particles together. Petroleum based binders cost less than cementitious binders, increasing their mass and binding them together.	Water insoluble when dry, provides a degree of surface waterproofing. Good residual effectiveness.	Surface creating fracturing and penning may develop. Long-term application may cause development. To become too hard for regrading. Bitumens and tars lower freezing point and petroleum oil products lack adhesive characteristics.
Cementitious Based Binders	High purity gypsum mixes with water and much to form a cement-like crust on the soil surface.	Flexible, durable, water permeable, and resists soil chemicals. Reduces amount of aggregate required during initial construction and has lower maintenance costs than other dust suppressants.	Cementitious based binders are only effective for dust control in non-traffic areas. Instead, consider mixing cementitious based binders with sub-base soils for greater soil strength.

## SPC-5 Silt Fence Drawing



5-128 Sediment and Pollutant Control - 5 August 15, 2013

SILT FENCE-SPC-5

## DUST CONTROL-EC7

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STABILIZED CONSTRUCTION ENTRANCE-EC5

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STABILIZED CONSTRUCTION ENTRANCE-EC5

## GH-4 Designated Washdown Areas Photos

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STABILIZED CONSTRUCTION ENTRANCE-EC5

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STABILIZED CONSTRUCTION ENTRANCE-EC5

## SPC-7 Storm Drain Drop Inlet Protection Drawing

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STABILIZED CONSTRUCTION ENTRANCE-EC5

## GH-4 Designated Washdown Areas Photos

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## GH-4 Designated Washdown Areas Photos

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STABILIZED CONSTRUCTION ENTRANCE-EC5

## GH-4 Designated Washdown Areas Photos

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STABILIZED CONSTRUCTION ENTRANCE-EC5

## GH-4 Designated Washdown Areas Photos

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STABILIZED CONSTRUCTION ENTRANCE-EC5

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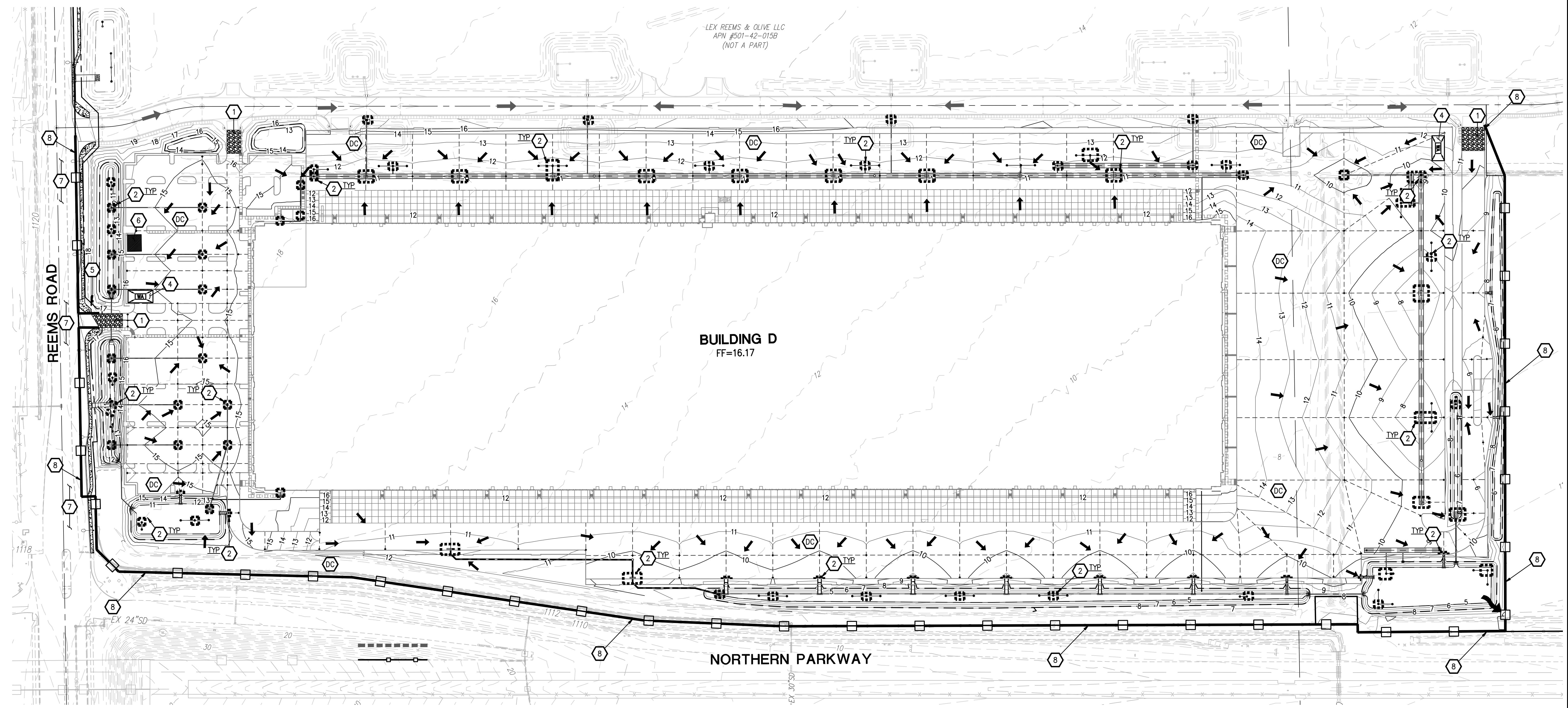
STABILIZED CONSTRUCTION ENTRANCE-EC5

## GH-4 Designated Washdown Areas Photos

August 15, 2013

Erosion Control - 7

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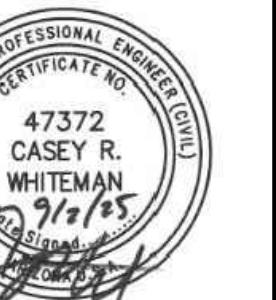


- SWPPP CONSTRUCTION NOTES**
- CONSTRUCT AND MAINTAIN A MINIMUM 30' WIDE X 50' LONG STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF A MINIMUM OF 6" OF 1" TO 3" DIAMETER, WASHED, WELL GRADED GRAVEL OR CRUSHED ROCK PER BMP-EC-5. FINAL LOCATION TO BE DETERMINED BY CONTRACTOR. SEE DETAIL ON SHEET C5.1.
  - CONSTRUCT STORM DRAIN INLET PROTECTION PER MARICOPA COUNTY DRAINAGE DESIGN MANUAL BMP SPC-7. SEE DETAIL ON SHEET C5.1.
  - FROM LEAVING THE SITE, SEE DETAIL ON SHEET C5.1. DESIGNATED WASH OUT AREA PER BMP GH-4. FINAL LOCATION TO BE DETERMINED BY CONTRACTOR.
  - POST SIGN NEAR THE MAIN ENTRANCE WITH AZPDES AUTHORIZATION NUMBER, NAME AND TELEPHONE NUMBER OF CONTACT PERSON AND A BRIEF DESCRIPTION OF PROJECT.
  - CONSTRUCT A COMBINED EQUIPMENT AND MATERIALS STORE AREA PER BMP GH-3. FINAL LOCATION TO BE DETERMINED BY CONTRACTOR.
  - CONTRACTOR TO PROVIDE ROAD SWEEPING/TRACKOUT PER DETAIL ON SHEET C5.1.
  - INSTALL SILT FENCE PER BMP SPC-5 PER DETAIL ON SHEET C5.1.
  - APPLY DUST CONTROL MEASURES OVER DISTURBED AREAS PER BMP-43.

#### LEGEND

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|-----------|--------------------------------------|
| —         | CENTER LINE                          |
| - - -     | PROPERTY LINE                        |
| — 1110 —  | EXISTING CONTOUR                     |
| — 1110 —  | PROPOSED CONTOUR                     |
| — - - - - | LIMITS OF DISTURBANCE                |
| —         | SILT FENCE                           |
| —         | DRAINAGE PATTERN                     |
| —         | EXISTING DRAINAGE PATTERN            |
| —         | ULTIMATE SITE OUTFALL (USO)          |
| —         | STORM DRAIN INLET PROTECTION (BMP-7) |
| —         | ENTRANCE SIGN                        |
| —         | WASHOUT AREA                         |
| —         | STORAGE AREA                         |
| —         | STABILIZED CONSTRUCTION ENTRANCE     |

<b>LEXINGTON 420 - BUILDING D</b>	
NEC REEMS RD & NORTHERN PKWY GLENDALE, ARIZONA	
<b>STORMWATER POLLUTION PREVENTION PLAN</b>	
PROJ. NO. 1033.02	
DATE:	SEP 2025
SCALE:	1" = 100'
DESIGNED:	DB DRAWN: CM APPROVED: CW
REV.	DWG. NO.
<b>C5.2</b>	
SHT. 49 OF 49	



Contact Arizona 811 at least two full working days before you begin excavation  
**ARIZONA 811**  
CALL 811 or click Arizona811.com